Location:

REGIONAL TRANSPORTATION COMMISSION
1105 Terminal Way, 1st Floor Great Room, Reno, NV
Date/Time: 9:00 A.M., Friday, July 18, 2025

REGIONAL TRANSPORTATION COMMISSION
OF WASHOE COUNTY
BOARD MEETING AGENDA

I. The Regional Transportation Commission Great Room is accessible to individuals with disabilities. Requests for auxiliary aids to assist individuals with disabilities should be made with as much advance notice as possible. For those requiring hearing or speech assistance, contact Relay Nevada at 1-800-326-6868 (TTY, VCO or HCO). Requests for supporting documents and all other requests should be directed to Michelle Kraus at 775-348-0400 and you will receive a response within five business days. Supporting documents may also be found on the RTC website: www.rtcwashoe.com.

II. This meeting will be televised live and replayed on RTC's YouTube channel at: bit/ly/RTCWashoeYouTube

III. Members of the public in attendance at the meeting may provide public comment (limited to three minutes) after filling out a request to speak form at the meeting. Members of the public that would like to provide presentation aids must bring eight (8) hard copies to be distributed to the Board members at the meeting. Alternatively, presentation aids may be emailed, in PDF format only, to mkraus@rtcwashoe.com prior to 4:00 p.m. on the day preceding the meeting to be distributed to the Board members in advance of the meeting. Members of the public may also provide public comment by one of the following methods: (1) emailing comments to: rtcpubliccomments@rtcwashoe.com; or (2) leaving a voicemail (limited to three minutes) at (775) 335-0018. Comments received prior to 4:00 p.m. on the day preceding the meeting will be entered into the record.

IV. The Commission may combine two or more agenda items for consideration and/or may remove an item from the agenda or delay discussion relating to an item on the agenda at any time.

V. The supporting materials for the meeting will be available at https://rtcwashoe.com/news/board-meeting-notes/. In addition, a member of the public may request supporting materials electronically from Michelle Kraus at the following email address: mkraus@rtcwashoe.com.

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1. Call to Order:
- 1.1. Roll Call
- 1.2. Pledge of Allegiance

2. Public Comment: *Public comment taken under this item may pertain to matters both on and off the agenda. The Chair may take public comment on a particular item on the agenda at the time it is discussed. Comments are to be made to the Board as a whole and not to individual commissioners.*

3. Approval of Agenda (For Possible Action)

4. Consent Items (For Possible Action):
- 4.1. Minutes
  - 4.1.1 Approve the meeting minutes for the 06/20/2025 RTC Board meeting. (For Possible Action)

4.2. Reports

4.2.1 Acknowledge receipt of the monthly Procurement Activity Report. (For Possible Action)

4.2.2 Acknowledge receipt of the monthly Planning Activity Report. (For Possible Action)

4.2.3 Acknowledge receipt of the monthly Engineering Activity Report. (For Possible Action)

4.2.4 Acknowledge receipt of the monthly Public Transportation and Operations report for June. (For Possible Action)

4.2.5 Acknowledge receipt of the monthly Community Outreach and Media Activity Report. (For Possible Action)

4.2.6 Acknowledge receipt of the Summary Report for the Technical, Citizens Multimodal, and Regional Road Impact Fee Advisory Committees. (For Possible Action)

4.3. Engineering Department

4.3.1 Approve a Local Public Agency Agreement with Nevada Department of Transportation for the use and reimbursement of federal funds on the Biggest Little Bike Network Project. (For Possible Action)

4.3.2 Approve a contract with Lumos and Associates, Inc., for design and engineering during construction services related to the 2026 Preventive Maintenance Project, in an amount not-to-exceed $1,008,735. (For Possible Action)

4.3.3 Approve a contract with Lumos and Associates, Inc., for design services and engineering during construction services for the Keystone Avenue Rehabilitation Project, in an amount not-to-exceed $855,140. (For Possible Action)

4.3.4 Approve Amendment No. 1 to the contract with CA Group, Inc., for design and engineering during construction services related to the Traffic Engineering and Intersection Improvements 26-01 Project, in the amount of $341,850, for a new total not-to-exceed amount of $687,549. (For Possible Action)

4.3.5 Approve a Resolution of Condemnation authorizing RTC's legal counsel to commence condemnation proceedings to acquire a temporary construction easement on a portion of APN 400-151-11 from Cassinari Enterprise, LLC, which is needed to construct the West Fourth Street Safety Project. (For Possible Action)

4.3.6 Approve a Resolution of Condemnation authorizing RTC's legal counsel to commence condemnation proceedings to acquire a permanent public use easement and a temporary construction easement on portions of APN 010-610-15 from Oppio Keystone, LLC which are needed to construct the West Fourth Street Safety Project. (For Possible Action)

4.3.7 Approve a Resolution of Condemnation authorizing RTC's legal counsel to commence condemnation proceedings to acquire a temporary construction easement on a portion of APN 006-212-04 from Reno MH & RV Park, LLC, which is needed to construct the West Fourth Street Safety Project. (For Possible Action)

4.3.8 Approve a Resolution of Condemnation authorizing RTC's legal counsel to commence condemnation proceedings to acquire a temporary construction easement on a portion of AP 006-222-19 from West End Reno, LLC, which is needed to construct the West Fourth Street Safety Project. (For Possible Action)

4.4. Public Transportation/Operations Department

4.4.1 Approve a contract with Pavion Corp to replace the existing Avigilon security servers at Centennial Plaza and Sutro with Verkada cloud connectors, in an amount not-to-exceed $138,274.65. (For Possible Action)

4.4.2 Acknowledge receipt of the RTC RIDE 5 Year Vehicle Replacement Strategy. (For Possible Action)

4.4.3 Approve Amendment No. 2 to the contract with Marathon Finishing Systems, Inc., for additional Phase 2 services to complete the installation of the hydrogen fuel cell service bay at RTC's 6th Street facility, in the amount of $21,935.45, for a new total not-to-exceed amount of $817,740.03. (For Possible Action)

4.4.4 Approve an Interlocal Cooperative Agreement (ICA) with the Nevada Department of Transportation to provide continued funding to the RTC for the ED Pass Program, in the amount of $350,000. (For Possible Action)

4.4.5 Approve a contract with CDM Smith, Inc., for architectural and engineering services to complete a feasibility study and the environmental process for relocation of RTC's fixed route maintenance and operations facility on Villanova Drive, in an amount not-to-exceed $1,091,365.19. (For Possible Action)

4.5. Executive, Administrative and Finance Department

4.5.1 Approve the RTC Goals for Fiscal Year (FY) 2026 (July 1, 2025 to June 30, 2026). (For Possible Action)

4.5.2 Acknowledge receipt of the updated RTC Strategic Roadmap for FY 2026-2027. (For Possible Action)

5. Discussion Items and Presentations:

5.1 Discuss and provide potential direction to staff regarding legislative measures from the 83rd Session of the Nevada Legislature (2025). (Informational Only)

5.2 Receive a presentation on the draft Central Reno/Midtown Neighborhood Network Plan. (Informational Only)

5.3 Receive a presentation on the draft Federal Fiscal Years (FFY) 2025-2029 Regional Transportation Improvement Program (RTIP). (Informational Only)

5.4. Authorize staff to present the 8th Edition Regional Road Impact Fee (RRIF) General Administrative Manual (GAM) and the RRIF Capital Improvement Plan (CIP) to the planning commissions acting as the capital improvements advisory committee and governing body of each participating local government for adoption. (For Possible Action)

5.5. Receive a report regarding regional road maintenance needs and available funding to perform roadway maintenance activities. (Informational Only)

5.6. Receive a presentation regarding the need for multi-county transportation planning and cooperation and provide input and direction regarding options for pursuing a formal organizational structure in partnership with adjacent counties and other agencies. (Informational Only)

6. Reports (Information Only):

6.1. Monthly verbal update/messages from RTC Executive Director Bill Thomas - no action taken.

6.2. Monthly verbal update/messages from Paul Nelson, RTC Government Affairs Officer on federal matters related to the RTC - no action will be taken.

6.3. Monthly verbal update/messages from NDOT Director Tracy Larkin Thomason or designated NDOT Deputy Director - no action will be taken.

7. Commissioner Announcements and Updates: *Announcements and updates to include requests for information or topics for future agendas. No deliberation or action will take place on this item.*

8. **Public Comment:** *Public comment taken under this item may pertain to matters both on and off the agenda. The Chair may take public comment on a particular item on the agenda at the time it is discussed. Comments are to be made to the Board as a whole and not to individual commissioners.*

9. **Adjournment (For Possible Action)**

Posting locations: RTC, 1105 Terminal Way, Reno, NV, RTC website: www.rtcwashoe.com, State website: https://notice.nv.gov/

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.1.1**

To: Regional Transportation Commission

From: Michelle Kraus, Clerk of the Board

SUBJECT: Draft Meeting Minutes for 06/20/2025

RECOMMENDED ACTION

Approve the meeting minutes for the 06/20/2025 RTC Board meeting.

BACKGROUND AND DISCUSSION

See attachment for Background and Discussion.

FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

REGIONAL TRANSPORTATION COMMISSION
WASHOE COUNTY, NEVADA

FRIDAY **9:14 A.M.** **June 20, 2025**

PRESENT:

Alexis Hill, Chair, Washoe County Commissioner
Devon Reese, Vice Chair, Reno City Council (Via Phone)
Mariluz Garcia, Washoe County Commissioner (Via Phone)
Bill Thomas, RTC Executive Director
Adam Spear, Legal Counsel
Sajid Sulahria, Deputy Director of NDOT (Alternate)

ABSENT:

Ed Lawson, Mayor of Sparks
Hillary Schieve, Mayor of Reno
Tracy Larkin Thomason, Director of NDOT

The regular monthly meeting, held in the 1st Floor Great Room at Regional Transportation Commission of Washoe County, Reno, Nevada, was called to order by Chair Hill at 9:14 a.m. A delay occurred due to a medical emergency affecting Commissioner Garcia, who joined via phone. The Board conducted the following business:

Item 1 CALL TO ORDER

1.1 Roll Call
1.2 Pledge of Allegiance

Item 2 PUBLIC COMMENT

Chair Hill opened the public comment period.

Juan Martinez, RTC Access rider, reported a negative experience with a taxi driver contracted by RTC and raised safety concerns. He also requested that air conditioning on Access vehicles be operational during summer months.

Dora Martinez, local resident, commented on the lack of route announcements on large buses and the need for consistency in signage and driver awareness. She supported the development of a dedicated Shopper's Route for individuals with disabilities and thanked the Board for improvements at the Route 11 inbound stop at Mae Anne and McCarran. She acknowledged Commissioner Reese for responsiveness to accessibility concerns.

Michael Gawthrop-Hutchins emailed public comment on 6/18/2025. He expressed strong support for RTC's decision to discontinue the purchase of Battery Electric Vehicles (BEVs). He noted negative feedback from passengers, drivers, and mechanics, stating that the buses were uncomfortable and failed to maintain schedules, particularly on the Regional Connector. He advocated for prioritizing dependable and cost-effective vehicles—even diesel if necessary—to enhance service frequency and

reliability. He urged RTC to shift focus from experimental technologies to expanding and improving core transit service to boost ridership and reduce emissions effectively.

Item 3 APPROVAL OF AGENDA

Due to quorum constraints, the Board limited the meeting to consent items only and tabled all other agenda items to the July meeting.

On motion of Vice Chair Reese to approve with changes, seconded by Commissioner Garcia, which motion unanimously carried, Chair Hill ordered that this item be approved.

Items 4 CONSENT ITEMS

4.1 Minutes

4.1.1 Approve the meeting minutes for the 04/18/2025 RTC Board meeting. (For Possible Action)

4.1.2 Approve the meeting minutes for the 05/16/2025 RTC Board meeting. (For Possible Action)

4.1.3 Approve the meeting minutes for the 05/29/2025 RTC Special Board meeting. (For Possible Action)

4.2. Reports

4.2.1 Acknowledge receipt of the monthly Procurement Activity Report. (For Possible Action)

4.2.2 Acknowledge receipt of the monthly Planning Activity Report. (For Possible Action)

4.2.3 Acknowledge receipt of the monthly Engineering Activity Report. (For Possible Action)

4.2.4 Acknowledge receipt of the monthly Public Transportation and Operations Activity Report. (For Possible Action)

4.2.5 Acknowledge receipt of the monthly Outreach Report from the Communications staff. (For Possible Action)

4.2.6 Acknowledge receipt of the monthly summary report for the Technical, Citizens Multimodal, and Regional Road Impact Fee Advisory Committees. (For Possible Action)

4.3 Planning Department

4.3.1 Approve the FY 2026 Shared Work Program with the Truckee Meadows Regional Planning Agency (TMRPA). (For Possible Action)

4.3.2 Approve funding for Transportation Alternatives (TA) Set-Aside projects and programs for the Federal Fiscal Year 2026-2027 award cycle in the amount of $1,680,884. (For Possible Action)

4.4 Engineering Department

4.4.1 Approve Amendment No. 1 to the contract with DOWL, LLC for design services related to the North Valleys North Virginia Street Capacity Project, in an amount not to exceed $6,101,705.05, for a new total not-to-exceed amount of $7,611,687.05. (For Possible Action)

4.4.2 Approve a Resolution of Condemnation authorizing RTC's legal counsel to commence condemnation proceedings to acquire a temporary construction easement interest on a portion of APN 019-360-13 from GCS Multi LLC, which is needed to construct the Virginia Line Bus Rapid Transit Improvement project. (For Possible Action)

4.4.3 Approve a Resolution of Condemnation authorizing RTC's legal counsel to commence condemnation proceedings to acquire a fee simple interest in, and a temporary

construction easement interest on, portions of APN 019-360-15 from Center Line Group LLC-Reno Series, which are needed to construct the Virginia Line Bus Rapid Transit Improvement Project. (For Possible Action)

4.4.4 Approve a settlement agreement between RTC, ZRA Enterprises, Ltd., and Robert Allen Pools & Spas, Inc., to resolve any and all litigation and claims related to RTC's acquisition of property for the Mill Street Capacity and Safety Project. (For Possible Action)

4.5 Public Transportation/Operations Department

4.5.1 Approve Amendment No. 2 to the contract with Spare Labs, Inc., (Order Form #SL-5055) to add the integration of the Spare AI platform in the amount of $57,500 through the end of the current contract term of July 31, 2027. (For Possible Action)

4.5.2 Approve Amendment No. 2 with Celtis Ventures, Inc. for marketing consulting services for RTC TOPS Program, Phase 3 in the amount of $500,000, for a new total not-to-exceed amount of $1,095,000. (For Possible Action)

4.6 Executive, Administrative and Finance Departments

4.6.1 Authorize the Executive Director to bind annual insurance coverage effective July 1, 2025, for automobile liability, general liability, public officials' errors and omissions (E&O), property, earthquake/flood, crime, cyber, pollution liability, social engineering, fiduciary liability, employment practices liability, and workers' compensation; and approve the RTC's continued membership in in the Nevada Public Agency Insurance Pool (POOL) and Public Agency Compensation Trust (PACT). (For Possible Action)

On motion of Vice Chair Reese to approve consent items, seconded by Commissioner Garcia, which motion unanimously carried, Chair Hill ordered that these items be approved.

Items 5 and 6 were tabled to the July 2025 meeting due to limited quorum time constraints.

Item 5 DISCUSSION ITEMS AND PRESENTATIONS

5.1 Receive a presentation on the Truckee River Path Inventory Study. (Informational Only – No Action Required)

5.2 Acknowledge receipt of a report regarding regional road maintenance needs and available funding to perform roadway maintenance activities. (Informational Only – No Action Required)

5.3 Acknowledge receipt of the RTC RIDE 5 Year Vehicle Replacement Strategy. (Informational Only – No Action Required)

5.4 Acknowledge receipt of the updated RTC Strategic Roadmap for FY 2025-2027 and provide input and direction regarding next steps. (Informational Only – No Action Required)

5.5 Approve the RTC Goals for Fiscal Year (FY) 2026 (July 1, 2025 to June 30, 2026). (For Possible Action)

Item 6 REPORTS (Informational Only)

6.1 RTC Executive Director Report

6.2 RTC Federal Report

6.3 NDOT Director Report

Item 7 ***COMMISSIONER ANNOUNCEMENTS AND UPDATES***

No announcements or updates were provided by Commissioners

Item 8 ***PUBLIC COMMENT***

Chair Hill opened the public comment period. No additional public comment was received.

Item 9 ***ADJOURNMENT***

The meeting was adjourned at 9:22 a.m.

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ALEXIS HILL, Chair
Regional Transportation Commission

**Copies of all presentations are available by contacting Michelle Kraus at mkraus@rtcwashoe.com.

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.2.1**

To: Regional Transportation Commission

From: Christian Schonlau, Director of Finance/CFO

SUBJECT: Procurement Activity Report

RECOMMENDED ACTION

Acknowledge receipt of the monthly Procurement Activity Report.

BACKGROUND AND DISCUSSION

Acknowledge receipt of the monthly Procurement Activity Report.

FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

ATTACHMENT A

PROJECTS CURRENTLY ADVERTISED

Invitations for Bids (IFB)	
Project	**Due Date**
N/A	

Request for Proposals (RFP)	
Project	**Due Date**
Development Neighborhood Plans (3 and 4) for the Active Transportation Plan	June 27, 2025
Rock Boulevard Corridor Study	June 27, 2025
Locus - Kirman - Taylor - Wells Corridor Study	July 25, 2025

REPORT ON INVITATION FOR BID (IFB) AWARDS

Per NRS 332, NRS 338 and RTC's Management Policy P-13 "Purchasing," the Executive Director has authority to negotiate and execute a contract with the lowest responsive and responsible bidder on an Invitation for Bid (IFB) without Commission approval.

Project	Contractor	Award Date	Contract Amount
Sparks Boulevard Capacity Improvement, North Phase	Granite Construction	06/19/2025	$68,790,790
Traffic Signal Modifications 25-01	Titan Electrical	06/19/2025	$2,121,044
West Fourth St. Downtown - Pedestrian Improvements	Q&D Construction	06/17/2025	$5,468,000

PROFESSIONAL SERVICES/CONSULTING AGREEMENTS

Per RTC's Management Policy P-13 Executive Director has authority to approve contracts greater than $25,000 and less than (or equal to) $100,000.

Project	Contractor	Contract Amount
Spanish Television Advertising on KOLO 8	Gray Media Group, KOLO 8	$40,000

CHANGE ORDERS AND CONTRACT AMENDMENTS WITHIN EXECUTIVE DIRECTOR'S RTC's P-13 PURCHASING POLICY AUTHORITY

Project	Contractor	Approval Date	CO / Amend. Number	CO / Amend. Amount	Revised Total Contract Amount
N/A					

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.2.2**

To: Regional Transportation Commission

From: Vanessa Lacer, Director of Planning

SUBJECT: Planning Activity Report

RECOMMENDED ACTION

Acknowledge receipt of the monthly Planning Activity Report.

BACKGROUND AND DISCUSSION

See Attachment for Background and Discussion.

FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

PLANNING STUDIES

Neighborhood Network Plans 1 & 2	
Marquis Williams, Project Manager	https://rtcwashoe.com/planning/active-transportation-plan/
Status: The first of two Neighborhood Network Plans (Central Reno) will be available for public for public review and comment in July. The second Neighborhood Network Plan (Central Sparks) will be available for public review and comment in August.	

Neighborhood Network Plans 3 & 4	
Marquis Williams, Project Manager	https://rtcwashoe.com/planning/active-transportation-plan/
Status: The planning process for Neighborhood Network Plans 3 & 4 has begun, with RFP advertisement on June 2, 2025.	

Rock Blvd Corridor/Area Study	
Shay League, Project Manager	
Status: The planning process for the Rock Blvd Corridor/Area Study has begun, with RFP advertisement on June 2, 2025.	

Kirman/Locust/Wells/Taylor Corridor/Area Study	
Xuan Wang, Project Manager	
Status: The planning process for the Kirman/Locust/Wells/Taylor Corridor/Area Study has begun, with RFP advertisement on June 25, 2025.	

ONGOING PROGRAMS

Data Collection Program	
Xuan Wang, Project Manager	https://dlm.maps.arcgis.com/apps/mapviewer/index.html?webmap=06f3673e1e40454cbabbb57e67b424e2
Status: Data collection started for scheduled sites. Continue to identify sites for data collection.	

RTC Regional Travel Demand Model Update	
Xuan Wang, Project Manager	https://www.rtcwashoe.com/mpo-reports/model2023/
Status: The project team is working on enhancing model functions.	

Active Transportation Program	
RTC Planning and Engineering Staff	https://www.rtcwashoe.com/metropolitan-planning/
Status: Second Active Transportation Technical Advisory Committee (AT-TAC) meeting held on July 1, 2025.	

Vision Zero Truckee Meadows	
RTC Planning Staff	https://visionzerotruckeemeadows.com/
Status: SS4A planning funds totaling $1.2 million in federal dollars awarded with revised draft agreement sent to FHWA 5/15/25. Once executed, staff will release an RFP for consultant support in the development of a Comprehensive Safety Action Plan and a predictive safety tool for use in developing future roadway projects. Vision Zero Truckee Meadows Task Force meeting planned for July 2025.	

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.2.3**

To: Regional Transportation Commission

From: Dale Keller, Deputy Executive Director/Director of Engineering

SUBJECT: Engineering Activity Report

RECOMMENDED ACTION

Acknowledge receipt of the monthly Engineering Activity Report.

BACKGROUND AND DISCUSSION

See attachment for Background and Discussion.

FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

RTC Engineering Monthly Report

Active Transportation Projects

Biggest Little Bike Network	
LaShonn Ford, Project Manager	https://rtcwashoe.com/projects/biggest-little-bike-network/
Status: The project is currently working on developing the 90% design.	

Eagle Canyon Safety and Operations	
LaShonn Ford, Project Manager	https://rtcwashoe.com/projects/eagle-canyon-safety-and-operations/
Status: The project design has reached 90% design. Final Design is underway.	

Capacity/Congestion Relief Projects

Buck Drive Circulation	
Bryan Byrne, Project Manager	https://rtcwashoe.com/projects/buck-drive-circulation/
Status: Kimley-Horn & Associates has finalized the design, and the project will go out to bid later this summer. Construction is tentatively anticipated to begin in fall 2025 and continue through spring 2026.	

Geiger Grade Road Realignment	
Kimberly Diegle, Project Manager	https://rtcwashoe.com/projects/geiger-grade-road-realignment/
Status: The feasibility study is underway including traffic analysis and environmental review of the study area.	

Military Road Capacity & Safety	
Austin McCoy, Project Manager	https://rtcwashoe.com/projects/military-road-capacity-safety/
Status: The RTC, in cooperation with the City of Reno, is in the final design phase for the project. Right-of-way activities and utility coordination is underway.	

Mill Street Capacity & Safety	
Kimberly Diegle, Project Manager	https://rtcwashoe.com/projects/mill-street-capacity-and-safety/
Status: Q&D Construction has begun work on the project. Visit MillStreetWidening.com for additional information.	

North Valleys North Virginia Street Capacity	
Garrett Rodgers, Project Manager	https://rtcwashoe.com/projects/north-valleys-north-virginia-street-capacity/
Status: Project is currently performing survey, geotechnical investigations, hydrology/hydraulics analysis, traffic modeling and preliminary engineering. Preliminary engineering has progressed to 30% Design.	

Pembroke Drive Capacity & Safety	
Ashley Hurlbut, Project Manager	https://rtcwashoe.com/projects/pembroke-drive-capacity-safety/
Status: Nichols Consulting Engineers (NCE) has progressed the design to 60%. Coordination with the City of Reno, Washoe County, and utility companies located along Pembroke continues. Project advancing toward final design and working toward final right-of-way setting.	

Pyramid Highway Operations Improvements	
Jessica Dover, Project Manager	https://rtcwashoe.com/projects/pyramid-highway-operations-improvements/
Status: Project advancing toward 60% design and working toward final right-of-way setting.	

Pyramid Wy, Sparks Blvd, Highland Ranch Pkwy Intersection	
Austin McCoy, Project Manager	https://rtcwashoe.com/projects/pyramid-way-sparks-boulevard-highland-ranch-intersection/
Status: Preliminary design and data collection has begun. This project involves providing 60% level design for the Pyramid/Sparks Interchange as well as preliminary (30%) design of the Connector (the new roadway from Pyramid Highway to US 395), identified as Phase 3 in the draft phasing plan of the FEIS. A packaging plan and phasing evaluation will be conducted for the overall Pyramid Highway/US 395 Connector project to better address potential funding availability for construction implementation. Traffic modeling and analysis will be utilized in a scenario approach to support the packaging and phasing effort alongside public involvement and a National Environmental Policy Act (NEPA) compatibility review.	

Sparks Boulevard Capacity Improvement	
Garrett Rodgers, Project Manager	https://rtcwashoe.com/projects/sparks-boulevard-capacity-improvement-greg-street-to-baring-boulevard/
Status: Bids opened June 2025. Project team is reviewing bid packages and working through project award process. Construction is anticipated to begin in August. More information is available at SparksBlvdProject.com.	

Vista Boulevard/Disc Drive Intersection Improvement	
Alex Wolfson, Project Manager	https://rtcwashoe.com/projects/vista-boulevard-disc-drive-intersection-improvements/
Status: Work is substantially complete at the Nichols Dr and Mira Loma / Veterans locations. Major work at the Vista and Disc intersection is expected to start in late July.	

Corridor Improvement Projects

Arlington Avenue Bridges NEPA/Design/EDC	
Bryan Byrne, Project Manager	https://rtcwashoe.com/construction-projects/arlington-avenue-bridges-project/
Status: Project is under construction. Please visit: ArlingtonBridges.com for up-to-date information and traffic detours.	

Butch Cassidy Drive Extension	
Kimberly Diegle, Project Manager	https://rtcwashoe.com/projects/butch-cassidy-drive-extension/
Status: Final design is underway for the project.	

Keystone Ave Bridge Replacement	
Jeffrey Wilbrecht, Project Manager	https://rtcwashoe.com/projects/keystone-avenue-bridge-replacement/
Status: The project team is working towards 30% (preliminary) design of the project. Continued work with United States Army Corp of Engineers is underway to coordinate necessary geotechnical exploration.	

Lemmon Drive Traffic Improvements and Resiliency	
Bryan Byrne, Project Manager	https://rtcwashoe.com/projects/lemmon-drive-traffic-improvements-and-resiliency/
Status: The project is actively advancing in completing the necessary NEPA studies. The project team is working to address public input into the design. Team is progressing into the 60% design phase of the project. More information can be found on the projects website at https://northvalleysimprovements.com/	

McCarran Boulevard Safety and Operational Improvements	
Jessica Dover, Project Manager	https://rtcwashoe.com/projects/mccarran-boulevard-safety-and-operational-improvements/
Status: Preliminary 30% design for (2) segments anticipated Fall 2025	

Sierra Street Bridge Replacement	
Bryan Byrne, Project Manager	https://rtcwashoe.com/projects/sierra-street-bridge-replacement/
Status: The design team is working on the 60% design, expected submittal is May 2025. The project is also transitioning to a CMAR (Construction Manager at Risk) delivery method, which will engage a contractor during the design phase to enhance collaboration. Public Information Meeting will be held on June 26, 2025, from 4-7 pm, at the McKinley Arts and Culture Center. Please join us for a project update and to ask any questions. For more details, visit the project website at [www.sierrastreetbridge.com].	

Sun Valley Boulevard Corridor Improvements - Phase 2	
Jessica Dover, Project Manager	https://rtc2023.wpengine.com/construction-projects/sun-valley-boulevard-corridor-improvements-phase-2/
Status: NCE is continuing design and Environmental efforts; 60% design anticipated Winter 2025	

West Fourth Street Downtown	
Scott Gibson, Project Manager	https://rtcwashoe.com/projects/west-fourth-street-downtown/
Status: The project has been awarded to Q&D construction with work expected to start mid-July.	

West Fourth Street Safety	
Scott Gibson, Project Manager	https://rtcwashoe.com/projects/west-fourth-street-safety/
Status: 100% design plans have been submitted to the city of Reno. NDOT has completed and approved the environmental review. ROW activities are underway. The project is expected to go to construction in spring 2026.	

Pavement Preservation Projects

2025 Bridge Maintenance	
Scott Gibson, Project Manager	https://rtcwashoe.com/projects/2025-bridge-maintenance/
Status: The project is underway starting with the Ralston Street Bridge (June 24) followed by Evans and Valley. The Kuenzli Street bridge is scheduled for later in the Fall.	

Arrowcreek/Wedge Rehabilitation	
Jessica Dover, Project Manager	https://rtcwashoe.com/projects/arrowcreek-parkway-wedge-rehabilitation/
Status: Construction has begun and will continue through the fall.	

La Posada Corrective	
Bryan Byrne, Project Manager	https://rtcwashoe.com/projects/la-posada-corrective-project/
Status: The project is at 50% design and is working to incorporate comments and progress to 90% design. The 90% design is expected to be completed in August 2025.	

Meadowood Rehab	
Garrett Rodgers, Project Manager	https://rtcwashoe.com/projects/meadowood-rehab/
Status: Construction Started May 12. Project completion is anticipated in Summer 2025.	

Prater Way Rehabilitation	
Kimberly Diegle, Project Manager	https://rtcwashoe.com/projects/prater-way-rehabilitation/
Status: Analysis of corridor configuration alternatives is being finalized.	

Traffic Engineering/ITS

Veterans Parkway ITS	
Austin McCoy	https://rtcwashoe.com/projects/veterans-parkway-its/
Construction is nearing completion. There will be minimal public traffic impacts while the contractor finishes final punch list items. Thank you for your patience during this project.	

Veterans Roundabout Modifications	
Jessica Dover	https://rtcwashoe.com/projects/veterans-roundabout-modifications/
Construction started on July 7th. Construction will continue through the end of the year.	

Traffic Signal Timing 7	
Alex Wolfson	https://rtcwashoe.com/projects/traffic-signal-timing-7-project/
The project team is currently looking at new signal timing for the following corridors: - Pyramid Way: Eagle Canyon to Interstate 80 - N McCarran Blvd: Pyramid to Kings Row - S McCarran Blvd: Greensboro to Neil Rd	

E. Lincoln Way Roundabout	
Ashley Hurlbut	https://rtcwashoe.com/projects/legends-roundabouts/
Project has been officially awarded to Sierra Nevada Construction, Inc. Team is coordinating pre-construction phase and looking to begin construction in the Summer of 2025.	

Traffic Signal Modifications 24-01	
Ashley Hurlbut	https://rtcwashoe.com/construction-projects/traffic-signal-modifications-24-01/
Construction of the project has resumed at North McCarran & West 7th Street. Completion is anticipated for Summer 2025.	

Traffic Signal Modifications (TSM) 25-01	
LaShonn Ford	https://rtcwashoe.com/projects/traffic-signal-modifications-25-01/
Design is complete. The project has been advertised to contractors. Construction anticipated to begin Summer 2025.	

Sparks Intelligent Corridors	
Alex Wolfson	https://rtcwashoe.com/projects/sparks-intelligent-corridor/
The RTC is testing out technology to disseminate connected vehicle data (travel time, delays, etc.) to motorists via a smart phone app. This information can be travel times, road conditions, and incidents, and can also be used to adjust traffic signal operations in real-time. Interested parties can learn more about this app and project at this link - www.rtcwashoe.com/construction-projects/traction_connect/ The RTC is hoping to gather public feedback on the kinds of services that are useful in order to inform operational decision making moving forward.	

Vista Boulevard/Prater Way ITS	
Garrett Rodgers	https://rtcwashoe.com/projects/vista-boulevard-prater-way-its/
Construction started in May 2025 and will continue through August 2025.	

Sparks/Ion Traffic Signal	
LaShonn Ford	https://rtcwashoe.com/projects/sparks-boulevard-ion-drive-traffic-signal/
The project has reached 60% design.	

Traffic Signal Fiber 25-01	
Austin McCoy	https://rtcwashoe.com/projects/traffic-signal-fiber-25-01/
The project was awarded to Fibertel. Project construction has begun and is anticipated to be complete in Fall 2025.	

Other Projects

Virginia Line BRT Improvements	
Kimberly Diegle, Project Manager	https://rtcwashoe.com/projects/virginia-line-brt-improvements/
Status: Final design and right of way process is underway for this project. NV Energy is proceeding with an overhead to underground utility relocation project, anticipated to start in Summer 2025.	

REPORT ON NEGOTIATED SETTLEMENT AGREEMENTS FOR THE ACQUISITION OF PROPERTY

Project	Property Owner	Purchase Amount	Amount Over Appraisal
Legends Roundabout	Target Corporation	$14,100.00	$0
Traffic Signal Modifications 25-01	The Sedona Village Community Association	$2,100.00	$0
Traffic Signal Modifications 25-01	Whale Rock LLC	$1,000.00	$0
Virginia Line Bus Rapid Transit	Peppermill Casinos, Inc.	$291,071.00	$0
Virginia Line Bus Rapid Transit	Shulmans Holding LLC	$4,560.80	$0
West Fourth Street Safety	4th Street Fund LLC	$20,000.00	$0
West Fourth Street Safety	Battle Born Properties LLC	$5,513.00	$0
West Fourth Street Safety	Bladow Properties LLC	$12,000.00	$0
West Fourth Street Safety	Cherry Creek Ventures, LLC	$11,000.00	$0
West Fourth Street Safety	Harker & Harker LLC	$2,000.00	$0
West Fourth Street Safety	NWB Silver State LLC	$11,909.00	$0
West Fourth Street Safety	Prime Holding Group LLC	$17,144.00	$0
West Fourth Street Safety	Reno Real Estate Development LLC	$13,280.00	$0

CONTRACTS UP TO $100,000

Project	Vendor	Scope	Amount
n/a			

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.2.4**

To: Regional Transportation Commission

From: James Gee, Director of Public Transportation and Operations

SUBJECT: Public Transportation and Operations Activity Report

RECOMMENDED ACTION

Acknowledge receipt of the monthly Public Transportation and Operations report for June.

BACKGROUND AND DISCUSSION

See attachment for Background and Discussion.

FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

BACKGROUND AND DISCUSSION **ATTACHMENT A**

Highlights -

Token Transit Mobile Validators Launched – On July 6, RTC launched the use of Token Transit mobile validators to provide more ways to pay on the bus. These validators are sleek, contactless devices installed on buses that allows riders to pay with their phone instantly.





RTC Provides Free Bus Rides to Star Spangled Sparks on Fourth of July - Free transit service was offered to the community on RTC's RAPID Lincoln Line (4 p.m. to 8 p.m.) and Route 11 (4 p.m. to midnight) to attend Star Spangled Sparks on Friday, July 4, 2025. These RTC transit routes dropped off event goers at RTC CENTENNIAL PLAZA in Victorian Square near The Nugget Casino Resort. RTC also provided free rides to and from The Nugget Casino Resort on RTC ACCESS. The free service was provided to encourage more people to take transit given limited parking availability in and around the area.

RTC RIDE Key Highlights – June



- Driver of the month: Malik Mettef (May Accomplishment)
- Bus Request: Kids Ride free media event.
- Magic Treehouse Pre- School site tour
- Employee Engagement Events:
  - Father's Day Mini Flashlight Giveaway
  - Soft Swirl Vendor for Keolis Way Week



- Juneteenth, Saturday -level Service
- 99% service hours and trips delivered

Keolis represented staffing headcount as of June 27, 2025:

Position	Total Employed	#Needed
Coach Operator Trainees	17	0
Coach Operators	164	10
Dispatchers	6	0
Road Supervisors	4	0
Mechanic A	5	0
Mechanic B	4	0
Mechanic C	3	1
Facilities Technician	2	0
EV Technician	1	0
Utility Worker	11	0
Electronics Tech	2	0
Body Technician	1	0

RTC ACCESS Key Highlights – June

Classes: No classes held in June. Next scheduled class July 7.

Safety:

- **Accidents:**
  - 2 Preventable
  - 1 Non-preventable
- **Incidents**
  - 1
- **Injuries:**
  - 1
- **YTD Preventable Accident Count: 7**
- **YTD Injury Count:** 2

June Safety Blitzes – continued May's

- Pedestrians and Bikes
- Motorbikes
- Impaired Drivers
- Pedestrians at Intersections

May Safety Meeting

- Bloodborne Pathogens

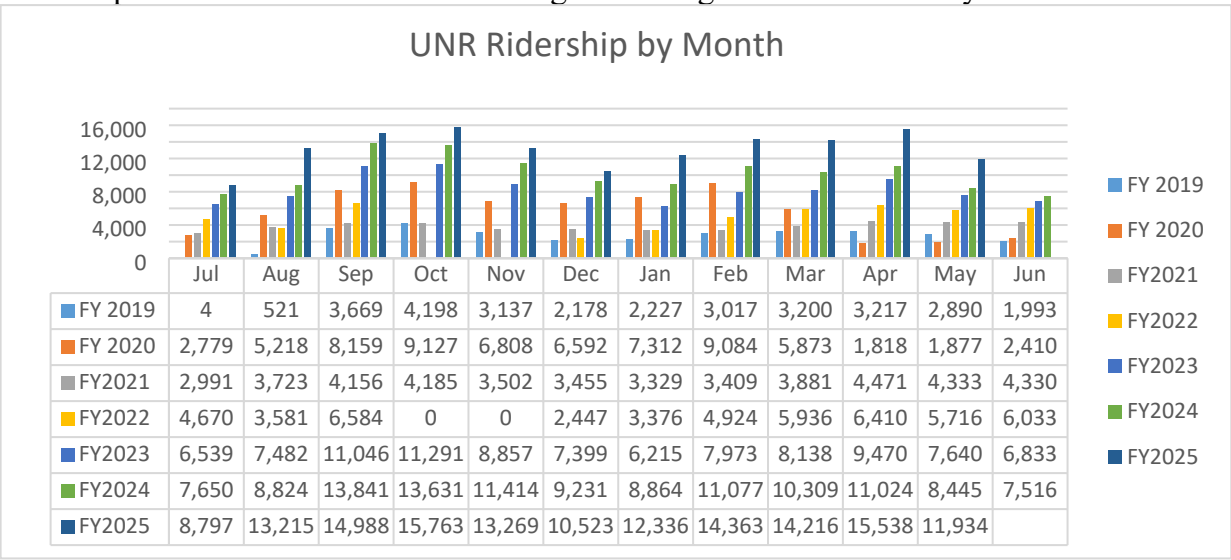
MTM represented staffing headcount as of June 27, 2025:

Position	Total Employed	#Needed
Drivers	61FT – 0PT	11FT – 0 PT
Dispatchers	4 FT	0
Reservationists	4. FTE's	0.5
Mechanic A	3 FT	0
Utility Worker	1	1
Facility/Maintenance Technician	1	1

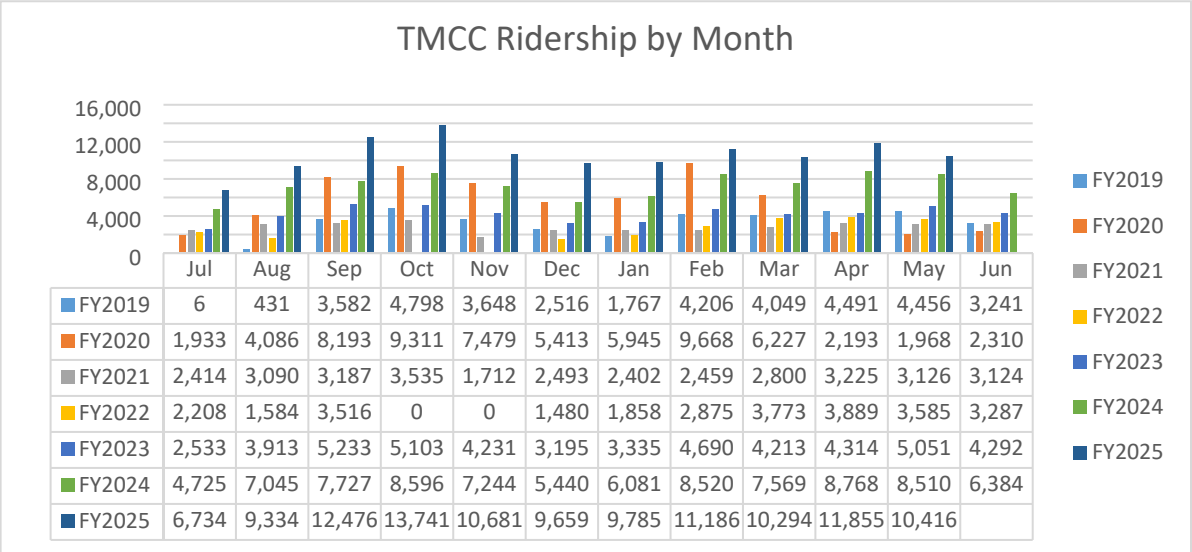
TRANSIT DEMAND MANAGEMENT (TDM) Update

- Vanpools remained at 331. Staff continues to work with a group in Tahoe to increase the number of vans going to the Lake.
- Staff are also working with Commute with Enterprise on their new FlexVan program. This will enable individuals to purchase single seats on the vanpool.
- Staff meets weekly with RTC's marketing consultant, Celtis to discuss deliverables. Celtis is working on User Generated Content (UGC) for our vanpool program.
- Working with NDOT for next year's grant.

Ridership numbers from the ED Pass Program through the month of May 2025:



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 2019	4	521	3,669	4,198	3,137	2,178	2,227	3,017	3,200	3,217	2,890	1,993
FY 2020	2,779	5,218	8,159	9,127	6,808	6,592	7,312	9,084	5,873	1,818	1,877	2,410
FY2021	2,991	3,723	4,156	4,185	3,502	3,455	3,329	3,409	3,881	4,471	4,333	4,330
FY2022	4,670	3,581	6,584	0	0	2,447	3,376	4,924	5,936	6,410	5,716	6,033
FY2023	6,539	7,482	11,046	11,291	8,857	7,399	6,215	7,973	8,138	9,470	7,640	6,833
FY2024	7,650	8,824	13,841	13,631	11,414	9,231	8,864	11,077	10,309	11,024	8,445	7,516
FY2025	8,797	13,215	14,988	15,763	13,269	10,523	12,336	14,363	14,216	15,538	11,934	



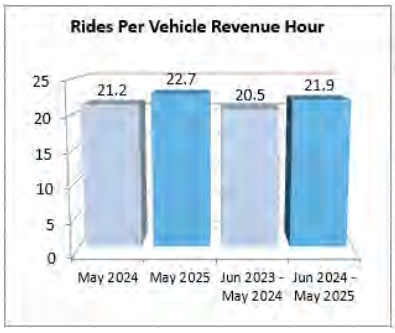
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY2019	6	431	3,582	4,798	3,648	2,516	1,767	4,206	4,049	4,491	4,456	3,241
FY2020	1,933	4,086	8,193	9,311	7,479	5,413	5,945	9,668	6,227	2,193	1,968	2,310
FY2021	2,414	3,090	3,187	3,535	1,712	2,493	2,402	2,459	2,800	3,225	3,126	3,124
FY2022	2,208	1,584	3,516	0	0	1,480	1,858	2,875	3,773	3,889	3,585	3,287
FY2023	2,533	3,913	5,233	5,103	4,231	3,195	3,335	4,690	4,213	4,314	5,051	4,292
FY2024	4,725	7,045	7,727	8,596	7,244	5,440	6,081	8,520	7,569	8,768	8,510	6,384
FY2025	6,734	9,334	12,476	13,741	10,681	9,659	9,785	11,186	10,294	11,855	10,416	

Once again, we hit all-time highs for the month of May with over 22,350 trips!

MAY 2025 TRANSIT PERFORMANCE

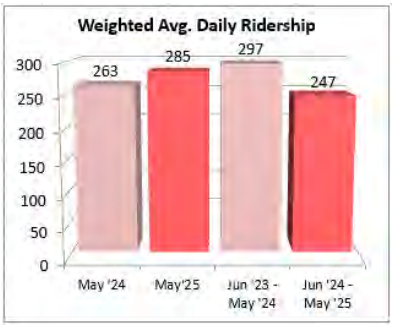
RTC RIDE

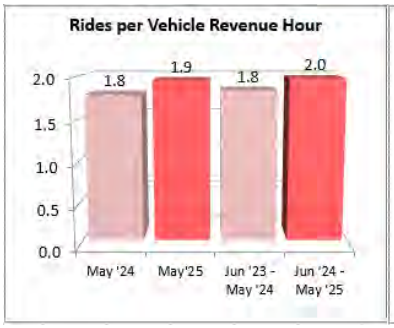


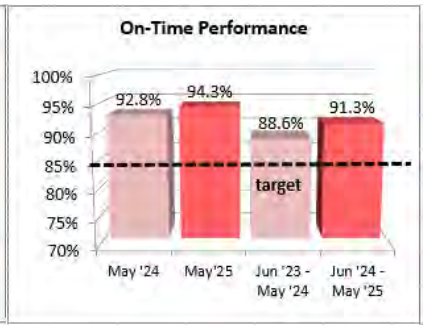




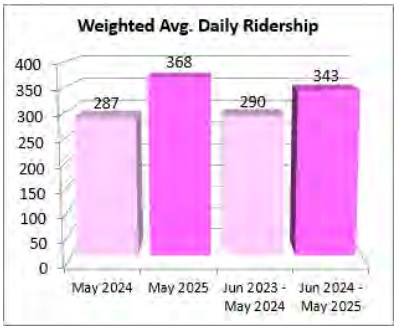
RTC ACCESS

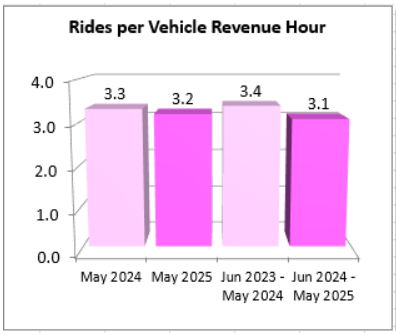


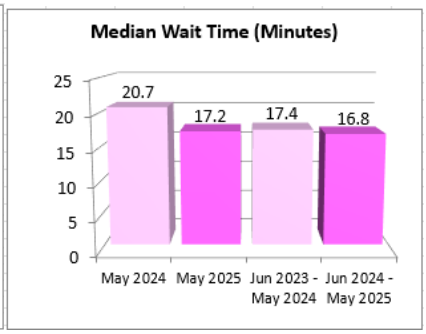




RTC FlexRIDE





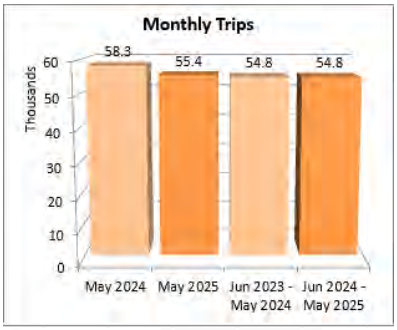


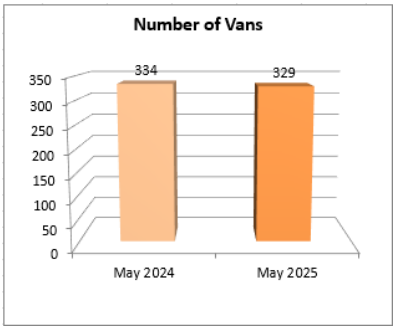
TART





RTC VANPOOL





REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.2.5**

To: Regional Transportation Commission

From: Josh MacEachern, Public Information Officer

SUBJECT: Community Outreach and Media Activity Report

RECOMMENDED ACTION

Acknowledge receipt of the monthly Community Outreach and Media Activity Report.

BACKGROUND AND DISCUSSION

See attached for Background and Discussion.

FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

RTC Communications & Outreach Report

June 2025



www.rtcwashoe.com

Outreach Activities

Josh MacEachern, Project Manager

June Overview:

In June 2025, the Regional Transportation Commission (RTC) of Washoe County continued our commitment to enhancing community engagement and advancing transportation initiatives across the region, with focus on:

- RTC Youth-Pass Press Conference 6/3.
- Sixth Street for All Public Meeting 6/10.
- Continued updates on the Arlington Bridges and Mill Street projects.
- Updates on the TOPS marketing plan.
- Planning of the Sparks Boulevard Public Meeting and Fourth Street Corridor Projects Public Meeting
- Planning of the Veterans RAB Media Opportunity and Keystone/McCarran Flip the Switch Media Opportunity.
- Sierra Street Bridge Project's second Public Meeting.

In addition, RTC saw growth across all social media channels.

June Highlights:

- **82 TV Spots (see addendum)**
- **587,444 Estimated Audience**
- **$37,058 Local Ad Value**
- **Arlington Bridges Demo and River Diversion**
- **Sierra Street Bridge Public Meeting #2**
- **Sixth Street for All Public Meeting**
- **Ralston Bridge Resurfacing**

Outreach Activities

Josh MacEachern, Project Manager

Press Releases:

- **6.2.25 – RTC and WCSD Announce Free Rides for WCSD Students Year Round**
- **6.4.25 – First Street & Arlington Avenue Intersection to Close Temporarily**
- **6.23.25 – Ralston Street Bridge Closed for Resurfacing**
- **6.25.25 – Learn More About RTC's Sierra Street Bridge Replacement Project.**

Highlights:







> Outreach Activities

Josh MacEachern, Project Manager

Public Outreach:

- **6.2.25 – Councilmember Anderson Ward 6 Community Forum (Paul)**
- **6.3.25 – RTC Youth-Pass Press Conference (Josh/Paul/Bill/Nichole)**
- **6.10.25 – Sixth Street for All Public Meeting (Josh/Alex/Paul/Dale)**
- **6.11.25 – Central Sparks Neighborhood Network Plan Steering Committee (Marquis/Josh/Graham)**
- **6.12.25 – RTC / UNR Office of Student Engagement Meeting (Josh/Paul/Jim)**
- **6.17.25 – Arlington Bridges Site Walk**
- **6.24.25 – Northern Nevada TIM Coalition Meeting (LaShonn)**
- **6.30.25 – Vice Mayor Taylor Ward 1 Community Forum (Paul)**

> Social Media

Josh MacEachern, Project Manager

Facebook

- Reach: 65,899
- Content Interactions: 714
- Link Clicks: 2,481
- Visits: 2,530
- New Follows: 63
- Followers: 4,9k

Instagram

- Reach: 16,520
- Content Interactions: 477
- Followers: 2.3k

X

- Impressions: 1,8k
- Engagements: 165
- Likes: 7
- Followers: 2.2k

YouTube

- Views: 1.9k
- Watch time (hours): 57.5
- Subscribers: 478

Email Marketing

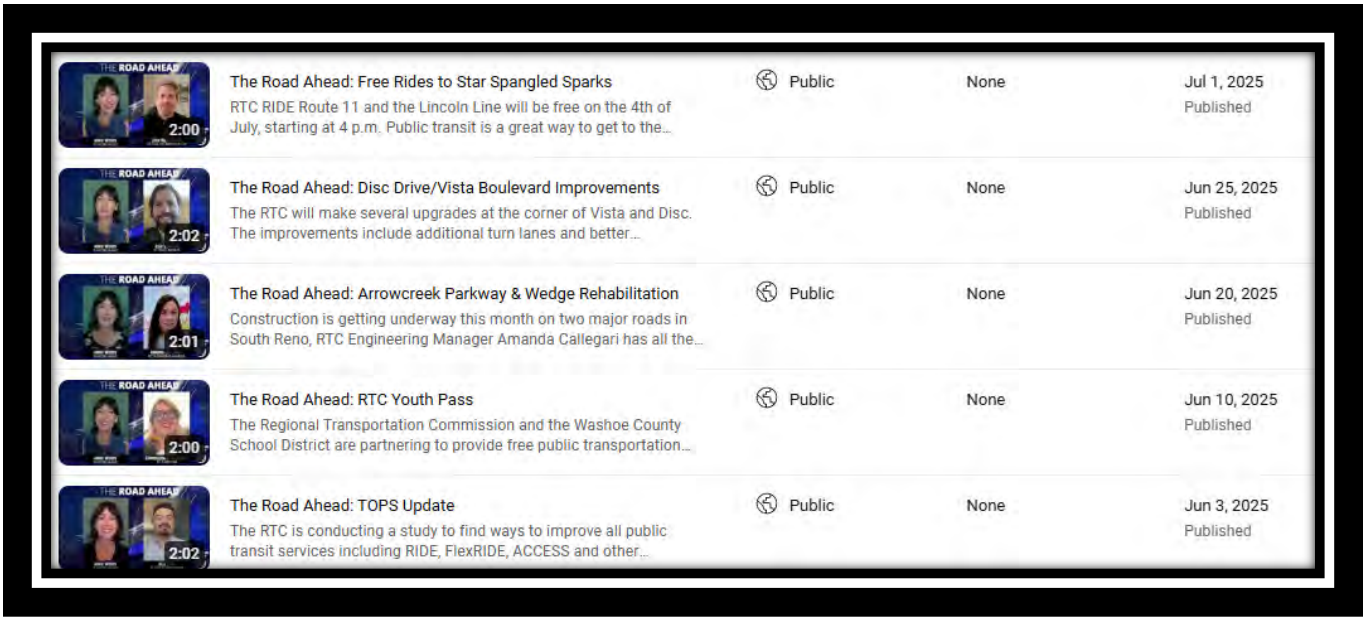
- Subscribers: 1.4k

> Video Production

Paul Nelson, Project Manager

The Road Ahead:

- **6.3.25 – TOPS Update**
- **6.10.25 – RTC Youth Pass**
- **6.20.25 – Arrowcreek Parkway and Wedge Rehabilitation**
- **6.25.25 – Disc Drive/Vista Boulevard Improvements**



REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.2.6**

To: Regional Transportation Commission

From: Xuan Wang, PHD, PE, PTP, RSP2, Transportation Planning Manager

SUBJECT: Advisory Committee Report

RECOMMENDED ACTION

Acknowledge receipt of the Summary Report for the Technical, Citizens Multimodal, and Regional Road Impact Fee Advisory Committees.

BACKGROUND AND DISCUSSION

The RTC has three advisory committees that provide input on a wide range of policy and planning issues as well as key planning documents and the RTC Budget. The committees include:

- The Citizens Multimodal Advisory Committee (CMAC), which includes members from the community. The RTC Board approves appointments to this advisory committee.
- The Technical Advisory Committee (TAC), which includes local public works directors, community development directors, and staff from other key agencies.
- The Regional Road Impact Fee Technical Advisory Committee (RRIF TAC), which was created to oversee and advise the local governments regarding land use classification assumptions and the Capital Improvements Plan (CIP) used in the impact fee program. The RRIF TAC consists of three representatives from each local entity, two RTC representatives, and four private sector members who are appointed by the RTC Board.

The CMAC met on 7/9/2025 and were presented with two primary items: the Draft FFY 2025-2029 Regional Transportation Improvement Program (RTIP) and the Draft Central Reno/Midtown Neighborhood Network Plan (NNP). Members asked how to plan ahead for the proper route to take while bicycling during construction of the various RTIP projects and about implications of the removal of the Rosewood Trailhead project. Members also inquired about how to provide public comment on the Central Reno/Midtown NNP and the order in which future NNPs are to be completed. More information can be found in the meeting minutes.

The TAC met on 7/10/2025 and received presentations on the Draft FFY 2025–2029 Regional Transportation Improvement Program (RTIP) and the Draft Central Reno/Midtown Neighborhood Network Plan (NNP). Members provided comments for clarification on the recommended improvements versus actual implementation and raised concerns regarding the maintenance of physical barriers in the Central Reno/Midtown NNP. Questions were also asked about how to provide comments on the RTIP process and the fiscal impact of the proposed I-80 East widening project. Staff clarified that the NDOT Statewide Transportation Improvement Program (STIP) is currently under development and will have detailed information on statewide projects.

No meeting of the RRIF TAC was held this month.

FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.3.1**

To: Regional Transportation Commission

From: LaShonn Ford, Project Manager

SUBJECT: Biggest Little Bike Network Project NDOT LPA Agreement

RECOMMENDED ACTION

Approve a Local Public Agency Agreement with Nevada Department of Transportation for the use and reimbursement of federal funds on the Biggest Little Bike Network Project. (For Possible Action)

BACKGROUND AND DISCUSSION

The Biggest Little Bike Network Project aims to improve bicycle facilities and enhance safety throughout Downtown Reno. The project will reconfigure four roadway corridors—Vine Street, 5th Street, Virginia Street, and Evans Street/Lake Street/Sinclair Street—to incorporate upgraded bike lane infrastructure.

Approval and execution of this Local Public Agency (LPA) Agreement will authorize the expenditure of federal funds. NDOT will support the RTC in implementing the project by overseeing the federal process and reimbursing RTC in accordance with the terms outlined in the agreement.

The RTC will utilize $21,042,500 in Congestion Mitigation and Air Quality (CMAQ) federal funds for construction. RTC is responsible for providing a 5% local match, $1,107,500, and for covering 100% of any costs that exceed the obligated federal funding. These amounts are based on a total estimated construction cost of $22,150,000.

Additionally, this agreement provides that NDOT will assist RTC with the completion of National Environmental Policy Act (NEPA) documentation and the acquisition of all necessary environmental permits and clearances, in compliance with applicable federal and state regulations.

Construction is anticipated to begin in Spring 2026.

FISCAL IMPACT

Funding is included in the FY 2026 budget for this project. The project is funded using Federal and Local Fuel Tax funds. Approval of the LPA Agreement would obligate $21,042,500 in CMAQ federal funds with a five percent (5%) local match, which amounts to $1,107,500. Additional Local Fuel Tax funds will fund the remainder of the anticipated construction costs.

PREVIOUS BOARD ACTION

2/16/2024 - Authorized the Professional Services Agreement (PSA) with Nichols Consulting Engineers, CHTD (NCE) for design services related to the Downtown Reno Micromobility Project, in an amount not-to-exceed $2,498,920.

Highway Agreement _____

COOPERATIVE (LOCAL PUBLIC AGENCY) AGREEMENT
BIGGEST LITTLE BIKE NETWORK

This Agreement is made and entered on , by and between the STATE OF NEVADA, acting by and through its Department of Transportation (hereinafter "DEPARTMENT") and Regional Transportation Commission of Washoe County, 1105 Terminal Way, Suite 108, Reno, NV 89502 (hereinafter "RTC").

WITNESSETH:

WHEREAS, agreements between the DEPARTMENT and local public agencies are authorized under Nevada Revised Statutes (NRS) Chapters 277 and 408; and

WHEREAS, the DEPARTMENT and the Nevada Division of the Federal Highway Administration (FHWA) have entered into a Stewardship Agreement pursuant to Title 23 United States Code (U.S.C.) § 106; and

WHEREAS, NRS 408.245 authorizes the DEPARTMENT to act as agent and to accept federal funds on behalf of local public agencies; and

WHEREAS, 23 Code of Federal Regulations (CFR) § 635.105(c) provides that when a local public agency project is located on a street or highway over which the DEPARTMENT does not have legal jurisdiction, or when special conditions warrant, the DEPARTMENT, while not relieved of overall project responsibility, may arrange for the local public agency having jurisdiction over such street or highway to perform the work with its own forces or by contract; provided certain conditions are met and the FHWA Division Administrator approves the arrangements in advance; and

WHEREAS, the RTC is willing to agree to design, acquire right-of-way, adjust and/or relocate utility facilities, advertise, award, and manage construction of the Reno Biggest Little Bike Network project as outlined in the Project Scope attached hereto and incorporated herein as Attachment A (hereinafter "PROJECT"); and

WHEREAS, the PROJECT has been approved by the Regional Transportation Commission of Washoe County for Federal Congestion Mitigation and Air Quality (CMAQ) funds; and

WHEREAS, the RTC is a sub-recipient of federal transportation funds, Catalog of Federal Domestic Assistance (CFDA) Number 20.205 and the RTC's Unique Entity Identifier (UEI) V5JZKHRMNK33 will be used for reporting purposes; and

NOW, THEREFORE, in consideration of the premises and mutual covenants hereinafter contained, it is agreed as follows:

ARTICLE I - DEPARTMENT AGREES:

1. To assist the RTC with: (a) completing the National Environmental Policy Act (NEPA) documentation in conformance with 23 CFR Part 771 and (b) obtaining the environmental

DRAFT

permits and clearances.

2. To ensure that the RTC's actions are in accordance with applicable Federal and State regulations and policies.

3. To obligate Federal CMAQ funding for the PROJECT in a maximum amount of Twenty-One Million Forty-Two Thousand Five Hundred and No/100 Dollars ($21,042,500.00).

4. To establish a Project Identification Number to track all PROJECT costs.

5. To ensure that applicable environmental laws and regulations are met on the PROJECT and to certify the PROJECT to FHWA in accordance with Federal requirements.

6. To review and comment on the RTC's design (including plans, specifications, and estimates) within fifteen (15) working days from receipt of submittal of such design and to ensure that DEPARTMENT, American Association of State Highway Transportation Officials (AASHTO) and Manual on Uniform Traffic Control Devices (MUTCD) Guidelines are followed and that the design meets the requirements of the Americans with Disability Act (ADA).

7. To ensure that applicable right-of-way laws and regulations are met on this PROJECT and to document those actions taken in accordance with the DEPARTMENT's administrative requirements.

8. To provide an overall Disadvantaged Business Enterprise (DBE) participation goal and/or training hours for the PROJECT based on the DEPARTMENT's DBE Program, subject to and in accordance with Federal and State law and any other applicable laws, rules, and regulations.

9. To review the DBE information submitted to the RTC by bidders on the PROJECT for compliance with 49 CFR Part 26 and to provide the RTC with the results of such review.

10. To review and approve the RTC's procedures utilized for advertising, bid opening, and award of the PROJECT, so that the DEPARTMENT may satisfy itself that the same are in accordance with applicable Federal requirements.

11. To ensure that all reporting and project documentation, as necessary for financial management and required by applicable Federal requirements, is submitted by the DEPARTMENT to the FHWA.

12. To authorize the RTC to proceed with the advertisement and award of the contract and construction of the PROJECT, once the final design (including plans, specifications, and estimates) and bid documents have been reviewed and approved by the DEPARTMENT, all certifications have been completed, and the funding authorized by FHWA.

13. The DEPARTMENT shall issue such authorization through a written "Notice to Proceed". The "Notice to Proceed" will include the Federal Award Identification Number (FAIN) and the modified "project end date" mutually established by both parties in conformance with the requirements of 2 CFR Part 200.

14. To assign a Local Public Agency Coordinator and a resident engineer to act as the

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DEPARTMENT's representatives to monitor the RTC's compliance with applicable Federal and State requirements.

15. To review, and approve when acceptable to the DEPARTMENT, addenda, supplementals, and change orders to the construction contract of the PROJECT to ensure compliance with the terms of this Agreement within five (5) working days. Failure to respond within five (5) working days shall constitute approval. Approval of such addenda, supplementals, and change orders does not alter the maximum reimbursement to the RTC as established in ARTICLE I, Paragraph 3, minus any DEPARTMENT eligible PROJECT costs. The estimated DEPARTMENT PROJECT costs are shown in Article III, Paragraph 5.

16. To review the RTC's as-built plans and to attend the RTC final inspection of the PROJECT.

17. To reimburse the RTC upon receipt of an invoice for ninety-five percent (95%) of eligible PROJECT costs, based on supporting documentation, minus any DEPARTMENT eligible PROJECT costs. Total reimbursement shall not exceed the total obligated amount, as established in ARTICLE I, Paragraph 3, minus any DEPARTMENT eligible PROJECT costs. The estimated DEPARTMENT eligible PROJECT costs are shown in Article III, Paragraph 5. Eligible PROJECT costs are those costs as defined in 2 CFR Part 200, and the State Administrative Manual (SAM), incorporated herein by reference. The SAM may be obtained from http://budget.nv.gov/uploadedFiles/budgetnvgov/content/Governance/SAM.pdf.

ARTICLE II - RTC AGREES:

1. To perform or have performed by consultant forces: (a) the design of the PROJECT (including the development of plans, specifications, and estimates); (b) the completion of the NEPA documentation in conformance with 23 CFR Part 771; (c) the acquisition of environmental permits and clearances; (d) coordinate utility relocations; and (e) the advertisement, award, and construction management of the PROJECT, as outlined in Attachment A, in accordance with Federal, State, and local laws, regulations, ordinances, and policies, including, but not limited to, those listed in the FHWA "Contract Administration Core Curriculum Participant's Manual and Reference Guide" at http://www.fhwa.dot.gov/programadmin/contracts/coretoc.cfm, incorporated herein by reference. The PROJECT shall be designed and constructed in accordance with RTC standards. The PROJECT shall be operated and maintained in accordance with applicable Federal, State, and local laws, regulations, ordinances, and policies.

2. To enter into an agreement with the City of Reno to: (a) require those utility companies having franchise agreements with the City of Reno when permitted under the terms of the franchise agreement, to relocate their facilities, if necessary, or otherwise accommodate the new improvements at no cost to the PROJECT or RTC; (b) accept the right-of-way acquired by the RTC for the PROJECT; and (c) to accept maintenance responsibilities, including utility costs, for the improvements constructed as part of the PROJECT, upon completion and the DEPARTMENT's final written acceptance of the PROJECT.

3. To coordinate and provide a liaison for the relocation or adjustment of utilities in accordance with applicable State and Federal regulations, including, but not limited to, NAC Chapter 408 and 23 CFR Part 645.

4. To ensure that any utility relocations are performed in compliance with ADA requirements.

5. To invite the DEPARTMENT to PROJECT meetings, including, but not limited to, field reviews, right-of-way settings, review meetings, and the pre-construction conference.

6. To provide all preliminary engineering, NEPA, right-of-way services, and right-of-way acquisition at no cost to the PROJECT.

7. To submit to the DEPARTMENT for review and approval preliminary plans at sixty percent (60%), ninety percent (90%), and one hundred percent (100%) design phases. The ninety percent (90%) and one hundred percent (100%) submittals shall include the PROJECT specifications, cost estimate, and bid documents, which must include the provisions listed in Attachment B "Required Documents in Bid Packets of Projects," attached hereto and incorporated herein.

8. To provide the DEPARTMENT a written certification, accompanied by supporting documentation, evidencing that: (a) the proposed improvements will be constructed on property owned or authorized to be used by the RTC; (b) any right-of-way acquired for the PROJECT has been obtained in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended; and (c) any utility relocations and /or adjustments were completed in accordance with federal and state regulations. The RTC shall submit the certification to the DEPARTMENT concurrent with its provision of the ninety percent (90%) submittal.

9. To proceed with the PROJECT advertisement only after receiving a written “Notice to Proceed” from the DEPARTMENT.

10. To submit to the DEPARTMENT three (3) final sets of plans, specifications, estimates, and bid documents for the DEPARTMENT’s use.

11. To perform the construction administration of the construction contract by providing appropriate personnel to: (a) observe, review, inspect, and perform materials testing; (b) be in responsible charge of the construction; (c) be capable of answering any question that may arise in relation to the contract plan and specifications during construction; (d) be responsible for ensuring that all applicable NEPA environmental permits and clearances requirements for monitoring and mitigation during construction of the PROJECT are being met; (e) be responsible for monitoring compliance with legal, contractual, and regulatory requirements, including reporting requirements; and (f) to report to the DEPARTMENT’s Resident Engineer on administration of the contract, compliance with Federal requirements, and the contractor’s acceptable fulfillment of the contract.

12. To submit to the DEPARTMENT for review and approval any addenda, supplementals, and change orders and to obtain written DEPARTMENT approval for any addenda, supplementals, and change orders prior to incorporating them into the PROJECT.

13. To allow the DEPARTMENT and its designated representatives to monitor all work associated with the PROJECT during construction.

14. To incorporate all required DBE goals and/or training hours into the contract for

the PROJECT as well as all applicable Federal and State required provisions and terms regarding the DBE goals and/or training hours.

15. To submit to the DEPARTMENT the DBE information submitted by bidders on the PROJECT demonstrating their compliance with 49 CFR Part 26, along with any supporting documentation required to clarify the DBE information, for review and conformation by the DEPARTMENT prior to making a determination of the lowest responsive and responsible bidder.

16. To monitor the consultant and/or contractor on the PROJECT to ensure that DBE goals and/or training hours are being met in accordance with all applicable Federal and State laws, including, but not limited to, 49 CFR Part 26, and to make available to the DEPARTMENT all necessary documents to support compliance with the DBE and/or training standards.

17. To perform PROJECT documentation and quality control during contract administration according to the RTC's established procedures, as approved by the DEPARTMENT. If the RTC does not have DEPARTMENT-approved procedures, it must then follow the procedures contained in the DEPARTMENT's "Documentation Manual" and "Construction Manual," incorporated herein by reference. The manuals may be obtained from the DEPARTMENT's Administrative Services Division.

18. To monitor compliance with subcontracting, prompt payments, and DBE requirements using B2GNow for tracking and reporting purposes and require contractors and subcontractors to use and submit documentation through B2GNow.

19. To provide to the DEPARTMENT all reporting and project documentation, as necessary for financial management, required by applicable Federal requirements, and any future Federal reporting requirements, and to comply with the Federal Funding Accountability and Transparency Act and implementing regulations at 2 CFR Part 170, including Appendix A available at http://edocket.access.gpo.gov/2010/pdf/2010-22705.pdf.

20. As work progresses on the PROJECT, the RTC shall provide the DEPARTMENT with monthly invoices for payment of the PROJECT costs. The final invoice must be submitted within ninety (90) calendar days of the acceptance of the PROJECT by the DEPARTMENT. The invoice shall be based upon and accompanied by auditable supporting documentation. Total reimbursement shall not exceed the total obligated amount, as established in Article I, Paragraph 3, less any DEPARTMENT eligible PROJECT costs. The estimated DEPARTMENT PROJECT costs are shown in Article III, Paragraph 5. Invoices for the preliminary engineering and right-of-way phases shall be forwarded to the DEPARTMENT's Local Public Agency Coordinator for payment processing. Invoices for the construction phase, including the final invoice, shall be forwarded to the DEPARTMENT's Resident Engineer for review. The DEPARTMENT's Resident Engineer shall forward the invoice to the DEPARTMENT's Local Public Agency Coordinator for payment processing. Eligible PROJECT costs are those costs as defined in 2 CFR Part 200, and the SAM.

21. To be responsible for the five percent (5%) match of Federal funds in an amount not to exceed One Million One Hundred Seven Thousand Five Hundred and No/100 Dollars ($1,107,500.00) and for one hundred percent (100%) of all costs exceeding the obligated Federal funds subject to the RTC's budgeted appropriations and the allocation of sufficient funds by the governing body of the RTC. The RTC agrees the DEPARTMENT and the State of Nevada are not responsible for any costs exceeding the obligated Federal funds.

22. To complete and sign Attachment C – "Affidavit Required Under 23 U.S.C. Section 112(C) And 2 CFR Parts 180 and 1200 - SUSPENSION OR DEBARMENT" and Attachment D – "Certification Required by Section 1352 of Title 31, United States Code, Restrictions of Lobbying Using Appropriated Federal Funds," "Instructions for Completion of SF-LLL, Disclosure of Lobbying Activities," and "Disclosure of Lobbying Activities" attached hereto and incorporated herein.

ARTICLE III - IT IS MUTUALLY AGREED:

1. The term of this Agreement shall be from the date first written above through and including June 30, 2031, or until the construction of all improvements contemplated herein has been completed and accepted by the DEPARTMENT, whichever occurs first, save and except the responsibility for maintenance as specified herein.

2. Costs associated with this Agreement will be administered in accordance with the cost principles contained in 2 CFR Part 200. Indirect costs are eligible for reimbursement. The RTC's indirect rate shall be approved by its cognizant federal agency and that approval provided to the DEPARTMENT. Fringe benefit rates must be approved by the DEPARTMENT on an annual basis to be eligible for reimbursement.

3. The description of the PROJECT may be changed in accordance with Federal requirements and by mutual written consent of the parties.

4. Each party agrees to complete a joint final inspection prior to final acceptance of the work by the DEPARTMENT.

5. The following is a summary of the estimated PROJECT costs and available funds:

Total Estimated PROJECT Costs:

DEPARTMENT Construction Engineering Costs:	$ 100,000.00
RTC Construction Engineering Costs:	$ 2,050,000.00
Construction Costs:	$ 20,000,000.00
Total Estimated PROJECT Costs:	$ 22,150,000.00

Available Funding Sources:

Federal CMAQ Funds:	$ 21,042,500.00
RTC Match Funds:	$ 1,107,500.00
Total PROJECT Funding:	$ 22,150,000.00

6. The RTC may not incur any reimbursable PROJECT costs until this Agreement is executed by both parties, and the DEPARTMENT has issued a written "Notice to Proceed." The "Notice to Proceed" includes the "project end date," which establishes the limit of federal participation for a project or phase of work associated with a project. The "project end date" is

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mutually established by both parties in conformance with the requirements of 2 CFR Part 200. The RTC is responsible for any costs incurred on the PROJECT after the "project end date." The RTC agrees the DEPARTMENT and the State of Nevada are not responsible for any costs incurred after the "project end date."

7. The total PROJECT costs shall be determined by adding the total costs incurred by the DEPARTMENT and the RTC for construction engineering and construction costs. The RTC match will be calculated using the applicable percentage of the total PROJECT costs eligible for Federal funding. Subject to budgeted appropriations and the allocation of sufficient funds by the governing body of the RTC prior to entering into this Agreement, the RTC is responsible for one hundred percent (100%) of all costs not eligible for Federal funding. The RTC agrees the DEPARTMENT and the State of Nevada are not responsible for any of those costs. Eligible PROJECT costs are those costs as defined in 2 CFR Part 200, and the SAM.

8. All right-of-way for the PROJECT is in place and no utility facilities, having prior rights or franchise agreements that require the RTC to pay for any relocation, will require relocation to accommodate the PROJECT. If it is subsequently determined that this is inaccurate, a written amendment to this Agreement designating the party having financial responsibility for such costs shall be required.

9. An alteration requested by either party which substantially changes the services provided for by the expressed intent of this Agreement shall be considered extra work and shall be specified in a written amendment which will set forth the nature and scope thereof. The method of payment for such extra work shall be specified at the time such amendment is written.

10. The RTC's total estimated PROJECT costs may not be an accurate reflection of the final cost. The final costs may vary widely depending on the Contractor's bid prices. The parties acknowledge and agree that the total estimated PROJECT costs set forth herein are only estimates and that in no event shall the DEPARTMENT or federal funding portion exceed the total obligated amount, as established in Article I, Paragraph 3.

11. Plans, specifications, estimates, and bid documents shall be reviewed by the DEPARTMENT for conformity with the Agreement terms. The RTC acknowledges that review by the DEPARTMENT does not include detailed review or checking of major components and related details or the accuracy and sufficiency of such deliverables.

12. This Agreement may be terminated by mutual consent of both parties without cause. The parties expressly agree that this Agreement shall be terminated upon written notification if for any reason Federal and/or State and/or RTC funding ability to satisfy this Agreement is withdrawn, limited, or impaired.

13. Should this Agreement be terminated by the RTC for any reason prior to the completion of the PROJECT, or the Agreement is terminated by the DEPARTMENT due to the RTC's failure to perform, the RTC shall reimburse the DEPARTMENT for any payments made to the RTC and any PROJECT costs incurred by the DEPARTMENT.

14. All notices or other communications required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been duly given if delivered personally in hand, by telephonic facsimile or electronic mail with simultaneous regular mail, or mailed certified mail, return receipt requested, postage prepaid on the date posted, and addressed to the

other party at the address set forth below:

FOR DEPARTMENT: Tracy Larkin Thomason, P.E., Director
Attn: Jake Kelgard, P.E.
Local Public Agency Coordinator
Nevada Department of Transportation
Roadway Design
1263 South Stewart Street
Carson City, Nevada 89712
Phone: (775) 888-7595
Fax: (775) 888-7401
Email: jkelgard@dot.nv.gov

FOR RTC: Sara Going, P.E.
Regional Transportation Commission of Washoe County
1105 Terminal Way, Suite 108
Reno, NV 89502
Phone: (775) 335-1897
Fax: (775) 348-3256
Email: sgoing@rtcwashoe.com

15. Up to the limitation of law, including, but not limited to, NRS Chapter 41 liability limitations, each party shall be responsible for all liability, claims, actions, damages, losses, and expenses, caused by the negligence, errors, omissions, recklessness, or intentional misconduct of its own officers and employees.

16. The parties do not waive and intend to assert available NRS Chapter 41 liability limitations in all cases. Agreement liability of both parties shall not be subject to punitive damages. Actual damages for any DEPARTMENT or RTC breach shall never exceed the amount of funds which have been appropriated for payment under this Agreement, but not yet paid, for the fiscal year budget in existence at the time of the breach.

17. This Agreement and the rights and obligations of the parties hereto shall be governed by, and construed according to, the laws of the State of Nevada. The parties consent to the exclusive jurisdiction of the Nevada state district courts for enforcement of this Agreement.

18. The illegality or invalidity of any provision or portion of this Agreement shall not affect the validity of the remainder of the Agreement, and this Agreement shall be construed as if such provision did not exist, and the unenforceability of such provision shall not be held to render any other provision or provisions of this Agreement unenforceable.

19. Failure to declare a breach or the actual waiver of any particular breach of the Agreement and or its material or nonmaterial terms by either party shall not operate as a waiver by such party of any of its rights or remedies as to any other breach, including a breach of the same term.

20. Except as otherwise expressly provided herein, all property presently owned by either party shall remain in such ownership upon termination of this Agreement, and there shall be no transfer of property between the parties during the course of this Agreement.

21. It is specifically agreed between the parties executing this Agreement that it is not intended by any of the provisions of any part of this Agreement to create any rights in any person or entity, public or private, a third-party beneficiary status hereunder, or to authorize anyone not a party to this Agreement to maintain a suit pursuant to the terms or provisions of this Agreement.

22. Each party agrees to keep and maintain under generally accepted accounting principles full, true, and complete records and documents pertaining to this Agreement and to present to the DEPARTMENT, FHWA, the U.S. Department of Transportation's Inspector General, the Comptroller General of the United States, or any of their duly authorized representatives, at any reasonable time, such information for inspection, examination, review, audit, and copying at any office where such records and documentation are maintained. Such records and documentation shall be maintained for three (3) years after final payment is made.

23. The parties are associated with each other only for the purposes and to the extent set forth in this Agreement. Each party is and shall be a public agency separate and distinct from the other party and shall have the right to supervise, manage, operate, control, and direct performance of the details incident to its duties under this Agreement. Nothing contained in this Agreement shall be deemed or construed to create a partnership or joint venture, to create relationships of an employer-employee or principal-agent, or to otherwise create any liability for one agency whatsoever with respect to the indebtedness, liabilities, and obligations of the other agency or any other party.

24. In connection with the performance of work under this Agreement, the parties agree not to discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, age, disability, pregnancy, sexual orientation, genetic information (GINA), or gender identity or expression, including, without limitation, with regard to employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including without limitation, apprenticeship. The parties further agree to insert this provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.

25. Pursuant to all applicable laws, including, but not limited to, the Civil Rights Act of 1964, the Federal Highway Act of 1973, Section 504 of the Rehabilitation Act of 1973, and the Age Discrimination Act of 1975, the parties shall ensure that no person shall on the grounds of race, color, national origin, sex, age, and handicap/disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity conducted by the recipient regardless of whether those programs and activities are federally-funded or not.

26. Neither party shall assign, transfer, or delegate any rights, obligations, or duties under this Agreement without the prior written consent of the other party.

27. The parties hereto represent and warrant that the person executing this Agreement on behalf of each party has full power and authority to enter into this Agreement and that the parties are authorized by law to engage in the cooperative action set forth herein.

28. Pursuant to NRS 239.010, information or documents may be open to public inspection and copying. The parties will have the duty to disclose unless a particular record is confidential by law or a common law balancing of interests.

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29. Each party shall keep confidential all information, in whatever form, produced, prepared, observed, or received by that party to the extent that such information is confidential by law.

30. All references herein to federal and state code, law, statutes, regulations, and circulars are to them, as amended.

31. This Agreement shall not become effective until and unless approved by appropriate official action of the governing body of each party.

32. This Agreement constitutes the entire agreement of the parties and as such is intended as a complete and exclusive statement of the promises, representations, negotiations, discussions, and other agreements that may have been made in connection with the subject matter hereof. Unless an integrated attachment to this Agreement specifically displays a mutual intent to amend a particular part of this Agreement, general conflicts in language between any such attachment and this Agreement shall be construed consistent with the terms of this Agreement. Unless otherwise expressly authorized by the terms of this Agreement, no modification or amendment to this Agreement shall be binding upon the parties unless the same is in writing and signed by the respective parties hereto and approved by the Attorney General.

33. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original Agreement and each of which shall constitute one and the same Agreement. The counterparts of this Agreement may be executed and delivered by facsimile or other electronic signature (including portable document format) by either of the Parties and the receiving Party may rely on the receipt of such document so executed and delivered electronically or by facsimile as if the original had been received.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year first above written.

Regional Transportation Commission of Washoe County

Bill Thomas, AIPC
Executive Director

State of Nevada, acting by and through its DEPARTMENT OF TRANSPORTATION

On behalf of Director

Approved as to Legality & Form:

Deputy Attorney General

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Attachment A

SCOPE OF WORK
Regional Transportation Commission of Washoe County Biggest Little Bike Network Project

This project is located in Reno, NV and consists of constructing bicycle facility connections and safety improvements throughout a network in downtown. Project construction includes reconfiguring roadways to incorporate enhanced bike lane infrastructure including buffers, median islands, pedestrian ramps, curb and gutter, bus stops, signs and striping, signal upgrades, landscaping, and drainage improvements. Limits are Vine St from Riverside Dr to University Terrace, 5th St from Keystone Ave to Evans Ave, Virginia St from California Ave to 11th St, 9th St from Sierra St to Virginia St, Sinclair St/Lake St from Holcomb Ave to 5th St, Evans Ave from 2nd St to 9th St, and 2nd St from Lake St to Evans Ave; as depicted in the image below.



Attachment B

REQUIRED DOCUMENTS IN BID PACKETS OF PROJECTS

Federal Wage Rates, as provided by the Labor Commission, are included in all Federal Projects over $2,000.00 *

The following attached provisions and forms:
Required Contract Provisions Federal-aid Construction Contracts (FHWA-1273)
Additional Contract Provisions Supplement to the weekly Certified Payrolls
Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246)
Additional Contract Provisions Disadvantaged Business Enterprise in Federal-aid Highway Construction
Affidavit Required Under Section 112(c)
Certification Required by Section 1352 of Title 31, United States Code (Restrictions of lobbying)

Bidder Disadvantaged Business and Small Business Enterprise (DBE/SBE) Information*
List of Subcontractor and Suppliers Bidding

Bidder Subcontractor Information (exceeding 5%)**
Bidder Subcontractor Information (exceeding 1% or $50,000.00, whichever is greater)**
Bidder Subcontractor Information (For subcontractors exceeding $250,000.00)**

*** Contact NDOT's Contract Compliance Division for information (775) 888- 7497**

**** Or local agency equivalent**

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

I. General
II. Nondiscrimination
III. Non-segregated Facilities
IV. Davis-Bacon and Related Act Provisions
V. Contract Work Hours and Safety Standards Act Provisions
VI. Subletting or Assigning the Contract
VII. Safety: Accident Prevention
VIII. False Statements Concerning Highway Projects
IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
XI. Certification Regarding Use of Contract Funds for Lobbying
XII. Use of United States-Flag Vessels:

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. **Equal Employment Opportunity:** Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (*see* 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

   a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

   b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. **EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

   a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

   b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

   c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

   d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

   e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. **Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

   a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

   b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

   c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

   a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

   b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

   c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

   d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. **Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. **Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. **Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:
(1) Withholding monthly progress payments;
(2) Assessing sanctions;
(3) Liquidated damages; and/or
(4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. **Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than $10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 “Contract provisions and related matters” with minor revisions to conform to the FHWA- 1273 format and FHWA program requirements.

1. **Minimum wages** (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided,* That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH–1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to *DBAconformance@dol.gov*. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to *DBAconformance@dol.gov*, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided,* That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. **Withholding** (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

3. **Records and certified payrolls** (29 CFR 5.5)

a. *Basic record requirements* (1) *Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements* (1) *Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (*e.g.,* the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH–347 or in any other format desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division website at *https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347/.pdf* or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) *Use of Optional Form WH–347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractorto civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. **Apprentices and equal employment opportunity** (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. **Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. **Subcontracts**. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. **Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. **Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. **Disputes concerning labor standards.** As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. **Certification of eligibility**. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

11. **Anti-retaliation**. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. **Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. **Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* $31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

4. **Subcontracts.** The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower- tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. **Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal- aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of $150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction forcause or default. 2 CFR 180.325.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

* * * * *

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

* * * * *

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B) This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as

on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

ADDITIONAL CONTRACT PROVISIONS

SUPPLEMENT TO THE WEEKLY CERTIFIED PAYROLLS

In addition to the required payroll data as enumerated in Section V, Part 2 of the Form FHWA-1273, "Required Contract Provisions, Federal-Aid Construction Contracts (Exclusive of Appalachian Contracts)", to facilitate monitoring of the Affirmative Action goals for each contract, employers are required to list, for their employees, a designation of race, ethnicity, color or national origin and Male/Female identifier on each weekly certified payroll.

For standardization purposes please use the following identification codes:

White/Caucasian: Persons having origins in Europe, North Africa or the Middle East.

Black/African American (except Hispanic): Persons having origins in any of the Black racial groups of Africa.

Native American – American Indian or Alaskan Native: Persons having origins in any of the original peoples of North America and who maintain their culture through tribe or community.

Hawaiian or other Pacific Islander: Persons having origins in the original peoples of Hawaii or other Pacific Islands.

Asian: Persons having origins in any of the peoples of the Far East, Southeast Asia, or India.

Hispanic Americans: Persons of Mexican, Puerto Rican, Cuban, Central or South American origin, or other Spanish culture or origin, regardless of race.

Two or More Races: Persons who identify with two or more designations listed above, or other persons protected from employment discrimination by EEO law, based on race, ethnicity, color or national origin, not otherwise defined.

Not Specified: Only for persons who choose not to list their race, ethnicity, color or national origin.

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

1. As used in these specifications:

   a. "Covered Area" means the geographical area described in the "Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)", of these special provisions.

   b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;

   c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

   d. "Minority" includes:

      (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

      (ii) Hispanic (all persons of Spanish or Portuguese ancestry whose culture is rooted in South America, Central America, Mexico, Puerto Rico, Cuba, the Caribbean Islands or the Iberian Peninsula, including Portugal, regardless of race);

      (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and

      (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North American and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of $10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U. S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation

from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the FEDERAL REGISTER in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U. S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

    a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

    b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organization's responses.

    c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.

    d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the

Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the contractor's EEO policy with other contractors and subcontractors with whom the Contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory affect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are non- segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a Contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the contractor's and failure of such a group to fulfill an obligation shall not be a defense for the contractor's non-compliance.

9. A single goal for minorities and a separate single goal for women have been established. The contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the contractor has achieved its goals for women generally, the contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

10. The contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order ll246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirement for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

16. All such records must be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the State Department of Transportation and the Federal Highway Administration.

17. FHWA 1409 (Federal-Aid Highway Construction Contractors Semiannual report).

    (INSTRUCTIONS: This report is to be completed by the Contractor semiannually for each individual employed on this contract (including any subcontracts under it) who has received training during the reporting period under the training special provisions (Attachment 2 FHPM 6-4-1.2). The report is to be submitted by the 20th of the month following the reporting period (July 20 and January 20). The original of this report is to be furnished to the trainee and two copies submitted to the Nevada Department of Transportation.)

18. Required Reports: Form PR-1391 (Federal-Aid Highway Construction Contractors Annual EEO Reports).

    This report should be submitted to the Nevada Department of Transportation by each Contractor and covered subcontractor for the month of July. Subcontractors should report contract and employment data pertaining to their subcontract work only. The staffing figures to be reported under employment data should represent the project work force on board in whole or in part for the last payroll period preceding the end of the month.

    The staffing figures to be reported in Table A should include journey-level men and women, apprentices, and on-the-job trainees. Staffing figures to be reported in Tables B and C should only include apprentices and on-the-job trainees as indicated.

ADDITIONAL CONTRACT PROVISIONS
DISADVANTAGED BUSINESS ENTERPRISE
IN FEDERAL-AID HIGHWAY CONSTRUCTION

DISADVANTAGED BUSINESS ENTERPRISE. This project is subject to Part 26, TITLE 49, Code of Federal Regulations entitled "Participation by Disadvantaged Business Enterprises in Department of Transportation Programs."

Policy. It is the policy of the Department of Transportation that disadvantaged business enterprises as defined in 49 CFR Part 26.5 shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with Federal funds under this agreement. Consequently, the DBE requirements of 49 CFR Part 26 apply to this agreement.

Obligation. (i) The recipient or its contractor agrees to ensure that disadvantaged business enterprises as defined in 49 CFR Part 26 have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or part with Federal funds provided under this agreement. In this regard all recipients or contractors shall take all necessary and reasonable steps in accordance with 49 CFR Part 26 to ensure that disadvantaged business enterprise have the maximum opportunity to compete for and perform contracts. Recipients and their contractors shall not discriminate on the basis of race, color, national origin, sex or handicap in the award and performance of NDOT assisted contracts.

I. BIDDERS DBE AFFIRMATIVE ACTION REQUIREMENTS

A. A bidder who intends to subcontract a portion of the work shall certify that affirmative action has been taken to seek out and consider disadvantaged business enterprises and women owned businesses as potential subcontractors.

B. Affirmative action shall consist of seeking out disadvantaged business enterprises and women owned businesses that are potential subcontractors and actively soliciting their interest, capability and prices and documenting such action.

C. "Socially and economically disadvantaged individual" means any person who is a citizen or lawful permanent resident of the United States and who is;

(a) Black (a person having origins in any of the black racial groups of Africa);

(b) Hispanic (a person of Spanish or Portuguese culture with origins in Mexico, South or Central America, or the Caribbean Islands, regardless of race);

(c) Asian American (a person having origins in any of the original peoples of the Far East. Southeast Asia, the Indian subcontinent, or the Pacific Islands);

(d) American Indian and Alaskan Native (a person having origins in any of the original peoples of North America); or

(e) A woman

D. Bidders shall be fully informed respecting the requirements of the Regulations; particular attention is directed to the following matters:

(a) A Disadvantaged Business Enterprise (DBE) must be a small business concern as defined pursuant to Section 3 of a U.S. Small Business Act; and 49 CFR Part 26.5

(b) "Disadvantaged Business" means a small business concern: (a) which is at least 51 percent owned by one or more socially and economically

disadvantaged individuals, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more socially and economically disadvantaged individuals; and (b) whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.

E. The Contractor shall designate and make known to the Engineer a liaison officer to administer the Contractor's disadvantaged business enterprise program.

AFFIDAVIT REQUIRED UNDER 23 USC SECTION 112(c)
AND 2 CFR PARTS 180 AND 1200 – SUSPENSION OR DEBARMENT

STATE OF _____ }
COUNTY OF _____ } SS

I, _____(Name of party signing this

affidavit and the Proposal Form) _____ (title).

being duly sworn do depose and say: That _____

(name of person, firm, association, or corporation) has not, either directly or indirectly, entered into agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this contract; and further that, except as noted below to the best of knowledge, the above named and its principals

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency:

(b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and

(d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

(Insert Exceptions, attach additional sheets)

The above exceptions will not necessarily result in denial of award but will be considered in determining bidder responsibility and whether or not the **[Agency Name]** will enter into contract with the party. For any exception noted, indicate on an attached sheet to whom it applies, initiating agency, and dates of action. Providing false information may result in criminal prosecution or administrative sanctions. The failure to furnish this affidavit and required exceptions if any shall disqualify the party.

_____
Signature

_____
Title

Sworn to before me this _____ day of _____, 20 _____

_____
Signature

(SEAL)

_____
Notary Public, Judge or other Official

CERTIFICATION REQUIRED BY SECTION 1352 OF TITLE 31, UNITED STATES CODE

RESTRICTIONS OF LOBBYING USING APPROPRIATED FEDERAL FUNDS

The undersigned certifies, to the best of his or her knowledge and belief that:

(1) No Federal appropriate funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

_____

Name (please type or print)

_____

Signature

_____

Title

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Use the SF-LLL-A Continuation Sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity in and/or has been secured to influence the outcome of a covered Federal action.

2. Identify the status of the covered Federal action.

3. Identify the appropriate classification of this report. If this is a follow up report caused b y a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.

4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.

5. If the organization filing the report in item 4 checks "Subawardee", then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.

6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.

7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.

8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number ; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."

9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.

10. (a) Enter the full name, address, city, state and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influence the covered Federal action.

    (b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, first Name, and Middle Initial (MI).

11. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (item 4) to the lobbying entity (item 10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. It this is a material change report, enter the cumulative amount of payment made or planned to be made.

12. Check the appropriate box(es). Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.

13. Check the appropriate box(es). Check all boxes that apply. If other, specify nature.

14. Provide a specific and detailed description of the services that the lobbyist has performed, or will be expected to perform, and the date(s) of any services rendered. Include all preparatory and related activity, not just time spent in actual contact with Federal officials. Identify the Federal officials. Identify the Federal official(s) or employee(s) contacted or the officer(s), employee(s), or Member(s) of Congress that were contacted.

15. Check whether or not a SF-LL-A Continuation Sheet(s) is attached.

16. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, D.C. 20503.

DISCLOSURE OF LOBBYING ACTIVITIES

Approved by OMB
0348-0046

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352

1. Type of Federal Actions:
☐ a. contract
☐ b. grant
☐ c. cooperative agreement
☐ d. loan
☐ e. loan guarantee
☐ f. loan insurance

2. Status of Federal Action:
☐ a. bid/offer/application
☐ c. Initial award
☐ d. post-award

3. Report Type:
☐ a. initial filing
☐ b. material change

For Material Change Only:
year _____ quarter _____
date of last report _____

4. Name and Address of Reporting Entity:
☐ **Prime** ☐ **Sub-awardee**
Tier _____, *if* known:

Congressional District, *if* known:

5. If Reporting Entity in No. 4 is Sub-awardee, Enter Name and Address of Prime:

Congressional District, *if* known:

6. Federal Department/Agency:

7. Federal Program Name/Description:

CFDA Number, *if* applicable: _____

8. Federal Action Number, *if* know:

9. Award Amount, *if* known:
$

10. a. Name and Address of Lobbying Entity
(if individual, last name, first name, MI):

(attach Continuation Sheet(s) SF-LLL-A, if necessary)

b. Individuals Performing Services *(including address if different from No. 10a)*
(last name, first name, MI):

(attach Continuation Sheet(s) SF-LLL-A, if necessary)

11. Amount of Payment *(check all that apply):*
$ _____ ☐ actual ☐ planned

12. Form of Payment *(check all that apply):*
☐ **a. cash**
☐ **b. in-kind; specify:** nature _____
value _____

13. Type of Payment *(check all that apply):*
☐ **a. retainer**
☐ **b. one-time fee**
☐ **c. commission**
☐ **d. contingent fee**
☐ **e. deferred**
☐ **f. other; specify:** _____

14. Brief Description of Services Performed or to be Performed and Date(s) of Service, including officer(s), employee(s), or Member(s) contacted, for Payment indicated in Item 11:

(attach Continuation Sheet(s) SF-LLL-A, if necessary)

15. Continuation Sheet(s) SF-LLL-A attached: ☐ **Yes** ☐ **No**

16. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Signature: _____
Print Name: _____
Title: _____
Telephone No.: _____ Date: _____

Federal Use Only:

Authorized for Local Reproduction Standard Form - LLL

BIDDER DISADVANTAGED BUSINESS (DBE) INFORMATION

Contract No.:

Contractor: _____

Project No(s).:

Address: _____

Total Bid Amount $ _____

_____

Contract DBE Goal: **____%.**

This information must be submitted with the bid proposal. Please list all subcontractors used to fulfill the DBE requirements for this contract. A bidder unable to meet the DBE goal shall submit documentation to outline their Good Faith Efforts (GFE) toward meeting the contract goal. Total DBE participation is subject to verification. Please fill out the form completely. Use additional forms if necessary.

DBE SUBCONTRACTORS:

DBE NAME AND ADDRESS	DBE PHONE NO.	PROPOSAL ITEM NO(S).	100% DBE SUB BID AMOUNT	DBE CERTIFICATION NO.*	DESCRIPTION OF WORK OR SERVICES TO BE CONTRACTED OR SUPPLIES TO BE SUPPLIED

A. TOTAL OF SUBCONTRACTOR DBE BID AMOUNT:

DBE SUPPLIERS:

DBE NAME AND ADDRESS	DBE PHONE NO.	PROPOSAL ITEM NO(S).	100% DBE SUPPLIER BID AMOUNT	60% DBE SUPPLIER BID AMOUNT (PARTICIPATION)	DBE CERTIFICATION NO.*	DESCRIPTION OF WORK OR SERVICES TO BE CONTRACTED OR SUPPLIES TO BE SUPPLIED

B. TOTAL OF SUPPLIER DBE PARTICIPATION AMOUNT:

C. Total Dollar Value of DBE Participation (Add Totals from Lines A & B): $**_____

D. Total Percent of DBE Participation (Divide Line C by Total Bid Amount): _____**%**

_____ _____
Contractor's Signature Date

***DBEs must be certified by the Nevada Unified Certification Program.**

Telephone No. _____

****DBE Participation amount is 100% of the subcontractor's bid amount and 60% of the supplier's bid amount.**

REV. 9/13

BIDDER SUBCONTRACTOR INFORMATION

(For subcontractors exceeding five percent (5%) of the bid amount)

Contract No.:

Contractor: _____

Project No(s).:

Address: _____

Total Bid Amount $ _____

This information must be submitted with your bid proposal. The bidder shall enter "NONE" under "SUBCONTRACTOR NAME" if not using subcontractors exceeding 5% of the bid amount.

SUBCONTRACTOR NAME AND ADDRESS	PHONE NO.	PROPOSAL ITEM NO(S).* (7 DIGIT #)	NEVADA CONTRACTOR LICENSE # (IF APPLICABLE)	LICENSE LIMIT (IF APPLICABLE)	DESCRIPTION OF WORK OR SERVICES TO BE SUBCONTRACTED

The undersigned affirms all work, other than that being performed by the subcontractors listed in the subcontractor reports submitted for this contract, will be performed by the Prime Contractor listed above.

*** Please list all items (attach a separate sheet if necessary). Do not enter "multiple" or "various."**

_____ _____

Contractor's Signature Date

Telephone No. _____

REV. 09/13

BIDDER SUBCONTRACTOR INFORMATION

(For subcontractors exceeding one percent (1%) of bid amount or $50,000, whichever is greater)

Contract No.: Contractor: _____

Project No(s).: Address: _____

Total Bid Amount $ _____

This information must be submitted by the three (3) lowest bidders **no later than 2 hours after the bid opening time.** The bidder shall enter "NONE" under "SUBCONTRACTOR NAME" if not using subcontractors exceeding 1% of the bid amount.

SUBCONTRACTOR NAME AND ADDRESS	SUBCONTRACTOR PHONE NO.	PROPOSAL ITEM NO(S).* (7 DIGIT #)	NEVADA CONTRACTOR LICENSE # (IF APPLICABLE)	LICENSE LIMIT (IF APPLICABLE)	DESCRIPTION OF WORK OR SERVICES TO BE SUBCONTRACTED

*** Please list all items (attach a separate sheet if necessary). Do not enter "multiple" or "various."**

_____ _____

Contractor's Signature Date

Telephone No. _____

REV. 09/13

BIDDER SUBCONTRACTOR INFORMATION

(For subcontractors exceeding $250,000.00)

Contract No.:

Contractor: _____

Project No(s).:

Address: _____

Total Bid Amount $ _____

This information must be submitted, by the three (3) lowest bidders, **no later than 2 hours after the bid opening time.** The bidder shall enter "NONE" under "SUBCONTRACTOR NAME" if not using subcontractors exceeding $250,000.00.

SUBCONTRACTOR NAME AND ADDRESS	SUBCONTRACTOR PHONE NO.	PROPOSAL ITEM NO(S).* (7 DIGIT #)	NEVADA CONTRACTOR LICENSE # (IF APPLICABLE)	LICENSE LIMIT (IF APPLICABLE)	DESCRIPTION OF WORK OR SERVICES TO BE SUBCONTRACTED

*** Please list all items (attach a separate sheet if necessary). Do not enter "multiple" or "various."**

_____ Contractor's Signature

_____ Date

Telephone No. _____

REV. 09/13

LIST OF SUBCONTRACTORS AND SUPPLIERS BIDDING

Contract No.: Contractor: _____

List all subcontractors providing bids to your firm for this contract. You may make copies of this form.

This form must be submitted no later than 5:00 pm the next business day after the bid opening time.

SUBCONTRACTOR NAME AND ADDRESS	SUBCONTRACTOR PHONE NO.	NEVADA CONTRACTOR LICENSE # (IF APPLICABLE)	LICENSE LIMIT (IF APPLICABLE)	USED?	DBE CERTIFIED?	SUPPLIER?
				Yes No	Yes No	Yes No
				Yes No	Yes No	Yes No
				Yes No	Yes No	Yes No
				Yes No	Yes No	Yes No
				Yes No	Yes No	Yes No
				Yes No	Yes No	Yes No
				Yes No	Yes No	Yes No
				Yes No	Yes No	Yes No
				Yes No	Yes No	Yes No
				Yes No	Yes No	Yes No
				Yes No	Yes No	Yes No
				Yes No	Yes No	Yes No

REV. 09/13

Attachment C

AFFIDAVIT REQUIRED UNDER 23 USC SECTION 112(c) AND 2 CFR PARTS 180 AND 1200 - SUSPENSION OR DEBARMENT

STATE OF _____

COUNTY OF _____ } SS

I, _____(Name of party signing this affidavit and the Proposal Form) _____ (title). being duly sworn do depose and say: That _____ (name of person, firm, association, or corporation) has not, either directly or indirectly, entered into agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this contract; and further that, except as noted below to the best of knowledge, the above named and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency:
(b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public or private agreement or transaction; violation of Federal or State antitrust statutes, including those proscribing price fixing between competitors, allocation of customers between competitors, and bid rigging; commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, receiving stolen property, making false claims, or obstruction of justice; commission of any other offense indicating a lack of business integrity or business honesty that seriously and directly affects your present responsibility;
(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and
(d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

(Insert Exceptions, attach additional sheets)

The above exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility and whether or not the Department will enter into contract with the party. For any exception noted, indicate on an attached sheet to whom it applies, initiating agency, and dates of action. Providing false information may result in criminal prosecution or administrative sanctions. The failure to furnish this affidavit and required exceptions if any shall disqualify the party.

_____
Signature

_____
Title

Sworn to before me this _____ day of _____, 20 _____

(SEAL)

_____
Notary Public, Judge or other Official

Attachment D

CERTIFICATION REQUIRED BY SECTION 1352 OF TITLE 31, UNITED STATES CODE

RESTRICTIONS OF LOBBYING USING APPROPRIATED FEDERAL FUNDS

The undersigned certifies, to the best of his or her knowledge and belief that:

(1) No Federal appropriate funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

_____
Name (please type or print)

_____
Signature

_____
Title

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether sub-awardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Use the SF-LLL-A Continuation Sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity in and/or has been secured to influence the outcome of a covered Federal action.

2. Identify the status of the covered Federal action.

3. Identify the appropriate classification of this report. If this is a follow up report caused b y a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.

4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or sub-award recipient. Identify the tier of the sub-awardee, e.g., the first sub-awardee of the prime is the 1st tier. Sub-awards include but are not limited to subcontracts, sub-grants and contract awards under grants.

5. If the organization filing the report in item 4 checks "Sub-awardee", then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.

6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.

7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.

8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number ; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."

9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.

10. (a) Enter the full name, address, city, state and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influence the covered Federal action.

    (b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, first Name, and Middle Initial (MI).

11. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (item 4) to the lobbying entity (item 10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. It this is a material change report, enter the cumulative amount of payment made or planned to be made.

12. Check the appropriate box(es). Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.

13. Check the appropriate box(es). Check all boxes that apply. If other, specify nature.

14. Provide a specific and detailed description of the services that the lobbyist has performed, or will be expected to perform, and the date(s) of any services rendered. Include all preparatory and related activity, not just time spent in actual contact with Federal officials. Identify the Federal officials. Identify the Federal official(s) or employee(s) contacted or the officer(s), employee(s), or Member(s) of Congress that were contacted.

15. Check whether or not a SF-LL-A Continuation Sheet(s) is attached.

16. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, D.C. 20503.

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352

Approved by OMB
0348-0046

1. Type of Federal Actions:
- ☐ a. contract
- ☐ b. grant
- ☐ c. cooperative agreement
- ☐ d. loan
- ☐ e. loan guarantee
- ☐ f. loan insurance

2. Status of Federal Action:
- ☐ a. bid/offer/application
- ☐ c. Initial award
- ☐ d. post-award

3. Report Type:
- ☐ a. initial filing
- ☐ b. material change

For Material Change Only:
year _____ quarter _____
date of last report _____

4. Name and Address of Reporting Entity:
☐ **Prime** ☐ **Sub-awardee**
Tier _____, *if* known:

Congressional District, *if* known:

5. If Reporting Entity in No. 4 is Sub-awardee, Enter Name and Address of Prime:

Congressional District, *if* known:

6. Federal Department/Agency:

7. Federal Program Name/Description:

CFDA Number, *if* applicable: _____

8. Federal Action Number, *if* know:

9. Award Amount, *if* known:
$

10. a. Name and Address of Lobbying Entity
(if individual, last name, first name, MI):

(attach Continuation Sheet(s) SF-LLL-A, if necessary)

b. Individuals Performing Services *(including address if different from No. 10a)*
(last name, first name, MI):

(attach Continuation Sheet(s) SF-LLL-A, if necessary)

11. Amount of Payment *(check all that apply):*
$ _____ ☐ actual ☐ planned

12. Form of Payment *(check all that apply):*
- ☐ **a. cash**
- ☐ **b. in-kind; specify**: nature _____
  value _____

13. Type of Payment *(check all that apply):*
- ☐ **a. retainer**
- ☐ **b. one-time fee**
- ☐ **c. commission**
- ☐ **d. contingent fee**
- ☐ **e. deferred**
- ☐ **f. other; specify:** _____

14. Brief Description of Services Performed or to be Performed and Date(s) of Service, including officer(s), employee(s), or Member(s) contacted, for Payment indicated in Item 11:

(attach Continuation Sheet(s) SF-LLL-A, if necessary)

15. Continuation Sheet(s) SF-LLL-A attached: ☐ **Yes** ☐ **No**

16. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Signature: _____
Print Name: _____
Title: _____
Telephone No.: _____ Date: _____

Federal Use Only:

Authorized for Local Reproduction Standard Form - LLL

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.3.2**

To: Regional Transportation Commission

From: Jessica Dover, Project Manager

SUBJECT: 2026 Preventive Maintenance Project Professional Services Agreement

RECOMMENDED ACTION

Approve a contract with Lumos and Associates, Inc., for design and engineering during construction services related to the 2026 Preventive Maintenance Project, in an amount not-to-exceed $1,008,735.

BACKGROUND AND DISCUSSION

This Professional Services Agreement (PSA) with Lumos and Associates, Inc. (Lumos) is for professional design and engineering during construction services for the 2026 Preventive Maintenance Project (Project) in the amount of $968,735 and project contingency in the amount of $40,000.

The Project will consist of pavement patching, crack sealing, and microsurfacing of regional roads within Washoe County, Reno, and Sparks. Striping design services for road modifications to provide operational and safety improvements is also part of the Project scope. A task has been added for Lumos to provide minimal data management support for 2026.

Lumos was selected from the Civil Engineering Design and Construction Management Services for the Streets & Highways Program Qualified List as a qualified firm to perform engineering, construction management, and quality assurance. The complete scope of services is included as Exhibit A-1 to the attached PSA. Lumos' scope, schedule, and fee indicate the amount for design and engineering during construction services is within the appropriate budget. The targeted schedule for these services is as follows:

- Notice to Proceed: July 2025
- Initial Evaluations: September 2025
- Final Design: January 2026
- Begin Construction: March 2026
- Complete Construction: October 2026

FISCAL IMPACT

Fuel tax appropriations are included in the FY 2026 budget.

PREVIOUS BOARD ACTION

4/18/2025 - Approved the Qualified Consultant List for Engineering Design and Construction Management Services for the Street and Highway Program.

AGREEMENT
FOR
PROFESSIONAL SERVICES

This agreement (this "Agreement") is dated and effective as of _____, 2025, by and between the Regional Transportation Commission of Washoe County ("RTC") and Lumos & Associates, Inc. ("CONSULTANT").

WITNESSETH:

WHEREAS, RTC has selected Lumos & Associates, Inc. from the Civil Engineering Design & Construction Management Services for the Streets & Highways Program shortlist to perform certain engineering, design, construction management, and quality assurance services in connection with the 2026 Preventive Maintenance Project (the "Project").

NOW, THEREFORE, RTC and CONSULTANT, in consideration of the mutual covenants and other consideration set forth herein, do hereby agree as follows:

ARTICLE 1 – TERM AND ENGAGEMENT

1.1. The term of this Agreement shall be from the date first written above through December 31, 2026, unless terminated at an earlier date, or extended to a later date, pursuant to the provisions herein.

1.2. CONSULTANT will perform the work using the project team identified in Exhibit A-2. Any changes to the project team must be approved by RTC's Project Manager.

1.3. CONSULTANT will promptly, diligently and faithfully execute the work to completion in accordance with applicable professional standards subject to any delays due to strikes, acts of God, act of any government, civil disturbances, or any other cause beyond the reasonable control of CONSULTANT.

1.4. CONSULTANT shall not proceed with work until both parties have executed this Agreement and a purchase order has been issued to CONSULTANT. If CONSULTANT violates that prohibition, CONSULTANT forfeits any and all right to reimbursement and payment for that work and waives any and all claims against RTC, its employees, agents, and affiliates, including but not limited to monetary damages, and any other remedy available at law or in equity arising under the terms of this Agreement. Furthermore, prior to execution and issuance of a purchase order, CONSULTANT shall not rely on the terms of this Agreement in any way, including but not limited to any written or oral representations, assurances or warranties made by RTC or any of its agents, employees or affiliates, or on any dates of performance, deadlines, indemnities, or any term contained in this Agreement or otherwise.

ARTICLE 2 - SERVICES OF CONSULTANT

2.1. SCOPE OF SERVICES

The scope of services consists of the tasks set forth in Exhibit A-1.

2.2. SCHEDULE OF SERVICES

Tasks and subtasks shall be completed in accordance with the schedule in Exhibit A-3. Any change(s) to the schedule must be approved by RTC's Project Manager.

2.3. CONTINGENCY

Contingency line items identified in the scope of services are for miscellaneous increases within the scope of work. Prior to the use of any contingency amounts, CONSULTANT shall provide a letter to RTC's Project Manager detailing the need, scope, and not-to-exceed budget for the proposed work. Work to be paid for out of contingency shall proceed only with the RTC Project Manager's written approval.

2.4. OPTIONS

RTC shall have the right to exercise its option(s) for all or any part of the optional tasks or subtasks identified in Exhibit A-1. CONSULTANT will prepare and submit a detailed scope of services reflecting the specific optional services requested, a schedule for such services, and a cost proposal. RTC will review and approve the scope of services and RTC and CONSULTANT will discuss and agree upon compensation and a schedule. CONSULTANT shall undertake no work on any optional task without written notice to proceed with the performance of said task. RTC, at its sole option and discretion, may select another individual or firm to perform the optional tasks or subtasks identified in Exhibit A-1.

2.5. ADDITIONAL SERVICES

CONSULTANT will provide additional services when agreed to in writing by RTC and CONSULTANT.

2.6. PERFORMANCE REQUIREMENTS

Any and all design and engineering work furnished by CONSULTANT shall be performed by or under the supervision of persons licensed to practice architecture, engineering, or surveying (as applicable) in the State of Nevada, by personnel who are careful, skilled, experienced and competent in their respective trades or professions, who are professionally qualified to perform the work, and who shall assume professional responsibility for the accuracy and completeness of documents prepared or checked by them, in accordance with appropriate prevailing professional standards. Notwithstanding the provision of any drawings, technical specifications, or other data by RTC, CONSULTANT shall have the responsibility of supplying all items and details required for the deliverables required hereunder.

Any sampling and materials testing shall be performed by an approved testing laboratory accredited by AASHTO or other ASTM recognized accrediting organization in the applicable test methods. If any geotechnical or materials testing is performed by a sub-consultant, that laboratory shall maintain the required certification. Proof of certification shall be provided to RTC with this Agreement. If certification expires or is removed during the term of this Agreement, CONSULTANT shall notify RTC immediately, and propose a remedy. If an acceptable remedy cannot be agreed upon by both parties, RTC may terminate this Agreement for default.

CONSULTANT shall provide only Nevada Alliance for Quality Transportation Construction (NAQTC) qualified personnel to perform field and laboratory sampling and testing during the term of this Agreement. All test reports shall be signed by a licensed NAQTC tester and notated with his/her license number.

2.7. ERRORS AND OMISSIONS

CONSULTANT shall, without additional compensation, correct or revise any deficiencies, errors, or omissions caused by CONSULTANT in its analysis, reports, and services. CONSULTANT also agrees that if any error or omission is found, CONSULTANT will expeditiously make the necessary correction, at no expense to RTC. If an error or omission was directly caused by RTC, and not by CONSULTANT and RTC requires that such error or omission be corrected, CONSULTANT may be compensated for such additional work.

ARTICLE 3 - COMPENSATION

3.1. CONSULTANT shall be paid for hours worked at the hourly rates and rates for testing in Exhibit B-1 through B-3, inclusive. RTC shall not be responsible for any other costs or expenses except as provided in Exhibit B-2.

3.2. The maximum amount payable to CONSULTANT to complete each task is equal to the not-to-exceed amounts identified in Exhibit B-2. CONSULTANT can request in writing that RTC's Project Manager reallocate not-to-exceed amounts between tasks. A request to reallocate not-to-exceed amounts must be accompanied with a revised fee schedule, and must be approved in writing by RTC's Project Manager prior to performance of the work. In no case shall CONSULTANT be compensated in excess of the following not-to exceed amounts:

Design Services	$281,560
Optional Design Services	$15,000
Design Contingency	$10,000
EDC	$672,175
Optional EDC	$0
EDC Contingency	$30,000
Total Not-to-Exceed Amount	$1,008,735

3.3. For any work authorized under Section 2.5, "Additional Services," RTC and CONSULTANT will negotiate not-to-exceed amounts based on the standard hourly rates and rates for testing in Exhibit B-1, B-2 and B-3. Any work authorized under Section 2.5, "Additional Services," when performed by persons who are not employees or individuals

employed by affiliates of CONSULTANT, will be billed at a mutually agreed upon rate for such services, but not more than 105% of the amounts billed to CONSULTANT for such services.

3.4. CONSULTANT shall receive compensation for preparing for and/or appearing in any litigation at the request of RTC, except: (1) if such litigation costs are incurred by CONSULTANT in defending its work or services or those of any of its sub-consultants; or (2) as may be required by CONSULTANT's indemnification obligations. Compensation for litigation services requested by RTC shall be paid at a mutually agreed upon rate and/or at a reasonable rate for such services.

ARTICLE 4 - INVOICING

4.1. CONSULTANT shall submit monthly invoices in the format specified by RTC. Invoices must be submitted to accountspayable@rtcwashoe.com. RTC's payment terms are 30 days after the receipt of the invoice. Simple interest will be paid at the rate of half a percent (0.5%) per month on all invoices approved by RTC that are not paid within thirty (30) days of receipt of the invoice.

4.2. RTC shall notify CONSULTANT of any disagreement with any submitted invoice for consulting services within thirty (30) days of receipt of an invoice. Any amounts not in dispute shall be promptly paid by RTC.

4.3. CONSULTANT shall maintain complete records supporting every request for payment that may become due. Upon request, CONSULTANT shall produce all or a portion of its records and RTC shall have the right to inspect and copy such records.

ARTICLE 5 - ACCESS TO INFORMATION AND PROPERTY

5.1. Upon request and without cost to CONSULTANT, RTC will provide all pertinent information that is reasonably available to RTC including surveys, reports and any other data relative to design and construction.

5.2. RTC will provide access to and make all provisions for CONSULTANT to enter upon RTC facilities and public lands, as required for CONSULTANT to perform its work under this Agreement.

ARTICLE 6 - OWNERSHIP OF WORK

6.1. Plans, reports, studies, tracings, maps, software, electronic files, licenses, programs, equipment manuals, and databases and other documents or instruments of service prepared or obtained by CONSULTANT in the course of performing work under this Agreement, shall be delivered to and become the property of RTC. Software already developed and purchased by CONSULTANT prior to the Agreement is excluded from this requirement. CONSULTANT and its sub-consultants shall convey and transfer all copyrightable interests, trademarks, licenses, and other intellectual property rights in such materials to RTC upon completion of all services under this Agreement and upon payment in full of all compensation due to CONSULTANT in accordance with the terms of this Agreement.

Basic survey notes, sketches, charts, computations and similar data prepared or obtained by CONSULTANT under this Agreement shall, upon request, also be provided to RTC.

6.2. CONSULTANT represents that it has secured all necessary licenses, consents, or approvals to use the components of any intellectual property, including computer software, used in providing services under this Agreement, that it has full legal title to and the right to reproduce such materials, and that it has the right to convey such title and other necessary rights and interests to RTC.

6.3. CONSULTANT shall bear all costs arising from the use of patented, copyrighted, trade secret, or trademarked materials, equipment, devices, or processes used on or incorporated in the services and materials produced under this Agreement.

6.4. CONSULTANT agrees that all reports, communications, electronic files, databases, documents, and information that it obtains or prepares in connection with performing this Agreement shall be treated as confidential material and shall not be released or published without the prior written consent of RTC; provided, however, that CONSULTANT may refer to this scope of work in connection with its promotional literature in a professional and commercially reasonable manner. The provisions of this subsection shall not apply to information in whatever form that comes into the public domain. The provisions of this paragraph also shall not restrict CONSULTANT from giving notices required by law or complying with an order to provide information or data when such order is issued by a court, administrative agency, or other entity with proper jurisdiction, or if it is reasonably necessary for CONSULTANT to defend itself from any suit or claim.

ARTICLE 7 - TERMINATION

7.1. CONTRACT TERMINATION FOR DEFAULT

If CONSULTANT fails to perform services in the manner called for in this Agreement or if CONSULTANT fails to comply with any other provisions of this Agreement, RTC may terminate this Agreement for default. Termination shall be effected by serving a notice of termination on CONSULTANT setting forth the manner in which CONSULTANT is in default. CONSULTANT will only be paid the contract price for services delivered and accepted, or services performed in accordance with the manner of performance set forth in this Agreement.

If it is later determined by RTC that CONSULTANT had an excusable reason for not performing, such as a fire, flood, or events which are not the fault of or are beyond the control of CONSULTANT, RTC, after setting up a new performance schedule, may allow CONSULTANT to continue work, or treat the termination as a termination for convenience.

7.2. CONTRACT TERMINATION FOR CONVENIENCE

RTC may terminate this Agreement, in whole or in part, at any time by written notice to CONSULTANT when it is in RTC's best interest. CONSULTANT shall be paid its costs, including contract closeout costs, and profit on work performed up to the time of termination. CONSULTANT shall promptly submit its termination claim to RTC to be

paid CONSULTANT. If CONSULTANT has any property in its possession belonging to RTC, CONSULTANT will account for the same, and dispose of it in the manner RTC directs.

ARTICLE 8 - INSURANCE

8.1. CONSULTANT shall not commence any work or permit any employee/agent to commence any work until satisfactory proof has been submitted to RTC that all insurance requirements have been met.

8.2. In conjunction with the performance of the services/work required by the terms of this Agreement, CONSULTANT shall obtain all types and amounts of insurance set forth in Exhibit C, and shall comply with all provisions set forth therein.

ARTICLE 9 - HOLD HARMLESS

9.1. CONSULTANT's obligation under this provision is as set forth in Exhibit C. Said obligation would also extend to any liability of RTC resulting from any action to clear any lien and/or to recover for damage to RTC property.

ARTICLE 10 - EQUAL EMPLOYMENT OPPORTUNITY

10.1. During the performance of this Agreement, CONSULTANT agrees not to discriminate against any employee or applicant for employment because of race, color, religion, sex, age, disability, or national origin. CONSULTANT will take affirmative action to ensure that applicants are employed, and that employees are treated fairly during employment, without regard to their race, color, religion, sex, age, disability, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. CONSULTANT agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by RTC setting forth the provisions of this nondiscrimination clause.

10.2. CONSULTANT will, in all solicitations or advertisements for employees placed by or on behalf of CONSULTANT, state that well qualified applicants will receive consideration of employment without regard to race, color, religion, sex, age, disability, or national origin.

10.3. CONSULTANT will cause the foregoing provisions to be inserted in all sub-agreements for any work covered by this Agreement so that such provisions will be binding upon each sub-consultant.

ARTICLE 11 - RESOLUTION OF CLAIMS AND DISPUTES

11.1. NEGOTIATED RESOLUTION

In the event that any dispute or claim arises under this Agreement, the parties shall timely cooperate and negotiate in good faith to resolve any such dispute or claim. Such cooperation shall include providing the other party with all information in order to properly

evaluate the dispute or claim and making available the necessary personnel to discuss and make decisions relative to the dispute or claim.

11.2. MEDIATION

If the parties have been unable to reach an informal negotiated resolution to the dispute or claim within thirty (30) days following submission in writing of the dispute or claim to the other party, or such longer period of time as the parties may agree to in writing, either party may then request, in writing, that the dispute or claim be submitted to mediation (the "Mediation Notice"). After the other party's receipt or deemed receipt of the Mediation Notice, the parties shall endeavor to agree upon a mutually acceptable mediator, but if the parties have been unable to agree upon a mediator within ten (10) days following receipt of the Mediation Notice, then each party shall select a mediator and those two selected mediators shall select the mediator. A mediator selected by the parties' designated mediators shall meet the qualification set forth in as provided in Rule 4 of Part C., "Nevada Mediation Rules" of the "Rules Governing Alternative Dispute Resolutions adopted by the Nevada Supreme Court." Unless otherwise agreed to by the parties, in writing, the mediator shall have complete discretion over the conduct of the mediation proceeding. Unless otherwise agreed to by the parties, in writing, the mediation proceeding must take place within thirty (30) days following appointment of the mediator. The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in Washoe County, Nevada, unless otherwise agreed to by the parties, in writing. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

11.3. LITIGATION

In the event that the parties are unable to settle and/or resolve the dispute or claim as provided above, then either party may proceed with litigation in the Second Judicial District Court of the State of Nevada, County of Washoe.

11.4. CONTINUING CONTRACT PERFORMANCE

During the pendency of any dispute or claim the parties shall proceed diligently with performance of this Agreement and such dispute or claim shall not constitute an excuse or defense for a party's nonperformance or delay.

ARTICLE 12 – PROJECT MANAGERS

12.1. RTC's Project Manager is Jessica Dover, P.E. or such other person as is later designated in writing by RTC. RTC's Project Manager has authority to act as RTC's representative with respect to the performance of this Agreement.

12.2. CONSULTANT' Project Manager is Alex Greenblat, P.E. or such other person as is later designated in writing by CONSULTANT. CONSULTANT's Project Manager has authority to act as CONSULTANT's representative with respect to the performance of this Agreement.

ARTICLE 13 - NOTICE

13.1. Notices required under this Agreement shall be given as follows:

RTC:

Bill Thomas, AICP
Executive Director
Jessica Dover, P.E.
RTC Project Manager
Regional Transportation Commission
1105 Terminal Way
Reno, Nevada 89502
Email: jdover@rtcwashoe.com
(775) 335-1831

CONSULTANT:

Steven G. Moon, P.E.
Director, Construction Services
Alex Greenblat, P.E.
Senior Project Manager, Engineering
Lumos & Associates, Inc.
950 Sandhill Road, Suite 100
Reno, Nevada 89521
Email: smoon@lumosinc.com
Phone: (775) 827-6111

ARTICLE 14 - DELAYS IN PERFORMANCE

14.1. TIME IS OF THE ESSENCE

It is understood and agreed that all times stated and referred to herein are of the essence. The period for performance may be extended by RTC's Executive Director pursuant to the process specified herein. No extension of time shall be valid unless reduced to writing and signed by RTC's Executive Director.

14.2. UNAVOIDABLE DELAYS

If the timely completion of the services under this Agreement should be unavoidably delayed, RTC may extend the time for completion of this Agreement for not less than the number of days CONSULTANT was excusably delayed. A delay is unavoidable only if the delay is not reasonably expected to occur in connection with or during CONSULTANT's performance, is not caused directly or substantially by acts, omissions, negligence or mistakes of CONSULTANT, is substantial and in fact causes CONSULTANT to miss specified completion dates, and cannot adequately be guarded against by contractual or legal means.

14.3. NOTIFICATION OF DELAYS

CONSULTANT shall notify RTC as soon as CONSULTANT has knowledge that an event has occurred or otherwise becomes aware that CONSULTANT will be delayed in the completion of the work. Within ten (10) working days thereafter, CONSULTANT shall

provide such notice to RTC, in writing, furnishing as much detail on the delay as possible and requesting an extension of time.

14.4. REQUEST FOR EXTENSION

Any request by CONSULTANT for an extension of time to complete the work under this Agreement shall be made in writing to RTC. CONSULTANT shall supply to RTC documentation to substantiate and justify the additional time needed to complete the work and shall provide a revised schedule. RTC shall provide CONSULTANT with notice of its decision within a reasonable time after receipt of a request.

ARTICLE 15 - GENERAL PROVISIONS

15.1. SUCCESSORS AND ASSIGNS

RTC and CONSULTANT bind themselves and their successors and assigns to the other party and to the successors and assigns of such party, with respect to the performance of all covenants of this Agreement. Except as set forth herein, neither RTC nor CONSULTANT shall assign or transfer interest in this Agreement without the written consent of the other. Nothing herein shall be construed as creating a personal liability on the part of any officer or agent or any public body which may be a party hereto, nor shall it be construed as giving any rights or benefits hereunder to anyone other than RTC and CONSULTANT.

15.2. NON TRANSFERABILITY

This Agreement is for CONSULTANT's professional services, and CONSULTANT's rights and obligations hereunder may not be assigned without the prior written consent of RTC.

15.3. SEVERABILITY

If any part, term, article, or provision of this Agreement is, by a court of competent jurisdiction, held to be illegal, void, or unenforceable, or to be in conflict with any law of the State of Nevada, the validity of the remaining provisions or portions of this Agreement are not affected, and the rights and obligations of the parties shall be construed and enforced as if this Agreement did not contain the particular part, term, or provision held invalid.

15.4. RELATIONSHIP OF PARTIES

CONSULTANT is an independent contractor to RTC under this Agreement. Accordingly, CONSULTANT is not entitled to participate in any retirement, deferred compensation, health insurance plans or other benefits RTC provides to its employees. CONSULTANT shall be free to contract to provide similar services for others while it is under contract to RTC, so long as said services and advocacy are not in direct conflict, as determined by RTC, with services being provided by CONSULTANT to RTC.

15.5. WAIVER/BREACH

Any waiver or breach of a provision in this Agreement shall not be deemed a waiver of any other provision in this Agreement and no waiver is valid unless in writing and executed by the waiving party. An extension of the time for performance of any obligation or act shall not be deemed an extension of time for the performance of any other obligation or act. This Agreement inures to the benefit of and is binding upon the parties to this Agreement and their respective heirs, successors and assigns.

15.6. REGULATORY COMPLIANCE

A. CONSULTANT shall comply with all applicable federal, state and local government laws, regulations and ordinances. CONSULTANT shall be responsible for obtaining all necessary permits and licenses for performance of services under this Agreement. Upon request of RTC, CONSULTANT shall furnish RTC certificates of compliance with all such laws, orders and regulations.

B. CONSULTANT represents and warrants that none of the services to be rendered pursuant to this Agreement constitute the performance of public work, as that term is defined by Section 338.010(17) of the Nevada Revised Statutes. To the extent CONSULTANT does engage in such public work, CONSULTANT shall be responsible for paying the prevailing wage as required by Chapter 338 of the Nevada Revised Statutes.

15.7. EXCLUSIVE AGREEMENT

There are no verbal agreements, representations or understandings affecting this Agreement, and all negotiations, representations and undertakings are set forth herein with the understanding that this Agreement constitutes the entire understanding by and between the parties.

15.8. AMENDMENTS

No alteration, amendment or modification of this Agreement shall be effective unless it is in writing and signed by both parties.

15.9. CONTINUING OBLIGATION

CONSULTANT agrees that if, because of death or any other occurrence it becomes impossible for any principal or employee of CONSULTANT to render the services required under this Agreement, neither CONSULTANT nor the surviving principals shall be relieved of any obligation to render complete performance. However, in such event, RTC may terminate this Agreement if it considers the death or incapacity of such principal or employee to be a loss of such magnitude as to affect CONSULTANT's ability to satisfactorily complete the performance of this Agreement.

15.10. APPLICABLE LAW AND VENUE

The provisions of this Agreement shall be governed and construed in accordance with the laws of the State of Nevada. The exclusive venue and court for all lawsuits concerning this Agreement shall be the Second Judicial District Court of the State of Nevada, County of Washoe, and the parties hereto submit to the jurisdiction of that District Court.

15.11. ATTORNEYS' FEES

In the event of a dispute between the parties result in a proceeding in any Court of Nevada having jurisdiction, the prevailing party shall be entitled to an award of costs and any reasonable attorneys' fees.

15.12. CERTIFICATION REQUIRED BY NEVADA SENATE BILL 27 (2017)

CONSULTANT expressly certifies and agrees, as a material part of this Agreement, that it is not currently engaged in a boycott of Israel. CONSULTANT further agrees, as a material part of this Agreement, it will not engage in a boycott of Israel for the duration of this Agreement. If, at any time during the formation or duration of this Agreement, CONSULTANT is engaged or engages in a boycott of Israel, it will constitute a material breach of this Agreement.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement the day and year first above written.

REGIONAL TRANSPORTATION COMMISSION
OF WASHOE COUNTY

By: _____
Bill Thomas, AICP, Executive Director

LUMOS & ASSOCIATES, INC.

By: _____
Steven G. Moon, P.E., Director, Construction Services

EXHIBIT A-1 through A-3

EXHIBIT A-1: SCOPE OF SERVICES

EXHIBIT A-2: PROJECT TEAM

EXHIBIT A-3: SCHEDULE OF SERVICES

EXHIBIT A-1

SCOPE OF SERVICES
FOR THE
2026 PREVENTIVE MAINTENANCE PROJECT

The 2026 Preventive Maintenance Project will include pavement patching, crack sealing, micro surfacing and striping of select regional roads within Washoe County, Reno, and Sparks Nevada.

The annual preventative maintenance project is part of RTC's Regional Pavement Preservation Program, which aims to extend the lifespan of our roadways and reduce long-term repair costs. Consistent and appropriate maintenance treatments are typically six to ten times less expensive than allowing pavement to deteriorate to the point of needing full reconstruction. RTC monitors pavement conditions across the region and uses this data to identify and prioritize projects. Input from the regional Pavement Preservation Committee—made up of staff from Washoe County, the City of Reno, and the City of Sparks—also helps guide project selection. The Program has led to measurable improvements by increasing and maintaining a minimum Network average pavement condition index (PCI) and reducing the region's backlog of roads in need of major repairs.

1. PROJECT MANAGEMENT

Management of the overall project will include scheduling of CONSULTANT staff resources, coordinating with local agencies, specifically City of Reno, City of Sparks and Washoe County, scheduling, invoicing, and general project administration. Detailed monthly invoices will be prepared to document work performed during the invoice period.

CONSULTANT'S Project Manager will facilitate and assist in coordination of: Project Kick off meeting, candidate review meetings, and preliminary design and final design review meetings, as required by RTC. CONSULTANT will compile agendas and provide meeting minutes.

CONSULTANT'S Project Manager will keep the RTC Project Manager well informed of Project progress with bi-weekly informal briefings via email or phone call. Formal progress meetings will be conducted on occasion.

It is assumed the Project design duration will be Approximately six (6) months.

Deliverables:

- Various meeting agendas and minutes
- Monthly invoices and summaries

2. PRELIMINARY DESIGN

2.1. Investigate Existing Conditions/ Survey/Data Collection

Provide an existing conditions evaluation for the proposed roadway sections located in the City of Reno, City of Sparks, and Washoe County utilizing pavement management section candidate lists provided by the local agencies. This evaluation shall include:

- Verification of the existing conditions of the roadways proposed for surface treatment including

logging of observed distress in accordance with ASTM D6433

- Assessment of each roadway section and verification that the roadway meets the criteria for surface treatment. Assessment will include review of historical treatment data, current and projected Pavement Condition Index (PCI), and existing pavement distress.
- Identify locations which require asphalt patching
- Identify locations which require crack sealing
- Recommendation of slurry required (ie, Type 2, Type 3, Micro, Double Micro, Cape Seals, fog seals, etc.)
- Verification of existing striping conditions
- Recommendations for striping modifications to meet MUTCD or local agency requirements
- Recommendations for striping modifications to accommodate pedestrian and bicycle improvements in accordance with AASHTO, MUTCD, and local requirements.
- Layout and measurement of areas identified for asphalt patching, mapping of the proposed slurry streets which will include GPS of the roadway areas, islands, striping, pavement patching locations, utility valves and manholes using a combination of aerial photogrammetry and/or ground collected survey field shots. Photogrammetry can be collected by either an unmanned aerial vehicle (UAV) or traditional fixed wing aircraft

2.2 Preliminary Layout/Plans and Specifications

- AUTOCAD drawings of the proposed slurry streets showing areas to be slurried including slurry limits, and locations of existing utility valves and manholes. Electronic copies to be provided.
- Slurry quantities for each street identified for preventative maintenance treatment
- Verification of existing striping, including striping quantities for each street identified for preventative maintenance treatment and/or included for restriping as directed by the RTC
- Striping maps which will include striping upgrades required to bring streets to current MUTCD or agency requirements
- Preparation of preliminary bid documents utilizing current templates provided by the RTC, to be provided to CONSULTANT electronically in MS Word format. CONSUTLANT will provide updates to boiler plate specifications, including Special Technical Specifications and Bid Item Clarifications, as required.
- Evaluate modifications to standard technical specifications and bid item clarifications
- The preliminary plans and specifications will include at a minimum:
    - 90% Pavement Maintenance Plan Sheets (at 1"=50' scale)
    - 90% Striping Sheets (at 1"=50' scale)
    - 90% Contract Documents including Special Technical Specifications and Bid Item Clarifications
    - Detail Sheets (scale as noted)

2.3 Striping Modification and Design

Provide Striping Plans for roadways designated to be modified from the original configuration.

- Provide recommendations for changes to existing roadways
- Provide 60% plans for roadways identified for striping modifications for agency review
    - Comments received from the 60% submittal will be incorporated into the 90% striping sheets included in Task 2.3.

3. FINAL DESIGN

CONSULTANT will prepare Final Construction Plans, Contract Documents and Technical Specifications suitable for construction bid advertisement in accordance with RTC standards and requirements. 90% Submittal Comments will be tracked, addressed, and incorporated as applicable into the subsequent plan set by the CONSULTANT, utilizing a comment resolution matrix. CONSULTANT will assist in distributing the comment resolution matrix in Excel spreadsheet format to appropriate agencies and stakeholders, as directed by RTC. RTC, Local Entity and CONSULTANT Quality Control review comments will be incorporated into the final Plans and Specifications.

The final construction plans will be provided in electronic format on 22" x 34" and 11" x 17" size sheets and will show all elements of the Project construction, including pavement patching location, slurry and crack seal limits, sheet quantities, and utility locations. Final specifications will be provided as separate Word/PDF documents; and, as a compiled PDF signed and sealed by a Professional Engineer registered with the Nevada Board of Professional Engineers and Land Surveyors. The final plans will include, as a minimum:

- Cover Sheet
- Index Sheet(s)
- Index Sheets will also be provided as a separate deliverable in PDF format
- Legend, General Notes, and Abbreviations
- Pavement Maintenance Plan Sheets (at 1"=50' scale)
- Striping Sheets (at 1"=50' scale)
    - Incorporate striping modification review comments from 90% submittal
- Detail Sheets (scale as noted)

4. BIDDING SERVICES

4.1. Plan Set and Specification Distribution

CONSULTANT will provide RTC with final plans and specifications, including addenda, in Portable Document Format (PDF), for use in the ProcureWare system. CONSULTANT will issue and distribute the Conformed Set of Plans and Project Specifications once the Contract for Construction has been awarded to the successful bidder.

4.2. Pre-bid Meeting

CONSULTANT will be available during the bidding process to answer technical questions and will hold the pre-bid meeting. All questions and responses will be documented and provided to RTC. CONSULTANT will prepare and provide PDF addenda, if required. All questions regarding legal aspects of the contract documents will be referred directly to RTC. CONSULTANT will prepare and provide a PDF Summary of the pre-bid meeting, as directed by the RTC.

4.3 Bid Opening

CONSULTANT will attend and participate in the bid opening and review the bids received for irregularities. CONSULTANT will provide a recommendation for award letter to the RTC. CONSULTANT will tabulate bid results into an Excel spreadsheet and check multiplication and addition of bid items.

5. PAVEMENT MANAGEMENT DATA OPTIMIZATION AND COORDINATION (OPTIONAL)

Provide data management and coordination services to support RTC's Pavement Preservation Program. This task may include audit of existing pavement management section (PMS) historical maintenance data, assisting in development of tools to track PMS candidate prioritization process annual results as related to preventative maintenance candidates, analysis of and updates to roadway functional classifications of regional roads, and improving GIS data utilization in coordination with RTC and local public agency needs. Services may include, but are not limited to:

- Assist RTC's work with DevMecca to develop a StreetSaver Custom Report that will cross reference the existing Network inventory with Lumos' historical maintenance records. Assist in review of results as requested by RTC to validate historical pavement maintenance records per PMS, and identify and correct incomplete or inconsistent treatment data as directed by the RTC
- Assist RTC's work with DevMecca to develop a StreetSaver Custom Report that will document annual preventative maintenance PMS candidates that were not selected for treatment and the reasons why they were not selected
- Support updates to roadway functional classifications of RTP roads
    - Analyze how reclassification may impact prioritization of pavement preservation maintenance treatment options for specified PMS; may include: development of or updates to GIS shape files, development of exhibits, Memos, and spreadsheet deliverables
- Coordinate with the RTC, and local agencies as directed by RTC, to identify GPS/GIS data needs to facilitate greater use of field-collected data resulting from RTC's annual preventative maintenance project

If CONSULTANT determines that it is necessary to perform work under this task, CONSULTANT shall provide a letter detailing the need, scope, and not-to-exceed budget for any proposed work. Work under this task shall proceed only with the RTC Project Manager's prior written approval. Work will be performed on a time and materials basis in accordance with CONSULTANT's fee schedule as included per Exhibit B-1.

6. DESIGN SERVICES CONTINGENCY (OPTIONAL)

This task is a contingency for miscellaneous increases within the scope of this contract in the performance of services under Tasks 1 through 5 if authorized. If CONSULTANT determines that it is necessary to perform work to be paid out of contingency, CONSULTANT shall provide a letter detailing the need, scope, and not-to-exceed budget for any proposed work. Work under this task shall proceed only with the RTC Project Manager's prior written approval. Work will be performed on a time and materials basis in accordance with CONSULTANT'S fee schedule as included per Exhibit B-1.

7. CONSTRUCTION ADMINISTRATION

CONSULTANT will provide contract administration services as follows:

- Coordinate and lead a preconstruction meeting prior to commencement of work and will prepare and issue an agenda and meeting summary in PDF format
- Coordinate and lead weekly construction progress meetings either on site, at the RTC Terminal building, or via Microsoft Teams, whichever venue may be appropriate. Prepare and issue an agenda and meeting summary for each weekly meeting in PDF format. Anticipated twenty-six (26) weekly meeting occurrences in this Task
- Perform construction coordination including, but not limited to: direct coordination with residents, business owners, LPA's, utility providers, contractors, schools, and emergency services

- Review and provide recommendations on contractor's traffic control plans
- Preparation of traffic control plans by an ATSSA certified Traffic Control Supervisor (TCS) for submittal of NDOT Temporary Encroachment Permit Applications (if required)
- Review and stamp contractor's submittals for conformance to the contract documents
- Review and provide recommendations on test results. Recommendations will be signed/sealed by a Nevada Professional Engineer in responsible charge, as applicable
- Review and provide recommendations on contractor's construction schedule and work progress
- Provide weekly look ahead schedule in format requested by RTC
- Review construction for acceptance and/or mitigation
- Provide review of contractor's weekly certified payroll reports and apprenticeship utilization
- Provide written verification and approval of contractor's monthly pay request
- Provide field reports and materials testing data to RTC on a weekly basis
- Supervise the inspection and material testing activities
- Respond to contractor requests for information (RFI). Responses will be signed/sealed by a Nevada Professional Engineer in responsible charge, as applicable
- Assist in change order review and approval.
- Provide final test results, project photos and videos, and field reports in electronic format (.pdf)
- Provide an evaluation of surface treatments placed during the 2025 Preventive Maintenance project prior to the expiration of the warranty period and provide written recommendations and associated inspections for any corrective actions required

8. CONSTRUCTION INSPECTION

The inspectors assigned to this project will:

- Attend the preconstruction conference
- Monitor the work performed by the Contractor and verify that the work is in accordance with the plans and specifications
- Assist in problem resolution with the RTC, contractor personnel, utility agencies, the public and others
- Prepare daily inspection reports, submitted weekly to RTC and CC'd to the appropriate government jurisdiction(s)
- Provide quantity reports and assist in review of contractor's monthly progress payments
- Provide verification of the distribution of public relation notices required to be delivered by the contractor
- Assist in preparation of the Punch List
- Maintain a field "blue line" set of drawings to incorporate contractor record drawing mark-ups

CONSULTANT will provide Inspector(s) that have the appropriate certification required by the Nevada Alliance for Quality Transportation Construction (NAQTC).

8.1. Inspection-Pavement Patching

One full-time Senior Inspector shall be provided during asphalt patching placement. The estimated total duration for asphalt patching operations is 400 hours comprised of ten (10) hour work days for forty (40) shifts.

8.2. Inspection-Pavement Crack Sealing

One full-time Senior Inspector shall be provided during placement of pavement crack seal. The estimated total duration for crack sealing operations is 220 hours comprised of two (2) hour workdays for one

hundred ten (110) shifts.

8.3. Inspection-Slurry Seal

Two full-time Senior Inspectors shall be provided during placement of slurry seal. The estimated total duration for slurry seal operations is 1,300 hours comprised of ten (10) hour workdays for sixty-five (65) shifts for each inspector.

8.4. Inspection-Striping

One-full time Senior Inspector shall be provided during pavement striping placement. The estimated total duration for striping operations is 750 hours comprised of ten (10) hour workdays for seventy-five (75) shifts.

9. MATERIALS TESTING

CONSULTANT will provide Material Testing for compliance with the specifications per the Standard Specifications for Public Works Construction, Revision 8 of the 2012 Edition (Orange Book) testing requirements.

The following tests and frequencies shall be performed:

- Provide Slurry Aggregate testing. Weekly aggregate testing will include: Sand Equivalent, Durability, and Sieve Analysis, including a 200 wash. A total of eighteen (18) samples will be acquired and tested
- Provide Slurry Emulsion testing. Partial emulsion testing will be completed in-house for Residue by Evaporation and Ring and Ball Softening Point as per the specified test method. Testing frequency shall be eighteen (18) samples for the entire project
- Provide On-site thin-lift Nuclear Gauge Testing and Sampling for asphalt concrete placement. Testing frequency shall be at random locations throughout the project
- Provide AC Testing. Provide asphalt concrete tests at random locations throughout the project. Laboratory tests shall include ignition oven extraction, aggregate gradation, maximum theoretical specific gravity, flow & stability and Marshall unit weight. Eight (8) – hot mix samples are anticipated. Reports will also include voids in total mix
- Provide Asphalt Concrete Coring and Lab Testing. Lab test shall include core unit weight. Twenty-four (24) – asphalt cores are anticipated. Test reports will also include percent compaction

10. RECORD DRAWINGS AND PROJECT CLOSEOUT

CONSULTANT shall provide record drawings based on Contractor and Inspector field markups for the completed project. An electronic plan set, in PDF format (11" x 17), will be provided to RTC for its files and distribution to local agencies as appropriate.

The final record drawings must be identified, dated and signed as the record drawings and must also contain the engineer's signature. These drawings may include either:

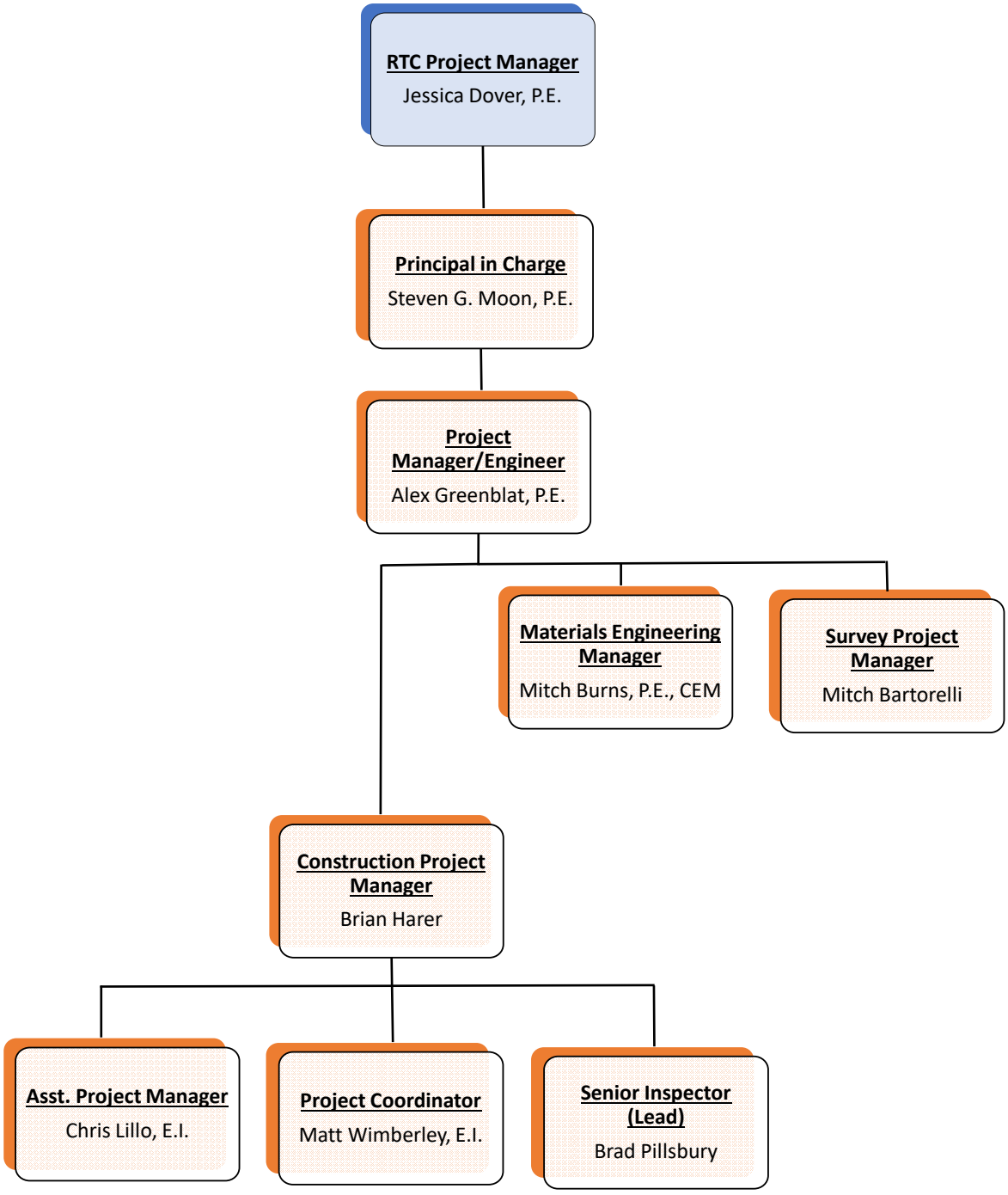
- The final revisions on the original engineer-stamped/signed reproducible drawings, which will then also be identified as the record drawings, or
- The record drawings shall include a copy of the original title sheet (including the appropriate

signatures by RTC, local governments, signed and stamped by the CONSULTANT) and identified as record drawings

CONSULTANT will prepare a project closeout package with a signed/sealed cover sheet/summary letter for the RTC that includes as-built drawings along with compiled testing and inspection reports, meeting summaries, substantial completion recommendation, final acceptance and relief of maintenance recommendation, summary of centerline and lane miles treated, and total lane miles of bike lanes added and treated. The closeout package will be provided in PDF format.

11. CONSTRUCTION SERVICES CONTINGENCY (OPTIONAL)

This task is contingency for miscellaneous increases within the scope of this contract in the performance of services under Tasks 7 through 10 if authorized. If CONSULTANT determines that it is necessary to perform work to be paid out of contingency, CONSULTANT shall provide a letter detailing the need, scope, and not-to-exceed budget for any proposed work. Work under this task shall proceed only with the RTC Project Manager's prior written approval. Work will be performed on a time and materials basis in accordance with CONSULTANT'S fee schedule as included per Exhibit B-1.


RTC Project Manager
Jessica Dover, P.E.
Principal in Charge
Steven G. Moon, P.E.
Project Manager/Engineer
Alex Greenblat, P.E.
Materials Engineering Manager
Mitch Burns, P.E., CEM
Survey Project Manager
Mitch Bartorelli
Construction Project Manager
Brian Harer
Asst. Project Manager
Chris Lillo, E.I.
Project Coordinator
Matt Wimberley, E.I.
Senior Inspector (Lead)
Brad Pillsbury

RTC 2026 Preventive Maintenance
Design and Construction Management Schedule
Exhibit A-3

Task	Start	End	Days
Initial Evaluations	9/29/2025	10/27/2025	28
Survey/Layout/Design	10/28/2025	12/23/2025	56
90% Design	11/4/2025	12/30/2025	56
Agency Review	12/31/2025	1/14/2026	14
100% Design	1/15/2026	1/29/2026	14
Advertise (3 Week Bid Time)	2/5/2026	2/26/2026	21
Open Bids	2/26/2026	2/26/2026	1
Notice To Proceed	3/16/2025	3/16/2025	1
Construction	3/16/2025	10/3/2025	200

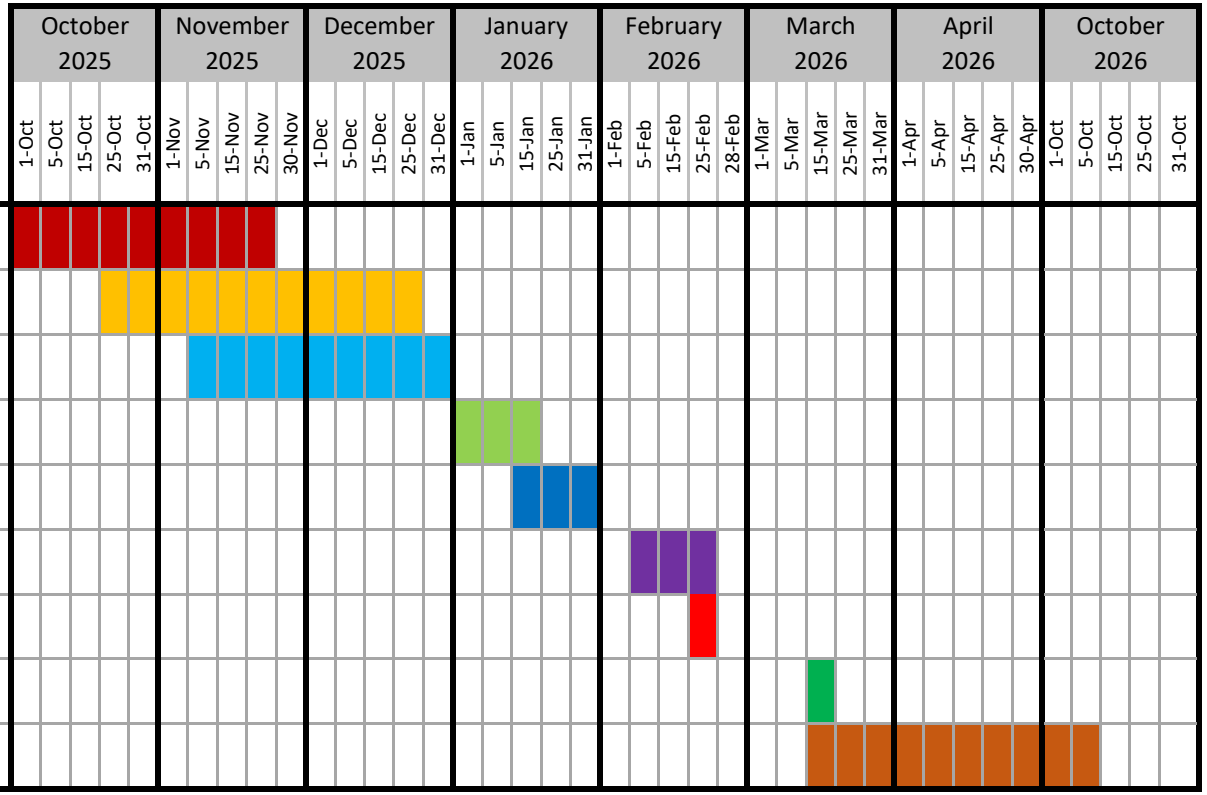


EXHIBIT B-1 through B-3

EXHIBIT B-1: 2025 HOURLY RATE FEE SCHEDULE

EXHIBIT B-2: FEE DETAIL

EXHIBIT B-3: TESTING FEE BREAKDOWN

LUMOS & ASSOCIATES

EXHIBIT B-1: RTC 2026 Preventive Maintenance Standard Fee Schedule – July 2025

Engineering	Per Hour
Assistant / Project / Senior Project Manager	210/235/250

Construction	Per Hour
Director	$295
Assistant / Project / Senior Project Manager	210/235/250
Construction Services Supervisor / Engineer	175/185
Assistant / Project / Senior Project Coordinator	145/185/195
Inspector / Senior Inspector (includes nuclear gauge)	160/170
Construction Technician I / II / III	120/130/140
Materials Technician I / II / III (includes nuclear gauge)	110/120/130
Administrative Technician	90/100/110

Surveying	Per Hour
Assistant / Project / Senior Project Manager	210/235/250
Staff / Project / Senior Surveyor	190/205/215

Administrative & Other Services	Per Hour
Administrative Support	$135
Copy & Print Services	Cost + 15%
Mileage (per mile)	0.90

Particle Size Testing For Soils/Aggregates		Each
Sieve Analysis	(ASTM C-136/C-117)	$200
Wash	(ASTM C-117)	150
Grain Size Analysis Soils	(ASTM D-421/422)	300
Sieve Analysis/Wash (coarse combined)	(ASTM C-136/C-117)	250

Soils & Aggregate Testing		Each
Specific Gravity & Absorption — Coarse or Fine Aggregate	(ASTM C-127/C-128)	$150
Sand Equivalent	(ASTM D-2419)	200
Dry Unit Weight of Aggregate	(ASTM C-29)	100
Organic Impurities	(ASTM C-40)	100
Fractured Faces	(NDOT T-230)	100
L.A. Abrasion	(ASTM C-131)	250
Sodium Sulfate Soundness (5 cycles)	(ASTM C-88)	500
Moisture Content	(ASTM C-566)	50
Moisture Content and Unit Density	(ASTM D-2937)	100
Plastic Index	(ASTM D-4318)	225
Expansion Index	(ASTM D-4829)	300
R-Value	(ASTM D-2844)	350
Direct Shear	(ASTM D-3080)	350
Consolidation	(ASTM D-2435)	500
Clay Lumps/Friable Parts	(ASTM C-142)	100
Cement Treated Base Compression Test		75
Fine Durability Index	(ASTM D-3744)	250
Coarse Durability Index	(ASTM D-3744)	300
Cleanness Value	(CAL 229)	250

Moisture Density Testing		Each
Compaction	(ASTM D-698 or ASTM D-1557)	$275
Rock Correction	(ASTM D-4718)	150
Harvard Miniature	(NDOT T-101)	150
CAL 216		300
Check Point	(ASTM D-1557)	125

Emulsion Testing		Each
% Residue By Evaporation/Softening Point (Ring & Ball)	(AASHTO T-53 & T-59) 24 hr. turnaround	$400
% Residue By Evaporation/Softening Point (Ring & Ball)	(AASHTO T-53 & T-59) 3-day turnaround	350
Saybolt Furol Viscosity Test @ 122˚	(AASHTO T-59)	275
Rotational Paddle Viscosity	(ASTM D-7226 & AASHTO T-382)	550

LUMOS & ASSOCIATES

EXHIBIT B-1: RTC 2026 Preventive Maintenance Standard Fee Schedule – July 2025

Concrete Testing		Each
Compression Concrete Cylinders	(ASTM C-39)	$40
Hold Cylinder (Cured but not tested)		30
Compression, Concrete Core	(ASTM C-42)	40
Flexural Strength of Concrete Beams	(ASTM C-78/C-293)	80
Compression, Grout Cylinder	(UBC 24-28)	40
Compression, Mortar Cylinder	(UBC 24-28)	40

Asphalt Concrete Testing		Each
Sieve Analysis	(ASTM D-5444)	$125
Unit Weight on Compacted Sample	(ASTM D-2726)	50
Unit Weight on Core	(ASTM D-2726)	75
Marshall Stability & Flow	(ASTM D-1559)	50
Max. Theoretical Specs. Gravity	(ASTM D-2041)	100
Bitumen Content	(ASTM D-6307)	150
A.C. Series (Marshall)		675
Oven Correction	(ASTM D-6307)	300

These rates apply to services rendered through December 31, 2026. Services provided after this date will be invoiced according to the Standard Fee Schedule in effect at that time.

EXHIBIT "B-2"

RTC OF WASHOE COUNTY
2026 Preventive Maintenance Project

JOB NO.: LA25.600
DATE: 7/7/2025

BUDGET ESTIMATE TASK	$295 DIRECTOR	$250 SR. PROJECT MANAGER	$235 SURVEY PROJECT MANAGER	$185 CONSTRUCTION SERVICES ENGINEER	$190 STAFF SURVEYOR	$185 PROJECT COORDINATOR	$170 SENIOR INSPECTOR	$130 MATERIALS TECH 3	$120 MATERIALS TECH 2	$100 ADMINISTRATIVE TECHNICIAN	TOTAL
1 - Project Management	4.00	32.00									$ 9,180.00
2 - Preliminary Design											
2.1 - Investigate Existing Conditions/ Survey/Data Collection		4.00					800.00				$ 137,000.00
2.2 - Preliminary Layout/Plans and Specifications		4.00	6.00		12.00	200.00					$ 41,690.00
2.3 - Striping Modification and Design		4.00	2.00		4.00	120.00					$ 24,430.00
3 - Final Design		8.00				280.00	50.00				$ 62,300.00
4 - Bidding Services											
4.1 - Plan Set and Specification Distribution		2.00				2.00					$ 870.00
4.2 - Pre-bid Meeting		6.00				6.00					$ 2,610.00
4.3 - Bid Opening		8.00				8.00					$ 3,480.00
5 - Pavement Management Data Optimization & Coordination (OPTIONAL)											$ 15,000.00
SUBTOTAL DESIGN SERVICES											$296,560
6 - Design Contingency (OPTIONAL)											$ 10,000.00
7 - Construction Administration	10.00	240.00	-	-	-	80.00	-	-	-	72.00	$ 84,950.00
8 - Construction Inspection											
8.1 - Inspection - Patching (40 W/D's @ 10 hrs/day) [1]		50.00	-	-	-	10.00	400.00	-	-	-	$ 82,350.00
8.2 - Inspection - Crack Seal Placement (110 W/D's @ 2hrs/day) [2]		25.00	-	-	-	5.00	220.00	-	-	-	$ 44,575.00
8.3 - Inspection - Slurry Seal Placement (65 W/D's) [3]		100.00	-	-	-	20.00	1,300.00	-	-	-	$ 249,700.00
8.4 - Inspection - Striping (75 W/D's) [4]		100.00	-	-	-	20.00	750.00	-	-	-	$ 156,200.00
9 - Materials Testing				26.00				80.00			$ 15,210.00
						Striping Plates	Slurry Agg Testing [5]	Emulsion Testing [5]	Marshall AC Testing [5]	AC Coring [5]	
Laboratory Testing $						$ 1,000.00	$11,700.00	$7,200.00	$5,400.00	$1,800.00	27,100.00
10 - Project Closeout		20.00	-	4.00	-	30.00		-	-	8.00	$ 12,090.00
SUBTOTAL CONSTRUCTION SERVICES											$ 672,175.00
2G - Construction Contingency (OPTIONAL)											$ 30,000.00
GRAND TOTAL DESIGN + EDC											$ 1,008,735.00

[1] Patching Inspection time based on one (1) inspector for 10 hours per day for 45 shifts of patching.

[2] Crack Seal Inspection time based on one (1) inspector for 2 hours per day for 110 shifts of crack seal placement.

[3] Slurry Inspection time based on two (2) inspectors, 10 hours per day for 65 shifts of Slurry.

[4] Striping Inspection time based on one (1) inspector for 10 hours per day for 75 shifts of Striping placement.

[5] See attached B-3 sheet for frequency of testing for asphalt concrete, slurry aggregates and emulsion.

[6] Anticipated project budget as provided by RTC on May 28, 2025

Slurry Budget: $ 6,500,000 [6]

LUMOS & ASSOCIATES

2026 PREVENTIVE MAINTENANCE MATERIAL TESTING

EXHIBIT "B-3" - Testing Fee Breakdown

Slurry Aggregates

Test	Unit Cost	
Sand Equivalent	$200.00	
Durability	$250.00	
Sieve Analysis	$200.00	
	$650.00	per aggregate series
	$11,700.00	(Total for 18 series)

Emulsion Testing

Test	Unit Cost	# of Tests	Total
Residue Testing (in-house)	$400.00	18	$7,200.00
			$7,200.00

Plantmix Testing

Test	Unit Cost	# of Tests	Total
Plantmix Series	$675.00	8	$5,400.00
Coring	$75.00	24	$1,800.00
			$7,200.00

EXHIBIT C

INDEMNIFICATION AND INSURANCE REQUIREMENTS

INDEMNIFICATION AND INSURANCE REQUIREMENTS FOR PROFESSIONAL SERVICE AGREEMENTS
[NRS 338 DESIGN PROFESSIONAL]
2022-07-08 Version

1. INTRODUCTION

IT IS HIGHLY RECOMMENDED THAT CONSULTANTS CONFER WITH THEIR INSURANCE CARRIERS OR BROKERS TO DETERMINE THE AVAILABILITY OF THESE INSURANCE CERTIFICATES AND ENDORSEMENTS IN ADVANCE OF PROPOSAL SUBMISSION. IF THERE ARE ANY QUESTIONS REGARDING THESE INSURANCE REQUIREMENTS, IT IS RECOMMENDED THAT THE AGENT/BROKER CONTACT RTC'S FINANCE DIRECTOR AT (775) 335-1845.

2. INDEMNIFICATION

CONSULTANT agrees, subject to the limitations in Nevada Revised Statutes Section 338.155, to save and hold harmless and fully indemnify RTC, Washoe County, City of Reno and City of Sparks including their elected officials, officers, employees, and agents (hereafter, "Indemnitees") from and against any and all claims, proceedings, actions, liability and damages, including reasonable attorneys' fees and defense costs incurred in any action or proceeding (collectively "Damages") arising out of the:

A. Negligence, errors, omissions, recklessness or intentional misconduct of CONSULTANT or CONSULTANT's agents, employees, officers, directors, subconsultants, or anyone else for whom CONSULTANT may be legally responsible, which are based upon or arising out of the professional services of CONSULTANT; and

B. Violation of law or any contractual provisions or any infringement related to trade names, licenses, franchises, patents or other means of protecting interests in products or inventions resulting from the use by the Indemnitees of any materials, devices, processes, equipment, or other deliverable (including software) supplied by CONSULTANT under or as a result of this Agreement, but excluding any violation or infringement resulting from the modification or alteration by the Indemnitees of any materials, devices, processes, equipment, or other deliverable (including software) not consented to by CONSULTANT.

CONSULTANT further agrees to defend, save and hold harmless and fully indemnify the Indemnitees from and against any and all Damages arising out the negligence, errors, omissions, recklessness or intentional misconduct of CONSULTANT or CONSULTANT's agents, employees, officers, directors, subconsultants, or anyone else for whom CONSULTANT may be legally responsible, which are not based upon or arising out of the professional services of CONSULTANT.

The Damages shall include, but are not limited to, those resulting from personal injury to any person, including bodily injury, sickness, disease or death and injury to real property or personal

property, tangible or intangible, and the loss of use of any of that property, whether or not it is physically injured.

If the Indemnitees are involved in defending actions of CONSULTANT or anyone else for whom CONSULTANT is legally responsible, CONSULTANT shall reimburse the Indemnitees for the time spent by such personnel at the rate of the Indemnitees pay or compensation for such services.

If an Indemnitee is found to be liable in the proceeding, then CONSULTANT'S obligation hereunder shall be limited to the proportional share of the liability attributed to CONSULTANT.

In determining whether a claim is subject to indemnification, the incident underlying the claim shall determine the nature of the claim.

In the event of a violation or an infringement under paragraph 2.B above and the use is enjoined, CONSULTANT, at its sole expense, shall either (1) secure for the Indemnitees the right to continue using the materials by suspension of any injunction or by procuring a license or licenses for the Indemnitees; or (2) modify the materials so that they become non-infringing. This covenant shall survive the termination of the Professional Services Agreement.

The provisions of this Agreement are separate and severable and it is the intent of the Parties hereto that in the event any provision of this Agreement should be determined by any court of competent jurisdiction to be void, voidable or too restrictive for any reason whatsoever, the remaining provisions of this Agreement shall remain valid and binding upon said Parties. It is also understood and agreed that in the event any provision should be considered, by any court of competent jurisdiction, to be void because it imposes a greater obligation on CONSULTANT than is permitted by law, such court may reduce and reform such provisions to limitations which are deemed reasonable and enforceable by said court.

3. GENERAL REQUIREMENTS

Prior to the start of any work on a RTC project, CONSULTANT shall purchase and maintain insurance of the types and limits as described below insuring against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by CONSULTANT, its subconsultants, or their employees, agents, or representatives. The cost of all such insurance shall be borne by CONSULTANT.

4. VERIFICATION OF COVERAGE

CONSULTANT shall furnish RTC with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth herein, on forms acceptable to RTC. All deductibles and self-insured retentions requiring RTC approval shall be shown on the certificate. All certificates and endorsements are to be addressed to RTC's Finance Director and be received by RTC before work commences. Upon request, CONSULTANT agrees that RTC has the right to review CONSULTANT'S and the Sub's insurance policies, or certified copies of the policies. Copies of applicable policy forms or endorsements confirming required additional insured, waiver of subrogation and notice of

cancellation provisions are required to be provided with any certificate(s) evidencing the required coverage.

5. NOTICE OF CANCELLATION

CONSULTANT or its insurers shall provide at least thirty (30) days' prior written notice to RTC prior to the cancellation or non-renewal of any insurance required under this Agreement. An exception may be included to provide at least ten (10) days' written notice if cancellation is due to non-payment of premium. CONSULTANT shall be responsible to provide prior written notice to RTC as soon as practicable upon receipt of any notice of cancellation, non-renewal, reduction in required limits or other material change in the insurance required under this Agreement.

6. SUBCONSULTANTS & SUBCONTRACTORS

CONSULTANT shall include all Subcontractors and Subconsultants (referred to collectively as "Subs") as insureds under its liability policies OR shall cause Subs employed by CONSULTANT to purchase and maintain separate liability coverages and limits of the types specified herein. If any Subs maintain separate liability coverages and limits, each shall include the RTC, Washoe County, City of Reno and City of Sparks as additional insureds under its commercial general liability policy, subject to the same requirements stated herein, without requiring a written contract or agreement between each of the additional insureds and any sub-consultant or sub-contractor. Any separate coverage limits of liability maintained by Subs shall be at least **$1,000,000** per occurrence and at least **$2,000,000** for any applicable coverage aggregates or the amount customarily carried by the Sub, whichever is GREATER. If any Subs provide their own insurance with limits less than required of the Contractor, Contractor shall include Subs in their coverage up to the full limits required of the Contractor. When requested by RTC, CONSULTANT shall furnish copies of certificates of insurance evidencing coverage for each subconsultant. CONSULTANT need not require its non-design subcontractors to carry Professional Errors and Omissions Liability insurance.

7. DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductibles or self-insured retentions that exceed $25,000 per occurrence or claim must be declared to RTC's Finance Director prior to signing this Agreement. RTC is entitled to request and receive additional documentation, financial or otherwise, prior to giving its approval of the deductibles and self-insured retentions. Any changes to the deductibles or self-insured retentions made during the term of this Agreement or during the term of any policy must be declared to RTC's Finance Director prior to the change taking effect.

8. ACCEPTABILITY OF INSURERS

Required insurance is to be placed with insurers with a Best's rating of no less than A-VII and acceptable to RTC. RTC may accept coverage with carriers having lower Best's ratings upon review of financial information concerning CONSULTANT and the insurance carrier. RTC reserves the right to require that CONSULTANT'S insurer(s) be licensed and admitted in the State

of Nevada or meet any applicable state and federal laws and regulations for non-admitted insurance placements.

9. OTHER CONDITIONS

A. Failure to furnish the required certificate(s) or failure to maintain the required insurance may result in termination of this Agreement at RTC's option.

B. If CONSULTANT fails to furnish the required certificate or fails to maintain the required insurance as set forth herein, RTC shall have the right, but not the obligation, to purchase said insurance at CONSULTANT's expense.

C. Any waiver of CONSULTANT's obligation to furnish such certificate or maintain such insurance must be in writing and signed by an authorized representative of RTC. Failure of RTC to demand such certificate or other evidence of full compliance with these insurance requirements or failure of RTC to identify a deficiency from evidence that is provided shall not be construed as a waiver of CONSULTANT's obligation to maintain such insurance, or as a waiver as to the enforcement of any of these provisions at a later date.

D. By requiring insurance herein, RTC does not represent that coverage and limits will necessarily be adequate to protect CONSULTANT, and such coverage and limits shall not be deemed as a limitation on CONSULTANT's liability under the indemnities granted to RTC in this contract.

E. If CONSULTANT'S liability policies do not contain the standard ISO separation of insureds condition, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.

10. COMMERCIAL GENERAL LIABILITY

CONSULTANT shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella insurance with a limit of not less than **$2,000,000** each occurrence. If such CGL insurance contains a general aggregate limit, it shall be increased to equal twice the required occurrence limit or revised to apply separately to this project.

CGL insurance shall be written on ISO occurrence form CG 00 01 04 13 (or a substitute form providing equivalent coverage) and shall cover liability arising from premises, operations, products-completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

RTC and any other Indemnitees listed in Section 2. INDEMNIFICATION of this Agreement shall be included as an additional insured under the CGL, using ISO additional insured endorsement CG 20 10 07/04 or CG 20 33 07/04 or a substitute providing equivalent coverage, and under the commercial umbrella, if any.

This insurance shall apply as primary insurance with respect to any other insurance or self-insurance programs afforded to RTC or any other Indemnitees under this Agreement.
CONSULTANT waives all rights against RTC and any other Indemnitees listed in section 2. INDEMNIFICATION of this Agreement for recovery of damages to the extent these damages are covered by the commercial general liability or commercial umbrella liability insurance maintained pursuant to this agreement. CONSULTANT's insurer shall endorse CGL policy to waive subrogation against RTC with respect to any loss paid under the policy.

11. COMMERCIAL AUTOMOBILE LIABILITY

CONSULTANT shall maintain automobile liability and, if necessary, commercial umbrella liability insurance with a limit of not less than **$1,000,000** each accident. Such insurance shall cover liability arising out of any auto (including owned, hired, and non-owned autos).

Coverage shall be written on ISO form CA 00 01, CA 00 05, CA 00 25, or a substitute form providing equivalent liability coverage for all owned, leased, hired (rented) and non-owned vehicles (as applicable). RTC may agree to accept auto liability for non-owned and hired (rented) vehicles under the CGL if CONSULTANT does not own or operate any owned or leased vehicles.

CONSULTANT waives all rights against RTC, its officers, employees and volunteers for recovery of damages to the extent these damages are covered by the automobile liability or commercial umbrella liability insurance obtained by CONSULTANT pursuant to this Agreement.

12. INDUSTRIAL (WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY) INSURANCE

It is understood and agreed that there shall be no Industrial (Worker's Compensation and Employer's Liability) Insurance coverage provided for CONSULTANT or any subconsultants by RTC. CONSULTANT, and any subconsultants, shall procure, pay for and maintain the required coverages.

CONSULTANT shall maintain workers' compensation and employer's liability insurance meeting the statutory requirements of the State of Nevada, including but not limited to NRS 616B.627 and NRS 617.210. The employer's liability limits shall not be less than **$1,000,000** each accident for bodily injury by accident or **$1,000,000** each employee for bodily injury by disease.

CONSULTANT shall provide a Final Certificate for itself and each subconsultant evidencing that CONSULTANT and each subconsultant maintained workers' compensation and employer's liability insurance throughout the entire course of the project.

If CONSULTANT, or any subconsultant is a sole proprietor, coverage for the sole proprietor must be purchased and evidence of coverage must appear on the Certificate of Insurance and Final Certificate.

CONSULTANT waives all rights against RTC, its elected officials, officers, employees and agents for recovery of damages to the extent these damages are covered by the workers compensation and employer's liability or commercial umbrella liability insurance obtained by Tenant pursuant to this agreement. CONSULTANT shall obtain an endorsement equivalent to WC 00 03 13 to affect this waiver.

13. PROFESSIONAL ERRORS AND OMISSIONS LIABILITY

CONSULTANT shall maintain professional liability insurance applying to liability for a professional error, omission, or negligent act arising out of the scope of CONSULTANT'S services provided under this Agreement with a limit of not less than **$1,000,000** each claim and annual aggregate. CONSULTANT shall maintain professional liability insurance during the term of this Agreement and, if coverage is provided on a "claims made" or "claims made and reported" basis, shall maintain coverage or purchase an extended reporting period for a period of at least three (3) years following the termination of this Agreement.

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.3.3**

To: Regional Transportation Commission

From: Austin McCoy, Project Manager

SUBJECT: Keystone Avenue Rehabilitation Project - Professional Services Agreement

RECOMMENDED ACTION

Approve a contract with Lumos and Associates, Inc., for design services and engineering during construction services for the Keystone Avenue Rehabilitation Project, in an amount not-to-exceed $855,140.

BACKGROUND AND DISCUSSION

This Professional Services Agreement (PSA) with Lumos and Associates, Inc., is for professional design services for the Keystone Avenue Rehabilitation Project in the amount of $389,160 and engineering during construction services (EDC) in the amount of $415,980. Project contingency in the amount of $50,000 is also included in the agreement. The project involves the rehabilitation of Keystone Avenue from Coleman Drive to McCarran Boulevard. Improvements will include, but are not limited to, replacing deteriorated curb, gutter, and sidewalk; upgrading ADA accessibility; enhancing safety features; and modifying roadway striping.

Lumos and Associates was selected from the Civil Engineering Design and Construction Management Services List as a qualified firm to perform engineering, construction management, and quality assurance. Lumos and Associates's scope, schedule, and negotiated budget amount for services is within the appropriated budget.

- Design Notice-to-Proceed: July 2025
- 60% Design Submittal: Fall 2026
- Final Design Submittal: Winter 2026
- Construction: Summer 2027

FISCAL IMPACT

Fuel Tax appropriations are included in the FY 2026 Budget.

PREVIOUS BOARD ACTION

4/18/2025 - Approved the qualified list of consultants to provide civil engineering, design, and construction management services for the Street and Highway Program.

AGREEMENT
FOR
PROFESSIONAL SERVICES

This agreement (this "Agreement") is dated and effective as of _____, 2025, by and between the Regional Transportation Commission of Washoe County ("RTC") and Lumos & Associates, Inc. ("CONSULTANT").

WITNESSETH:

WHEREAS, RTC has selected Lumos & Associates, Inc. from the Civil Engineering Design & Construction Management Services for the Streets & Highways Program shortlist to perform design engineering, and engineering during construction services in connection with the Keystone Avenue Rehabilitation Project.

NOW, THEREFORE, RTC and CONSULTANT, in consideration of the mutual covenants and other consideration set forth herein, do hereby agree as follows:

ARTICLE 1 – TERM AND ENGAGEMENT

1.1. The term of this Agreement shall be from the date first written above through December 31, 2027, unless terminated at an earlier date, or extended to a later date, pursuant to the provisions herein.

1.2. CONSULTANT will perform the work using the project team identified in Exhibit A-2. Any changes to the project team must be approved by RTC's Project Manager.

1.3. CONSULTANT will promptly, diligently and faithfully execute the work to completion in accordance with applicable professional standards subject to any delays due to strikes, acts of God, act of any government, civil disturbances, or any other cause beyond the reasonable control of CONSULTANT.

1.4. CONSULTANT shall not proceed with work until both parties have executed this Agreement and a purchase order has been issued to CONSULTANT. If CONSULTANT violates that prohibition, CONSULTANT forfeits any and all right to reimbursement and payment for that work and waives any and all claims against RTC, its employees, agents, and affiliates, including but not limited to monetary damages, and any other remedy available at law or in equity arising under the terms of this Agreement. Furthermore, prior to execution and issuance of a purchase order, CONSULTANT shall not rely on the terms of this Agreement in any way, including but not limited to any written or oral representations, assurances or warranties made by RTC or any of its agents, employees or affiliates, or on any dates of performance, deadlines, indemnities, or any term contained in this Agreement or otherwise.

ARTICLE 2 - SERVICES OF CONSULTANT

2.1. SCOPE OF SERVICES

The scope of services consist of the tasks set forth in Exhibit A-1.

2.2. SCHEDULE OF SERVICES

Tasks and subtasks shall be completed in accordance with the schedule in Exhibit A-3. Any change(s) to the schedule must be approved by RTC's Project Manager.

2.3. CONTINGENCY

Contingency line items identified in the scope of services are for miscellaneous increases within the scope of work. Prior to the use of any contingency amounts, CONSULTANT shall provide a letter to RTC's Project Manager detailing the need, scope, and not-to-exceed budget for the proposed work. Work to be paid for out of contingency shall proceed only with the RTC Project Manager's written approval.

2.4. OPTIONS

RTC shall have the right to exercise its option(s) for all or any part of the optional tasks or subtasks identified in Exhibit A-1. CONSULTANT will prepare and submit a detailed scope of services reflecting the specific optional services requested, a schedule for such services, and a cost proposal. RTC will review and approve the scope of services and RTC and CONSULTANT will discuss and agree upon compensation and a schedule. CONSULTANT shall undertake no work on any optional task without written notice to proceed with the performance of said task. RTC, at its sole option and discretion, may select another individual or firm to perform the optional tasks or subtasks identified in Exhibit A-1.

2.5. ADDITIONAL SERVICES

CONSULTANT will provide additional services when agreed to in writing by RTC and CONSULTANT.

2.6. PERFORMANCE REQUIREMENTS

Any and all design and engineering work furnished by CONSULTANT shall be performed by or under the supervision of persons licensed to practice architecture, engineering, or surveying (as applicable) in the State of Nevada, by personnel who are careful, skilled, experienced and competent in their respective trades or professions, who are professionally qualified to perform the work, and who shall assume professional responsibility for the accuracy and completeness of documents prepared or checked by them, in accordance with appropriate prevailing professional standards. Notwithstanding the provision of any drawings, technical specifications, or other data by RTC, CONSULTANT shall have the

responsibility of supplying all items and details required for the deliverables required hereunder.

Any sampling and materials testing shall be performed by an approved testing laboratory accredited by AASHTO or other ASTM recognized accrediting organization in the applicable test methods. If any geotechnical or materials testing is performed by a sub-consultant, that laboratory shall maintain the required certification. Proof of certification shall be provided to RTC with this Agreement. If certification expires or is removed during the term of this Agreement, CONSULTANT shall notify RTC immediately, and propose a remedy. If an acceptable remedy cannot be agreed upon by both parties, RTC may terminate this Agreement for default.

CONSULTANT shall provide only Nevada Alliance for Quality Transportation Construction (NAQTC) and/or American Concrete Institute (ACI) qualified personnel to perform field and laboratory sampling and testing during the term of this Agreement. All test reports shall be signed by a licensed NAQTC or ACI (as applicable) tester and notated with his/her license number.

2.7. ERRORS AND OMISSIONS

CONSULTANT shall, without additional compensation, correct or revise any deficiencies, errors, or omissions caused by CONSULTANT in its analysis, reports, and services. CONSULTANT also agrees that if any error or omission is found, CONSULTANT will expeditiously make the necessary correction, at no expense to RTC. If an error or omission was directly caused by RTC, and not by CONSULTANT and RTC requires that such error or omission be corrected, CONSULTANT may be compensated for such additional work.

ARTICLE 3 - COMPENSATION

3.1. CONSULTANT shall be paid for hours worked at the hourly rates and rates for testing in Exhibit B-1 and B-2, inclusive. RTC shall not be responsible for any other costs or expenses except as provided in Exhibit B-2.

3.2. The maximum amount payable to CONSULTANT to complete each task is equal to the not-to-exceed amounts identified in Exhibit B-2 "TOTALS" column. CONSULTANT can request in writing that RTC's Project Manager reallocate not-to-exceed amounts between tasks. A request to reallocate not-to-exceed amounts must be accompanied with a revised fee schedule, and must be approved in writing by RTC's Project Manager prior to performance of the work. In no case shall CONSULTANT be compensated in excess of the following not-to exceed amounts:

Design Services	$352,870
Optional Design Services	$36,290
Design Contingency	$30,000
Optional Engineering During Construction Services	$415,980
Engineering During Construction Services Contingency	$20,000
Total Not-to-Exceed Amount	$855,140

3.3. For any work authorized under Section 2.5, "Additional Services," RTC and CONSULTANT will negotiate not-to-exceed amounts based on the standard hourly rates and rates for testing in Exhibit B-1 and B-2. Any work authorized under Section 2.5, "Additional Services," when performed by persons who are not employees or individuals employed by affiliates of CONSULTANT, will be billed at a mutually agreed upon rate for such services, but not more than 105% of the amounts billed to CONSULTANT for such services.

3.4. CONSULTANT shall receive compensation for preparing for and/or appearing in any litigation at the request of RTC, except: (1) if such litigation costs are incurred by CONSULTANT in defending its work or services or those of any of its sub-consultants; or (2) as may be required by CONSULTANT's indemnification obligations. Compensation for litigation services requested by RTC shall be paid at a mutually agreed upon rate and/or at a reasonable rate for such services.

ARTICLE 4 - INVOICING

4.1. CONSULTANT shall submit monthly invoices in the format specified by RTC. Invoices must be submitted to accountspayable@rtcwashoe.com. RTC's payment terms are 30 days after the receipt of the invoice. Simple interest will be paid at the rate of half a percent (0.5%) per month on all invoices approved by RTC that are not paid within thirty (30) days of receipt of the invoice.

4.2. RTC shall notify CONSULTANT of any disagreement with any submitted invoice for consulting services within thirty (30) days of receipt of an invoice. Any amounts not in dispute shall be promptly paid by RTC.

4.3. CONSULTANT shall maintain complete records supporting every request for payment that may become due. Upon request, CONSULTANT shall produce all or a portion of its records and RTC shall have the right to inspect and copy such records.

ARTICLE 5 - ACCESS TO INFORMATION AND PROPERTY

5.1. Upon request and without cost to CONSULTANT, RTC will provide all pertinent information that is reasonably available to RTC including surveys, reports and any other data relative to design and construction.

5.2. RTC will provide access to and make all provisions for CONSULTANT to enter upon RTC facilities and public lands, as required for CONSULTANT to perform its work under this Agreement.

ARTICLE 6 - OWNERSHIP OF WORK

6.1. Plans, reports, studies, tracings, maps, software, electronic files, licenses, programs, equipment manuals, and databases and other documents or instruments of service prepared or obtained by CONSULTANT in the course of performing work under this Agreement, shall be delivered to and become the property of RTC. Software already developed and purchased by CONSULTANT prior to the Agreement is excluded from this requirement. CONSULTANT and its sub-consultants shall convey and transfer all copyrightable interests, trademarks, licenses, and other intellectual property rights in such materials to RTC upon completion of all services under this Agreement and upon payment in full of all compensation due to CONSULTANT in accordance with the terms of this Agreement. Basic survey notes, sketches, charts, computations and similar data prepared or obtained by CONSULTANT under this Agreement shall, upon request, also be provided to RTC.

6.2. CONSULTANT represents that it has secured all necessary licenses, consents, or approvals to use the components of any intellectual property, including computer software, used in providing services under this Agreement, that it has full legal title to and the right to reproduce such materials, and that it has the right to convey such title and other necessary rights and interests to RTC.

6.3. CONSULTANT shall bear all costs arising from the use of patented, copyrighted, trade secret, or trademarked materials, equipment, devices, or processes used on or incorporated in the services and materials produced under this Agreement.

6.4. CONSULTANT agrees that all reports, communications, electronic files, databases, documents, and information that it obtains or prepares in connection with performing this Agreement shall be treated as confidential material and shall not be released or published without the prior written consent of RTC; provided, however, that CONSULTANT may refer to this scope of work in connection with its promotional literature in a professional and commercially reasonable manner. The provisions of this subsection shall not apply to information in whatever form that comes into the public domain. The provisions of this paragraph also shall not restrict CONSULTANT from giving notices required by law or complying with an order to provide information or data when such order is issued by a court, administrative agency, or other entity with proper jurisdiction, or if it is reasonably necessary for CONSULTANT to defend itself from any suit or claim.

ARTICLE 7 - TERMINATION

7.1. CONTRACT TERMINATION FOR DEFAULT

If CONSULTANT fails to perform services in the manner called for in this Agreement or if CONSULTANT fails to comply with any other provisions of this Agreement, RTC may

terminate this Agreement for default. Termination shall be effected by serving a notice of termination on CONSULTANT setting forth the manner in which CONSULTANT is in default. CONSULTANT will only be paid the contract price for services delivered and accepted, or services performed in accordance with the manner of performance set forth in this Agreement.

If it is later determined by RTC that CONSULTANT had an excusable reason for not performing, such as a fire, flood, or events which are not the fault of or are beyond the control of CONSULTANT, RTC, after setting up a new performance schedule, may allow CONSULTANT to continue work, or treat the termination as a termination for convenience.

7.2. CONTRACT TERMINATION FOR CONVENIENCE

RTC may terminate this Agreement, in whole or in part, at any time by written notice to CONSULTANT when it is in RTC's best interest. CONSULTANT shall be paid its costs, including contract closeout costs, and profit on work performed up to the time of termination. CONSULTANT shall promptly submit its termination claim to RTC to be paid CONSULTANT. If CONSULTANT has any property in its possession belonging to RTC, CONSULTANT will account for the same, and dispose of it in the manner RTC directs.

ARTICLE 8 - INSURANCE

8.1. CONSULTANT shall not commence any work or permit any employee/agent to commence any work until satisfactory proof has been submitted to RTC that all insurance requirements have been met.

8.2. In conjunction with the performance of the services/work required by the terms of this Agreement, CONSULTANT shall obtain all types and amounts of insurance set forth in Exhibit C, and shall comply with all provisions set forth therein.

ARTICLE 9 - HOLD HARMLESS

9.1. CONSULTANT's obligation under this provision is as set forth in Exhibit C. Said obligation would also extend to any liability of RTC resulting from any action to clear any lien and/or to recover for damage to RTC property.

ARTICLE 10 - EQUAL EMPLOYMENT OPPORTUNITY

10.1. During the performance of this Agreement, CONSULTANT agrees not to discriminate against any employee or applicant for employment because of race, color, religion, sex, age, disability, or national origin. CONSULTANT will take affirmative action to ensure that applicants are employed, and that employees are treated fairly during employment, without regard to their race, color, religion, sex, age, disability, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading,

demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. CONSULTANT agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by RTC setting forth the provisions of this nondiscrimination clause.

10.2. CONSULTANT will, in all solicitations or advertisements for employees placed by or on behalf of CONSULTANT, state that well qualified applicants will receive consideration of employment without regard to race, color, religion, sex, age, disability, or national origin.

10.3. CONSULTANT will cause the foregoing provisions to be inserted in all sub-agreements for any work covered by this Agreement so that such provisions will be binding upon each sub-consultant.

ARTICLE 11 - RESOLUTION OF CLAIMS AND DISPUTES

11.1. NEGOTIATED RESOLUTION

In the event that any dispute or claim arises under this Agreement, the parties shall timely cooperate and negotiate in good faith to resolve any such dispute or claim. Such cooperation shall include providing the other party with all information in order to properly evaluate the dispute or claim and making available the necessary personnel to discuss and make decisions relative to the dispute or claim.

11.2. MEDIATION

If the parties have been unable to reach an informal negotiated resolution to the dispute or claim within thirty (30) days following submission in writing of the dispute or claim to the other party, or such longer period of time as the parties may agree to in writing, either party may then request, in writing, that the dispute or claim be submitted to mediation (the "Mediation Notice"). After the other party's receipt or deemed receipt of the Mediation Notice, the parties shall endeavor to agree upon a mutually acceptable mediator, but if the parties have been unable to agree upon a mediator within ten (10) days following receipt of the Mediation Notice, then each party shall select a mediator and those two selected mediators shall select the mediator. A mediator selected by the parties' designated mediators shall meet the qualification set forth in as provided in Rule 4 of Part C., "Nevada Mediation Rules" of the "Rules Governing Alternative Dispute Resolutions adopted by the Nevada Supreme Court." Unless otherwise agreed to by the parties, in writing, the mediator shall have complete discretion over the conduct of the mediation proceeding. Unless otherwise agreed to by the parties, in writing, the mediation proceeding must take place within thirty (30) days following appointment of the mediator. The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in Washoe County, Nevada, unless otherwise agreed to by the parties, in writing. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

11.3. LITIGATION

In the event that the parties are unable to settle and/or resolve the dispute or claim as provided above, then either party may proceed with litigation in the Second Judicial District Court of the State of Nevada, County of Washoe.

11.4. CONTINUING CONTRACT PERFORMANCE

During the pendency of any dispute or claim the parties shall proceed diligently with performance of this Agreement and such dispute or claim shall not constitute an excuse or defense for a party's nonperformance or delay.

ARTICLE 12 – PROJECT MANAGERS

12.1. RTC's Project Manager is Austin McCoy, P.E. or such other person as is later designated in writing by RTC. RTC's Project Manager has authority to act as RTC's representative with respect to the performance of this Agreement.

12.2. CONSULTANT' Project Manager is Alex Greenblat, P.E. or such other person as is later designated in writing by CONSULTANT. CONSULTANT's Project Manager has authority to act as CONSULTANT's representative with respect to the performance of this Agreement.

ARTICLE 13 - NOTICE

13.1. Notices required under this Agreement shall be given as follows:

RTC:
Bill Thomas, AICP
Executive Director
Austin McCoy, P.E.
RTC Project Manager
Regional Transportation Commission
1105 Terminal Way
Reno, Nevada 89502
Email: amccoy@rtcwashoe.com
(775) 335-1824

CONSULTANT:
Dan Stucky, P.E.
Engineering Director
Alex Greenblat, P.E.
Group Manager, Engineering
Lumos and Associates, Inc.
950 Sandhill Road, Suite 100
Reno, Nevada 89521
Email: agreenblat@lumosinc.com
(775) 827-6111

ARTICLE 14 - DELAYS IN PERFORMANCE

14.1. TIME IS OF THE ESSENCE

It is understood and agreed that all times stated and referred to herein are of the essence. The period for performance may be extended by RTC's Executive Director pursuant to the process specified herein. No extension of time shall be valid unless reduced to writing and signed by RTC's Executive Director.

14.2. UNAVOIDABLE DELAYS

If the timely completion of the services under this Agreement should be unavoidably delayed, RTC may extend the time for completion of this Agreement for not less than the number of days CONSULTANT was excusably delayed. A delay is unavoidable only if the delay is not reasonably expected to occur in connection with or during CONSULTANT's performance, is not caused directly or substantially by acts, omissions, negligence or mistakes of CONSULTANT, is substantial and in fact causes CONSULTANT to miss specified completion dates, and cannot adequately be guarded against by contractual or legal means.

14.3. NOTIFICATION OF DELAYS

CONSULTANT shall notify RTC as soon as CONSULTANT has knowledge that an event has occurred or otherwise becomes aware that CONSULTANT will be delayed in the completion of the work. Within ten (10) working days thereafter, CONSULTANT shall provide such notice to RTC, in writing, furnishing as much detail on the delay as possible and requesting an extension of time.

14.4. REQUEST FOR EXTENSION

Any request by CONSULTANT for an extension of time to complete the work under this Agreement shall be made in writing to RTC. CONSULTANT shall supply to RTC documentation to substantiate and justify the additional time needed to complete the work and shall provide a revised schedule. RTC shall provide CONSULTANT with notice of its decision within a reasonable time after receipt of a request.

ARTICLE 15 - GENERAL PROVISIONS

15.1. SUCCESSORS AND ASSIGNS

RTC and CONSULTANT bind themselves and their successors and assigns to the other party and to the successors and assigns of such party, with respect to the performance of all covenants of this Agreement. Except as set forth herein, neither RTC nor CONSULTANT shall assign or transfer interest in this Agreement without the written consent of the other. Nothing herein shall be construed as creating a personal liability on

the part of any officer or agent or any public body which may be a party hereto, nor shall it be construed as giving any rights or benefits hereunder to anyone other than RTC and CONSULTANT.

15.2. NON TRANSFERABILITY

This Agreement is for CONSULTANT's professional services, and CONSULTANT's rights and obligations hereunder may not be assigned without the prior written consent of RTC.

15.3. SEVERABILITY

If any part, term, article, or provision of this Agreement is, by a court of competent jurisdiction, held to be illegal, void, or unenforceable, or to be in conflict with any law of the State of Nevada, the validity of the remaining provisions or portions of this Agreement are not affected, and the rights and obligations of the parties shall be construed and enforced as if this Agreement did not contain the particular part, term, or provision held invalid.

15.4. RELATIONSHIP OF PARTIES

CONSULTANT is an independent contractor to RTC under this Agreement. Accordingly, CONSULTANT is not entitled to participate in any retirement, deferred compensation, health insurance plans or other benefits RTC provides to its employees. CONSULTANT shall be free to contract to provide similar services for others while it is under contract to RTC, so long as said services and advocacy are not in direct conflict, as determined by RTC, with services being provided by CONSULTANT to RTC.

15.5. WAIVER/BREACH

Any waiver or breach of a provision in this Agreement shall not be deemed a waiver of any other provision in this Agreement and no waiver is valid unless in writing and executed by the waiving party. An extension of the time for performance of any obligation or act shall not be deemed an extension of time for the performance of any other obligation or act. This Agreement inures to the benefit of and is binding upon the parties to this Agreement and their respective heirs, successors and assigns.

15.6. REGULATORY COMPLIANCE

A. CONSULTANT shall comply with all applicable federal, state and local government laws, regulations and ordinances. CONSULTANT shall be responsible for obtaining all necessary permits and licenses for performance of services under this Agreement. Upon request of RTC, CONSULTANT shall furnish RTC certificates of compliance with all such laws, orders and regulations.

B. CONSULTANT represents and warrants that none of the services to be rendered pursuant to this Agreement constitute the performance of public work, as that term

is defined by Section 338.010(17) of the Nevada Revised Statutes. To the extent CONSULTANT does engage in such public work, CONSULTANT shall be responsible for paying the prevailing wage as required by Chapter 338 of the Nevada Revised Statutes.

15.7. EXCLUSIVE AGREEMENT

There are no verbal agreements, representations or understandings affecting this Agreement, and all negotiations, representations and undertakings are set forth herein with the understanding that this Agreement constitutes the entire understanding by and between the parties.

15.8. AMENDMENTS

No alteration, amendment or modification of this Agreement shall be effective unless it is in writing and signed by both parties.

15.9. CONTINUING OBLIGATION

CONSULTANT agrees that if, because of death or any other occurrence it becomes impossible for any principal or employee of CONSULTANT to render the services required under this Agreement, neither CONSULTANT nor the surviving principals shall be relieved of any obligation to render complete performance. However, in such event, RTC may terminate this Agreement if it considers the death or incapacity of such principal or employee to be a loss of such magnitude as to affect CONSULTANT's ability to satisfactorily complete the performance of this Agreement.

15.10. APPLICABLE LAW AND VENUE

The provisions of this Agreement shall be governed and construed in accordance with the laws of the State of Nevada. The exclusive venue and court for all lawsuits concerning this Agreement shall be the Second Judicial District Court of the State of Nevada, County of Washoe, and the parties hereto submit to the jurisdiction of that District Court.

15.11. ATTORNEYS' FEES

In the event of a dispute between the parties result in a proceeding in any Court of Nevada having jurisdiction, the prevailing party shall be entitled to an award of costs and any reasonable attorneys' fees.

15.12. CERTIFICATION REQUIRED BY NEVADA SENATE BILL 27 (2017)

CONSULTANT expressly certifies and agrees, as a material part of this Agreement, that it is not currently engaged in a boycott of Israel. CONSULTANT further agrees, as a material part of this Agreement, it will not engage in a boycott of Israel for the duration of this Agreement. If, at any time during the formation or duration of this Agreement,

CONSULTANT is engaged or engages in a boycott of Israel, it will constitute a material breach of this Agreement.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement the day and year first above written.

REGIONAL TRANSPORTATION COMMISSION
OF WASHOE COUNTY

By: _____
Bill Thomas, AICP, Executive Director

LUMOS & ASSOCIATES, INC.

By: _____
Dan Stucky, P.E., Director, Engineering

EXHIBIT A-1 through A-3

EXHIBIT A-1: SCOPE OF SERVICES

EXHIBIT A-2: PROJECT TEAM

EXHIBIT A-3: SCHEDULE OF SERVICES

EXHIBIT A-1

SCOPE OF SERVICES
FOR THE
KEYSTONE AVENUE REHABILITATION PROJECT

The Regional Transportation Commission (RTC) has identified Keystone Avenue for rehabilitation with the following limits: Keystone Avenue from S/S Coleman Drive to S/S N. McCarran Boulevard (NDOT) including the returns of all cross streets.

Keystone Avenue from S/S Coleman Drive to S/S N. McCarran Boulevard (NDOT) is depicted as City of Reno Right-of-Way per the Washoe Regional Mapping System. N. McCarran Boulevard is Nevada Department of Transportation (NDOT) Right-of-Way.

The Scope of Services for the Keystone Avenue Rehabilitation Project (Project) is anticipated to include eligible Improvements per the 2023 Street & Highway Program Policy, including but not limited to: portions of sidewalk, curb, gutter, driveway, and pedestrian ramp evaluation and replacement, pavement reconstruction, utility adjustments, storm drain inlet upgrades, striping modifications, and signage.

1. PROJECT MANAGEMENT

Management of the overall project will include scheduling of CONSULTANT staff resources, coordinating with agencies, specifically City of Reno, scheduling, invoicing, and general project administration. Detailed monthly invoices will be prepared to document work performed during the invoice period.

CONSULTANT'S Project Manager will facilitate and assist in coordination of: Project Kick off meeting, preliminary design, 90% and 100% design review meetings, as required by RTC. CONSULTANT will compile agendas and provide meeting minutes.

CONSULTANT'S Project Manager will keep the RTC Project Manager well informed of Project progress with bi-weekly progress meetings.

The assumed duration for this task is approximately 24 months, which extends through construction.

Deliverables:

- Various meeting agendas and minutes
- Monthly invoices and summaries

2. TOPOGRAPHIC MAPPING

CONSULTANT will establish a horizontal and vertical survey control network on-site, referenced to the Nevada State Plane Coordinate System, West Zone, NAD83 and based on the City of Reno Benchmarks using a local combined scale factor to establish ground values for the project. Existing survey monuments will be located and re-established in the field. CONSULTANT will utilize the survey control network to complete a topographic survey within: Keystone Avenue roadway Right-of-Way from S/S Coleman Drive to S/S N. McCarran Boulevard. Cross streets will be surveyed approximately 50' beyond the returns along Keystone Avenue.

A project basemap will be created using a combination of aerial photogrammetry and ground collected survey field shots. The project will be flown at an appropriate elevation to obtain a horizontal scale of 1"=20' with a 1' contour interval consistent with National Map Accuracy Standards. Field shots using conventional surveying methods will be obtained at critical locations such as concrete curb, handicap ramps, utilities, overhead utility lines and storm drain features to be combined with the aerial digital terrain model to supplement the basemap. A digital terrain model, topographic basemap, and color orthophoto will be generated using the combination of ground and aerial collected data and utilized for design purposes.

CONSULTANT will investigate and locate subsurface utilities within the roadway right-of-way, and areas reasonably affected, in accordance with the American Society of Civil Engineers Standard guideline for the Collection and Depiction of Existing Subsurface Utility Data, Quality Level C. Catch basins and storm drain manholes will be dipped as needed for inclusion into the base map. Lumos will request the most recent City of Reno dip sheets to supplement field information.

The record Right-of-Way information will be shown on the project plans. No resolution of Right-of-Way is included in this task.

3. RIGHT-OF-WAY ENGINEERING

Keystone Avenue from S/S Coleman Drive to S/S N. McCarran Boulevard (NDOT) shall be the limits associated with Work under Task 3. CONSULTANT shall request approval from the RTC Project Manager to proceed with Right of Way Engineering Services.

3.1. Preliminary Title Reports

It is estimated that a total of up to sixteen (16) Temporary Construction Easements (TCEs) and/or Permanent Easements (PEs) may be required for construction of ramp improvements. CONSULTANT will obtain up to sixteen (16) preliminary title reports including exceptions and updates. CONSULTANT will review the assessor parcel map, address, and owner information within the title reports and verify the document links within the title report are correct and functioning. CONSULTANT will coordinate necessary revisions to the preliminary title reports with the title company. CONSULTANT will deliver the electronic preliminary title reports to RTC. CONSULTANT assumes one update to each of the sixteen (16) title reports will be required for the duration of the project. CONSULTANT will coordinate the updates with the title company and deliver the updated title reports to RTC.

3.2. Boundary Survey and Legal Descriptions

CONSULTANT will review title reports for up to sixteen (16) subject parcels to identify existing encumbrances, record mapping, parcel boundary and/or easement legal descriptions detailed within the exceptions portion of said reports. CONSULTANT will utilize County records to obtain deeds and other record data for the parcels to be surveyed. CONSULTANT will use this information to create digital AutoCAD boundary line work necessary for generating search survey coordinates for boundary monuments associated with the subject subdivisions and parcels.

CONSULTANT will then perform field boundary surveys of the subject parcels. During the field survey, existing property corners, section corners, and Right-of-Way monuments, including centerline, will be located as required to resolve the legal boundaries of the subject parcels.

CONSULTANT will utilize record boundary information in conjunction with the data gathered in the field to prepare a digital boundary base map for the subject parcels. The digital base map will depict parcel boundaries, easement boundaries, street Right-of-Ways and found boundary monuments.

CONSULTANT will utilize the boundary base map to prepare up to sixteen (16) legal descriptions and exhibit figures.

Right-of-Way appraisal, property owner negotiations, escrow coordination and title clearance are not included within this task.

3.3. Permission to Construct Agreement Exhibits

CONSULTANT will prepare Permission to Construct ("PTC") exhibits for up to forty-six (46) parcels. This excludes any legal descriptions relating to the PTC's. PTC's are assumed to be completed for any parcel whose driveway access fronts the affected roadway or whose property would be affected by temporary grading/construction operations for pedestrian ramps.

3.4. Right-of-Way Setting

CONSULTANT will participate in a meeting to set the Right-of-Way requirements for the project. CONSULTANT will prepare a meeting agenda and meeting summary. CONSULTANT will prepare a Right-of-Way summary in excel format identifying all easements necessary to construct the project including acquisitions, partial acquisitions, permanent easements, public utility easements, temporary construction easements, and permissions to construct. The summary will include APN, property owner, address, easement type, easement size, easement purpose and estimated acquisition valuation and estimated Offer amount; (valuation/estimated Offer information to be provided by RTC). The summary will be updated as needed throughout the project to reflect updated vesting deeds and final easements. Exhibits will be provided for the meeting.

3.5. Right-of-Way Maps

CONSULTANT will prepare Right-of-Way maps including existing and proposed easements, existing right-of-way, APN, owner information, and size and type of proposed easement. The right-of-way maps will be updated as needed throughout the project to reflect updated vesting deeds and final easements.

Task 3 Deliverables:

- Preliminary title reports and updated vesting deeds
- Right-of-way setting meeting agenda and summary
- Right-of-way summary in excel format
- Right-of-way maps
- Legal descriptions and exhibits
- PTC Exhibits

4. INVESTIGATION of EXISTING CONDITIONS

Keystone Avenue from S/S Coleman Drive to S/S N. McCarran Boulevard (NDOT) shall be the limits associated with Work under Task 4.

4.1. Concrete Condition Survey

CONSULTANT will evaluate curb and gutter, sidewalk, and driveway approaches based upon RTC criteria. The CONSULTANT shall also evaluate existing pedestrian ramps for compliance with current ADA standards. CONSULTANT shall also evaluate the pedestrian access routes including existing pedestrian ramps, sidewalks, and driveway aprons within the project limits for compliance with current ADA standards and potential safety issues, such as sight distance and/or visibility, based upon RTC criteria.

CONSULTANT shall identify catch basin structures to be upgraded to Type 4R catch basin structures. Existing manhole covers will be evaluated within City Right-of-Way and the project limits for potential upgrades, such as, existing 36" SSMH covers being converted to 24" with adapter, or incorrect covers.

CONSULTANT will provide a recommendation on concrete replacement based upon condition and compliance standards to the RTC for consideration.

4.2. Pavement Structural Investigation

CONSULTANT propose**s** a field investigation that will consist of approximately six (6) test pits and six (6) supplemental cores. Exploration depths will range from one (1) to five (5) feet below ground surface, or practical refusal, whichever comes first. CONSULTANT will collect samples of each soil type encountered within the test pits and core excavations and document the existing pavement structural section. CONSULTANT will obtain a no-cost encroachment permit from the City of Reno for soil sampling. Traffic Control (lane closure) will be provided. CONSULTANT to provide asphalt patching per applicable specification or as directed per Encroachment/Excavation Permit requirements. CONSULTANT will also complete the USA Dig clearance.

Representative samples of the subgrade soils encountered will be used for the following laboratory testing: soil classification, PI, moisture, gradation, and R-values. Per the 2021 RTC Structural Design Guide for Flexible Pavements, two (2) R-value tests will be conducted per sampling location. If the two (2) tests (at a location) do not fall within the ASTM D2844 precision statement, an additional R-value test will be conducted.

Results of the investigation will be summarized in an updated written report discussing site conditions, field investigation and associated laboratory testing, conclusion, and recommendations. The Pavement Structural Investigation will be supervised by, and the report will be signed/sealed by a registered Professional Engineer in the State of Nevada. A preliminary report has already been provided to the RTC, but only contained cores, and did not include any R-Value sampling or testing.

4.3. Utility Coordination

Based on field investigation, CONSULTANT will provide RTC a list of utility companies whose utilities are likely to be within the project limits or reasonably affected by the project. RTC will issue the initial notification to the utility agencies on the list and CONSULTANT will coordinate with the utility agencies for upcoming work, facility relocation and new installation, and to ensure utilities likely affected by the project are drawn on the plan and profile, evaluate potential conflicts through field investigation, investigate conflict resolution strategies. CONSULTANT will assist in relocation of utilities with prior rights by facilitating meetings and reviewing utility's design/cost for incorporation into a reimbursement agreement and/or incorporation of the utility work into the RTC plans.

Utility coordination meetings will be held with the RTC and affected utility companies. CONSULTANT

will coordinate the meetings with the RTC Project Manager, prepare and distribute meeting agendas, and provide and distribute meeting summaries following the meeting. It is assumed two (2) utility coordination meetings will be held.

CONSULTANT will distribute design review submittals (50% and 90%) to utility agencies for review and comment. CONSULTANT will track which utility agencies were provided design review submittals as part of the design review comment matrix for each round of submittals. CONSULTANT will track and incorporate all Utility Agency review comments received into the review comment matrix for each submittal. CONSULTANT will incorporate comments received from Utility Agencies, as appropriate.

4.4. Utility Pothole Exploration (Optional)

Should insufficient information be available from existing records to determine whether conflicts between the proposed work and existing utilities will occur, the CONSULTANT shall request approval from the RTC Project Manager to pothole enough locations to make such a determination. CONSULTANT will obtain a no-cost encroachment permit from the City of Reno to complete the work. USA Dig will be contacted prior to starting potholing activities. Traffic Control (lane closure) will be provided. CONSULTANT to provide asphalt patching per applicable specification or as directed per Encroachment/Excavation Permit requirements. We have assumed up to two (2) days of traffic control, inspection, and excavation services would be required.

Task 4 Deliverables (PDF format):

- Concrete Condition Survey Markups
- Pavement Structural Investigation Report

5. AGENCY COORDINATION & PUBLIC OUTREACH

5.1. Public Information Support

CONSULTANT will prepare applicable exhibits for RTC for any public outreach necessary for the project.

CONSULTANT will also participate in up to two (2) meetings with any residents to discuss the project if needed.

CONSULTANT will provide RTC with all publicly viewed information two weeks prior to their public release for review and comment.

Deliverables:

- Public information exhibits

5.2. NDOT Permitting (Optional)

CONSULTANT will proceed with Task 5.2 upon approval from the RTC Project Manager.
CONSULTANT anticipates the following scope of work relating to NDOT permitting:
Limits of Improvement:

- South side of Keystone Avenue/N. McCarran Boulevard intersection.

Anticipated Civil Design Elements:

- Asphalt reconstruction, utility adjustments, striping, and potentially PCC curb and gutter. There are new ADA pedestrian ramps installed by NDOT, so that improvement is excluded.

- CONSULTANT will provide new improvement design and will produce improvement plans, traffic control plans, and permit application, with the intent of submitting for an NDOT Type VI 'Miscellaneous' Occupancy Permit.

RTC will submit an Occupancy Permit application prepared by the CONSULTANT. CONSULTANT will also provide color-coded improvement plans and documentation pertaining to civil work in accordance with the Nevada Department of Transportation standards. It is anticipated that NDOT will require a Permit Category Type VI 'Miscellaneous Permit'. RTC will be responsible for submission and processing of the NDOT permit.

CONSULTANT will identify and participate in negotiations if RTC and NDOT design standards conflict. CONSULTANT will file a 'Design Variation' request to NDOT with the improvement plan submittal as necessary.

CONSULTANT will provide to RTC the following NDOT permitting documents:

- Title Sheet: providing required information including a vicinity map, NDOT general notes, installation quantities etc.
- Color-coded Plan & Profile, Cross-section and Detail Sheet(s): providing NDOT designated reference materials.
- Support documentation including a Drainage Information form and Technical Drainage Letter, if required. CONSULTANT does not anticipate developing a Drainage Report.
- Traffic control plans reviewed and approved by an ATSSA certified individual.

Assumptions and Exclusions:
In preparing this NDOT scope of work, CONSULTANT had made the following exclusions and/or assumptions:

- CONSULTANT excludes a separate geotechnical investigation for this task, however, if a modified report becomes a requirement of NDOT to submit for a Permit Category Type VI 'Miscellaneous Permit', CONSULTANT can provide a proposal at a later date.
- This scope excludes a Cultural Resource Survey or Underlying Fee Ownership (UFO).
- CONSULTANT assumes the construction schedule will be developed by the General Contractor.
- Utility improvements other than potential City of Reno storm drain inlets, is excluded.
- SWPPP submittal and Erosion Control Plan will be the responsibility of the General Contractor.
- Fees for Agency submittal, reviews and permit fees are excluded from the total fee and are the sole responsibility of the RTC.

6. PRELIMINARY DESIGN

CONSULTANT will prepare 50% preliminary plans and a preliminary cost estimate suitable for RTC and City of Reno review. Curb, gutter, and sidewalk that are deficient according to both RTC and City of Reno standards shall be identified. Utility Improvements identified to date and Right-of-Way limits will be included in the 50% Submittal. Vertical design and grading details are excluded from the 50% Submittal. Preliminary design review meeting will be performed under Task 1.

Deliverables:

- Preliminary plans and cost estimate

7. FINAL DESIGN

7.1. Prepare Final Plans, Specifications, and Estimate

CONSULTANT will prepare Final Construction Plans, Contract Documents and Technical Specifications suitable for construction bid advertisement for the approved alignment in accordance with RTC standards and requirements. RTC will provide the boilerplate via email in MS Word format. The RTC, City of Reno, Utility provides, and Quality Control review comments will be incorporated into the final Plans and Specifications.

The final construction plans will be on 22" x 34" size sheets and will show all elements of the Project construction, including plan/profile view, right-of-way lines, cross-sections, and construction/slope limits. The final plan set will include, as a minimum:

- Cover Sheet
- Legend, General Notes, and Abbreviations
- Plan/Profile Sheets (at 1"=20' scale)
- Intersection, Grading, and Pedestrian Ramp Sheets (at 1"=20' scale)
- Signage and Striping Sheets (at 1"=20' scale)
- Detail Sheets (scale as noted)

Depths of existing sanitary sewer, storm drain and water utilities will be checked and noted on the plans if there is any reason to expect conflict due to vertical clearances. All located, existing underground utilities will be shown on the Plan Sheets accompanied with the following: "Note: Subsurface utilities are depicted by their Quality Levels in accordance with American Society of Civil Engineers Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data (CI/ASCE 38-02). All utility information shown hereon is depicted to Quality Level "C", unless otherwise noted."

The Contract Documents and Technical Specifications will reference the latest edition of Standard Specifications for Public Works Construction (Orange Book) for standard construction items. Technical provisions will be prepared for approved deviations from the Orange Book and unique construction items not adequately covered in the Orange Book. The final plans and specifications will be signed and sealed by a Nevada Registered Professional Civil Engineer in responsible charge of preparation. Plans and specifications will be submitted to the RTC, City of Reno, utility agencies and other affected parties for review at the 50%, 90%, 100% and final stages of completion per the following:

- 50% & 90% Plans – Electronic (PDF); (1) half size and (1) full size set to RTC, City of Reno, and to each utility agency and other affected parties
- 90% Specifications – Electronic (PDF, zipped folder with individual documents in Word format) to RTC, and Electronic PDF to City of Reno
- 100% Plans – Electronic (PDF); (1) half size and (1) full size set to RTC, City of Reno, and to each utility agency and other affected parties
- 100% Specifications – Electronic (PDF, zipped folder with individual documents in Word format) to RTC, and Electronic PDF to City of Reno
- Final Working Plan Set – Electronic (PDF); (1) half size and (1) full size set to RTC, City of Reno, and to each utility agency and other affected parties
- Final Working Specification Document – Electronic (PDF, zipped folder with individual documents in Word format) to RTC, and Electronic PDF to City of Reno
- 50%, 90%, 100%, IFB Engineer's Opinion of Probable Construction Costs – Electronic (PDF, Excel spreadsheet format) to RTC
- 50%, 90%, 100% Submittal Comments will be tracked, addressed, and incorporated as applicable

into the subsequent plan set by the CONSULTANT, utilizing a comment resolution matrix. CONSULTANT will assist in distributing the comment resolution matrix in Excel spreadsheet format to appropriate agencies and stakeholders, as directed by RTC.

90% Plans shall include Right-of-Way sheets, detail sheets, existing surface features, existing and proposed subsurface utilities (per paragraph, above), surface Improvements, plan and profile sheets with final roadway design (horizontal and vertical) identified for the Project. Striping and signage plans, pedestrian ramp grading, and any other details necessary for Construction shall be included with the 90% Submittal.

The 90% Submittal will address and incorporate as applicable, all comments generated from the 50% Submittal review.

100% and Issued for Bids (IFB) Submittal will address and incorporate as applicable, all comments generated from the 90% and 100% Submittal reviews, respectively. 90% and 100% design review meetings will be performed under Task 1.

The final plans and specifications will be signed and sealed by a Nevada Registered Professional Civil Engineer in responsible charge of the Project. CONSULTANT will prepare final signed and sealed plans and specifications and distribute as indicated above. The RTC will upload the documents to the ProcureWare system.

CONSULTANT will provide a final Engineer's opinion of probable construction costs for the Project based on the final design and any alternatives or options, as part of the 90%, 100% and Issued for Bid (IFB) Submittal. The cost opinion will be in the same format as the bid proposal form included in the contract documents.

7.2. Constructability Review

CONSULTANT will perform a quality control review of the plans, contract documents, technical specifications and Opinion of Probable Construction Costs and Time, which will focus on technical aspects of the plans, specifications and OPCC and will ensure that all items of work are adequately covered.

The CONSULTANT will also estimate the number of working or calendar days, as appropriate, for the construction of the Project.

CONSULTANT shall facilitate a meeting to perform a Constructability Review of the Project prior to the 100% submittal with the RTC. The intent is to review plans, specifications, and construction approach to minimize potential construction change orders and ensure clear intent is provided. Field personnel and designer shall attend a field review of roadway segment is anticipated. Discussion topics may include review of design in the field, conflict identification, maintenance of traffic control, special events, limitations of operations, schedule, and phasing, etc.

8. BIDDING SERVICES

8.1. Plan Set and Specification Distribution

CONSULTANT will provide RTC with final plans and specifications, including addenda, in Portable Document Format (PDF), for use in the ProcureWare system. CONSULTANT will issue and distribute the Conformed Set of Plans once the Contract for Construction has been awarded to the successful bidder.

8.2. Pre-bid Meeting

CONSULTANT will be available during the bidding process to answer technical questions and will hold the pre-bid meeting. All questions and responses will be documented and provided to RTC. CONSULTANT will prepare and provide PDF addenda, if required. All questions regarding legal aspects of the contract documents will be referred directly to RTC. CONSULTANT will prepare and provide a PDF Summary of the pre-bid meeting, as directed by the RTC.

8.3. Bid Opening

CONSULTANT will attend and participate in the bid opening and review the bids received for irregularities. CONSULTANT will provide a recommendation for award. CONSULTANT will tabulate bid results into an Excel spreadsheet and check multiplication and addition of bid items.

9. DESIGN CONTINGENCY (OPTIONAL)

This task is a contingency for miscellaneous increases within the scope of this contract in the performance of services under Tasks 1 through 8 if authorized. If CONSULTANT determines that it is necessary to perform work to be paid out of contingency, CONSULTANT shall provide a letter detailing the need, scope, and not-to-exceed budget for any proposed work. Work under this task shall proceed only with the RTC Project Manager's prior written approval. Work will be performed on a time and materials basis in accordance with CONSULTANT'S fee schedule as included per Exhibit B-1.

Task 10 - 15 - CONSTRUCTION SERVICES (OPTIONAL) - The RTC and CONSULTANT shall review Optional Construction Services following the completion of final design to determine their appropriateness to the project.

10. CONSTRUCTION ADMINISTRATION

CONSULTANT will provide contract administration services as follows:

- Coordinate and lead a preconstruction meeting prior to commencement of work and will prepare and issue via PDF an agenda and meeting summary.
- Coordinate and lead weekly construction progress meetings either on site, at the RTC Terminal building, or via Microsoft Teams, whichever venue may be appropriate. Prepare and issue via PDF an agenda and meeting summary for each weekly meeting.
    - Anticipated 21 weekly meeting occurrences in this Task.
- Perform construction coordination
- Review and provide recommendations on contractor's traffic control plans
- Review contractor submittals for conformance to the contract documents
- Review and provide recommendations on test results
- Review and provide recommendations on contractor's construction schedule and work progress
- Review construction for acceptance and/or mitigation
- Provide verification and approval of contractor's monthly pay request
- Supervise the inspection and material testing activities
- Provide recommendations to the RTC for any necessary construction changes due to field conditions
- Assist in change order review and approval

11. CONSTRUCTION STAKING

CONSULTANT will provide construction staking at offsets designated by the contractor for the curb and gutter, driveway aprons, pedestrian ramps, catch basins, manholes (if needed), reconstruction limits, and finish grade of the roadways. This will be limited to one (1) set of finish grade stakes.

CONSULTANT will provide record of survey for survey monuments installed in the affected roadways. Control for the project will be referenced to the Nevada Coordinate System, West Zone, NAD83 using local combined scale factor to establish ground values for the project. Punch marks along with a "PLS' number will be placed on newly installed street centerline monuments. A Record of Survey will be prepared and filed with the Office of the Washoe County Recorder depicting the survey monuments that have been re-established. The RTC is responsible for any filing fee.

12. CONSTRUCTION INSPECTION

The following staffing shall be provided for the duration of project construction:

- Provide Inspector(s) that have the appropriate certification required by the Nevada Alliance for Quality Transportation Construction (NAQTC). Provide one full-time Senior Inspector, ten (10) hour workdays for One Hundred Five (105) shifts, for a total of 1,050 hours.

The inspectors will:/

- Attend the preconstruction conference
- Monitor the work performed by the Contractor and verify that the work is in accordance with the plans and specifications
- Assist in problem resolution with the RTC, contractor personnel, utility agencies, the public and others
- Prepare daily inspection reports, submitted weekly to RTC and CC'd to the appropriate government jurisdiction(s).
- Provide quantity reports and assist in review of contractor's monthly progress payments
- Provide verification of the distribution of public relation notices required to be delivered by the contractor
- Assist in preparation of the Punch List
- Maintain a field blue line set of drawings to incorporate contractor record drawing mark-ups

13. MATERIALS TESTING

CONSULTANT will provide Materials Testing for compliance with the specifications per the Standard Specifications for Public Works Construction, Revision 8 of the 2012 Edition (Orange Book) testing requirements.

The following tests and frequencies shall be performed:

- Materials to be tested will include asphalt concrete, aggregate base, native subgrade material, structural fill, pipe bedding, cement treated base, and Portland Cement Concrete. Test reports, accompanied with CONSULTANT's recommendation regarding acceptance/mitigation of materials, shall be submitted promptly to the RTC and CC'd to appropriate governmental jurisdiction(s). Laboratory tests are anticipated to include cement treated base compression tests, moisture density curves, Atterberg limits, sieve analysis, and concrete compression tests.
- Provide On-site Nuclear Gauge Testing & Sampling during the placement of aggregate base and fill materials, on-site thin-lift Nuclear Gauge testing & sampling for asphalt concrete placement, and on-site PCC testing & sampling. Three hundred (300) hours of field testing are anticipated.
- Provide AC Testing. Provide asphalt concrete tests at a frequency of every five hundred (500) tons

placed. Laboratory tests shall include ignition oven extraction, aggregate gradation, maximum theoretical specific gravity, flow & stability, and Marshall unit weight. Fourteen (14) – hot mix samples are anticipated.

- Provide Asphalt Concrete Coring and Lab Testing. Lab test shall include core unit weight. Forty Two (42) – asphalt cores, including joint cores are anticipated. Test reports will also include percent compaction.

14. RECORD DRAWINGS AND PROJECT CLOSEOUT

CONSULTANT shall provide record drawings based on Contractor and Inspector field markups for the completed project. An electronic plan set, in PDF format (11" x 17), will be provided to RTC for its files and distribution to local agencies as appropriate.

The final record drawings must be identified, dated and signed as the record drawings and must also contain the engineer's signature. These drawings may include either:

1. The final revisions on the original engineer-stamped/signed reproducible drawings, which will then also be identified as the record drawings, or

The record drawings shall include a copy of the original title sheet (including the appropriate signatures by RTC, local government, signed and stamped by the CONSULTANT) and identified as record drawings.

CONSULTANT will prepare a project closeout package with signed/sealed cover sheet/summary letter for the RTC that includes as-built drawings along with compiled testing and inspection reports, meeting summaries, substantial completion recommendation and final acceptance and relief of maintenance recommendation.

15. CONSTRUCTION SERVICES CONTINGENCY (OPTIONAL)

This task is contingency for miscellaneous increases within the scope of this contract in the performance of services. If CONSULTANT determines that it is necessary to perform work to be paid out of contingency, CONSULTANT shall provide a letter detailing the need, scope, and not-to-exceed budget for any proposed work. Work under this task shall proceed only with the RTC Project Manager's prior written approval. This task may or may not be used at the sole discretion of the RTC.

ASSUMPTIONS/EXCLUSIONS:

- Construction Services, including but not limited to: Construction Administration, Construction Surveying/Staking, Construction Inspection, Materials Testing, and As-Built Information may be re-evaluated at 100% milestone to verify assumptions and project scope appropriateness.
- Work outside the established scope of work can be performed on a time and materials basis in accordance with Exhibit B-1
- RTC will coordinate directly with NDOT during the preliminary design phase.
- Scope excludes drainage analysis for the project

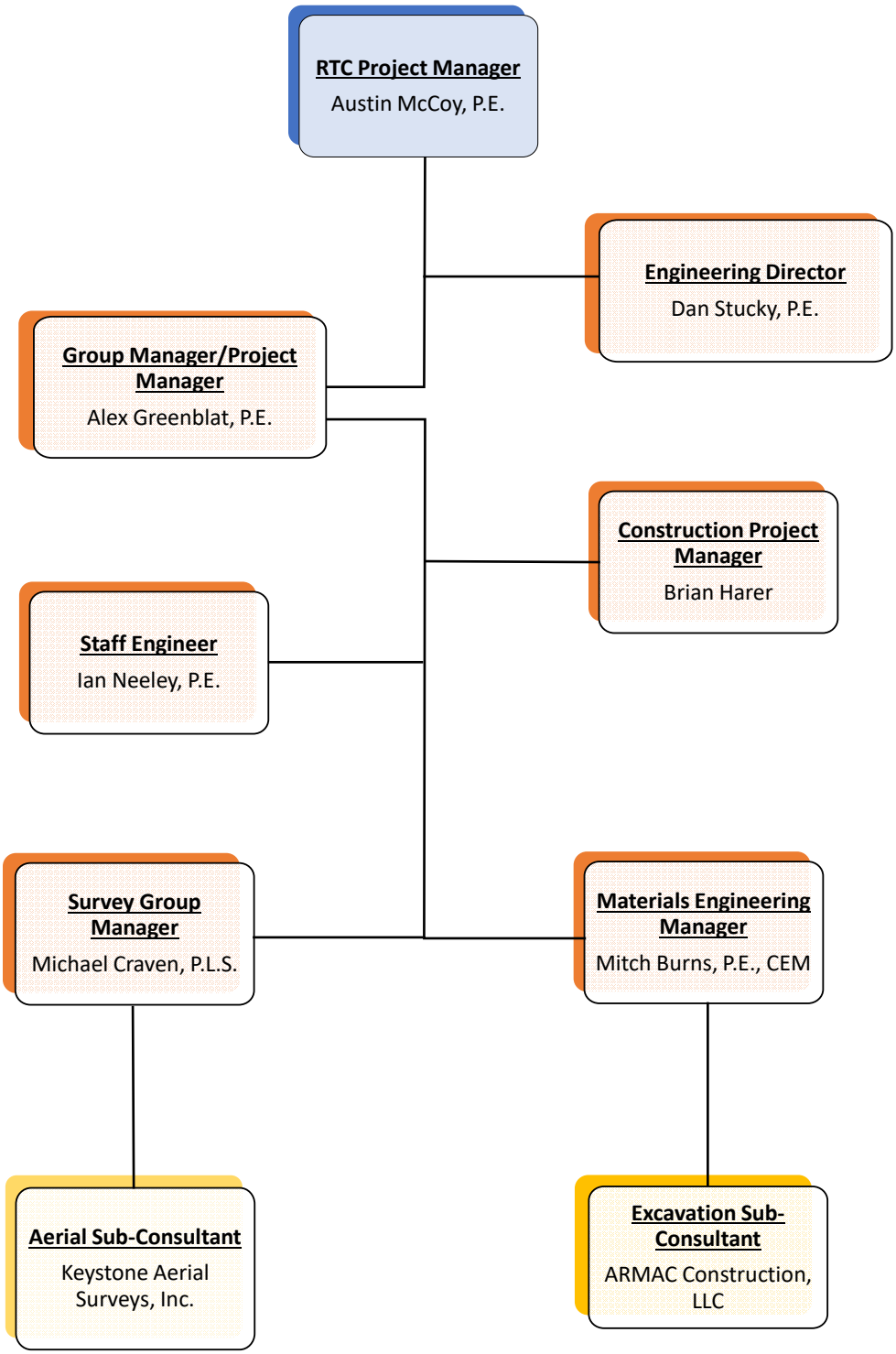
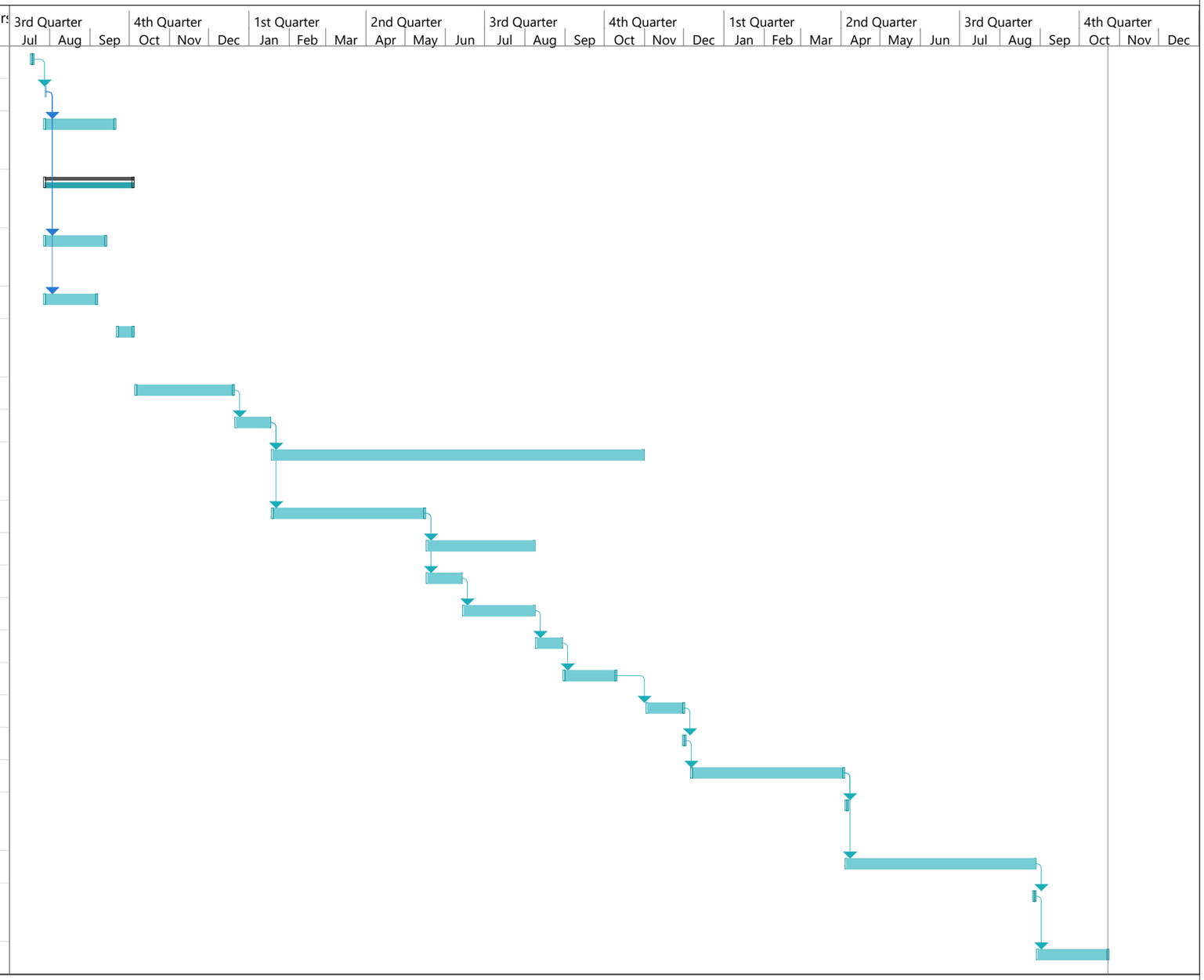

RTC Project Manager
Austin McCoy, P.E.
Engineering Director
Dan Stucky, P.E.
Group Manager/Project Manager
Alex Greenblat, P.E.
Construction Project Manager
Brian Harer
Staff Engineer
Ian Neeley, P.E.
Survey Group Manager
Michael Craven, P.L.S.
Materials Engineering Manager
Mitch Burns, P.E., CEM
Aerial Sub-Consultant
Keystone Aerial Surveys, Inc.
Excavation Sub-Consultant
ARMAC Construction, LLC

EXHIBIT A-3 Schedule of Services

ID	Task Name	Duration	Start	Finish	Predecessors
1	PSA Procurement	1 day	Fri 7/18/25	Fri 7/18/25	
2	Project Kickoff	1 day	Mon 7/28/25	Mon 7/28/25	1
3	Topographic Mapping and Right-of-Way Engineering	8 wks	Mon 7/28/25	Fri 9/19/25	2
4	Investigation of Existing Conditions	10 wks	Mon 7/28/25	Fri 10/3/25	
5	Supplemental Geotechnical Investigation	7 wks	Mon 7/28/25	Fri 9/12/25	2
6	Utility Coordination	6 wks	Mon 7/28/25	Fri 9/5/25	2
7	Existing Concrete Condition Survey	2 wks	Mon 9/22/25	Fri 10/3/25	
8	Preliminary Design (50%)	11 wks	Mon 10/6/25	Fri 12/19/25	
9	Agency Review	4 wks	Mon 12/22/25	Fri 1/16/26	8
10	Right-of-Way Setting, Engineering, and Acquisition	41 wks	Mon 1/19/26	Fri 10/30/26	9
11	Final Design (90%)	17 wks	Mon 1/19/26	Fri 5/15/26	9
12	NDOT Permitting	12 wks	Mon 5/18/26	Fri 8/7/26	11
13	Agency Review	4 wks	Mon 5/18/26	Fri 6/12/26	11
14	Final Design (100%)	8 wks	Mon 6/15/26	Fri 8/7/26	13
15	Agency Review	3 wks	Mon 8/10/26	Fri 8/28/26	14
16	Final Bid Documents	6 wks	Mon 8/31/26	Fri 10/9/26	15
17	Advertise (Tentative)	4 wks	Tue 11/3/26	Mon 11/30/26	16
18	Open Bids (Tentative)	1 day	Tue 12/1/26	Tue 12/1/26	17
19	Contracts and Idle Period	17 wks	Mon 12/7/26	Fri 4/2/27	18
20	Notice to Proceed (Tentative)	1 day	Mon 4/5/27	Mon 4/5/27	19
21	Construction (Tentative)	105 days	Mon 4/5/27	Fri 8/27/27	19
22	Substantial Completion (Tentative)	1 day	Fri 8/27/27	Fri 8/27/27	21
23	As-Built Documentation	8 wks	Mon 8/30/27	Fri 10/22/27	22



Project: KEYSTONE AVENUE
RECONSTRUCTION PROJECT
Date: 7/1/2025

Task	Inactive Task	Manual Summary Rollup	External Milestone
Split	Inactive Milestone	Manual Summary	Deadline
Milestone	Inactive Summary	Start-only	Progress
Summary	Manual Task	Finish-only	Manual Progress
Project Summary	Duration-only	External Tasks	

EXHIBIT B-1 through B-2

EXHIBIT B-1: HOURLY RATE FEE SCHEDULE

EXHIBIT B-2: FEE DETAIL

LUMOS & ASSOCIATES

Exhibit B-1

Standard Fee Schedule

January 1, 2025

Engineering	Per Hour
Director	$295
Group Manager	280
Senior Project Manager – Special Projects	250
Assistant / Project / Senior Project Manager	210/235/250
Staff / Project / Senior Hydrogeologist	190/200/215
Staff / Project / Senior Engineer	190/205/215
Assistant / Project / Senior Project Coordinator	145/185/195
Project / Senior Project Designer	160/170
Engineering Technician I / II / III	110/140/150
Construction	**Per Hour**
Director	$295
Materials Engineering Manager	265
Assistant / Project / Senior Project Manager	210/235/250
Staff / Project / Senior Geotechnical Engineer	190/205/215
Construction Services Supervisor / Engineer	175/185
Assistant / Project / Senior Project Coordinator	145/185/195
Geotechnician	175
Inspector / Senior Inspector (includes nuclear gauge)	160/170
Construction Technician I / II / III	120/130/140
Materials Technician I / II / III (includes nuclear gauge)	110/120/130
Administrative Technician	90/100/110
Surveying	**Per Hour**
Director	$295
Group Manager	280
Assistant / Project / Senior Project Manager	210/235/250
Staff / Project / Senior Surveyor	190/205/215
Assistant / Project / Senior Project Coordinator	145/185/195
Photogrammetrist / Photogrammetry Manager	170/205
GIS Analyst	140
Surveying Technician I / II / III	95/140/150
Party Chief	190
Administrative & Other Services	**Per Hour**
Administrative Support	$135
Copy & Print Services	Cost + 15%
Mileage (per mile)	0.90

LUMOS & ASSOCIATES

Quality Control Fee Schedule

January 1, 2025

Testing/Inspection	Per Hour
Director	$295
Materials Engineering Manager	265
Assistant / Project / Senior Project Manager	210/235/250
Staff / Project / Senior Geotechnical Engineer	190/205/215
Construction Services Supervisor / Engineer	175/185
Assistant / Project / Senior Project Coordinator	145/185/195
Geotechnician	175
Inspector / Senior Inspector (includes nuclear gauge)	160/170
Construction Technician I / II / III	120/130/140
Materials Technician I / II / III (includes nuclear gauge)	110/120/130
Administrative Technician	90/100/110

Particle Size Testing For Soils/Aggregates		Each
Sieve Analysis	(ASTM C-136/C-117)	$200
Wash	(ASTM C-117)	150
Grain Size Analysis Soils	(ASTM D-421/422)	300
Sieve Analysis/Wash (coarse combined)	(ASTM C-136/C-117)	250

Soils & Aggregate Testing		Each
Specific Gravity & Absorption — Coarse or Fine Aggregate	(ASTM C-127/C-128)	$150
Sand Equivalent	(ASTM D-2419)	200
Dry Unit Weight of Aggregate	(ASTM C-29)	100
Organic Impurities	(ASTM C-40)	100
Fractured Faces	(NDOT T-230)	100
L.A. Abrasion	(ASTM C-131)	250
Sodium Sulfate Soundness (5 cycles)	(ASTM C-88)	500
Moisture Content	(ASTM C-566)	50
Moisture Content and Unit Density	(ASTM D-2937)	100
Plastic Index	(ASTM D-4318)	225
Expansion Index	(ASTM D-4829)	300
R-Value	(ASTM D-2844)	350
California Bearing Ratio	(ASTM D-1883)	Quote on request
Direct Shear	(ASTM D-3080)	350
Unconfined Compression	(ASTM D-2166)	Quote on request
Consolidation	(ASTM D-2435)	500
Permeability (4-inch Rigid Wall, Falling head)	(ASTM D-4491)	Quote on request
Soluble Sulfates		Quote on request
pH	(ASTM D-4972)	Quote on request
Resistivity		Quote on request
Clay Lumps/Friable Parts	(ASTM C-142)	100
Cement Treated Base Mix Design		Quote on request
Cement Treated Base Compression Test		75
Fine Durability Index	(ASTM D-3744)	250
Coarse Durability Index	(ASTM D-3744)	300
Cleanness Value	(CAL 229)	250

Moisture Density Testing		Each
Compaction	(ASTM D-698 or ASTM D-1557)	$275
Rock Correction	(ASTM D-4718)	150
Harvard Miniature	(NDOT T-101)	150
CAL 216		300
Check Point	(ASTM D-1557)	125

LUMOS & ASSOCIATES

Quality Control Fee Schedule

January 1, 2025

Emulsion Testing		Each
% Residue By Evaporation/Softening Point (Ring & Ball)	(AASHTO T-53 & T-59) 24 hr. turnaround	$400
% Residue By Evaporation/Softening Point (Ring & Ball)	(AASHTO T-53 & T-59) 3-day turnaround	350
Saybolt Furol Viscosity Test @ 122°	(AASHTO T-59)	275
Rotational Paddle Viscosity	(ASTM D-7226 & AASHTO T-382)	550

Concrete Testing		Each
Compression Concrete Cylinders	(ASTM C-39)	$40
Hold Cylinder (Cured but not tested)		30
Compression, Concrete Core	(ASTM C-42)	40
Flexural Strength of Concrete Beams	(ASTM C-78/C-293)	80
Compression, Grout Cylinder	(UBC 24-28)	40
Compression, Mortar Cylinder	(UBC 24-28)	40
Masonry Block Absorption and Moisture	(ASTM C-140)	Quote on request
Shrinkage	(ASTM C-426)	Quote on request
Compression, Concrete Masonry Units	(ASTM C-140)	Quote on request
Compression, Concrete Masonry Prisms	(ASTM C-1314)	Quote on request
Density of Spray Applied Fireproofing		Quote on request
Concrete Mix Design, including Mixing and Casting of Cylinders		Quote on request

Asphalt Concrete Testing		Each
Sieve Analysis	(ASTM D-5444)	$125
Unit Weight on Compacted Sample	(ASTM D-2726)	50
Unit Weight on Core	(ASTM D-2726)	75
Marshall Stability & Flow	(ASTM D-1559)	50
Max. Theoretical Specs. Gravity	(ASTM D-2041)	100
Bitumen Content	(ASTM D-6307)	150
Asphalt Concrete Mix Design		Quote on request
A.C. Series (Marshall)		675
Oven Correction	(ASTM D-6307)	300

KEYSTONE AVENUE
REHABILITATION PROJECT
RTC Project #0212085

EXHIBIT B-2
FEE DETAIL

DATE: 7/1/2025

BUDGET ESTIMATE	ENGINEERING AND CONSTRUCTION SERVICES															ADMIN	OTHER	TOTALS
FEE	$280	$250	$265	$190	$170	$150	$170	$175	$215	$140	$280	$170	$205	$285	$150	$135		
TITLE	GROUP	SR. PROJECT	MATERIALS	STAFF	SR. PROJECT	ENGR	SENIOR	GEO	CONS. ASSIST.	CONSTRUCTION	SURVEY	PHOTO-	PHOTOGRAMMETRY	2 MAN	SURVEY	ADMINISTRATOR	SUBS	
TASK	MANAGER	MANAGER	MANAGER	ENGINEER	DESIGNER	TECH III	INSPECTOR	TECHNICIAN	PROJECT MAN.	TECHNICIAN III	GROUP MAN.	GRAMMETRIST	MANAGER	CREW	TECH III		OTHER	TOTAL
Project Management	10																	$2,800
Project Meetings/Coordination	40	12		50														$23,700
Project Basemap											10	40	32	90				$52,710
3.1 - Preliminary Title Reports (Max 16)											2				8		$24,000	$25,760
3.2 - Boundary Survey and Legal Descriptions (Max 16)											42			24	110			$35,100
3.3 - PTC Exhibits (Max 46)	4			8		45												$9,390
3.4 - Right-of-Way Setting	8			12		12												$6,320
3.5 - Right of Way Maps	4			20		30												$9,420
Concrete and ADA Assessments		2				10	32											$7,440
Field Investigation			4														$12,500	$17,060
E&E Permit Coordination (City of Reno)			2	2				4								4		$2,150
Update Report & Lab Testing			8					24								12		$7,940
Report Modifications & Meeting w/ RTC	2		2	2				8								4		$3,410
Initial mapping requests and utility meetings	8			20														$6,040
Potholing and Traffic control		2	2				24										$19,500	$24,610
5.1 - Public Information Support	2			4		8												$2,520
5.2 - NDOT Permitting (Optional)	4			24		40												$11,680
6.1 - Preliminary Plan Sheets (50%), & Estimate	2			40	20	120												$29,560
90% Improvement Plans & Specs	6			90	50	180												$54,280
100% Improvement Plans & Specs	2			32	20	80												$22,040
Final Bid Documents	2			20	10	40												$12,060
7.2 - Quality Assurance/Quality Control/Constructability Review	20	8	2	8			24											$13,730
Sub Total Hrs.	30	8	2	150	80	300	24											594
Sub Total $	$8,400	$2,000	$530	$28,500	$13,600	$45,000	$4,080											$102,110
8 - Bidding Services																		
RFIs/Addendums/Bid Tabs/Attendance in Pre-bid and opening	8	4		20		16												$9,440
Sub Total Hrs.	8	4		20		16												48
Sub Total $	$2,240	$1,000		$3,800		$2,400												$9,440
9 - Design Contingency (OPTIONAL)																		
Design Contingency																	$30,000	$30,000
Sub Total Hrs.																		
Sub Total $																	$30,000	$30,000
Total Hrs.	122	28	20	352	100	581	80	56			54	40	32	114	178	20		1777
SUB-TOTAL DESIGN SERVICES	$34,160	$7,000	$5,300	$66,880	$17,000	$87,150	$13,600	$9,800			$15,120	$6,800	$6,560	$32,490	$26,700	$2,700	$87,900	**$419,160**

KEYSTONE AVENUE
REHABILITATION PROJECT
RTC Project #0212085

EXHIBIT B-2
FEE DETAIL

DATE: 7/1/2025

BUDGET ESTIMATE	ENGINEERING AND CONSTRUCTION SERVICES															ADMIN	OTHER	TOTALS
FEE	$280	$250	$265	$190	$170	$150	$170	$175	$215	$140	$280	$170	$205	$285	$150	$135		
TITLE	GROUP	SR. PROJECT	MATERIALS	STAFF	SR. PROJECT	ENGR	SENIOR	GEO	CONS. ASSIST.	CONSTRUCTION	SURVEY	PHOTO-	PHOTOGRAMMETRY	2 MAN	SURVEY	ADMINISTRATOR	SUBS	
TASK	MANAGER	MANAGER	MANAGER	ENGINEER	DESIGNER	TECH III	INSPECTOR	TECHNICIAN	PROJECT MAN.	TECHNICIAN III	GROUP MAN.	GRAMMETRIST	MANAGER	CREW	TECH III		OTHER	TOTAL
10 - Construction Administration (OPTIONAL)																		
Construction Administration	20	80		80					40							20		$52,100
Sub Total Hrs.	20	80		80					40							20		220
Sub Total $	$5,600	$20,000		$15,200					$8,600							$2,700		$52,100
11 - Construction Staking (OPTIONAL)																		
Construction Staking											8		10	144	90			$58,830
Record of Survey and Monuments											4			16	24			$9,280
Sub Total Hrs.											12		10	160	$114			182
Sub Total $											$3,360		$2,050	$45,600	$17,100			$68,110
12 - Construction Inspection (OPTIONAL)																		
Inspection Coordination and Oversight		40																$10,000
Construction Inspection							1050											$178,500
Sub Total Hrs.		40					1050											1090
Sub Total $		$10,000					$178,500											$188,500
13 - Materials Testing (OPTIONAL)																		
Materials Testing Coordination and Oversight			24													48		$12,840
Materials Testing (Field)										300								$42,000
Materials Testing (Lab)																	$39,750	$39,750
Sub Total Hrs.			24							300						48		372
Sub Total $			$6,360							$42,000						$6,480	$39,750	$94,590
14 - Record Drawings and Project Closeout (OPTIONAL)																		
Record Drawings	4	4		16		32	16											$12,680
Sub Total Hrs.	4	4		16		32	16											72
Sub Total $	$1,120	$1,000		$3,040		$4,800	$2,720											$12,680
15 - Construction Services Contingency (OPTIONAL)																		
Construction Contingency																	$20,000	$20,000
Sub Total Hrs.																		
Sub Total $																	$20,000	$20,000
Total Hrs.	24	124	24	96		32	1066		40	300	12		10	160	114	68		2070
SUB-TOTAL CONSTRUCTION SERVICES	$6,720	$31,000	$6,360	$18,240		$4,800	$181,220		$8,600	$42,000	$3,360		$2,050	$45,600	$17,100	$9,180	$59,750	**$435,980**
TOTAL DESIGN AND CONSTRUCTION SERVICES	$40,880	$38,000	$11,660	$85,120	$17,000	$91,950	$194,820	$9,800	$8,600	$42,000	$18,480		$8,610	$78,090	$43,800	$11,880	$147,650	**$855,140**

EXHIBIT C

INDEMNIFICATION AND INSURANCE REQUIREMENTS

ATTACHMENT C

INDEMNIFICATION AND INSURANCE REQUIREMENTS FOR PROFESSIONAL SERVICE AGREEMENTS
[NRS 338 DESIGN PROFESSIONAL]
2022-07-08 Version

1. INTRODUCTION

IT IS HIGHLY RECOMMENDED THAT CONSULTANTS CONFER WITH THEIR INSURANCE CARRIERS OR BROKERS TO DETERMINE THE AVAILABILITY OF THESE INSURANCE CERTIFICATES AND ENDORSEMENTS IN ADVANCE OF PROPOSAL SUBMISSION. IF THERE ARE ANY QUESTIONS REGARDING THESE INSURANCE REQUIREMENTS, IT IS RECOMMENDED THAT THE AGENT/BROKER CONTACT RTC'S FINANCE DIRECTOR AT (775) 332-9511.

2. INDEMNIFICATION

CONSULTANT agrees, subject to the limitations in Nevada Revised Statutes Section 338.155, to save and hold harmless and fully indemnify RTC and City of Reno including their elected officials, officers, employees, and agents (hereafter, "Indemnitees") from and against any and all claims, proceedings, actions, liability and damages, including reasonable attorneys' fees and defense costs incurred in any action or proceeding (collectively "Damages") arising out of the:

A. Negligence, errors, omissions, recklessness or intentional misconduct of CONSULTANT or CONSULTANT's agents, employees, officers, directors, subconsultants, or anyone else for whom CONSULTANT may be legally responsible, which are based upon or arising out of the professional services of CONSULTANT; and

B. Violation of law or any contractual provisions or any infringement related to trade names, licenses, franchises, patents or other means of protecting interests in products or inventions resulting from the use by the Indemnitees of any materials, devices, processes, equipment, or other deliverable (including software) supplied by CONSULTANT under or as a result of this Agreement, but excluding any violation or infringement resulting from the modification or alteration by the Indemnitees of any materials, devices, processes, equipment, or other deliverable (including software) not consented to by CONSULTANT.

CONSULTANT further agrees to defend, save and hold harmless and fully indemnify the Indemnitees from and against any and all Damages arising out the negligence, errors, omissions, recklessness or intentional misconduct of CONSULTANT or CONSULTANT's agents, employees, officers, directors, subconsultants, or anyone else for whom CONSULTANT may be legally responsible, which are not based upon or arising out of the professional services of CONSULTANT.

The Damages shall include, but are not limited to, those resulting from personal injury to any person, including bodily injury, sickness, disease or death and injury to real property or personal property, tangible or intangible, and the loss of use of any of that property, whether or not it is physically injured.

If the Indemnitees are involved in defending actions of CONSULTANT or anyone else for whom CONSULTANT is legally responsible, CONSULTANT shall reimburse the Indemnitees for the time spent by such personnel at the rate of the Indemnitees pay or compensation for such services.

If an Indemnitee is found to be liable in the proceeding, then CONSULTANT'S obligation hereunder shall be limited to the proportional share of the liability attributed to CONSULTANT.

In determining whether a claim is subject to indemnification, the incident underlying the claim shall determine the nature of the claim.

In the event of a violation or an infringement under paragraph 2.B above and the use is enjoined, CONSULTANT, at its sole expense, shall either (1) secure for the Indemnitees the right to continue using the materials by suspension of any injunction or by procuring a license or licenses for the Indemnitees; or (2) modify the materials so that they become non-infringing. This covenant shall survive the termination of the Professional Services Agreement.

The provisions of this Agreement are separate and severable and it is the intent of the Parties hereto that in the event any provision of this Agreement should be determined by any court of competent jurisdiction to be void, voidable or too restrictive for any reason whatsoever, the remaining provisions of this Agreement shall remain valid and binding upon said Parties. It is also understood and agreed that in the event any provision should be considered, by any court of competent jurisdiction, to be void because it imposes a greater obligation on CONSULTANT than is permitted by law, such court may reduce and reform such provisions to limitations which are deemed reasonable and enforceable by said court.

3. GENERAL REQUIREMENTS

Prior to the start of any work on a RTC project, CONSULTANT shall purchase and maintain insurance of the types and limits as described below insuring against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by CONSULTANT, its subconsultants, or their employees, agents, or representatives. The cost of all such insurance shall be borne by CONSULTANT.

4. VERIFICATION OF COVERAGE

CONSULTANT shall furnish RTC with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth herein, on forms acceptable to RTC. All deductibles and self-insured retentions requiring RTC approval shall be shown on the certificate. All certificates and endorsements are to be addressed to RTC's Finance Director and be received by RTC before work commences. Upon request, CONSULTANT agrees that RTC has the right to review CONSULTANT'S and the Sub's insurance policies, or certified copies of the policies. Copies of applicable policy forms or endorsements confirming required additional insured, waiver of subrogation and notice of cancellation provisions are required to be provided with any certificate(s) evidencing the required coverage.

5. NOTICE OF CANCELLATION

CONSULTANT or its insurers shall provide at least thirty (30) days' prior written notice to RTC prior to the cancellation or non-renewal of any insurance required under this Agreement. An exception may be included to provide at least ten (10) days' written notice if cancellation is due to non-payment of premium. CONSULTANT shall be responsible to provide prior written notice to RTC as soon as practicable upon receipt of any notice of cancellation, non-renewal, reduction in required limits or other material change in the insurance required under this Agreement.

6. SUBCONSULTANTS & SUBCONTRACTORS

CONSULTANT shall include all Subcontractors and Subconsultants (referred to collectively as "Subs") as insureds under its liability policies OR shall cause Subs employed by CONSULTANT to purchase and maintain separate liability coverages and limits of the types specified herein. If any Subs maintain separate liability coverages and limits, each shall include the RTC and City of Reno as additional insureds under its commercial general liability policy, subject to the same requirements stated herein, without requiring a written contract or agreement between each of the additional insureds and any sub-consultant or sub-contractor. Any separate coverage limits of liability maintained by Subs shall be at least **$1,000,000** per occurrence and at least **$2,000,000** for any applicable coverage aggregates or the amount customarily carried by the Sub, whichever is GREATER. If any Subs provide their own insurance with limits less than required of the Contractor, Contractor shall include Subs in their coverage up to the full limits required of the Contractor. When requested by RTC, CONSULTANT shall furnish copies of certificates of insurance evidencing coverage for each subconsultant. CONSULTANT need not require its non-design subcontractors to carry Professional Errors and Omissions Liability insurance.

7. DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductibles or self-insured retentions that exceed $25,000 per occurrence or claim must be declared to RTC's Finance Director prior to signing this Agreement. RTC is entitled to request and receive additional documentation, financial or otherwise, prior to giving its approval of the deductibles and self-insured retentions. Any changes to the deductibles or self-insured retentions made during the term of this Agreement or during the term of any policy must be declared to RTC's Finance Director prior to the change taking effect.

8. ACCEPTABILITY OF INSURERS

Required insurance is to be placed with insurers with a Best's rating of no less than A-VII and acceptable to RTC. RTC may accept coverage with carriers having lower Best's ratings upon review of financial information concerning CONSULTANT and the insurance carrier. RTC reserves the right to require that CONSULTANT'S insurer(s) be licensed and admitted in the State of Nevada or meet any applicable state and federal laws and regulations for non-admitted insurance placements.

9. OTHER CONDITIONS

A. Failure to furnish the required certificate(s) or failure to maintain the required insurance may result in termination of this Agreement at RTC's option.

B. If CONSULTANT fails to furnish the required certificate or fails to maintain the required insurance as set forth herein, RTC shall have the right, but not the obligation, to purchase said insurance at CONSULTANT's expense.

C. Any waiver of CONSULTANT's obligation to furnish such certificate or maintain such insurance must be in writing and signed by an authorized representative of RTC. Failure of RTC to demand such certificate or other evidence of full compliance with these insurance requirements or failure of RTC to identify a deficiency from evidence that is provided shall not be construed as a waiver of CONSULTANT's obligation to maintain such insurance, or as a waiver as to the enforcement of any of these provisions at a later date.

D. By requiring insurance herein, RTC does not represent that coverage and limits will necessarily be adequate to protect CONSULTANT, and such coverage and limits shall not be deemed as a limitation on CONSULTANT's liability under the indemnities granted to RTC in this contract.

E. If CONSULTANT'S liability policies do not contain the standard ISO separation of insureds condition, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.

10. COMMERCIAL GENERAL LIABILITY

CONSULTANT shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella insurance with a limit of not less than **$2,000,000** each occurrence. If such CGL insurance contains a general aggregate limit, it shall be increased to equal twice the required occurrence limit or revised to apply separately to this project.

CGL insurance shall be written on ISO occurrence form CG 00 01 04 13 (or a substitute form providing equivalent coverage) and shall cover liability arising from premises, operations, products-completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

RTC and any other Indemnitees listed in Section 2. INDEMNIFICATION of this Agreement shall be included as an additional insured under the CGL, using ISO additional insured endorsement CG 20 10 07/04 or CG 20 33 07/04 or a substitute providing equivalent coverage, and under the commercial umbrella, if any.

This insurance shall apply as primary insurance with respect to any other insurance or self-insurance programs afforded to RTC or any other Indemnitees under this Agreement.

CONSULTANT waives all rights against RTC and any other Indemnitees listed in section 2. INDEMNIFICATION of this Agreement for recovery of damages to the extent these damages are covered by the commercial general liability or commercial umbrella liability insurance maintained pursuant to this agreement. CONSULTANT's insurer shall endorse CGL policy to waive subrogation against RTC with respect to any loss paid under the policy.

11. COMMERCIAL AUTOMOBILE LIABILITY

CONSULTANT shall maintain automobile liability and, if necessary, commercial umbrella liability insurance with a limit of not less than **$1,000,000** each accident. Such insurance shall cover liability arising out of any auto (including owned, hired, and non-owned autos).

Coverage shall be written on ISO form CA 00 01, CA 00 05, CA 00 25, or a substitute form providing equivalent liability coverage for all owned, leased, hired (rented) and non-owned vehicles (as applicable). RTC may agree to accept auto liability for non-owned and hired (rented) vehicles under the CGL if CONSULTANT does not own or operate any owned or leased vehicles.

CONSULTANT waives all rights against RTC, its officers, employees and volunteers for recovery of damages to the extent these damages are covered by the automobile liability or commercial umbrella liability insurance obtained by CONSULTANT pursuant to this Agreement.

12. INDUSTRIAL (WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY) INSURANCE

It is understood and agreed that there shall be no Industrial (Worker's Compensation and Employer's Liability) Insurance coverage provided for CONSULTANT or any subconsultants by RTC. CONSULTANT, and any subconsultants, shall procure, pay for and maintain the required coverages.

CONSULTANT shall maintain workers' compensation and employer's liability insurance meeting the statutory requirements of the State of Nevada, including but not limited to NRS 616B.627 and NRS 617.210. The employer's liability limits shall not be less than **$1,000,000** each accident for bodily injury by accident or **$1,000,000** each employee for bodily injury by disease.

CONSULTANT shall provide a Final Certificate for itself and each subconsultant evidencing that CONSULTANT and each subconsultant maintained workers' compensation and employer's liability insurance throughout the entire course of the project.

If CONSULTANT, or any subconsultant is a sole proprietor, coverage for the sole proprietor must be purchased and evidence of coverage must appear on the Certificate of Insurance and Final Certificate.

CONSULTANT waives all rights against RTC, its elected officials, officers, employees and agents for recovery of damages to the extent these damages are covered by the workers compensation and employer's liability or commercial umbrella liability insurance obtained by Tenant pursuant to this

agreement. CONSULTANT shall obtain an endorsement equivalent to WC 00 03 13 to affect this waiver.

13. PROFESSIONAL ERRORS AND OMISSIONS LIABILITY

CONSULTANT shall maintain professional liability insurance applying to liability for a professional error, omission, or negligent act arising out of the scope of CONSULTANT'S services provided under this Agreement with a limit of not less than **$1,000,000** each claim and annual aggregate. CONSULTANT shall maintain professional liability insurance during the term of this Agreement and, if coverage is provided on a "claims made" or "claims made and reported" basis, shall maintain coverage or purchase an extended reporting period for a period of at least three (3) years following the termination of this Agreement.

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.3.4**

To: Regional Transportation Commission

From: Ashley Hurlbut, Project Manager

SUBJECT: Traffic Engineering Spot Improvement 26-01 Project PSA Amendment No. 1 with CA Group, Inc.

RECOMMENDED ACTION

Approve Amendment No. 1 to the contract with CA Group, Inc., for design and engineering during construction services related to the Traffic Engineering and Intersection Improvements 26-01 Project, in the amount of $341,850, for a new total not-to-exceed amount of $687,549.

BACKGROUND AND DISCUSSION

The Traffic Engineering Spot Improvement 26-01 Project (Project) includes the design and analysis of operational, safety, and other traffic improvements to existing intersections prioritized within the RTC ITS Network Master Plan.

On December 20, 2024, the RTC Board approved a Professional Services Agreement (PSA) with CA Group Inc. (CA Group) to design and analyze operational, safety, and other traffic improvements to existing facilities at the following locations:

1- South Virginia Street at Kietzke Lane
2- Double R Boulevard at Amston Road
3- McCarran Boulevard at Mira Loma Drive
4- Veterans Parkway at Cesena Avenue/Pesaro Way
5- Mae Anne Avenue at Ambassador Drive and Stone Valley Drive

The project team has successfully completed preliminary traffic studies and delivered some of the work identified under the original PSA scope. A future amendment to support final design and engineering during construction (EDC) services was anticipated at the time of initial approval. Based on the traffic analysis, it was determined that no improvements were warranted along Mae Anne Avenue at Ambassador Drive and Stone Valley Drive at this time. In addition, staff identified a need to improve intersection operations at N. McCarran Blvd and Evans Avenue by modifying signal improvements and striping.

Amendment No. 1 to the PSA with CA Group provides an additional $341,850 to complete final design and EDC services at the following locations:

1- South Virginia Street at Kietzke Lane
2- Double R Boulevard at Amston Road
3- McCarran Boulevard at Mira Loma Drive
4- Veterans Parkway at Cesena Avenue/Pesaro Way
5- Evans Avenue and McCarran Boulevard

CA Group was selected from the Traffic Engineering Design and Construction Management Services List as a qualified firm to perform engineering, construction management, and quality assurance for the Project. CA Group's scope, schedule, and negotiated budget amount for services is within the appropriated budget. While the schedule may fluctuate based upon agency and other coordination, the targeted schedule for these services are as follows:

- 30% Design: September 2025
- 60% Design: January 2026
- 90% Design: March 2026
- Final Design: June 2026
- Construction: Late Summer 2026

All other terms and conditions of the original PSA remain unchanged and in full effect.

FISCAL IMPACT

Fuel Tax appropriations for this item are included in the FY 2026 Budget.

PREVIOUS BOARD ACTION

12/12/2024 - Approved a Professional Services Agreement with CA Group, Inc. for design services related to the Traffic Engineering Spot Improvement 26-01 Project in an amount not-to-exceed $345,699.

AMENDMENT NO. 1

The Regional Transportation Commission of Washoe County ("RTC") and CA Group, Inc. ("CONSULTANT") entered into an agreement dated December 20, 2024 (the "Agreement"). This Amendment No. 1 is dated and effective as of _____.

RECITALS

WHEREAS, RTC and CONSULTANT entered into the Agreement in order for CONSULTANT to perform Design and Optional Engineering During Construction (EDC) services with a not to exceed budget of $345,699.00 in connection with the TE Spot 26-01 ("Project").

WHEREAS, the parties have determined that there is a need to amend the Agreement in order for CONSULTANT to provide $341,850.00 in additional Design and EDC services. Under the Agreement, CONSULTANT undertook traffic engineering studies at the Project locations which recommended improvements to improve safety and traffic operations. RTC determined it was advantageous to the RTC and the public to include those improvements in the Project. This amendment reflects the additional design and construction services for the identified improvements.

NOW, THEREFORE, in consideration of the mutual promises of the parties and other good and valuable considerations, the parties do agree as follows:

1. Section 3.2 shall be replaced in its entirety with the following:

   The maximum amount payable to CONSULTANT to complete each task is equal to the not-to-exceed amounts identified in Exhibit B. CONSULTANT can request in writing that RTC's Project Manager reallocate not-to-exceed amounts between tasks. A request to reallocate not-to-exceed amounts must be accompanied with a revised fee schedule, and must be approved in writing by RTC's Project Manager prior to performance of the work. In no case shall CONSULTANT be compensated in excess of the following not-to-exceed amounts:

Design Services	$418,560
Design Contingency	$33,000
Engineering During Construction Services	$220,989
Engineering During Construction Services Contingency	$15,000
Total Not-to-Exceed Amount	$687,549

2. Exhibit A – Scope of Services of the Agreement is replaced in its entirety with the version of Exhibit A attached hereto.

3. Exhibit B – Compensation is replaced in its entirety with the version of Exhibit B attached hereto.

4. All other provisions of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have made and executed this amendment.

REGIONAL TRANSPORTATION COMMISSION
OF WASHOE COUNTY

By:_____
Bill Thomas, AICP, Executive Director

CA GROUP, INC.

By:_____
Chad Anson, Executive Vice President

EXHIBIT A

SCOPE OF SERVICES

INTRODUCTION

CONSULTANT will provide Engineering Design and Construction Administration Services for the Traffic Engineering Spot Improvement 26-01 Project.

The project limits and anticipated improvements include:

- **S Virginia St at Kietzke Ln**
  - Extend SB Virginia to NB Kietzke left turn lane
  - Add second left turn lane from EB Kietzke Ln. to NB Virginia St.

- **Double R Blvd and Amston Rd** (Scope needs to be finalized with City of Reno. Possible improvements include):

  - Remove and/or trim vegetation
    - Remove and/or trim the foliage located in the median north of Double R/Amston to improve the sight distance.

  - Porkchop island on Amston approach
    - Install a porkchop island on the Amston approach to physically restrict the left-out movements.

  - Median buffer and acceleration lane striping
    - Re-stripe Double R southbound for possible opportunity to create an acceleration lane or buffer space for WB to SB left turns.

  - Intersection warning signage
    - Flashing intersection ahead warning signs.

  - Crosswalk
    - Construct a crosswalk across Double R south of Amston.

- **McCarran Blvd and Mira Loma Dr**
  - Install mid-block crosswalk near Rosewood Apartments pending City approval
  - Mira Loma capacity improvements on east side of intersection (dual left-turn lanes)
  - Improvements along the NB leg of McCarran Blvd up to the entrance of Mira Loma Park to enhance the ingress and egress.
  - Access management evaluation
  - Multi-modal upgrades evaluation

- **Evans Ave and McCarran Blvd.**
  - Operational Improvements to the south leg of the intersection.
    - Signal improvements
    - Striping changes

- **Veterans Pkwy and Cesena Ave / Pesaro Way**
    - Signal warrant analysis
    - If signal isn't warranted, perform access management evaluation
    - Channelization to limit left turn access from Cesena Ave and Pesaro Way onto Veteran's Pkwy **(OPTIONAL)**

- **Mae Anne Ave and Stone Valley Dr**
    - Signal warrant analysis at Ambassador Dr. Discuss additional signal effects on the Stone Vally Dr. intersection.

The anticipated project schedule includes eighteen (18) months to perform the studies at the various locations, preliminary and final design for 4 locations. Bidding Services, Contract Administration and Construction is anticipated to be four (4) months.

Major milestones anticipated to maintain the Project schedule are listed below:

- Service Provider Agreement: January 2025
- NTP: January 2025
- Studies: March 2025
- 30% Design: September 2025
- 60% Design: January 2026
- 90% Design: March 2026
- 100%: May 2026
- Final Design: June 2026
- Invitation to Bid: July 2026
- Construction: Late Summer 2026

The scope of services will generally consist of the following tasks:

1. PROJECT MANAGEMENT

1.1. Team and Project Management

CONSULTANT will provide project management services for the duration of the Traffic Engineering Spot Improvement 26-01 Project including closeout activities; assumed to be eighteen (18) months total, January 2025 through June 2026. Once the project proceeds to construction, project management services will be performed under the Contract Administration task.

Project management includes project setup and administration, including preparation and execution of Subconsultant agreements; monthly budget monitoring and invoicing; monthly preparation and reporting of project progress (including work completed and documentation of any changes, actual and anticipated, in scope, schedule, and budget); risk management; preparation and monthly project schedule updates; management of Subconsultants, oversight of quality assurance on deliverables; file management; project closeout; and general project administration.

CONSULTANT Project Manager will serve as the Regional Transportation Commission (RTC)'s

single point of contact and will have primary responsibility for coordinating the efforts of the project team and subconsultants.

1.2. Project Coordination and Meetings

The CONSULTANT Project Manager will be responsible for the ongoing project coordination of CONSULTANT activities for the duration of the work. The CONSULTANT Project Manager shall also maintain communication, as appropriate, with local, state, and private stakeholders as required for the progress of the scope of work detailed in this document. All significant communications shall be documented and reported to the RTC Project Manager. CONSULTANT Project Manager will keep the RTC Project Manager informed of progress with bi-weekly informal briefings via email or phone call. The CONSULTANT Project Manager will coordinate with team leads to discuss the progress of the project and identify issues and action items to be addressed.

1.2.1. Project Kickoff Meetings

CONSULTANT will hold a kickoff meeting with the RTC and other agency staff as appropriate, to confirm the project objectives, approach, milestones, stakeholder and outreach approach, and potential project challenges. CONSULTANT will prepare a meeting agenda, take and distribute meeting minutes, and track concerns about the project from the attendees.

CONSULTANT will hold an internal kickoff meeting with CONSULTANT staff, and subconsultants to internally align the team with the goals of the RTC and the goals of the project.

1.2.2. Project Management Team Meetings

CONSULTANT will facilitate monthly meetings with the RTC Project Manager to discuss the design progress; upcoming milestones; scope, schedule, and budget; risk status; key technical issues by discipline; and make informed decisions. This meeting will be facilitated by the CONSULTANT Project Manager and an agenda and meeting summary will be provided. A total of ten (10) meetings are anticipated.

Deliverables - Meeting Invitation, Materials, Exhibits and Summaries

1.3. Design Schedule

CONSULTANT will prepare and maintain a project schedule and distribute updates on a monthly basis. The schedule will be reviewed with the RTC at monthly Project Management Team (PMT) meetings, with a focus on the upcoming 4-week look ahead, critical path activities, and schedule threats.

1.4. Constructability Reviews and Construction Schedules

CONSULTANT will provide an independent constructability review of the 60 Percent Design plans, an independent review of the 90 Percent Design plans, and provide a draft construction schedule at the 90 Percent Design submittal. Constructability reviews and updates to the draft construction schedule will be provided on the Final Design Submittals.

2. INVESTIGATION OF EXISTING CONDITIONS

2.1. Condition Survey

CONSULTANT will visually evaluate and document the condition of the existing roadways and project site conditions during two (2) one-day site visits.

CONSULTANT will document potential design constraints at each location (drainage, utility, landscape, aesthetics, etc.) and evaluate signing, lighting, striping, and approaches based upon RTC criteria. The CONSULTANT shall also evaluate existing pedestrian ramps for compliance with current ADA standards and consider multi-modal improvements. CONSULTANT will review other field conditions as appropriate.

2.2. Topographic Survey

These services will not be provided for all locations. Topographic mapping and boundary for the following locations:

- Double R Blvd./Amston Rd.,
- McCarran Blvd./Mira Loma Dr. The project area for McCarran Blvd./Mira Loma Dr. intersection will include the entrance of Mira Loma Park north of the intersection.
- Kietzke Ln./S. Virginia St.
- Evans Ave./McCarran Blvd.

Topographic mapping for each location will be performed to meet design needs.

CONSULTANT will conduct field surveys and provide photogrammetric mapping and office support to produce topographic design surveys within the project area. The survey information will be provided for the full right-of-way width and/or limits of proposed construction. Aerial mapping will include the full-length right-of-way corridor.

All key existing features of the project site will include, but will not be limited to: centerline elevations; existing stripping; edge of pavement; curb, gutter, and sidewalks; ADA ramps; multi-use paths; retaining walls; ditch features; hinge points; location, invert and rim elevations of all sewer and storm drain manholes and cross-manholes; culverts; location, invert and rim elevations for all water and gas valves, boxes and vaults; location, invert and rim elevations of storm drain inlets and catch basins; utility poles and anchors; fences; signs; existing survey monuments encountered; location of underground utility carsonite markers (if any); and any other key existing features.

CONSULTANT will perform minor supplemental field survey as necessary as design progresses.

The horizontal datum shall be Nevada State Plane Coordinate System, West Zone NAD83/94 (HARN), based on GPS surveys. The vertical datum shall be NAVD 88 based on digital bar-code leveling circuits to published City or County, benchmarks.

Deliverables – Color aerial imagery ortho photos compatible with both MicroStation and AutoCAD; topographic linework, existing ground surface including 3D breaklines; label callouts for rim and pipe inverts of storm drains, sewer systems, and other utilities; 1-foot existing ground contour intervals at a scale of 1" = 40' for a reasonable offset each side of right-of-way and beyond each of the project location limits.

2.3. Right-of-Way Mapping and Engineering Services

CONSULTANT will obtain record right-of-way based upon Washoe County GIS information. The right-of-way boundary will be surveyed, and right-of way will be tied to the roadway centerline and existing monuments. The record right-of-way information will be shown on the project plans. No further resolution of the roadway right-of-way is included in this task.

It is estimated that approximately nine (9) parcels will require acquisition or easements to construct the planned improvements. CONSULTANT will perform boundary surveying including preparation of full Metes and Bounds descriptions of 9 individual parcels. This will include property record research, drafting of property boundaries from record descriptions, calculations of search coordinates for filed boundary survey, field boundary survey on each affected parcel, post processing and reduction of field data, boundary resolution based upon field findings, preparation of legal descriptions and exhibit maps of individual affected parcels. CONSULTANT shall pull preliminary Title Reports and updates as necessary for each affected parcel.

Right-of-way appraisal, property owner negotiations, escrow coordination and title clearance is not included within this task.

2.4. Subsurface Utilities

Utilities within the project area for the S. Virginia St./Kietzke Ln., Double R Blvd./Amston Rd., and McCarran Blvd./Mira Loma locations will be located and assessed for possible conflict with the proposed project.

CONSULTANT will investigate and locate subsurface utilities within the roadway right-of-way, and areas reasonably affected, in accordance with the American Society of Civil Engineers Standard guideline for the Collection and Depiction of Existing Subsurface Utility Data, Quality Level C. Additionally, CONSULTANT will coordinate with Utility Owners to remove lids of surface features and document depth of utility device, or invert of pipe, within such surface features.

Based on field investigation, CONSULTANT will provide the RTC a list of utility companies whose utilities are likely to be within the project limits or reasonably affected by the project and prepare the initial notification for placement on RTC letterhead and for RTC signature. CONSULTANT will distribute to the utility agencies on the list and coordinate with the utility agencies for upcoming work, facility relocation and new installation, and to ensure utilities likely affected by the project are drawn on the plans, evaluate potential conflicts through field investigation, and investigate conflict resolution strategies.

No upgrading or expanding of facilities shall be included.

CONSULTANT will distribute design review submittals to utility agencies for review and comment and provide the RTC a list of utility agencies provided design review submittals and Utility Agency review comments.

Deliverables - Depiction of Subsurface Utilities on Design Plans, Subsurface Utility Inventory

3. PRELIMINARY STUDIES

3.1. Data Collection

CONSULTANT will obtain as-built data (hard copy, .pdf, and electronic CADD files) for the Traffic Engineering Spot Improvement 26-01 Project limits from the RTC and the City of Reno if available.

3.2. Traffic Counts

CONSULTANT will perform traffic counts to support the performance of traffic signal warrants at the following locations:

Veteran's Pkwy and Cesena Ave./Pesaro Wy.
Mae Anne Ave. and Ambassador Dr.

3.3. Pedestrian Counts

CONSULTANT will perform pedestrian counts to support the warrants that may be needed to justify mid-block crosswalks and/or controls that may accompany the crosswalks. The following locations are anticipated to require crosswalks:

Double R Blvd. and Amston Rd.
McCarran Blvd. and Mira Loma Dr.

3.4. Signal Warrant Analysis

CONSULTANT will conduct signal warrant analysis per MUTCD requirement for the following intersections:

Veteran's Pkwy and Cesena Ave./Pesaro Wy.
Mae Anne Ave. and Ambassador Dr.

CONSULTANT will prepare a Technical Memo discussing the warrant analysis and address each warrant discussed in the MUTCD requirements.

3.5. Access Management Evaluation

CONSULTANT will prepare an Access Management Technical Memorandum that documents the existing number of driveway locations. Existing driveways will be evaluated for conformance/non-conformance to current local access management standards. In addition, the technical memorandum will discuss existing access conditions and provide recommendations to the RTC

where consolidation, removal or limitation of access for driveways should be considered. Memorandums will be provided for the following locations:

Veteran's Pkwy and Cesena Ave./Pesaro Wy.
McCarran Blvd. and Mira Loma Dr.

3.6. Multimodal Connectivity/Upgrade Evaluation

CONSULTANT will prepare a Multimodal Connectivity/Upgrade Technical Memorandum that documents and reviews the following intersections to identify multi-modal connectivity including pedestrian, bicycle, and transit modes:

McCarran Blvd. and Mira Loma Dr.

CONSULTANT shall identify the entire absence or gaps within these modes for consideration by the RTC for potential improvements.

3.7. Design Criteria

CONSULTANT will develop design criteria for the project and will establish guidance based on:

- Standard Specifications for Public Works Construction, (Orange Book), Revision 8 of the 2012 Edition
- AASHTO Policy for Geometric Design of Highways and Streets (Green Book), 2018
- Manual on Uniform Traffic Control Devices, 11th Edition
- AASHTO Roadside Design Guide, 2011
- Guide for the Planning, Design, and Operation of Pedestrian Facilities, AASHTO, 2004
- City of Reno Standard Details
- Truckee Meadows Regional Drainage Manual, 4/30/2009 version
- NDOT Road Design Guide, 2019
- NDOT Stand Plans for Road and Bridge Construction, 2022
- NDOT Traffic SLI Design Guide, 2018
- NDOT Access Management System and Standards, 2017
- TRB Access Management Manual, Second Edition

Structural, Landscape and Aesthetic, and Erosion Control design is not anticipated.

CONSULTANT will review existing conditions for consistency with the agreed upon standards.

Deliverables – N/A

4. PRELIMINARY DESIGN

4.1. Drainage Analysis

CONSULTANT will conduct a drainage evaluation for improvements that add lanes or crosswalk locations that modify drainage patterns to provide protection from nuisance flows. It is anticipated that drainage features will consist of curb cuts or gutter modification to tie into existing drainage

facilities. Drainage facilities will be based on approximate sizing methods and will not be supported with hydrologic and hydraulic analyses.

Improvements will be constructed in a manner that will not obstruct the existing water conveyance. Consequently, all offsite flows will be perpetuated, and no offsite hydrologic analysis will be necessary.

4.2. Lighting, Electrical and ITS Design

Electrical design will include possible RRFB or PEB signal at mid-block crossings, miscellaneous electrical connections; electrical service points (if necessary); and coordination with NVE for any electrical utility relocations and any new service requirements (if needed). New lighting may be needed for controls at crosswalk locations. The following location are anticipated to have crosswalks and possible RRFB or PEB signal:

McCarran Blvd. and Mira Loma Dr.
Double R Blvd. and Amston Rd. (OPTIONAL)

Lighting design will not be completed for the 30 Percent Design. Lighting design for the 60 Percent Design will be conceptual only. No detailed analysis will be completed at the 60 Percent Design for lighting.

The electrical design will include all necessary lighting, power locations, conduit, wiring, boxes, and electrical requirements for the lighting system and power distribution services. CONSULTANT will provide associated electrical schedules and lighting/electrical calculations.

4.3. 30 Percent Design

CONSULTANT will prepare a 30 Percent Design roll plot submittals for the following intersections:

- McCarran Blvd. at Mira Loma Dr.
- Double R Blvd. at Amston Rd.
- Kietzke Ln. at S. Virginis St.
- Evans Ave. at McCarran Blvd.

The roll plots will be designed in accordance with design criteria developed in Task 3.7. CONSULTANT will prepare a list of the exceptions (if any) identifying limits, standards, and potential mitigations.

The design roll plots will be presented in an abbreviated format using GIS based aerial photography that properly depicts the elements of the project construction, including plan view, right-of-way lines, typical sections, and construction limits.

4.4. 30 Percent Design Submittal

CONSULTANT will submit the 30 Percent Design as summarized:

RTC:

- 1 Electronic Distribution 30 Percent Design roll plot, Design Exception Summary (if necessary)
- 1 Electronic Distribution of Review and Comment Form

City of Reno:

- 1 Electronic Distribution 30 Percent Design roll plot, Design Exception Summary (if necessary)
- 1 Electronic Distribution of Review and Comment Form

Utility Agencies:

- 1 Electronic 30 Percent Design roll plot
- 1 Electronic Distribution of Review and Comment Form

4.5. 30 Percent Design Review Comment Resolution

CONSULTANT will prepare for and attend one in-person meeting with RTC and City of Reno staff to discuss the 30 Percent Design. CONSULTANT will consolidate and provide responses to the 30 Percent Design plan review comments with the 60 Percent Design deliverables.

4.6. 60 Percent Design

CONSULTANT will prepare 60 Percent Design plans, a corresponding 60 Percent Design preliminary engineer's estimate, and an outline of the 60 Percent Design technical specifications for the following intersections:

- McCarran Blvd at Mir Loma Dr.
- Double R Blvd. at Amston Rd.
- Kietzke Ln.at S. Virginia St.
- Evans Ave. at McCarran Blvd.

The following is a listing of plan sheets to construct the improvements at the four locations listed above. The listing includes the amount of detail anticipated in the project contract documents for the 60 Percent Design submittal:

Title Sheets 1

Index of Sheets, General Notes, Legend, Abbreviations, Key Maps 2

Typical Section Sheets 2

- As-constructed and proposed improvement typical sections
- Minimum and maximum multi-use-path widths
- Preliminary multi-use-path designs
- Removal limits
- Pavement section depths

Roadway Plan Sheets 7

- Survey control points, Horizontal curve data, bearings, distances and station and offsets for angle points, tapers, and curves (multi-use path only)
- Preliminary locations for new curbs, gutters, and sidewalk
- Preliminary multi-use-path widths
- Existing right-of way-limits
- Proposed signing and striping detailing sign type and location, lane arrangements including turn lanes, storage lengths, acceleration lanes, and deceleration lanes
- Existing Utilities and Proposed Utility adjustments/relocations

Removals 7

- Removal Limits, including existing roadway, signs, drainage, etc.
- Existing Utilities and Proposed Utility adjustments/relocations

ITS 2

- Proposed RRFBs locations and layout

Right of Way 2

- Proposed acquisition and easements boundaries

Additional sheets included in Preliminary Design are:

- Signing and Striping Details 7
- Signal Plan and Blank Schedules 4
- Misc Detail Sheets 6

Approximately 40 Sheets Total.

Exclusions from the 60 Percent Design:

- Survey Control Sheets will not be prepared
- Roadway Profile Sheets will not be prepared
- Geometric Control and Grading Sheets will not be prepared
- Superelevation diagrams will not be prepared
- Drainage Detail Sheets will not be prepared

- Utility specific generated design (water, gas, etc.), as necessary resulting from utility conflicts, will not be prepared
- Site reconstruction plans for adjacent properties will not be prepared
- Retaining Wall and Soundwall Sheets will not be prepared
- Lighting Sheets will not be prepared
- Detailed analysis for electrical will not be completed
- Landscape and Aesthetic Sheets for new or remediation for project impacts will not be prepared
- Structural Sheets will not be prepared
- Cross sections will not be prepared

4.7. 60 Percent Cost Estimate and Technical Specification Outline

CONSULTANT will prepare a detailed unit price engineer's estimate of probable construction cost in the same format as the bid proposal form to be included in the contract documents. Bid item numbers will correspond to the appropriate sections in the RTC's Orange Book.

The RTC will provide CONSULTANT the most recent RTC Technical Specifications templates. Technical provisions will reference Revision 8 of the 2012 Edition of Standard Specifications for Public Works Construction (Orange Book) for standard construction items. Technical provisions will be prepared for changes to the standards or unique site conditions not adequately covered in the Orange Book.

CONSULTANT will prepare 60 Percent Design technical provisions which will include a detailed outline of the technical provisions for those items not identified as part of the Standard Specifications.

4.8. 60 Percent Design Submittal

CONSULTANT will submit the 60 Percent Design as summarized:

RTC:

- 1 Electronic Distribution 11" x 17" 60 Percent Design plans, Design Exception Summary (if necessary)
- 1 Electronic Distribution of the Technical Specifications outline
- 1 Electronic Distribution Engineer's opinion of probable construction cost estimate
- 1 Electronic Distribution of full version of Draft Hydraulic Report; full version of Draft Geotechnical Report
- 1 Electronic Distribution of Review and Comment Form and previous submittal responses (if applicable)

City of Reno:

- 1 Electronic Distribution 11" x 17" 60 Percent Design plans, Design Exception Summary (if necessary)

- 1 Electronic Distribution of the Technical Specifications outline
- 1 Electronic Distribution of full version of Draft Hydraulic Report; full version of Draft Geotechnical Report
- 1 Electronic Distribution of Review and Comment Form and previous submittal responses (if applicable)

Utility Agencies:

- 1 Electronic Distribution 11" x 17" 60 Percent Design plans, Design Exception Summary (if necessary)
- 1 Electronic Distribution of the Technical Specifications outline
- 1 Electronic Distribution of Review and Comment Form and previous submittal responses (if applicable)

4.9. 60 Percent Design Review Comment Resolution

CONSULTANT will prepare for and attend one in-person meeting with RTC and City of Reno staff to discuss 60 Percent Design. CONSULTANT will consolidate and provide responses to the 60 Percent Design plan review comments with the 90 Percent Design deliverables.

5. FINAL DESIGN

5.1. Lighting, Electrical, and ITS

CONSULTANT will advance the design for the RRFB at Mira Loma Drive to 90 Percent Design, 100 Percent Design, and Final Design in conjunction with other disciplines and incorporating input from the RTC and City of Reno.

5.2. 90 Percent Design

Incorporating agency comments from the 60 Percent Design review, CONSULTANT will advance the design and prepare 90 Percent Design plans, a corresponding 90 Percent preliminary engineer's estimate, and 90 Percent technical specifications.

Design Plans will be presented in an abbreviated format using GIS based aerial photography that properly depicts the elements of the project construction, including plan view, right-of-way lines, typical sections, and construction limits.

The Draft Technical Drainage Report will be updated as the design progresses. Review comments received from the 60 Percent Design will be incorporated and a Final Technical Drainage Report will be prepared for the 90 Percent Design submittal.

Plan sheets included in the 60 Percent Design submittal will be advanced to the 90 Percent Design level of detail.

Sheets to be included are:

Title Sheet 1

Index of Sheets, General Notes, Legend, Abbreviations, Key Maps 2

Survey Control Sheets 3

Typical Section Sheets 2

- As-constructed and proposed improvement typical sections
- Minimum and maximum multi-use-path widths
- Preliminary multi-use-path designs
- Removal limits
- Pavement section depths
- Existing right-of-way limits
- Proposed right-of-way limits

Removals 7

- Removal Limits, including existing roadway, signs, drainage, etc.

Roadway Plan Sheets 7

- Survey control points, Horizontal curve data, bearings, distances and station and offsets for angle points, tapers, and curves (multi-use path only)
- locations for new curbs, gutters, and sidewalk
- Multi-use-path widths
- Proposed signing and striping detailing sign type and location, lane arrangements including turn lanes, storage lengths, acceleration lanes, and deceleration lanes
- Existing Utilities and Proposed Utility adjustments/relocations needed
- Existing right-of-way limits
- Proposed right-of-way limits

Additional sheets included in the Final Design are:

- Geometric Control and Grading Sheets 4
- Signing and Striping Details 7
- ITS Sheets 2
- Signal Plan and Schedules 4
- Lighting and Electrical Sheets 2
- Misc Detail Sheets 6

Right of Way 2

- Proposed acquisition and easements boundaries

Approximately 49 Sheets Total.

Exclusions from the 90 Percent Design:

- Roadway Profile Sheets will not be prepared
- Superelevation diagrams will not be prepared
- Drainage Detail Sheets are not anticipated and will not be prepared
- Utility specific generated design (water, gas, etc.), as necessary resulting from utility conflicts, will not be prepared
- Site reconstruction plans for adjacent properties will not be prepared
- Retaining Wall and Soundwall Sheets will not be prepared
- Landscape and Aesthetic Sheets for new or remediation for project impacts will not be prepared
- Structural Sheets will not be prepared
- Cross sections will not be prepared

CONSULTANT will prepare for and attend one in-person meeting with RTC and City of Reno staff to discuss the 90 Percent Design.

5.3. 90 Percent Cost Estimate and Technical Specifications

CONSULTANT will advance the detailed unit price engineer's estimate of probable construction cost to the 90% design level.

CONSULTANT will provide detailed technical specifications for the outline created at the 60% submittal, and any additional item as determined during the 90% design. Technical provisions will reference Revision 8 of the 2012 Edition of Standard Specifications for Public Works Construction (Orange Book) for standard construction items.

5.4. 90 Percent Design Submittal

CONSULTANT will submit the 90 Percent Design as summarized:

RTC:

- 1 Electronic Distribution 11" x 17" 90 Percent Design plans, Design Exception Summary (if necessary)
- 1 Electronic Distribution of the Technical Specifications
- 1 Electronic Distribution Engineer's opinion of probable construction cost estimate
- 1 Electronic Distribution of full version of Final Hydraulic Report; full version of Final Geotechnical Report
- 1 Electronic Distribution of Review and Comment Form and previous submittal responses (if applicable)

City of Reno:

- 1 Electronic Distribution 11" x 17" 90 Percent Design plans, Design Exception Summary (if necessary)
- 1 Electronic Distribution of the Technical Specifications
- 1 Electronic Distribution of full version of Final Hydraulic Report; full version of Final Geotechnical Report
- 1 Electronic Distribution of Review and Comment Form and previous submittal responses (if applicable)

Utility Agencies:

- 1 Electronic Distribution 11" x 17" 90 Percent Design plans, Design Exception Summary (if necessary)
- 1 Electronic Distribution of the Technical Specifications
- 1 Electronic Distribution of Review and Comment Form and previous submittal responses (if applicable)

5.5. 90 Percent Design Review Comment Resolution

CONSULTANT will prepare for and attend one in-person meeting with RTC and City of Reno staff to discuss the 90 Percent Design. CONSULTANT will consolidate and provide responses to the 90 Percent Design plan review comments with the 100 Percent Design deliverables.

5.6. 100 Percent Design

Incorporating agency comments from the 90 Percent Design review, CONSULTANT will advance the design and prepare 100 Percent Design plans, engineer's estimate, and technical specifications. CONSULTANT will submit 100 Percent Design plans, specifications and engineer's estimate to RTC, City of Reno, and utility companies with facilities in the project limits to verify all comments have been responded to, reconciled, and incorporated into the plans.

5.7. 100 Percent Cost Estimate and Technical Specifications

CONSULTANT will advance the detailed unit price engineer's estimate of probable construction cost and detailed technical specifications to the 100% design level.

5.8. 100 Percent Design Submittal

CONSULTANT will acquire the 100 Percent Design plans for S. Virginia St. at N. Kietzke Ln from the RTC and insert the plan sheets with the 100 Percent Design Set prepared by the CONSULTANT. No design or other services to change or alter the sheets is anticipated.

CONSULTANT will submit the 100 Percent Design as summarized:

RTC:

- 1 Electronic Distribution 11" x 17" 100 Percent Design plans, Design Exception Summary (if necessary)
- 1 Electronic Distribution of the Technical Specifications
- 1 Electronic Distribution Engineer's opinion of probable construction cost estimate
- 1 Electronic Distribution of Review and Comment Form and previous submittal responses (if applicable)

City of Reno:

- 1 Electronic Distribution 11" x 17" 100 Percent Design plans, Design Exception Summary (if necessary)
- 1 Electronic Distribution of the Technical Specifications
- 1 Electronic Distribution of Review and Comment Form and previous submittal responses (if applicable)

Utility Agencies:

- 1 Electronic Distribution 11" x 17" 100 Percent Design plans, Design Exception Summary (if necessary)
- 1 Electronic Distribution of the Technical Specifications
- 1 Electronic Distribution of Review and Comment Form and previous submittal responses (if applicable)

5.9. 100 Percent Design Review Comment Resolution

CONSULTANT will prepare for and attend one in-person meeting with RTC and City of Reno staff to discuss the 100 Percent Design. CONSULTANT will consolidate and provide responses to the 90 Percent Design plan review comments with the 100 Percent Design deliverables.

5.10. Final Design

Once the agencies verify that all review comments have been addressed and no additional changes are required, CONSULTANT will sign and stamp the design plans and technical specifications for use as an advertised project.

6. BIDDING SERVICES

6.1. Bidding Services

CONSULTANT will be available during the bidding process to respond to Requests for Information (RFIs) and will attend the RTC hosted pre-bid meeting. All questions and responses will be documented and provided to the RTC, and prepare and provide any addenda, if required. All questions regarding legal aspects of the contract documents will be referred directly to the

RTC. CONSULTANT will prepare and provide a summary of the pre-bid meeting, as directed by the RTC.

CONSULTANT will attend the bid opening, review the bids received for irregularities, and provide a recommendation for award. CONSULTANT will tabulate bid results into a MS Excel spreadsheet to verify the quantities and costs of the bid items.

After bid opening and award, CONSULTANT will prepare a conformed set of specifications for distribution to the project and construction teams. All RTC and Contractor signed pages and any addenda will be incorporated into a final set of project specifications. CONSULTANT will also prepare a conformed set of plans, if any changes are required resulting from RFIs during the bidding process.

Deliverables – Pre-Bid meeting minutes, bid review tabulation, conformed set of design plans and specifications

7. DESIGN CONTINGENCY (OPTIONAL)

7.1. Design Contingency

This is a contingency for miscellaneous increases within the scope of this contract in performance of services under Task 1 through Task 7. If CONSULTANT determines that it is necessary to perform work outside of the scope covered in Task 1 through Task 7, CONSULTANT shall provide a letter detailing the need, scope, and not-to-exceed budget for any proposed work. Work under this task shall proceed only with the RTC Project Manager's written approval.

7.2. Veterans Pkwy and Cesena Ave / Pesaro Way Channelization Design

CONSULTANT will conduct the design and prepare 100 Percent Design plans, for new channelization to limit left turn access from Cesena Ave and Pesaro Way onto Veteran's Pkwy. CONSULTANT will incorporate quantities into the engineer's estimate and incorporate verbiage into the technical specifications. CONSULTANT will submit these design plans at the appropriate milestones with the rest of the design set to RTC, City of Reno, and utility companies with facilities in the project limits to verify all comments have been responded to, reconciled, and incorporated into the plans.

7.3. Double R Blvd Mid-Block Crosswalk Design

CONSULTANT will conduct the design and prepare 100 Percent Design plans for new mid-block crossing with possible RRFB or PCB across Double R Blvd between Amston Rd. and Technology Way. CONSULTANT will incorporate quantities into the engineer's estimate and incorporate verbiage into the technical specifications. CONSULTANT will submit these design plans at the appropriate milestones with the rest of the design set to RTC, City of Reno, and utility companies with facilities in the project limits to verify all comments have been responded to, reconciled, and incorporated into the plans.

8. CONTRACT ADMINISTRATION (OPTIONAL)

8.1. Engineering Services During Construction (EDC)

As the Engineer of Record, the CONSULTANT shall provide EDC services as necessary for construction of the Project. EDC services include, but are not limited to the following:

- Construction Engineering Support. The CONSULTANT will respond to Contractor inquires through RTC requests. The CONSULTANT will prepare drawings and review change orders requested by the RTC. In addition, the CONSULTANT will make field visits, as necessary, to answer questions regarding the ongoing construction activities.

8.2. Contract Administration

CONSULTANT shall provide contract administration services as follows:

- Perform construction coordination
- Review and provide recommendations on contractor's traffic control plans
- Review and stamp contractor's submittal for conformance to the contract
- documents, including plantmix bituminous pavement and Portland Cement
- concrete mix designs
- Review and provide recommendations on test results
- Review and provide recommendations on contractor's construction schedule
- and work progress
- Review construction for acceptance and/or mitigation
- Provide verification and approval of contractor's monthly pay request
- Supervise the inspection, surveying and material testing activities
- Provide recommendations to the RTC for any necessary construction changes due to field conditions
- Assist in change order review and approval

8.3. Construction Surveying

CONSULTANT will provide construction staking as follows:

- One set of preliminary grading stakes at 50' stations denoting offsets and cut or fill to finish grade. This set of stakes will also delineate clearing and grubbing limits
- One set of offset stakes for storm drain, water, sanitary sewer, and conduit alignments, head walls, traffic signals improvements, and utility pull boxes and vaults
- One set of red tops at 50 feet centers for sub grade preparation
- One set of final curb and gutter, sidewalk, pedestrian ramps, and roadway centerline finish grades stakes at 50-foot stations and 25-foot stations at returns
- Roadway monuments, referenced in four directions

8.4. Inspection

CONSULTANT will provide one full-time inspector during all construction activities. A sixty-five (65) working day contract period is anticipated. This inspector will:

- Attend the preconstruction conference
- Monitor the work performed by the contractor and verify that the work is in accordance with the plans and specifications
- Assist in problem resolution with the RTC, contractor personnel, utility agencies, the public, and others
- Prepare daily inspection reports submitted weekly to RTC and cc'd to the appropriate government jurisdiction(s)
- Provide quantity reports and assist in contractor's monthly progress payments
- Provide verification of the distribution of public relation notices required to be delivered by the contractor
- Assist in preparation of the Punch List
- Maintain a field blueline set of drawings to incorporate contractor
- Record drawing mark-ups

CONSULTANT will provide an additional inspector during paving days to monitor plantmix bituminous pavement placement and in-place density tests. 40 hours of field inspection is anticipated.

8.5. Materials Testing

8.5.1. Materials Testing

CONSULTANT will provide Material Testing for compliance with the specifications per the latest edition of the Standard Specifications for Public Works Construction (Orange Book) testing requirements. Materials to be tested will include plantmix bituminous pavement, aggregate base, native subgrade material, structural fill material and Portland Cement Concrete. Test reports, accompanied with CONSULTANT's recommendation regarding acceptance/mitigation of materials, shall be submitted promptly to the RTC and CC'd to appropriate governmental jurisdiction(s).

8.5.2. AC Plant Inspection and Testing

CONSULTANT will provide plantmix bituminous pavement plant inspection and laboratory aggregate testing. 10 hours for plant visits and sampling are anticipated. Laboratory tests will consist of sieve analysis, percent of wear, fractured faces and plasticity index.

8.5.3. Asphalt Cement Testing

CONSULTANT will provide asphalt cement testing. Sampling and testing of asphalt cement binder material shall be in accordance with Section 1.01A ASPHALT CEMENT of the RTC's Special Technical Specifications. For each paving day, CONSULTANT's designated representative shall coordinate with and receive asphalt cement binder samples from the designated plant representative. CONSULTANT's designated representative shall be present during all sampling operations. Each sample will be properly labeled and signed off by both representatives. A sample shall be taken during the production of each "lot" (500 ton) of plantmix bituminous pavement using container no larger than a quart in size. CONSULTANT to submit all asphalt cement binder samples to the Nevada Department of Transportation (NDOT), Material Laboratory or testing. All samples should be accompanied with a NDOT form titled 'Transmittal for Asphalt Samples" to be provided by the RTC.

8.5.4. On-site Nuclear Gauge Testing and Sampling

CONSULTANT will provide on-site nuclear gauge testing and sampling during the placement of aggregate base and fill materials, on-site thin-lift Nuclear Gauge testing and sampling for plantmix bituminous pavement placement, and on-site PCC testing and sampling, 30 hours of field testing are anticipated, and laboratory tests will include moisture density curves, Atterberg limits, and sieve analysis. Test frequency shall comply with the latest edition of the Orange Book.

8.5.5. Plantmix Bituminous Pavement Testing

CONSULATANT will provide plantmix bituminous pavement tests per each "lot" (500 tons) placed. Laboratory test shall include extraction, aggregate gradation, specific gravity, flow and stability and Marshall unit weight. Reports will also include voids in total mix and voids filled.

8.5.6. Plantmix Bituminous Pavement Coring

CONSULTANT will provide plantmix bituminous pavement coring and Lab Testing. Lab test shall include core unit weight. Test reports will include percent compaction.

9. RECORD INFORMATION (OPTIONAL)

9.1. Record Information

The RTC and CONSULTANT shall review Optional Construction Services following the completion of final design.

CONSULTANT will provide as-built record drawings for the completed project. Two sets of electronic drawings, in single file .pdf format, will be provided to the RTC for its files and distribution to City of Reno. The .pdf file shall include all plan sheets in one file with index/bookmark for easy access to different sheets or sections of the plan set.

The final record drawings must be identified, dated, and signed as the record drawings and must also contain the engineer's stamp and signature. CONSULTANT may either provide the final revisions on the original engineer-stamped/signed reproducible drawings, which will then also be identified as the record drawings or provide new engineer-stamped/signed reproducible drawings identified as the record drawings.

The Record Drawings shall include a scan of the original title sheet (including the appropriate signatures by the RTC and local government representatives, signed and stamped by CONSULTANT) and identified as record drawings.

10. CONSTRUCTION CONTINGENCY (OPTIONAL)

10.1. Construction Contingency

The RTC and CONSULTANT shall review Optional Construction Services following the completion of final design. This is a contingency for miscellaneous increases within the scope of this contract in the performance of services under Task 9 and Task 10. If CONSULTANT determines that it is necessary to perform work outside of the scope covered in Task 9 and Task 10, CONSULTANT shall provide a letter detailing the need, scope, and not- to-exceed budget for any proposed work. Work under this task shall proceed only with the RTC Project Manager’s written approval.

EXHIBIT B

SCHEDULE OF MANHOURS AND PRICES

Traffic Engineering Spot 26-01 Project

	Project Biling Rates					
	Tasks					
	Description	**Task Hours**	**Task Cost (Fully Loaded Labor)**	**Sub Consultants**	**Other Direct Costs**	
Task No.	**Task**					
1.0	**PROJECT MANAGEMENT**	**46**	**$12,410**			
1.1	Team and Project Management	14	$4,130			
1.2	Project Coordination and Meetings					
1.2.1	Project Kickoff Meeting	6	$1,310			
1.2.2	Project Management Team Meetings (10)	10	$2,950			
1.3	Design Schedule	4	$1,180			
1.4	Constructability Reviews and Construction Schedules	12	$2,840			
	AMENDMENT 1	**29**	**$7,975**			
1.1	Team and Project Management	16	$4,720			
1.2	Project Coordination and Meetings					
1.2.1	Project Kickoff Meeting					
1.2.2	Project Management Team Meetings (10)	5	$1,475			
1.3	Design Schedule					
1.4	Constructability Reviews and Construction Schedules	8	$1,780			
2.0	**INVESTIGATION OF EXISTING CONDITIONS**	**45**	**$8,725**	**$30,000**		
2.1	Condition Survey	10	$2,030			
2.2	Topographic Survey			$30,000		
2.3	Subsurface Utilities	35	$6,695			
	AMENDMENT 1	**12**	**$3,180**	**$54,050**		
2.1	Condition Survey					
2.2	Topographic Survey			$35,500		
2.3	Right-of-Way Mapping and Engineering Services	12	$3,180	$18,550		
2.4	Subsurface Utilities					
3.0	**PRELIMINARY STUDIES**	**304**	**$67,030**	**$4,800**		
3.1	Data Collection	6	$770			
3.2	Traffic Counts			$2,400		
3.3	Pedestrian Counts			$2,400		
3.4	Signal Warrant Analysis	166	$37,050			
3.5	Access Management Analysis	84	$18,660			
3.6	Multimodal Connectivity/Upgrade Evaluation	40	$9,000			
3.7	Design Criteria	8	$1,550			
4.0	**PRELIMINARY DESIGN**	**290**	**$48,840**		**$200**	
4.1	Drainage Analysis					
4.2	Lighting and Electrical Design					
4.3	30 Percent Design	74	$11,910			
4.4	30 Percent Design Submittal	9	$1,735		$100	
4.5	30 Percent Design Review Comment Resolution	12	$2,620			
4.6	60 Percent Design	156	$25,330			
4.7	60 Percent Cost Estimate and Technical Specification Outline	17	$3,095			
4.8	60 Percent Design Submittal	9	$1,735		$100	
4.9	60 Percent Design Review Comment Resolution	13	$2,415			
	AMENDMENT 1	**382**	**$62,400**			
4.1	Drainage Analysis					
4.2	Lighting and Electrical Design					
4.3	30 Percent Design	116	$18,970			
4.4	30 Percent Design Submittal	8	$1,440			
4.5	30 Percent Design Review Comment Resolution					
4.6	60 Percent Design	248	$40,070			
4.7	60 Percent Cost Estimate and Technical Specification Outline					
4.8	60 Percent Design Submittal	4	$860			
4.9	60 Percent Design Review Comment Resolution	6	$1,060			
5.0	**FINAL DESIGN**	**326**	**$56,650**	**$9,600**	**$300**	
5.1	Lighting and Electrical Design Design			$9,600		
5.2	90 Percent Design	126	$20,620			
5.3	90 Percent Cost Estimate and Technical Specifications	40	$8,040			
5.4	90 Percent Design Submittal	9	$1,735		$100	
5.5	90 Percent Design Review Comment Resolution	9	$1,735			
5.6	100 Percent Design	70	$11,310			
5.7	100 Percent Cost Estimate and Technical Specifications	25	$4,535			
5.8	100 Percent Design Submittal	9	$1,735		$100	
5.90	100 Percent Design Review Comment Resolution	17	$3,475			
5.10	Final Design	21	$3,465		$100	
	AMENDMENT 1	**300**	**$48,030**			
5.1	Lighting and Electrical Design Design					
5.2	90 Percent Design	140	$21,870			
5.3	90 Percent Cost Estimate and Technical Specifications	14	$2,940			
5.4	90 Percent Design Submittal	8	$1,580			
5.5	90 Percent Design Review Comment Resolution	12	$1,340			
5.6	100 Percent Design	98	$15,430			
5.7	100 Percent Cost Estimate and Technical Specifications	4	$860			
5.8	100 Percent Design Submittal	6	$1,150			
5.90	100 Percent Design Review Comment Resolution	4	$720			
5.10	Final Design	14	$2,140			

SCHEDULE OF MANHOURS AND PRICES

Traffic Engineering Spot 26-01 Project

	Project Biling Rates					
	Tasks					
	Description	**Task Hours**	**Task Cost (Fully Loaded Labor)**	**Sub Consultants**	**Other Direct Costs**	
Task No.	**Task**					
6.0	**BIDDING SERVICES**	**14**	**$2,710**	**$600**		
6.1	Bidding Services	14	$2,710	$600		
	AMENDMENT 1	**6**	**1060**			
6.1	Bidding Services	6	$1,060			
7.0	**DESIGN CONTINGENCY (OPTIONAL)**		**$5,000**			
7.1	Design Contingency		$5,000			
	AMENDMENT 1		**$28,000**			
7.1	Design Contingency		$5,000			
7.2	Veteran's Pkwy and Cesena Ave / Pesaro Way Channelization Design		$8,000			
8.0	**CONTRACT ADMINISTRATION (OPTIONAL)**	**468**	**$74,004**	**$17,800**		
8.1	Engineering Services During Construction (EDC)	20	$3,260	$1,800		
8.2	Contract Administration	48	$12,744			
8.3	Construction Surveying			$6,000		
8.4	Inspection	400	$58,000			
8.5	Materials Testing			$10,000		
	AMENDMENT 1	**454**	**$89,230**	**$35,985**		
8.1	Engineering Services During Construction (EDC)	8	$1,040			
8.2	Contract Administration	196	$51,940			
8.3	Construction Surveying			$13,500		
8.4	Inspection	250	$36,250			
8.5	Materials Testing			$22,485		
9.0	**RECORD INFORMATION (OPTIONAL)**	**10**	**$2,030**			
9.1	Record Information	10	$2,030			
	AMENDMENT 1	**10**	**$1,940**			
9.1	Record Information	10	$1,940			
10.0	**CONSTRUCTION CONTINGENCY (OPTIONAL)**		**$5,000**			
10.1	Construction Contingency		$5,000			
	AMENDMENT 1		**$10,000**			
10.1	Construction Contingency		$10,000			
	Total Labor (Including Contingency)	**2696**	**$534,214**			
	Total Labor Cost (Excluding Contingency)		$486,214			
	Total Direct Cost			$152,835	$500	
	Total (Excluding Contingency)					**$639,549**

SCOPE CONTRACT SUMMARY	
Total Design Services (Task 1 - 6)	$418,560
Optional Design Services Contingency (Task 7)	$33,000
Total Optional Contract Administration Services (Task 8 - 9)	$220,989
Optional Contract Administration Contingency (Task 10)	$15,000
Total Estimated Services:	**$687,549**

SCHEDULE OF MANHOURS AND PRICES

Traffic Engineering Spot 26-01 Project

Project Biling Rates		$295.00	$265.00	$215.00	$170.00	$130.00	$180.00	$60.00	$220.00	$105.00	$90.00	$145.00				
		David Dodson	Paul Frost, Pete Booth, Dean Mottram	Hoang Hoag, Vinay Virupaksha, Sriram Bala, Arvid Handigard	Trevor Howard, Ancila Kaiparambil	Rani Tariq, Tanner Richardson	Steve Bird, Jim Cerrigoli, Jamie Fuller Dunn	Kaleb Anson/Emily Frost	Andrea Engleman	Alyssa Young	Tammy Michels	Mark Cooper				
Tasks																
Description		**Project Manager**	**Design Lead / Quality Lead / RE**	**Senior Engineer**	**Engineer**	**Engineering Intern**	**Senior Designer**	**Intern**	**Outreach Lead**	**Technical Writer**	**Admin**	**Construction Inspector**	**Task Hours**	**Task Cost (Fully Loaded Labor)**	**Sub Consultants**	**Other Direct Costs**	**Comments**
Task No.	**Task**															
1.0	**PROJECT MANAGEMENT**	**30**	**8**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**46**	**$12,410**	**$0**	**$0**	
1.1	Team and Project Management	14											14	$4,130			
1.2	Project Coordination and Meetings												0	$0			
1.2.1	Project Kickoff Meeting	2					4						6	$1,310			
1.2.2	Project Management Team Meetings (10)	10											10	$2,950			
1.3	Design Schedule	4											4	$1,180			
1.4	Constructability Reviews and Construction Schedules		8				4						12	$2,840			
	AMENDMENT 1	**21**	**4**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**29**	**$7,975**	**$0**	**$0**	
1.1	Team and Project Management	16											16	$4,720			
1.2	Project Coordination and Meetings												0	$0			
1.2.1	Project Kickoff Meeting												0	$0			
1.2.2	Project Management Team Meetings (10)	5											5	$1,475			
1.3	Design Schedule												0	$0			
1.4	Constructability Reviews and Construction Schedules		4				4						8	$1,780			
2.0	**INVESTIGATION OF EXISTING CONDITIONS**	**3**	**4**	**0**	**6**	**0**	**32**	**0**	**0**	**0**	**0**	**0**	**45**	**$8,725**	**$30,000**	**$0**	
2.1	Condition Survey	2					8						10	$2,030			
2.2	Topographic Survey												0	$0	$30,000		Bowman
2.3	Subsurface Utilities	1	4		6		24						35	$6,695			
	AMENDMENT 1	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**$3,180**	**$54,050**	**$0**	
2.1	Condition Survey												0	$0			
2.2	Topographic Survey												0	$0	$35,500		Bowman
2.3	Right-of-Way Mapping and Engineering Services		12										12	$3,180	$18,550		Bowman
2.4	Subsurface Utilities												0	$0			
3.0	**PRELIMINARY STUDIES**	**2**	**48**	**244**	**6**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**304**	**$67,030**	**$4,800**	**$0**	
3.1	Data Collection		2					4					6	$770			
3.2	Traffic Counts												0	$0	$2,400		All Traffic Data Services
3.3	Pedestrian Counts												0	$0	$2,400		All Traffic Data Services
3.4	Signal Warrant Analysis	2	24	140									166	$37,050			
3.5	Access Management Analysis		12	72									84	$18,660			
3.6	Multimodal Connectivity/Upgrade Evaluation		8	32									40	$9,000			
3.7	Design Criteria		2		6								8	$1,550			
4.0	**PRELIMINARY DESIGN**	**14**	**0**	**14**	**78**	**36**	**124**	**24**	**0**	**0**	**0**	**0**	**290**	**$48,840**	**$0**	**$200**	
4.1	Drainage Analysis												0	$0			
4.2	Lighting and Electrical Design												0	$0			
4.3	30 Percent Design	2		4	22	12	26	8					74	$11,910			
4.4	30 Percent Design Submittal	1					8						9	$1,735		$100	
4.5	30 Percent Design Review Comment Resolution	4					8						12	$2,620			
4.6	60 Percent Design	4		10	44	24	58	16					156	$25,330			
4.7	60 Percent Cost Estimate and Technical Specification Outline	1			8		8						17	$3,095			
4.8	60 Percent Design Submittal	1					8						9	$1,735		$100	
4.9	60 Percent Design Review Comment Resolution	1			4		8						13	$2,415			
	AMENDMENT 1	**10**	**0**	**22**	**112**	**52**	**148**	**38**	**0**	**0**	**0**	**0**	**382**	**$62,400**	**$0**	**$0**	
4.1	Drainage Analysis												0	$0			
4.2	Lighting and Electrical Design												0	$0			
4.3	30 Percent Design	4		6	34	16	44	12					116	$18,970			
4.4	30 Percent Design Submittal						8						8	$1,440			
4.5	30 Percent Design Review Comment Resolution												0	$0			
4.6	60 Percent Design	6		12	76	36	92	26					248	$40,070			
4.7	60 Percent Cost Estimate and Technical Specification Outline												0	$0			
4.8	60 Percent Design Submittal			4									4	$860			
4.9	60 Percent Design Review Comment Resolution				2		4						6	$1,060			
5.0	**FINAL DESIGN**	**20**	**4**	**14**	**82**	**34**	**150**	**22**	**0**	**0**	**0**	**0**	**326**	**$56,650**	**$9,600**	**$300**	
5.1	Lighting and Electrical Design Design												0	$0	$9,600		PK Electrical
5.2	90 Percent Design	4		8	36	20	46	12					126	$20,620			
5.3	90 Percent Cost Estimate and Technical Specifications	8			8		24						40	$8,040			
5.4	90 Percent Design Submittal	1					8						9	$1,735		$100	
5.5	90 Percent Design Review Comment Resolution	1					8						9	$1,735			
5.6	100 Percent Design	2		4	20	10	26	8					70	$11,310			
5.7	100 Percent Cost Estimate and Technical Specifications	1			8		16						25	$4,535			
5.8	100 Percent Design Submittal	1					8						9	$1,735		$100	
5.90	100 Percent Design Review Comment Resolution	1	4		4		8						17	$3,475			
5.10	Final Design	1		2	6	4	6	2					21	$3,465		$100	

SCHEDULE OF MANHOURS AND PRICES

Traffic Engineering Spot 26-01 Project

Project Biling Rates		$295.00	$265.00	$215.00	$170.00	$130.00	$180.00	$60.00	$220.00	$105.00	$90.00	$145.00				
		David Dodson	Paul Frost, Pete Booth, Dean Mottram	Hoang Hoag, Vinay Virupaksha, Sriram Bala, Arvid Handigard	Trevor Howard, Ancila Kaiparambil	Rani Tariq, Tanner Richardson	Steve Bird, Jim Cerrigoli, Jamie Fuller Dunn	Kaleb Anson/Emily Frost	Andrea Engleman	Alyssa Young	Tammy Michels	Mark Cooper				
Tasks																
	Description	**Project Manager**	**Design Lead / Quality Lead / RE**	**Senior Engineer**	**Engineer**	**Engineering Intern**	**Senior Designer**	**Intern**	**Outreach Lead**	**Technical Writer**	**Admin**	**Construction Inspector**	**Task Hours**	**Task Cost (Fully Loaded Labor)**	**Sub Consultants**	**Other Direct Costs**	**Comments**
Task No.	**Task**																
	AMENDMENT 1	**8**	**0**	**30**	**40**	**50**	**130**	**42**	**0**	**0**	**0**	**0**	**300**	**$48,030**	**$0**	**$0**	
5.1	Lighting and Electrical Design Design												0	$0			
5.2	90 Percent Design	4		10	0	30	74	22					140	$21,870			
5.3	90 Percent Cost Estimate and Technical Specifications	4			4		6						14	$2,940			
5.4	90 Percent Design Submittal			4			4						8	$1,580			
5.5	90 Percent Design Review Comment Resolution			4				8					12	$1,340			
5.6	100 Percent Design			6	32	18	32	10					98	$15,430			
5.7	100 Percent Cost Estimate and Technical Specifications			4									4	$860			
5.8	100 Percent Design Submittal			2			4						6	$1,150			
5.90	100 Percent Design Review Comment Resolution						4						4	$720			
5.10	Final Design				4	2	6	2					14	$2,140			
6.0	**BIDDING SERVICES**	**2**	**0**	**0**	**4**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**14**	**$2,710**	**$600**	**$0**	
6.1	Bidding Services	2			4		8						14	$2,710	$600		PK Electrical
	AMENDMENT 1	**0**	**0**	**0**	**2**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**6**	**1060**	**$0**	**$0**	
6.1	Bidding Services				2		4						6	$1,060			PK Electrical
7.0	**DESIGN CONTINGENCY (OPTIONAL)**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**$5,000**	**$0**	**$0**	
7.1	Design Contingency												0	$5,000			
	AMENDMENT 1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**$28,000**	**$0**	**$0**	
7.1	Design Contingency												0	$5,000			
7.2	Veteran's Pkwy and Cesena Ave / Pesaro Way Channelization Design												0	$8,000			
7.3	Double R Blvd Mid-Block Crosswalk Design												0	$15,000			
8.0	**CONTRACT ADMINISTRATION (OPTIONAL)**	**8**	**44**	**0**	**0**	**16**	**0**	**0**	**0**	**0**	**0**	**400**	**468**	**$74,004**	**$17,800**	**$0**	
8.1	Engineering Services During Construction (EDC)	4				16							20	$3,260	$1,800		
8.2	Contract Administration	4	44										48	$12,744			
8.3	Construction Surveying												0	$0	$6,000		
8.4	Inspection											400	400	$58,000			
8.5	Materials Testing												0	$0	$10,000		
	AMENDMENT 1	**0**	**196**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**250**	**454**	**$89,230**	**$35,985**	**$0**	
8.1	Engineering Services During Construction (EDC)					8							8	$1,040			
8.2	Contract Administration		196										196	$51,940			13 weeks total (first 2 weeks, 40 hours; then 4 weeks, 20 hours; 5 weeks, 8 hours; 2 weeks, 20 hours)
8.3	Construction Surveying												0	$0	$13,500		
8.4	Inspection											250	250	$36,250			10 hours per day; 65 working days
8.5	Materials Testing												0	$0	$22,485		
9.0	**RECORD INFORMATION (OPTIONAL)**	**2**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**10**	**$2,030**	**$0**	**$0**	
9.1	Record Information	2					8						10	$2,030			
	AMENDMENT 1	**0**	**0**	**4**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**10**	**$1,940**	**$0**	**$0**	
9.1	Record Information			4			6						10	$1,940			
10.0	**CONSTRUCTION CONTINGENCY (OPTIONAL)**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**$5,000**	**$0**	**$0**	
10.1	Construction Contingency												0	$5,000			
	AMENDMENT 1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**$10,000**	**$0**	**$0**	
10.1	Construction Contingency												0	$10,000			
	Total Labor (Including Contingency)	**120**	**320**	**328**	**330**	**196**	**622**	**130**	**0**	**0**	**0**	**650**	**2684**	**$531,034**			
	Total Labor Cost (Excluding Contingency)	$35,400	$84,800	$70,520	$56,100	$25,480	$111,960	$7,800	$0	$0	$0	$94,250		$486,310			
	Total Direct Cost														$152,835	$500	
	Total (Excluding Contingency)																**$639,645**

BASIC SCOPE CONTRACT SUMMARY	
Total Estimated Basic Direct Labor Cost:	$319,010
Optional Direct Labor Services	$167,204
Subconsultants:	$152,835
Direct Expenses:	$500
Contingency	$48,000
Total Estimated Services:	***$687,549***

SCOPE CONTRACT SUMMARY	
Total Design Services (Task 1 - 6)	$418,560
Optional Design Services Contingency (Task 7)	$33,000
Total Optional Contract Administration Services (Task 8 - 9)	$220,989
Optional Contract Administration Contingency (Task 10)	$15,000
Total Estimated Services:	***$687,549***

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.3.5**

To: Regional Transportation Commission

From: Michele Payne, Property Agent

SUBJECT: Resolution of Condemnation – Cassinari Enterprise, LLC

RECOMMENDED ACTION

Approve a Resolution of Condemnation authorizing RTC's legal counsel to commence condemnation proceedings to acquire a temporary construction easement on a portion of APN 400-151-11 from Cassinari Enterprise, LLC, which is needed to construct the West Fourth Street Safety Project.

BACKGROUND AND DISCUSSION

The purpose of the project is to reconstruct roadways and add wider sidewalks and safety improvements along West Fourth Street between McCarran Boulevard and Keystone Avenue. The 100% design plans for the project are complete. The project is currently scheduled to begin construction in Spring 2026.

Through an Interlocal Cooperative Agreement with the City of Reno and Washoe County dated March 25, 2024, the RTC has been authorized to negotiate and/or initiate eminent domain proceedings to acquire property when necessary for the project. RTC needs to acquire these specific property interests from Cassinari Enterprise, LLC in order to construct the project.

Cassinari Enterprise, LLC is the owner of record. RTC has been working with the property owner to purchase the property interests. While there have been discussions, proposals and offers made, the efforts to reach a mutually acceptable agreement have been unsuccessful to date. RTC is in the process of certifying the status of right-of-way acquisition for this project in order to secure NDOT and FHWA approval needed to obligate federal funding for the project. In order to avoid potential delays to the project, staff is requesting approval of this Resolution of Condemnation to authorize RTC to initiate condemnation proceedings for these property interests and seek a court-ordered right-of-entry and/or order for immediate occupancy, if needed. RTC will continue to work with the property owner to continue efforts to reach a mutually acceptable agreement. Proper notice of this agenda item has been provided to the property owner as required by NRS 241.034.

FISCAL IMPACT

The costs to acquire property rights has been budgeted; however, the actual fiscal impact cannot be determined at this time.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

RESOLUTION OF CONDEMNATION 25-13

WHEREAS, it is necessary for the Regional Transportation Commission of Washoe County, Nevada ("RTC") to provide regional transportation facilities which are of a quality and standard necessary to satisfactorily meet the needs of the traveling public; and

WHEREAS, the RTC approved the FY 2025 Program of Projects for the Regional Street & Highway Program, which included the West Fourth Street Safety Project (the "Project"); and

WHEREAS, pursuant to an Interlocal Cooperative Agreement ("ICA") between the RTC and the City of Reno dated March 25, 2024, the City of Reno authorized the RTC to initiate such eminent domain proceedings as may be necessary for the Project; and

WHEREAS, Chapter 277A of Nevada Revised Statutes provides that the RTC may exercise the power of eminent domain, if the city or county which has jurisdiction over the property approves; and

WHEREAS, the current owner of record of the property interests to be acquired, as listed in the records of the Washoe County Recorder's Office and insofar as is known to the RTC, is Cassinari Enterprise, LLC.

NOW, THEREFORE, BE IT RESOLVED, that RTC does hereby find:

1. That RTC needs the following property interests to construct the Project: a temporary construction easement on a portion of APN 400-151-11 (the "Property Rights"). The Property Rights are shown in the form easement document(s), metes and bounds description(s) and design drawing(s) attached hereto.

2. That RTC staff has previously contacted the owner(s) about the Property Rights. While there have been discussions, proposals and offers made, the efforts to reach a mutually acceptable agreement for the acquisition of the Property Rights through purchase have been unsuccessful to date.

3. That the Property Rights to be acquired in conjunction with the above referenced Project are to be applied to a public use, to wit, the Project.

4. That the Property Rights described herein are necessary for such public use.

5. By certified mail sent on July 3, 2025, proper notice of the RTC's intent to consider eminent domain action to acquire the Property Rights of the above referenced owner(s) has been given as required by NRS 241.034.

NOW, THEREFORE, BE IT FURTHER RESOLVED, based on the aforementioned findings of fact, that the RTC does hereby direct:

1. That RTC's legal counsel initiate, if needed, eminent domain proceedings on behalf of the RTC in accordance with provisions of Chapters 37 and 277A of Nevada Revised Statutes to acquire the Property Rights.

2. That RTC's legal counsel shall commence and prosecute, in the name of the RTC, eminent domain proceedings in the court having jurisdiction of the Property Rights.

3. That RTC's legal counsel is authorized to pursue all actions deemed appropriate for the successful prosecution of this case, including but not limited to, an application to the court for an order permitting the RTC to take immediate possession of the Property Rights for the construction of the Project, upon complying with conditions imposed by law.

PASSED, ADOPTED AND APPROVED on July 18, 2025.

_____

Alexis Hill, Chair
Regional Transportation Commission of Washoe County

Attachments

1. Form of Temporary Construction Easement and Exhibit “A” and “A-1” for Ptn. of APN 400-151-11 – Temporary Construction Easement

Ptn. of APN: 400-151-11

WHEN RECORDED RETURN TO:
Regional Transportation Commission of Washoe County
Attn: Michele Payne
1105 Terminal Way, Suite 108
Reno, NV 89502

MAIL TAX STATEMENTS TO:
Exempt

LEGAL DESCRIPTION PREPARED BY:
Eric C. Sage, P.L.S.
Wood Rodgers, Inc.
1361 Corporate Boulevard
Reno, NV 89502

Project: West Fourth Street Safety Project
Project #: 0713001
Parcels: Ptn. of APN: 400-151-11

TEMPORARY CONSTRUCTION EASEMENT

This TEMPORARY CONSTRUCTION EASEMENT, made this _____ day of _____, 2025 between, CASSINARI ENTERPRISE, LLC, a Nevada limited liability company ("GRANTOR") to the REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY ("GRANTEE").

WITNESSETH:

That the GRANTOR, for and in consideration of the sum of ONE DOLLAR ($1.00), lawful money of the United States of America, and other good and valuable consideration, the receipt whereof is hereby acknowledged, does by these presents grant unto the GRANTEE and to its assigns a temporary easement upon, over and across the real property described on Exhibit "A" and depicted on Exhibit "A-1" attached hereto and made a part hereof by reference (the "Temporary Easement"), for the purposes of construction work necessary to complete the West Fourth Street Safety Project, which will include Paving for sidewalk, curb and gutter. The term of this Temporary Easement shall commence on February 1, 2026 and shall continue through and include the termination date of January 31, 2028.

TO HAVE AND TO HOLD all and singular the said real property, together with the appurtenances, unto the said GRANTEE and to any heirs, successors and assigns for the term of this Temporary Easement.

IN WITNESS WHEREOF said GRANTOR has hereunto signed on the day and year first above written.

CASSINARI ENTERPRISE, LLC
a Nevada limited liability company

Signed: _____

Its: OWNER

STATE OF NEVADA)
) ss.
COUNTY OF WASHOE)

This instrument was acknowledged before me on _____, 2025 by _____, its _____ for _____.

S
E
A
L

_____
Signature of notarial officer

_____
Print name

My commission expires:

_____

EXHIBIT A
LEGAL DESCRIPTION FOR
TEMPORARY EASEMENT
APN 400-151-11

All that certain temporary easement situate within the Northwest One-Quarter (NW 1/4) of Section 16, Township 19 North, Range 19 East, M.D.M., City of Reno, County of Washoe, State of Nevada, being a portion of that Parcel of land described in Document No. 4419823 recorded December 19, 2014, in the Official Records of Washoe County, State of Nevada, being more particularly described as follows:

BEGINNING at the intersection of the Westerly Line of said Parcel and the Northerly Right-of-Way of West Fourth Street relinquished to the City of Reno per Document No. 3329606 recorded December 28, 2005, in the Official Records of Washoe County, State of Nevada;

THENCE departing said Right-of-Way along said Westerly Line, North 14°18'48" West a distance of 21.03 feet;

THENCE departing said Westerly Line, North 68°52'45" East a distance of 87.75 feet;

THENCE South 14°18'48" East a distance of 21.03 feet to the aforementioned Northerly Right-of-Way;

THENCE along said Right-of-Way, South 68°52'45" West a distance of 87.75 feet to the POINT OF BEGINNING;

Containing 1,833 square feet of land, more or less.

See Exhibit A-1, Plat to Accompany, attached hereto and made a part hereof.

The Basis of Bearings for this description is the Nevada State Plane Coordinate System, West Zone, North American Datum of 1983/1994, High Accuracy Reference Network (NAD 83/94-HARN).

Prepared by:
Wood Rodgers, Inc.
1361 Corporate Blvd.
Reno, NV 89502
(775) 823-4068



4/24/25

Eric C. Sage, P.L.S.
Nevada Certificate No. 23301

EXHIBIT A-1

PLAT TO ACCOMPANY

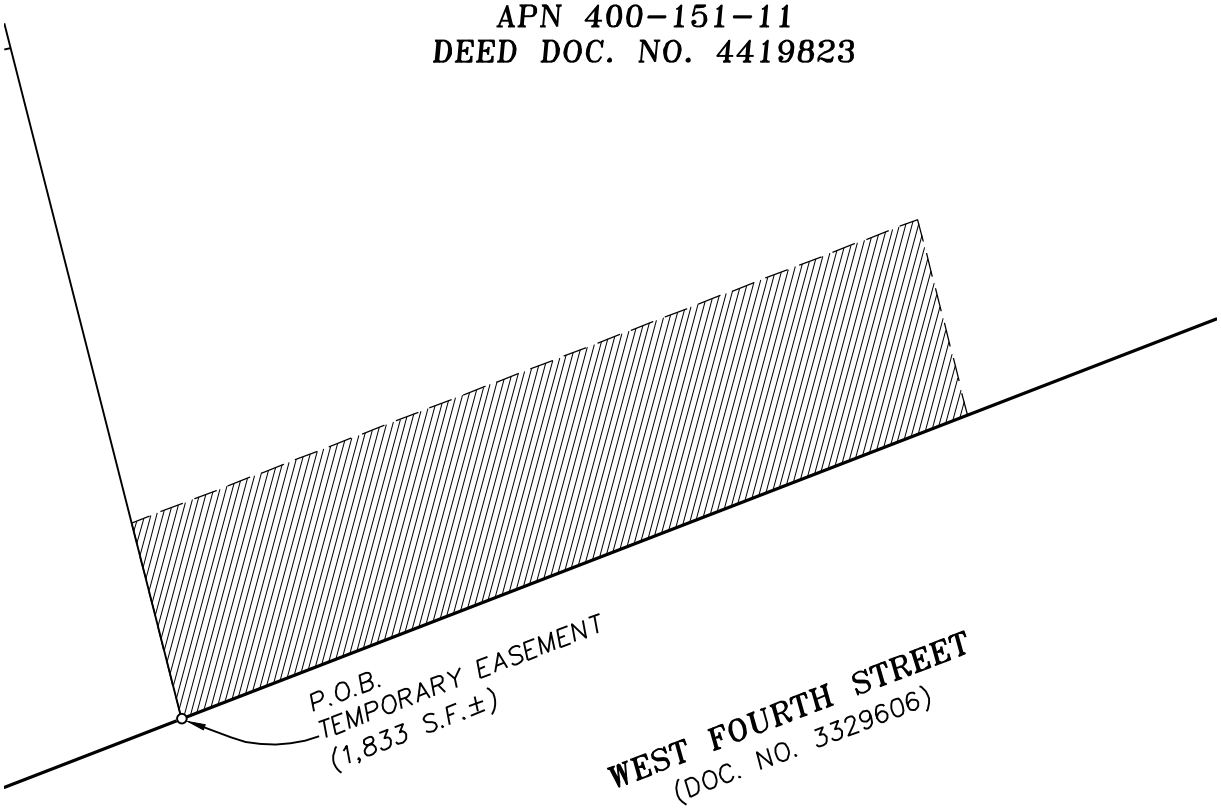
TEMPORARY EASEMENT

SITUATE WITHIN THE NW 1/4 OF SECTION 16
TOWNSHIP 19 NORTH, RANGE 19 EAST, M.D.M.
RENO WASHOE COUNTY NEVADA



1" = 20'

APN 400-151-11
DEED DOC. NO. 4419823



JOB NO. 8312046
SHEET 1 OF 1

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
1361 Corporate Blvd
Reno, NV 89502
Tel 775.823.4068
Fax 775.823.4066

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.3.6**

To: Regional Transportation Commission

From: Michele Payne, Property Agent

SUBJECT: Resolution of Condemnation – Oppio Keystone, LLC

RECOMMENDED ACTION

Approve a Resolution of Condemnation authorizing RTC's legal counsel to commence condemnation proceedings to acquire a permanent public use easement and a temporary construction easement on portions of APN 010-610-15 from Oppio Keystone, LLC which are needed to construct the West Fourth Street Safety Project.

BACKGROUND AND DISCUSSION

The purpose of the project is to reconstruct roadways and add wider sidewalks and safety improvements along West Fourth Street between McCarran Boulevard and Keystone Avenue. The 100% design plans for the project are complete. The project is currently scheduled to begin construction in Spring 2026.

Through an Interlocal Cooperative Agreement with the City of Reno and Washoe County dated March 25, 2024, the RTC has been authorized to negotiate and/or initiate eminent domain proceedings to acquire property when necessary for the project. RTC needs to acquire these specific property interests from Oppio Keystone, LLC in order to construct the project.

Oppio Keystone, LLC is the owner of record. RTC has been working with the property owner to purchase the property interests. While there have been discussions, proposals and offers made, the efforts to reach a mutually acceptable agreement have been unsuccessful to date. RTC is in the process of certifying the status of right-of-way acquisition for this project in order to secure NDOT and FHWA approval needed to obligate federal funding for the project. In order to avoid potential delays to the project, staff is requesting approval of this Resolution of Condemnation to authorize RTC to initiate condemnation proceedings for these property interests and seek a court-ordered right-of-entry and/or order for immediate occupancy, if needed. RTC will continue to work with the property owner to continue efforts to reach a mutually acceptable agreement. Proper notice of this agenda item has been provided to the property owner as required by NRS 241.034.

FISCAL IMPACT

The costs to acquire property rights has been budgeted; however, the actual fiscal impact cannot be determined at this time.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

RESOLUTION OF CONDEMNATION 25-15

WHEREAS, it is necessary for the Regional Transportation Commission of Washoe County, Nevada ("RTC") to provide regional transportation facilities which are of a quality and standard necessary to satisfactorily meet the needs of the traveling public; and

WHEREAS, the RTC approved the FY 2025 Program of Projects for the Regional Street & Highway Program, which included the West Fourth Street Safety Project (the "Project"); and

WHEREAS, pursuant to an Interlocal Cooperative Agreement ("ICA") between the RTC and the City of Reno dated March 25, 2024, the City of Reno authorized the RTC to initiate such eminent domain proceedings as may be necessary for the Project; and

WHEREAS, Chapter 277A of Nevada Revised Statutes provides that the RTC may exercise the power of eminent domain, if the city or county which has jurisdiction over the property approves; and

WHEREAS, the current owner of record of the property interests to be acquired, as listed in the records of the Washoe County Recorder's Office and insofar as is known to the RTC, is Oppio Keystone, LLC.

NOW, THEREFORE, BE IT RESOLVED, that RTC does hereby find:

1. That RTC needs the following property interests to construct the Project: (1) a permanent public use easement on a portion of APN 010-610-15; and (2) a temporary construction easement on a portion of APN 010-610-15 (collectively, the "Property Rights"). The Property Rights are shown in the form easement document(s), metes and bounds description(s) and design drawing(s) attached hereto.

2. That RTC staff has previously contacted the owner(s) about the Property Rights. While there have been discussions, proposals and offers made, the efforts to reach a mutually acceptable agreement for the acquisition of the Property Rights through purchase have been unsuccessful to date.

3. That the Property Rights to be acquired in conjunction with the above referenced Project are to be applied to a public use, to wit, the Project.

4. That the Property Rights described herein are necessary for such public use.

5. By certified mail sent on July 3, 2025, proper notice of the RTC's intent to consider eminent domain action to acquire the Property Rights of the above referenced owner(s) has been given as required by NRS 241.034.

NOW, THEREFORE, BE IT FURTHER RESOLVED, based on the aforementioned findings of fact, that the RTC does hereby direct:

1. That RTC's legal counsel initiate, if needed, eminent domain proceedings on behalf of the RTC in accordance with provisions of Chapters 37 and 277A of Nevada Revised Statutes to acquire the Property Rights.

2. That RTC's legal counsel shall commence and prosecute, in the name of the RTC, eminent domain proceedings in the court having jurisdiction of the Property Rights.

3. That RTC's legal counsel is authorized to pursue all actions deemed appropriate for the successful prosecution of this case, including but not limited to, an application to the court for an order permitting the RTC to take immediate possession of the Property Rights for the construction of the Project, upon complying with conditions imposed by law.

PASSED, ADOPTED AND APPROVED on July 18, 2025.

_____

Alexis Hill, Chair
Regional Transportation Commission of Washoe County

Attachments

1. Form of Permanent Public Use Easement and Exhibit "A" and "A-1" for Ptn. of APN 010-610-15 – Permanent Public Use Easement
2. Form of Temporary Construction Easement and Exhibit "A" and "A-1" for Ptn. of APN 010-610-15 – Temporary Construction Easement

Ptn. of APN: 010-610-15

WHEN RECORDED RETURN TO:
Regional Transportation Commission of Washoe County
Attn: Michele Payne
1105 Terminal Way, Suite 108
Reno, NV 89502

MAIL TAX STATEMENTS TO:
Exempt

LEGAL DESCRIPTION PREPARED BY:
Eric C. Sage, P.L.S.
Wood Rodgers, Inc.
1361 Corporate Boulevard
Reno, NV 89502

Project: West Fourth Street Safety Project
Project #: 0713001
Parcel: PE

PERMANENT PUBLIC USE EASEMENT

This PERMANENT PUBLIC USE EASEMENT is made this _____ day of _____, 2025, between **OPPIO KEYSTONE, LLC, a Nevada limited liability company (**"GRANTOR") and the REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY and the CITY OF RENO (collectively, "GRANTEES").

WITNESSETH:

That the GRANTOR, for and in consideration of the sum of ONE DOLLAR ($1.00), lawful money of the United States of America, and other good and valuable consideration, the receipt whereof is hereby acknowledged, does by these presents grant unto the GRANTEES and their assigns forever a permanent easement for the location, construction, and repair of sidewalk, curb and gutter improvements, and all related purposes and appurtenances, for public use and right-of-way upon, over and across certain real property described on Exhibit "A" and depicted on Exhibit "A-1" attached hereto and made a part hereof.

TOGETHER with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof; with the exception of any and all reservations as are previously hereinabove expressly excepted from this conveyance.

GRANTOR hereby waives, with full knowledge that a public sidewalk and the necessary appurtenances thereto are to be located upon, over and across the lands hereinabove described, any claim for any and all damages to the remaining adjacent lands and property of the GRANTOR by reason of the location, construction, landscaping and maintenance of said public sidewalk and other improvements and appurtenances in said location.

TO HAVE AND TO HOLD all and singular the said real property, together with the appurtenances, unto the said GRANTEES and to any heirs, successors and assigns forever.

IN WITNESS WHEREOF said GRANTOR has hereunto signed on the day and year first above written.

OPPIO KEYSTONE, LLC, a Nevada limited liability company

By: _____

Its: _____

STATE OF NEVADA)
) ss.
COUNTY OF WASHOE)

This instrument was acknowledged before me on _____, 2025 by _____, its _____ for _____.

S
E
A
L

_____
Signature of notarial officer

_____
Print name

My commission expires:

_____

EXHIBIT A
LEGAL DESCRIPTION FOR
PERMANENT EASEMENT AREAS 1 & 2
APN 010-610-15

All that certain permanent easements situate within the Southeast One-Quarter (SE 1/4) of Section 10, Township 19 North, Range 19 East, M.D.M., City of Reno, County of Washoe, State of Nevada, being portions of Parcel 1 per Record of Survey No. 5888 recorded December 1, 2017, as File No. 4768261 in the Official Records of Washoe County, State of Nevada, being more particularly described as follows:

PERMANENT EASEMENT AREA 1

BEGINNING at the point of intersection of the Westerly Right-of-Way of Keystone Avenue and the Southerly Right-of-Way of West Fourth Street, being the Northeast Corner of said Parcel 1;

THENCE departing said Corner and said Southerly Right-of-Way along said Westerly Right-of-Way, from which the radius point bears South 54°50'48" West, 19.04 feet along the arc of a 450.96 foot radius curve to the right through a central angle of 02°25'09";

THENCE departing said Westerly Right-of-Way, North 82°16'30" West a distance of 25.01 feet to the aforementioned Southerly Right-of-Way;

THENCE along said Southerly Right-of-Way, North 48°42'33" East a distance of 18.84 feet to the POINT OF BEGINNING;

Containing 179 square feet of land, more or less.

PERMANENT EASEMENT AREA 2

COMMENCING at the point of intersection of the Westerly Right-of-Way of Keystone Avenue and the Southerly Right-of-Way of West Fourth Street, being the Northeast Corner of said Parcel 1;

THENCE departing said Corner and said Westerly Right-of-Way along said Southerly Right-of-Way, South 48°42'33" West a distance of 207.23 feet to the beginning of a tangent curve to the right;

THENCE continuing along said Southerly Right-of-Way, 65.47 feet along the arc of a 698.00 foot radius curve through a central angle of 05°22'28" to the POINT OF BEGINNING, being the beginning of a non-tangent curve to the right;

THENCE departing said Southerly Right-of-Way, from a radial line which bears North 57°36'57" West, 28.80 feet along the arc of a 68.50 foot radius curve through a central angle of 24°05'33" to the beginning of a compound curve;

THENCE 69.31 feet along the arc of a 696.50 foot radius curve through a central angle of 05°42'06" to the beginning of a compound curve;

THENCE 28.07 feet along the arc of a 68.50 foot radius curve through a central angle of 23°28'35" to the aforementioned Southerly Right-of-Way, being the beginning of a non-tangent curve to the left and a point of cusp;

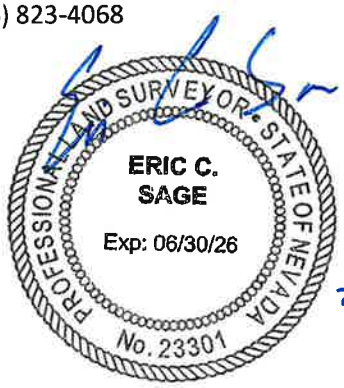
THENCE along said Southerly Right-of-Way, from a radial line which bears North 25°44'02" West, 124.05 feet along the arc of a 698.00 foot radius curve through a central angle of 10°10'57" to the POINT OF BEGINNING;

Containing 562 square feet of land, more or less.

See Exhibit A-1, Plat to Accompany, attached hereto and made a part hereof.

The Basis of Bearings for these descriptions is the Nevada State Plane Coordinate System, West Zone, North American Datum of 1983/1994, High Accuracy Reference Network (NAD 83/94-HARN).

Prepared by:
Wood Rodgers, Inc.
1361 Corporate Blvd.
Reno, NV 89502
(775) 823-4068



2/7/25

Eric C. Sage, P.L.S.
Nevada Certificate No. 23301

EXHIBIT A-1

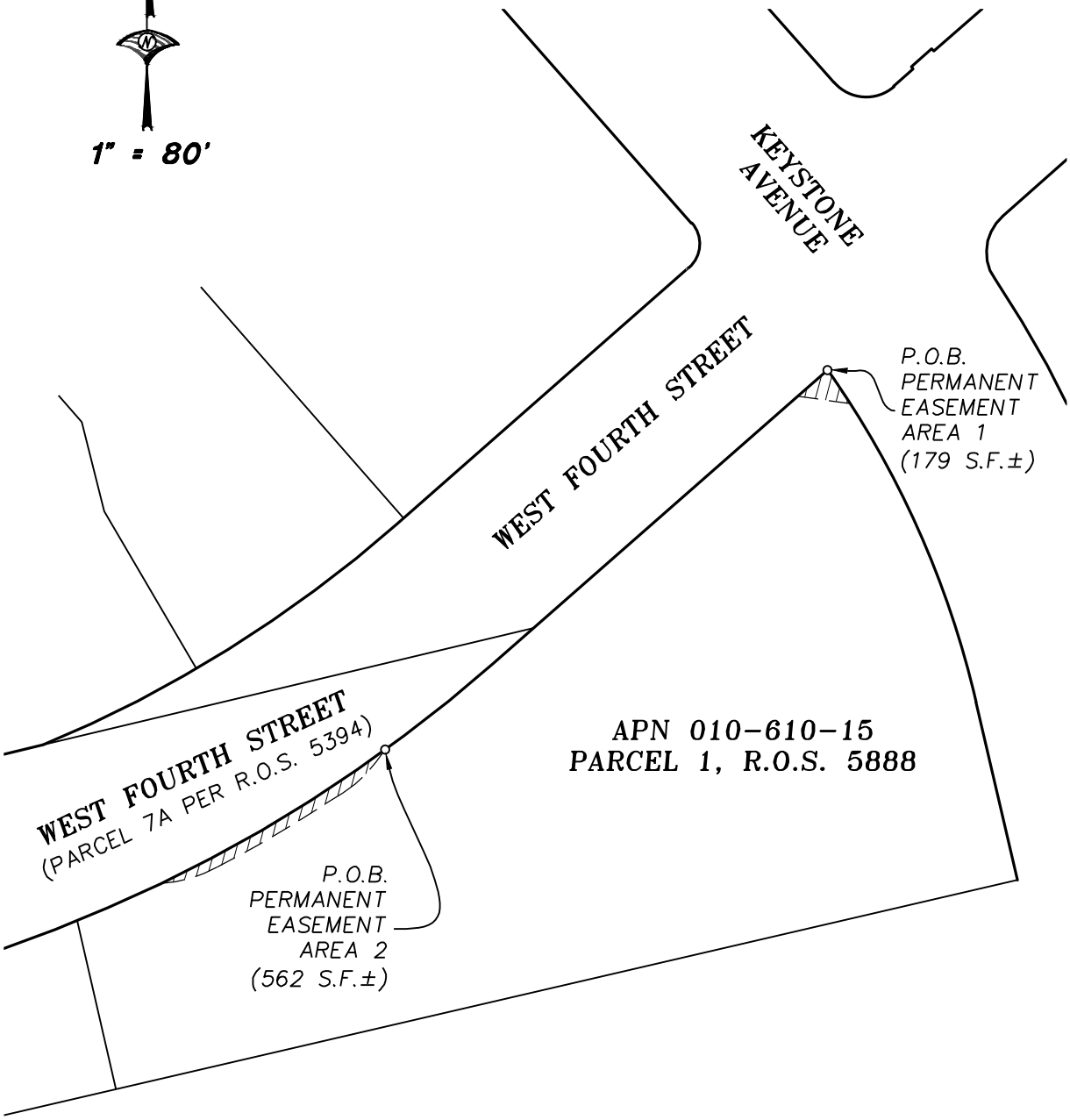
PLAT TO ACCOMPANY

PERMANENT EASEMENT AREAS 1 & 2

SITUATE WITHIN THE SE 1/4 OF SECTION 10
TOWNSHIP 19 NORTH, RANGE 19 EAST, M.D.M.
RENO WASHOE COUNTY NEVADA



1" = 80'



JOB NO. 8312046
SHEET 1 OF 1

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
1361 Corporate Blvd
Reno, NV 89502
Tel 775.823.4068
Fax 775.823.4066

J:\Jobs\8312_RTC Of Washoe County\8312046 4th Street Safety\Geomatics\legals_exhibits\4th Street Safety_Easements.dwg 2/7/2025 11:58 AM Paul Roulos

Ptn. of APN: 010-610-15

WHEN RECORDED RETURN TO:
Regional Transportation Commission of Washoe County
Attn: Michele Payne
1105 Terminal Way, Suite 108
Reno, NV 89502

MAIL TAX STATEMENTS TO:
Exempt

LEGAL DESCRIPTION PREPARED BY:
Eric C. Sage, P.L.S.
Wood Rodgers, Inc.
1361 Corporate Boulevard
Reno, NV 89502

Project: West Fourth Street Safety Project
Project #: 0713001
Parcels: Ptn. of APN: 010-610-15

TEMPORARY CONSTRUCTION EASEMENT

This TEMPORARY CONSTRUCTION EASEMENT, made this _____ day of _____, 2025 between, OPPIO KEYSTONE, LLC, a Nevada limited liability company ("GRANTOR") to the REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY ("GRANTEE").

WITNESSETH:

That the GRANTOR, for and in consideration of the sum of ONE DOLLAR ($1.00), lawful money of the United States of America, and other good and valuable consideration, the receipt whereof is hereby acknowledged, does by these presents grant unto the GRANTEE and to its assigns a temporary easement upon, over and across the real property described on Exhibit "A" and depicted on Exhibit "A-1" attached hereto and made a part hereof by reference (the "Temporary Easement"), for the purposes of construction work necessary to complete the West Fourth Street Safety Project, which will include sidewalk, curb and gutter improvements. The term of this Temporary Easement shall commence on February 1, 2026, and shall continue through and include the termination date of January 31, 2028.

TO HAVE AND TO HOLD all and singular the said real property, together with the appurtenances, unto the said GRANTEE and to any heirs, successors and assigns for the term of this Temporary Easement.

IN WITNESS WHEREOF said GRANTOR has hereunto signed on the day and year first above written.

OPPIO KEYSTONE, LLC, a Nevada limited liability company

Signed: _____

Role: _____

STATE OF NEVADA)
) ss.
COUNTY OF WASHOE)

This instrument was acknowledged before me on _____, 2025 by _____, its _____ for _____.

S
E
A
L

_____
Signature of notarial officer

_____
Print name

My commission expires:

_____

EXHIBIT A
LEGAL DESCRIPTION FOR
TEMPORARY EASMENT
APN 010-610-15

All that certain temporary easement situate within the Southeast One-Quarter (SE 1/4) of Section 10, Township 19 North, Range 19 East, M.D.M., City of Reno, County of Washoe, State of Nevada, being a portion of Parcel 1 per Record of Survey No. 5888 recorded December 1, 2017, as File No. 4768261 in the Official Records of Washoe County, State of Nevada, being more particularly described as follows:

COMMENCING at the point of intersection of the Westerly Right-of-Way of Keystone Avenue and the Southerly Right-of-Way of West Fourth Street, being the Northeast Corner of said Parcel 1;

THENCE departing said Corner and said Southerly Right-of-Way along said Westerly Right-of-Way, from which the radius point bears South 54°50'48" West, 19.04 feet along the arc of a 450.96 foot radius curve to the right through a central angle of 02°25'09" to the POINT OF BEGINNING;

THENCE continuing along said Westerly Right-of-Way and along said previous curve, 6.53 feet along the arc of the previous 450.96 foot radius curve through a central angle of 00°49'47";

THENCE departing said Westerly Right-of-Way along the following twelve (12) arcs, courses, and distances:

1) North 82°16'30" West a distance of 26.94 feet;
2) South 48°42'33" West a distance of 83.56 feet;
3) South 41°17'27" East a distance of 5.00 feet;
4) South 48°42'33" West a distance of 23.22 feet;
5) North 41°17'27" West a distance of 5.00 feet;
6) South 48°42'33" West a distance of 79.33 feet to the beginning of a tangent curve to the right;
7) 69.27 feet along the arc of a 745.00 foot radius curve through a central angle of 05°19'38";
8) South 35°57'49" East a distance of 10.00 feet to the beginning of a non-tangent curve to the right;
9) from a radial line which bears North 35°57'49" West, 80.76 feet along the arc of a 755.00 foot radius curve through a central angle of 06°07'44" to the beginning of a non-tangent curve to the right;
10) from a radial line which bears North 29°30'03" West, 46.97 feet along the arc of a 713.00 foot radius curve through a central angle of 03°46'29";
11) North 25°43'34" West a distance of 10.00 feet to the beginning of a non-tangent curve to the right;
12) from a radial line which bears North 25°43'34" West, 44.56 feet along the arc of a 703.00 foot radius curve through a central angle of 03°37'53" to the Westerly Line of said Parcel 1;

THENCE along said Westerly Line, North 12°59'56" West a distance of 5.06 feet to the aforementioned Southerly Right-of-Way, being the beginning of a non-tangent curve to the left;

THENCE along said Right-of-Way, from a radial line which bears North 22°09'37" West, 43.53 feet along the arc of a 698.00 foot radius curve through a central angle of 03°34'25" to the beginning of a non-tangent curve to the left;

THENCE departing said Right-of-Way, from a radial line which bears North 04°20'43" West, 28.07 feet along the arc of a 68.50 foot radius curve through a central angle of 23°28'35" to the beginning of a compound curve;

THENCE 69.31 feet along the arc of a 696.50 foot radius curve through a central angle of 05°42'06" to the beginning of a compound curve;

THENCE 28.80 feet along the arc of a 68.50 foot radius curve to the left through a central angle of 24°05'33" to the aforementioned Southerly Right-of-Way, being the beginning of a non-tangent curve to the left;

THENCE along said Right-of-Way, from a radial line which bears North 35°54'59" West, 65.47 feet along the arc of a 698.00 foot radius curve through a central angle of 05°22'28";

THENCE continuing along said Right-of-Way, North 48°42'33" East a distance of 192.66 feet;

THENCE departing said Right-of-Way, South 82°16'30" East a distance of 25.01 feet to the POINT OF BEGINNING;

Containing 3,061 square feet of land, more or less.

See Exhibit A-1, Plat to Accompany, attached hereto and made a part hereof.

The Basis of Bearings for this description is the Nevada State Plane Coordinate System, West Zone, North American Datum of 1983/1994, High Accuracy Reference Network (NAD 83/94-HARN).

Prepared by:
Wood Rodgers, Inc.
1361 Corporate Blvd.
Reno, NV 89502
(775) 823-4068



2/7/25

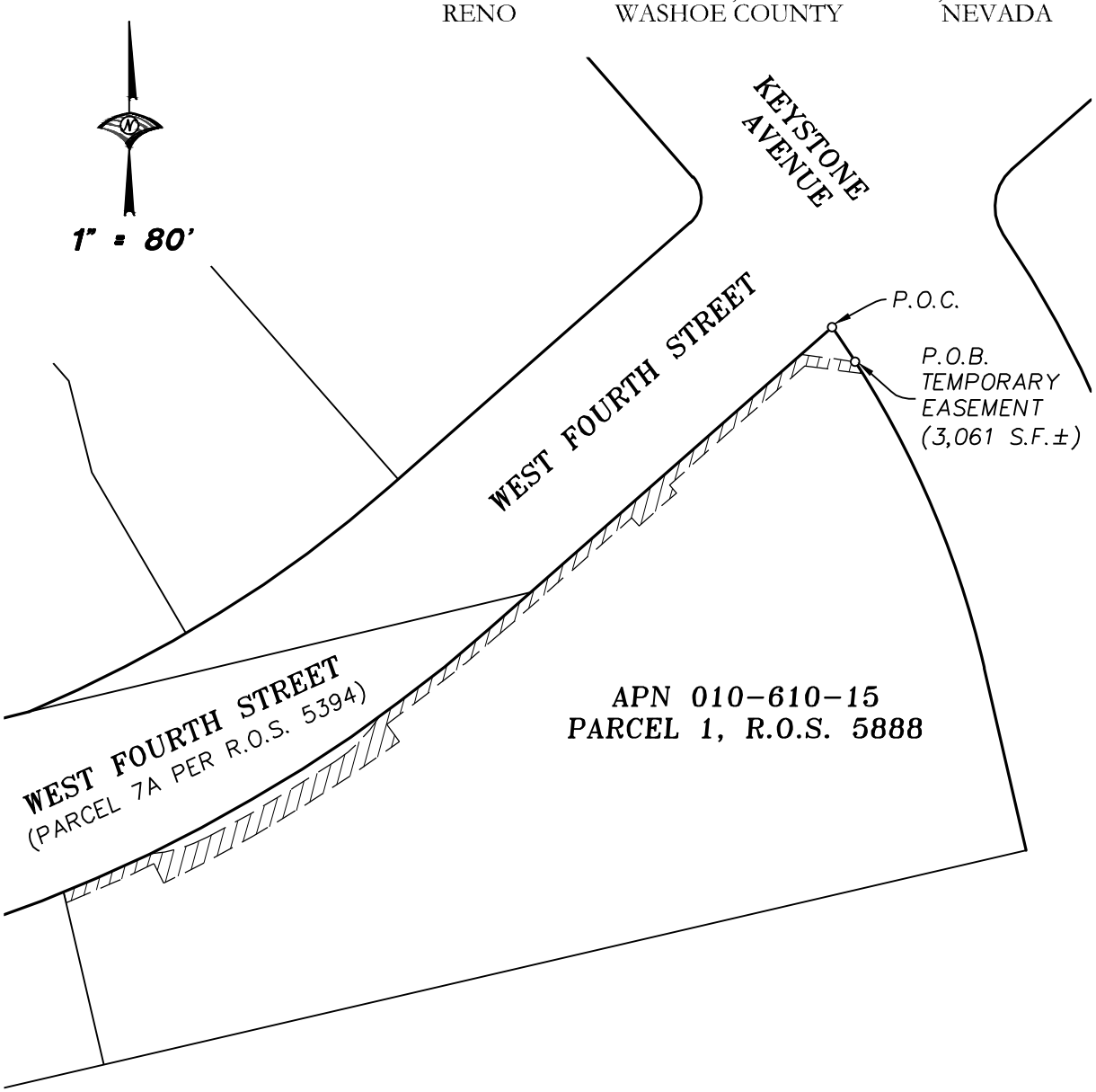
Eric C. Sage, P.L.S.
Nevada Certificate No. 23301

EXHIBIT A-1

PLAT TO ACCOMPANY

TEMPORARY EASEMENT

SITUATE WITHIN THE SE 1/4 OF SECTION 10
TOWNSHIP 19 NORTH, RANGE 19 EAST, M.D.M.
RENO WASHOE COUNTY NEVADA



JOB NO. 8312046
SHEET 1 OF 1

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
1361 Corporate Blvd
Reno, NV 89502
Tel 775.823.4068
Fax 775.823.4066

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REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.3.7**

To: Regional Transportation Commission

From: Michele Payne, Property Agent

SUBJECT: Resolution of Condemnation – Reno MH & RV Park, LLC

RECOMMENDED ACTION

Approve a Resolution of Condemnation authorizing RTC's legal counsel to commence condemnation proceedings to acquire a temporary construction easement on a portion of APN 006-212-04 from Reno MH & RV Park, LLC, which is needed to construct the West Fourth Street Safety Project.

BACKGROUND AND DISCUSSION

The purpose of the project is to reconstruct roadways and add wider sidewalks and safety improvements along West Fourth Street between McCarran Boulevard and Keystone Avenue. The 100% design plans for the project are complete. The project is currently scheduled to begin construction in Spring 2026.

Through an Interlocal Cooperative Agreement with the City of Reno and Washoe County dated March 25, 2024, the RTC has been authorized to negotiate and/or initiate eminent domain proceedings to acquire property when necessary for the project. RTC needs to acquire these specific property interests from Reno MH & RV Park, LLC in order to construct the project.

Reno MH & RV Park, LLC is the owner of record. RTC has been working with the property owner to purchase the property interests. While there have been discussions, proposals and offers made, the efforts to reach a mutually acceptable agreement have been unsuccessful to date. RTC is in the process of certifying the status of right-of-way acquisition for this project in order to secure NDOT and FHWA approval needed to obligate federal funding for the project. In order to avoid potential delays to the project, staff is requesting approval of this Resolution of Condemnation to authorize RTC to initiate condemnation proceedings for these property interests and seek a court-ordered right-of-entry and/or order for immediate occupancy, if needed. RTC will continue to work with the property owner to continue efforts to reach a mutually acceptable agreement. Proper notice of this agenda item has been provided to the property owner as required by NRS 241.034.

FISCAL IMPACT

The costs to acquire property rights has been budgeted; however, the actual fiscal impact cannot be determined at this time.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

RESOLUTION OF CONDEMNATION 25-16

WHEREAS, it is necessary for the Regional Transportation Commission of Washoe County, Nevada ("RTC") to provide regional transportation facilities which are of a quality and standard necessary to satisfactorily meet the needs of the traveling public; and

WHEREAS, the RTC approved the FY 2025 Program of Projects for the Regional Street & Highway Program, which included the West Fourth Street Safety Project (the "Project"); and

WHEREAS, pursuant to an Interlocal Cooperative Agreement ("ICA") between the RTC and the City of Reno dated March 25, 2024, the City of Reno authorized the RTC to initiate such eminent domain proceedings as may be necessary for the Project; and

WHEREAS, Chapter 277A of Nevada Revised Statutes provides that the RTC may exercise the power of eminent domain, if the city or county which has jurisdiction over the property approves; and

WHEREAS, the current owner of record of the property interests to be acquired, as listed in the records of the Washoe County Recorder's Office and insofar as is known to the RTC, is Reno MH & RV Park, LLC.

NOW, THEREFORE, BE IT RESOLVED, that RTC does hereby find:

1. That RTC needs the following property interests to construct the Project: a temporary construction easement on a portion of APN 006-212-04 (the "Property Rights"). The Property Rights are shown in the form easement document(s), metes and bounds description(s) and design drawing(s) attached hereto.

2. That RTC staff has previously contacted the owner(s) about the Property Rights. While there have been discussions, proposals and offers made, the efforts to reach a mutually acceptable agreement for the acquisition of the Property Rights through purchase have been unsuccessful to date.

3. That the Property Rights to be acquired in conjunction with the above referenced Project are to be applied to a public use, to wit, the Project.

4. That the Property Rights described herein are necessary for such public use.

5. By certified mail sent on July 3, 2025, proper notice of the RTC's intent to consider eminent domain action to acquire the Property Rights of the above referenced owner(s) has been given as required by NRS 241.034.

NOW, THEREFORE, BE IT FURTHER RESOLVED, based on the aforementioned findings of fact, that the RTC does hereby direct:

1. That RTC's legal counsel initiate, if needed, eminent domain proceedings on behalf of the RTC in accordance with provisions of Chapters 37 and 277A of Nevada Revised Statutes to acquire the Property Rights.

2. That RTC's legal counsel shall commence and prosecute, in the name of the RTC, eminent domain proceedings in the court having jurisdiction of the Property Rights.

3. That RTC's legal counsel is authorized to pursue all actions deemed appropriate for the successful prosecution of this case, including but not limited to, an application to the court for an order permitting the RTC to take immediate possession of the Property Rights for the construction of the Project, upon complying with conditions imposed by law.

PASSED, ADOPTED AND APPROVED on July 18, 2025.

_____

Alexis Hill, Chair
Regional Transportation Commission of Washoe County

Attachments

1. Form of Temporary Construction Easement and Exhibit “A” and “A-1” for Ptn. of APN 006-212-04 – Temporary Construction Easement

13Ptn. of APN: 006-212-04

WHEN RECORDED RETURN TO:
Regional Transportation Commission of Washoe County
Attn: Michele Payne
1105 Terminal Way, Suite 108
Reno, NV 89502

MAIL TAX STATEMENTS TO:
Exempt

LEGAL DESCRIPTION PREPARED BY:
Eric C. Sage, P.L.S.
Wood Rodgers, Inc.
1361 Corporate Boulevard
Reno, NV 89502

Project: West Fourth Street Safety Project
Project #: 0713001
Parcels: Ptn. of APN: 006-212-04

TEMPORARY CONSTRUCTION EASEMENT

This TEMPORARY CONSTRUCTION EASEMENT, made this _____ day of _____, 2025 between, RENO MH & RV PARK, LLC, a Delaware Limited Liability Company ("GRANTOR") to the REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY ("GRANTEE").

WITNESSETH:

That the GRANTOR, for and in consideration of the sum of ONE DOLLAR ($1.00), lawful money of the United States of America, and other good and valuable consideration, the receipt whereof is hereby acknowledged, does by these presents grant unto the GRANTEE and to its assigns a temporary easement upon, over and across the real property described on Exhibit "A" and depicted on Exhibit "A-1" attached hereto and made a part hereof by reference (the "Temporary Easement"), for the purposes of construction work necessary to complete the West Fourth Street Safety Project, which will include roundabout, sidewalk, curb and gutter improvements. The term of this Temporary Easement shall commence on February 1, 2026 and shall continue through and include the termination date of January 31, 2028.

TO HAVE AND TO HOLD all and singular the said real property, together with the appurtenances, unto the said GRANTEE and to any heirs, successors and assigns for the term of this Temporary Easement.

IN WITNESS WHEREOF said GRANTOR has hereunto signed on the day and year first above written.

RENO MH & RV PARK, LLC
a Delaware Limited Liability Company

By: _____

Its: _____

STATE OF NEVADA)
) ss.
COUNTY OF WASHOE)

This instrument was acknowledged before me on _____, 2025 by _____, its _____ for _____.

S
E
A
L

_____
Signature of notarial officer

_____
Print name

My commission expires:

_____

EXHIBIT A
LEGAL DESCRIPTION FOR
TEMPORARY EASEMENT
APN 006-212-04

All that certain temporary easement situate within the Southwest One-Quarter (SW 1/4) of Section 10, Township 19 North, Range 19 East, M.D.M., City of Reno, County of Washoe, State of Nevada, being a portion of Parcel 2 described in Deed Document No. 5050266 recorded July 9, 2020, in the Official Records of Washoe County, State of Nevada, being more particularly described as follows:

COMMENCING at the Southeast Corner of said Parcel 2, also being on the Northerly Right-of-Way of West Fourth Street relinquished to the City of Reno per Document No. 3329606 recorded December 28, 2005, in the Official Records of Washoe County, State of Nevada;

THENCE departing said Corner along said Northerly Right-of-Way, South 65°40'18" West a distance of 43.82 feet to the POINT OF BEGINNING;

THENCE continuing along said Northerly Right-of-Way, South 65°40'18" West a distance of 78.81 feet;

THENCE departing said Northerly Right-of-Way, North 24°19'42" West a distance of 11.77 feet;

THENCE North 65°40'18" East a distance of 78.81 feet;

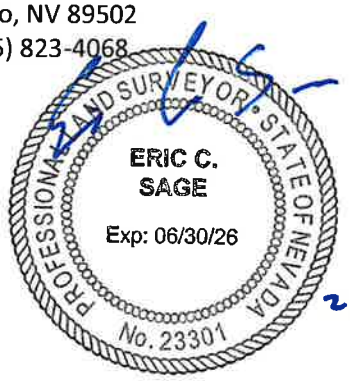
THENCE South 24°19'42" East a distance of 11.77 feet to the POINT OF BEGINNING;

Containing 927 square feet of land, more or less.

See Exhibit A-1, Plat to Accompany, attached hereto and made a part hereof.

The Basis of Bearings for this description is the Nevada State Plane Coordinate System, West Zone, North American Datum of 1983/1994, High Accuracy Reference Network (NAD 83/94-HARN).

Prepared by:
Wood Rodgers, Inc.
1361 Corporate Blvd.
Reno, NV 89502
(775) 823-4068



2/7/2025

Eric C. Sage, P.L.S.
Nevada Certificate No. 23301

EXHIBIT A-1

PLAT TO ACCOMPANY

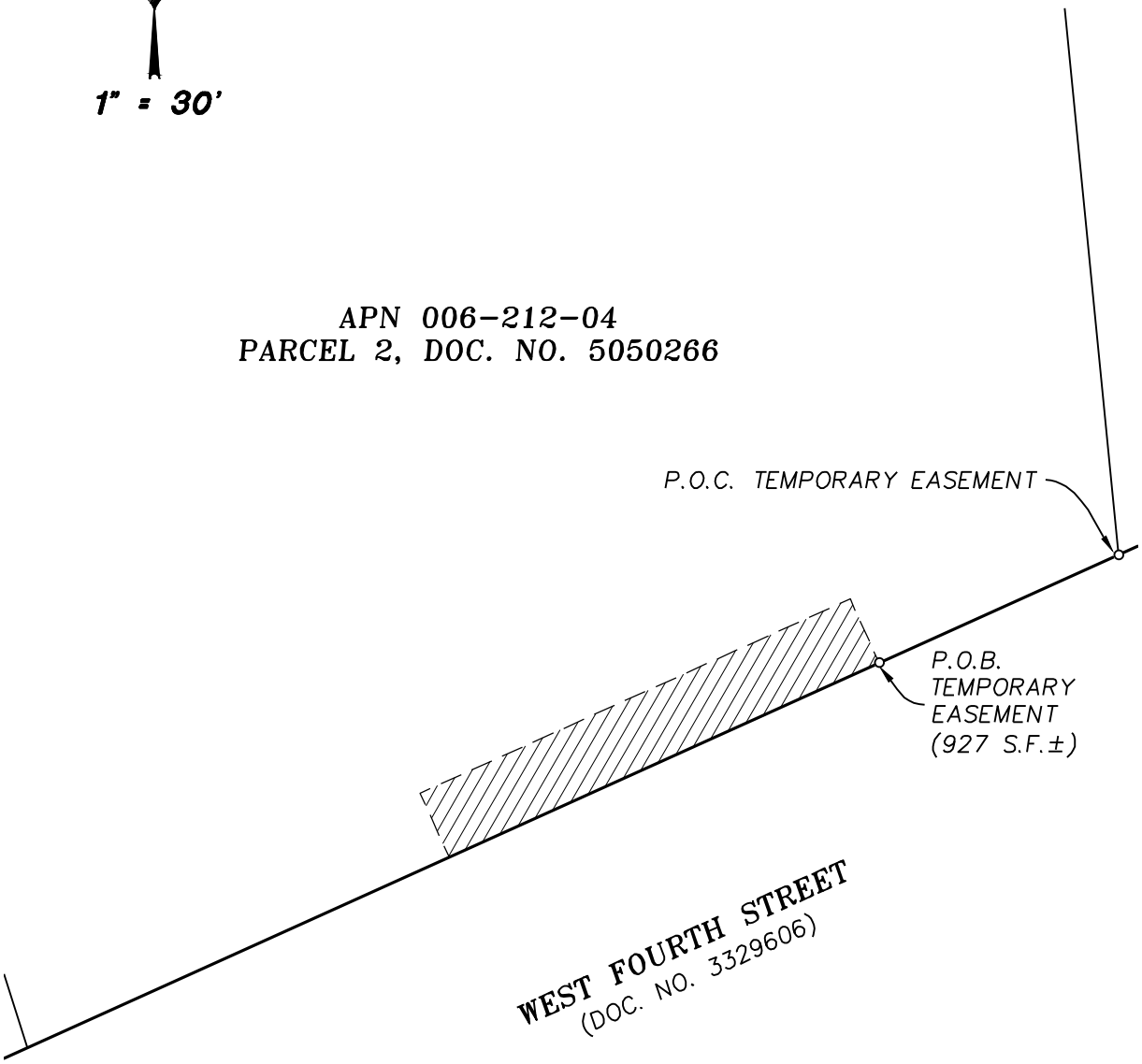
TEMPORARY EASEMENT

SITUATE WITHIN THE SW 1/4 OF SECTION 10
TOWNSHIP 19 NORTH, RANGE 19 EAST, M.D.M.
RENO WASHOE COUNTY NEVADA



1" = 30'

APN 006-212-04
PARCEL 2, DOC. NO. 5050266



JOB NO. 8312046
SHEET 1 OF 1

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
1361 Corporate Blvd
Reno, NV 89502
Tel 775.823.4068
Fax 775.823.4066

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REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.3.8**

To: Regional Transportation Commission

From: Michele Payne, Property Agent

SUBJECT: Resolution of Condemnation – West End Reno, LLC

RECOMMENDED ACTION

Approve a Resolution of Condemnation authorizing RTC's legal counsel to commence condemnation proceedings to acquire a temporary construction easement on a portion of APN 006-222-19 from West End Reno, LLC, which is needed to construct the West Fourth Street Safety Project.

BACKGROUND AND DISCUSSION

The purpose of the project is to reconstruct roadways and add wider sidewalks and safety improvements along West Fourth Street between McCarran Boulevard and Keystone Avenue. The 100% design plans for the project are complete. The project is currently scheduled to begin construction in Spring 2026.

Through an Interlocal Cooperative Agreement with the City of Reno and Washoe County dated March 25, 2024, the RTC has been authorized to negotiate and/or initiate eminent domain proceedings to acquire property when necessary for the project. RTC needs to acquire these specific property interests from West End Reno, LLC in order to construct the project.

West End Reno, LLC is the owner of record. RTC has been working with the property owner to purchase the property interests. While there have been discussions, proposals and offers made, the efforts to reach a mutually acceptable agreement have been unsuccessful to date. RTC is in the process of certifying the status of right-of-way acquisition for this project in order to secure NDOT and FHWA approval needed to obligate federal funding for the project. In order to avoid potential delays to the project, staff is requesting approval of this Resolution of Condemnation to authorize RTC to initiate condemnation proceedings for these property interests and seek a court-ordered right-of-entry and/or order for immediate occupancy, if needed. RTC will continue to work with the property owner to continue efforts to reach a mutually acceptable agreement. Proper notice of this agenda item has been provided to the property owner as required by NRS 241.034.

FISCAL IMPACT

The costs to acquire property rights has been budgeted; however, the actual fiscal impact cannot be determined at this time.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

RESOLUTION OF CONDEMNATION 25-18

WHEREAS, it is necessary for the Regional Transportation Commission of Washoe County, Nevada ("RTC") to provide regional transportation facilities which are of a quality and standard necessary to satisfactorily meet the needs of the traveling public; and

WHEREAS, the RTC approved the FY 2025 Program of Projects for the Regional Street & Highway Program, which included the West Fourth Street Safety Project (the "Project"); and

WHEREAS, pursuant to an Interlocal Cooperative Agreement ("ICA") between the RTC and the City of Reno dated March 25, 2024, the City of Reno authorized the RTC to initiate such eminent domain proceedings as may be necessary for the Project; and

WHEREAS, Chapter 277A of Nevada Revised Statutes provides that the RTC may exercise the power of eminent domain, if the city or county which has jurisdiction over the property approves; and

WHEREAS, the current owner of record of the property interests to be acquired, as listed in the records of the Washoe County Recorder's Office and insofar as is known to the RTC, is West End Reno, LLC.

NOW, THEREFORE, BE IT RESOLVED, that RTC does hereby find:

1. That RTC needs the following property interests to construct the Project: a temporary construction easement on a portion of APN 006-222-19 (the "Property Rights")]. The Property Rights are shown in the form easement document(s), metes and bounds description(s) and design drawing(s) attached hereto.

2. That RTC staff has previously contacted the owner(s) about the Property Rights. While there have been discussions, proposals and offers made, the efforts to reach a mutually acceptable agreement for the acquisition of the Property Rights through purchase have been unsuccessful to date.

3. That the Property Rights to be acquired in conjunction with the above referenced Project are to be applied to a public use, to wit, the Project.

4. That the Property Rights described herein are necessary for such public use.

5. By certified mail sent on July 3, 2025, proper notice of the RTC's intent to consider eminent domain action to acquire the Property Rights of the above referenced owner(s) has been given as required by NRS 241.034.

NOW, THEREFORE, BE IT FURTHER RESOLVED, based on the aforementioned findings of fact, that the RTC does hereby direct:

1. That RTC's legal counsel initiate, if needed, eminent domain proceedings on behalf of the RTC in accordance with provisions of Chapters 37 and 277A of Nevada Revised Statutes to acquire the Property Rights.

2. That RTC's legal counsel shall commence and prosecute, in the name of the RTC, eminent domain proceedings in the court having jurisdiction of the Property Rights.

3. That RTC's legal counsel is authorized to pursue all actions deemed appropriate for the successful prosecution of this case, including but not limited to, an application to the court for an order permitting the RTC to take immediate possession of the Property Rights for the construction of the Project, upon complying with conditions imposed by law.

PASSED, ADOPTED AND APPROVED on July 18, 2025.

_____

Alexis Hill, Chair
Regional Transportation Commission of Washoe County

Attachments

1. Form of Temporary Construction Easement and Exhibit “A” and “A-1” for Ptn. of APN 006-222-19 – Temporary Construction Easement

Ptn. of APN: 006-222-19

WHEN RECORDED RETURN TO:
Regional Transportation Commission of Washoe County
Attn: Michele Payne
1105 Terminal Way, Suite 108
Reno, NV 89502

MAIL TAX STATEMENTS TO:
Exempt

LEGAL DESCRIPTION PREPARED BY:
Eric C. Sage, P.L.S.
Wood Rodgers, Inc.
1361 Corporate Boulevard
Reno, NV 89502

Project: West Fourth Street Safety Project (the "Project")
Project #: 0713001
Parcels: Ptn. of APN: 006-222-19

TEMPORARY EASEMENT DEED

THIS DEED, made this _____ day of _____, 2025 between, WEST END RENO, LLC, a Nevada limited liability company, hereinafter called GRANTOR, and the REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY, hereinafter called GRANTEE,

WITNESSETH:

That the GRANTOR, for and in consideration of the sum of ONE DOLLAR ($1.00), lawful money of the United States of America, and other good and valuable consideration, the receipt whereof is hereby acknowledged, does by these presents grant unto the GRANTEE and to its assigns a temporary easement upon, over and across the real property described on Exhibit "A" and depicted on Exhibit "A-1" attached hereto and made a part hereof by reference (the "Temporary Easement), for the purposes of:

providing safety improvements including driveway and sidewalk improvements.

The Temporary Easement shall commence on or after February 1, 2026, and shall continue through and include the termination date of January 31, 2028.

TO HAVE AND TO HOLD all and singular the said real property, together with the appurtenances, unto the said GRANTEE and to any heirs, successors and assigns for the term of this Temporary Easement.

IN WITNESS WHEREOF, GRANTOR has hereunto signed on the day and year first above written.

WEST END RENO, LLC, a Nevada limited liability company

By: _____

Its: _____

STATE OF _____

County of _____

This instrument was acknowledged before me on _____, 2025 by _____, its _____ for _____.

S
E
A
L

_____
Signature of notarial officer

_____
Print name

EXHIBIT A
LEGAL DESCRIPTION FOR
TEMPORARY EASEMENT
APN 006-222-19

All that certain temporary easement situate within the Southeast One-Quarter (SE 1/4) of Section 10, Township 19 North, Range 19 East, M.D.M., City of Reno, County of Washoe, State of Nevada, being a portion of Parcel B pre Parcel Map No. 1753 recorded November 5, 1984, as File No. 960157 in the Official Records of Washoe County, State of Nevada, being more particularly described as follows:

BEGINNING at the Southeast Corner of said Parcel B, also being on the Northerly Right-of-Way of West Fourth Street shown as Parcel 7A per Record of Survey No. 5394 recorded April 4, 2012, as File No. 4100105 in the Official Records of Washoe County, State of Nevada;

THENCE departing said Corner along said Right-of-Way, South 76°35'13" West a distance of 92.92 feet;

THENCE departing said Right-of-Way, North 13°24'47" West a distance of 5.00 feet;

THENCE North 76°35'13" East a distance of 92.83 feet to the Easterly Line of said Parcel B;

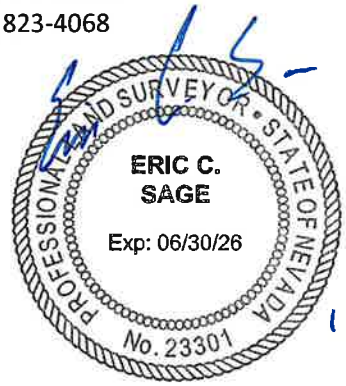
THENCE along said Parcel B, South 14°19'27" East a distance of 5.00 feet to the POINT OF BEGINNING;

Containing 464 square feet of land, more or less.

See Exhibit A-1, Plat to Accompany, attached hereto and made a part hereof.

The Basis of Bearings for this description is the Nevada State Plane Coordinate System, West Zone, North American Datum of 1983/1994, High Accuracy Reference Network (NAD 83/94-HARN).

Prepared by:
Wood Rodgers, Inc.
1361 Corporate Blvd.
Reno, NV 89502
(775) 823-4068



11/31/25

Eric C. Sage, P.L.S.
Nevada Certificate No. 23301

EXHIBIT A-1

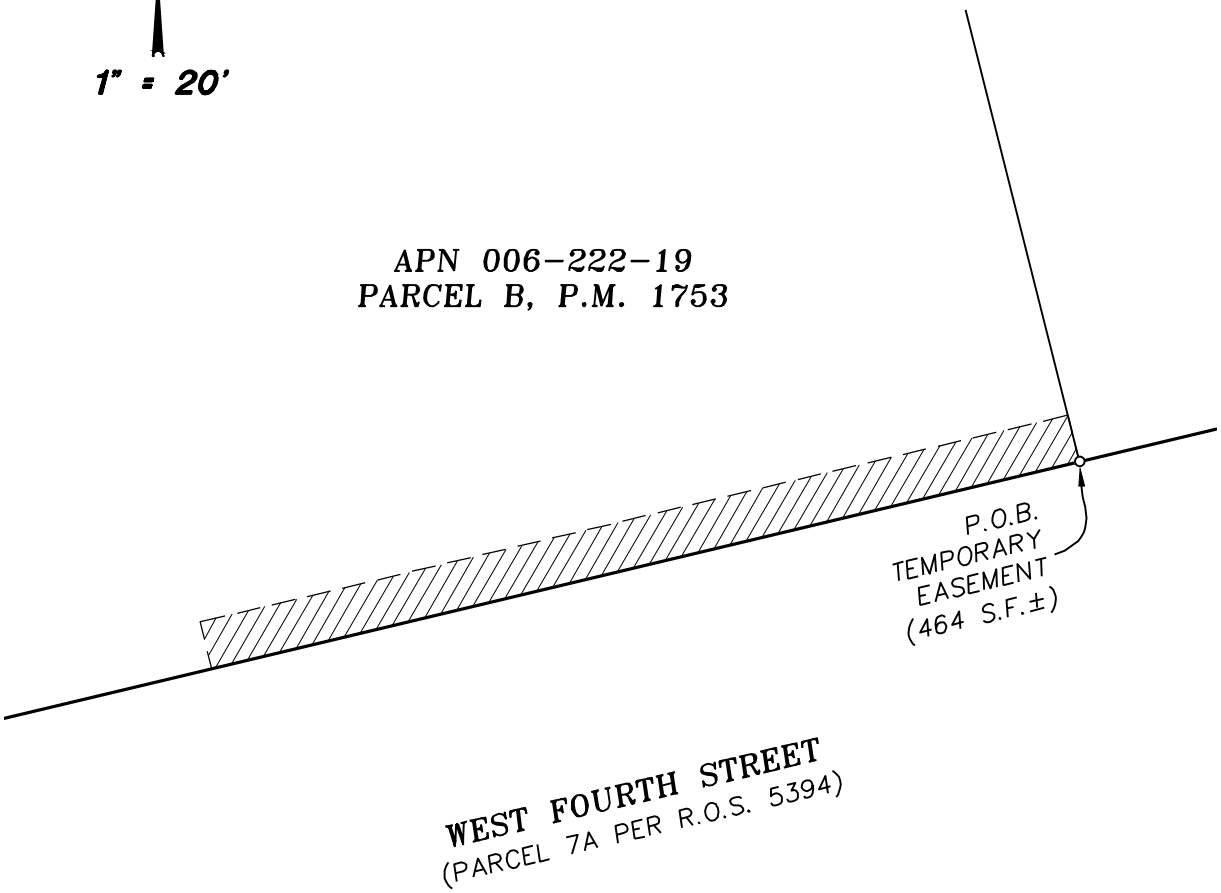
PLAT TO ACCOMPANY

TEMPORARY EASEMENT

SITUATE WITHIN THE SE 1/4 OF SECTION 10
TOWNSHIP 19 NORTH, RANGE 19 EAST, M.D.M.
RENO WASHOE COUNTY NEVADA



1" = 20'



JOB NO. 8312046
SHEET 1 OF 1

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
1361 Corporate Blvd
Reno, NV 89502
Tel 775.823.4068
Fax 775.823.4066

J:\Jobs\8312_RTC Of Washoe County\8312046 4th Street Safety\Geomatics\legals_exhibits\4th Street Safety_Easements.dwg 1/30/2025 1:27 PM Paul Roulias

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.4.1**

To: Regional Transportation Commission

From: James Gee, Director of Public Transportation and Operations

SUBJECT: Security System Upgrade at Centennial Plaza and Sutro Garage

RECOMMENDED ACTION

Approve a contract with Pavion Corp to replace the existing Avigilon security servers at Centennial Plaza and Sutro with Verkada cloud connectors, in an amount not-to-exceed $138,274.65.

BACKGROUND AND DISCUSSION

This is a sole source procurement with Pavion Corp for replacement of the 5+ year old Avigilon servers at CP and Sutro (3 servers total); for security camera video access and storage. The servers will be replaced with new Verkada cloud-connectors, which will allow for the existing cameras at both locations to be used in the Verkada Cloud. This will eliminate the need to have on-premise servers for security video storage at those locations. The cost for CP is a total of $91,169.58. The cost for Sutro is a total of $47,105.07. Total cost for both locations is $138,274.65. The purchase will include a 5-year cloud connector license. Terms will begin at date of purchase. This is a sole source procurement to match and integrate with the existing Verkada security system used at our Terminal offices.

FISCAL IMPACT

Federal funding (80%) and Local Sales Tax match (20%) appropriations for this purchase are included in the FY26 capital budget for this action.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

RTC - Centennial Plaza
Verkada Upgrade - NV, Reno

Quote # QUO-26970-R0T5W7

9 June, 2025

4060 S. McCarran Blvd.

Reno, NV 89502

Hyong Cho 775-850-0402

Contact:

John Ponzo

Phone:

7758702336.00

Business / Owner:

Regional Transportation Commission (RTC) - Administration-1105 Terminal Way, Reno, NV (1002228-B1)

Email:

jponzo@rtcwashoe.com

Summary of: Regional Transportation Commission (RTC) - Administration-1421 Victorian Ave, Sparks, NV (1002228-S2)	Totals
Equipment	**$88,289.54**
Professional Services	**$2,880.04**
Project Subtotal, Excl Tax	**$91,169.58**
Freight Amount	
Tax	**$0.00**
Project Total	**$91,169.58**

*sales tax is an estimation. actual tax will be calculated at time of invoice

Client Signature: _____

Name: _____

Title: _____

Date: _____

Initial: _____

SCOPE OF WORK

Pavion will provide and install following equipment and services:

1. Convert existing Avigilon cameras and encoders at RTC Centennial facility to Verkada system.
2. Two (2) Verkada Command Connector with 32TB Storage
3. 77 - Five (5) Year Verkada subscription services
4. Utilize existing network cabling, cameras and hardware to complete the project
5. Program and commissioning

Project Proposal

RTC - Centennial Plaza Verkada Upgrade					$89,073.38
Qty	**Manufacturer**	**Model**	**Description**	**Price Each**	**Price Ext.**
2	Verkada Inc	CC700-32TB-HW	CC700 Command Connector, 32TB, 50 5MP channels at 60 days	$9,737.83	$19,475.66
1	Verkada Inc	LIC-CAM-5Y-CAP	5-Year Camera License, Capacity Increase	$68,563.88	$68,563.88
8	PavionX	PAV-INST	Installation Labor	$129.23	$1,033.84

Project Expenses					$2,096.20
Qty	**Manufacturer**	**Model**	**Description**	**Price Each**	**Price Ext.**
6	PavionX	PAV-PRG	Programming Labor	$184.62	$1,107.72
4	PavionX	PAV-PM	Project Management Labor	$184.62	$738.48
1	PavionX	SHIPPING CHARGE	SHIPPING CHARGE	$250.00	$250.00

CLARIFICATIONS & EXCLUSIONS

1. Verkada software licenses include:
2. Unlimited users and access across web and mobile platforms
3. Unlimited cloud archiving of video clips
4. Automatic firmware and cloud software updates
5. Verkada customer support (available via phone, email, and live chat within Verkada Command).

Payment Terms:

Purchase Order #	Date of Acceptance

Tax Exempt ID #	Print Name & Title

Email Signed Proposal to: hcho@rfi.com

TERMS AND CONDITIONS
This Proposal is valid and open for thirty (30) days from the date first listed above on this Proposal. Prior to Customer's execution, Pavion may withdraw this Proposal at any time by written notice to Customer.
Pavion's terms and conditions for this Proposal are available at https://www.pavion.com/legal and are incorporated into this Proposal.
Please review Pavion's terms and conditions for the proposed services and location and sign below confirming Customer's acceptance of this Proposal. By accepting this Proposal, you certify you are authorized to bind Customer to this Proposal and Pavion's terms and conditions, Customer has reviewed Pavion's applicable terms and conditions, and Customer agrees to this Proposal and such terms and conditions.
Customer's contract, purchase order, or master agreement documents, including scope of work and terms and conditions, may be submitted for Pavion's review. Pavion may only be bound to Customer contract documents, including flow down contract documents from property owner, tenant, end user or upper-tier contractors to the extent such documents have been provided to and agreed upon by Pavion prior to submission of this Proposal. This Proposal shall supersede all other contract documents.
Pavion does not agree to any amendments to the terms and conditions of Pavion's Master Monitoring Contract or Master Fire Contract.
Pavion's Subscription Agreement or Managed Services Agreements with accompanying documents including this Proposal and scope of work require a separate execution in addition to executing this Proposal.

PAYMENT TERMS
Pavion's preferred method of payment is ACH/EFT. All price quotes reflect payments by cash, check or wire transfer. Payment by credit card or other similar methods may incur additional fees. Cancellation following execution of this Proposal will result in charges for labor incurred, material restocking fees, and freight. Customer assumes all liability associated with imposed taxes. Any work requested that is an alteration or deviation from the scope provided herein is subject to pricing change.

Unless otherwise indicated in this Proposal, Pavion's payment terms are strictly Net 30 from the date of invoice. In the case of progress payments, payment is expected within thirty (30) days after completion of the work performed during the payment period. All payment terms greater than Net 30 will require prior written approval from a Pavion Corp. Finance Manager or Credit Manager.

Failure to make payments within sixty (60) days after the completion of the Scope of Work or after the completion of a progress period shall provide Pavion Corp. an option to terminate this agreement per the terms set forth without prior notice. In addition, any late payments may be subject to a 1.5% late fee.
For Monitoring and Subscription Services, Service Plans, Preventative Services or Test and Inspection Plans, Subscriber will be invoiced in advance, quarterly or annually at Pavion's option. Pavion will make all reasonable efforts to honor our pricing for thirty (30) days.

If Pavion's costs increase, whether due to threatened or imposed tariffs or for any other reason, Pavion reserves the right, and the Customer agrees should Pavion exercise such right, for Customer to pay price increases due to such cost increases. Except in the case of threatened or imposed tariffs, Pavion agrees it shall not charge more than a 15% price increase after the Agreement is executed.

We look forward to maintaining a trusted, long-term business relationship. If you have any questions regarding this proposal or any other matter, please feel free to contact your Pavion Account Executive.

Initial: _____

RTC -Sutro Facility Verkada Upgrade

Quote # QUO-26980-W2T4J7

9 June, 2025

4060 S. McCarran Blvd.

Reno, NV 89502

Hyong Cho 775-850-0402

Contact:

John Ponzo

Business / Owner:

Regional Transportation Commission (RTC) - Administration-1105 Terminal Way, Reno, NV (1002228-B1)

Phone:

7758702336.00

Email:

jponzo@rtcwashoe.com

Summary of: RTC Sutro Facility - 600 Sutro St. - Reno, NV	Totals
Equipment	**$45,480.43**
Professional Services	**$1,624.64**
Project Subtotal, Excl Tax	**$47,105.07**
Freight Amount	
Tax	**$0.00**
Project Total	**$47,105.07**

*sales tax is an estimation. actual tax will be calculated at time of invoice

Client Signature: _____

Name: Bill Thomas

Title: Executive Director

Date: _____

Initial: _____

SCOPE OF WORK

Pavion will provide and install following equipment and services:

1. Convert existing Avigilon cameras and encoders at RTC Sutro facility to Verkada system.
2. One (1) Verkada Command Connector with 32TB Storage
3. 40 - Five (5) Year Verkada subscription services
4. Utilize existing network cabling, cameras and hardware to complete the project
5. Program and commissioning

Project Proposal

RTC - Sutro Verkada Upgrade					$45,872.35
Qty	**Manufacturer**	**Model**	**Description**	**Price Each**	**Price Ext.**
1	Verkada Inc	CC700-32TB-HW	CC700 Command Connector, 32TB, 50 5MP channels at 60 days	$9,737.83	$9,737.83
1	Verkada Inc	LIC-CAM-5Y-CAP	5-Year Camera License, Capacity Increase	$35,617.60	$35,617.60
4	PavionX	PAV-INST	Installation Labor	$129.23	$516.92
1	PavionX	PAV-MCP	Miscellaneous & Consumable Project Materials	$0.00	$0.00

Project Expenses					$1,232.72
Qty	**Manufacturer**	**Model**	**Description**	**Price Each**	**Price Ext.**
4	PavionX	PAV-PRG	Programming Labor	$184.62	$738.48
2	PavionX	PAV-PM	Project Management Labor	$184.62	$369.24
1	PavionX	SHIPPING CHARGE	SHIPPING CHARGE	$125.00	$125.00

CLARIFICATIONS & EXCLUSIONS

1. Verkada software licenses include:
2. Unlimited users and access across web and mobile platforms
3. Unlimited cloud archiving of video clips
4. Automatic firmware and cloud software updates
5. Verkada customer support (available via phone, email, and live chat within Verkada Command).

Payment Terms:

Purchase Order #	Date of Acceptance

Tax Exempt ID #	Print Name & Title

Email Signed Proposal to: hcho@rfi.com

TERMS AND CONDITIONS

This Proposal is valid and open for thirty (30) days from the date first listed above on this Proposal. Prior to Customer's execution, Pavion may withdraw this Proposal at any time by written notice to Customer.

Pavion's terms and conditions for this Proposal are available at https://www.pavion.com/legal and are incorporated into this Proposal.

Please review Pavion's terms and conditions for the proposed services and location and sign below confirming Customer's acceptance of this Proposal. By accepting this Proposal, you certify you are authorized to bind Customer to this Proposal and Pavion's terms and conditions, Customer has reviewed Pavion's applicable terms and conditions, and Customer agrees to this Proposal and such terms and conditions.

Customer's contract, purchase order, or master agreement documents, including scope of work and terms and conditions, may be submitted for Pavion's review. Pavion may only be bound to Customer contract documents, including flow down contract documents from property owner, tenant, end user or upper-tier contractors to the extent such documents have been provided to and agreed upon by Pavion prior to submission of this Proposal. This Proposal shall supersede all other contract documents.

Pavion does not agree to any amendments to the terms and conditions of Pavion's Master Monitoring Contract or Master Fire Contract.

Pavion's Subscription Agreement or Managed Services Agreements with accompanying documents including this Proposal and scope of work require a separate execution in addition to executing this Proposal.

PAYMENT TERMS

Pavion's preferred method of payment is ACH/EFT. All price quotes reflect payments by cash, check or wire transfer. Payment by credit card or other similar methods may incur additional fees. Cancellation following execution of this Proposal will result in charges for labor incurred, material restocking fees, and freight. Customer assumes all liability associated with imposed taxes. Any work requested that is an alteration or deviation from the scope provided herein is subject to pricing change.

Unless otherwise indicated in this Proposal, Pavion's payment terms are strictly Net 30 from the date of invoice. In the case of progress payments, payment is expected within thirty (30) days after completion of the work performed during the payment period. All payment terms greater than Net 30 will require prior written approval from a Pavion Corp. Finance Manager or Credit Manager.

Failure to make payments within sixty (60) days after the completion of the Scope of Work or after the completion of a progress period shall provide Pavion Corp. an option to terminate this agreement per the terms set forth without prior notice. In addition, any late payments may be subject to a 1.5% late fee.

For Monitoring and Subscription Services, Service Plans, Preventative Services or Test and Inspection Plans, Subscriber will be invoiced in advance, quarterly or annually at Pavion's option. Pavion will make all reasonable efforts to honor our pricing for thirty (30) days.

If Pavion's costs increase, whether due to threatened or imposed tariffs or for any other reason, Pavion reserves the right, and the Customer agrees should Pavion exercise such right, for Customer to pay price increases due to such cost increases. Except in the case of threatened or imposed tariffs, Pavion agrees it shall not charge more than a 15% price increase after the Agreement is executed.

We look forward to maintaining a trusted, long-term business relationship. If you have any questions regarding this proposal or any other matter, please feel free to contact your Pavion Account Executive.

Initial: _____

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.4.2**

To: Regional Transportation Commission

From: Jim Gee, Director of Public Transportation and Operations

SUBJECT: RTC RIDE 5 Year Vehicle Replacement Strategy

RECOMMENDED ACTION

Acknowledge receipt of the RTC RIDE 5 Year Vehicle Replacement Strategy.

BACKGROUND AND DISCUSSION

The RTC RIDE 5-Year Vehicle Replacement Strategy outlines a revised approach to fleet management focused on improving reliability and sustainability. After years of experience with battery electric buses (BEVs), staff has determined that ongoing maintenance issues, limited range, and parts availability make continued investment in BEVs unsustainable. As a result, RTC will shift toward hybrid electric vehicles, which offer greater reliability and lower infrastructure demands while still supporting environmental goals. Staff plans to continue to evaluate hydrogen fuel cell vehicles as part of our long-term strategy.

FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

RTC RIDE 5 Year Vehicle Replacement Strategy

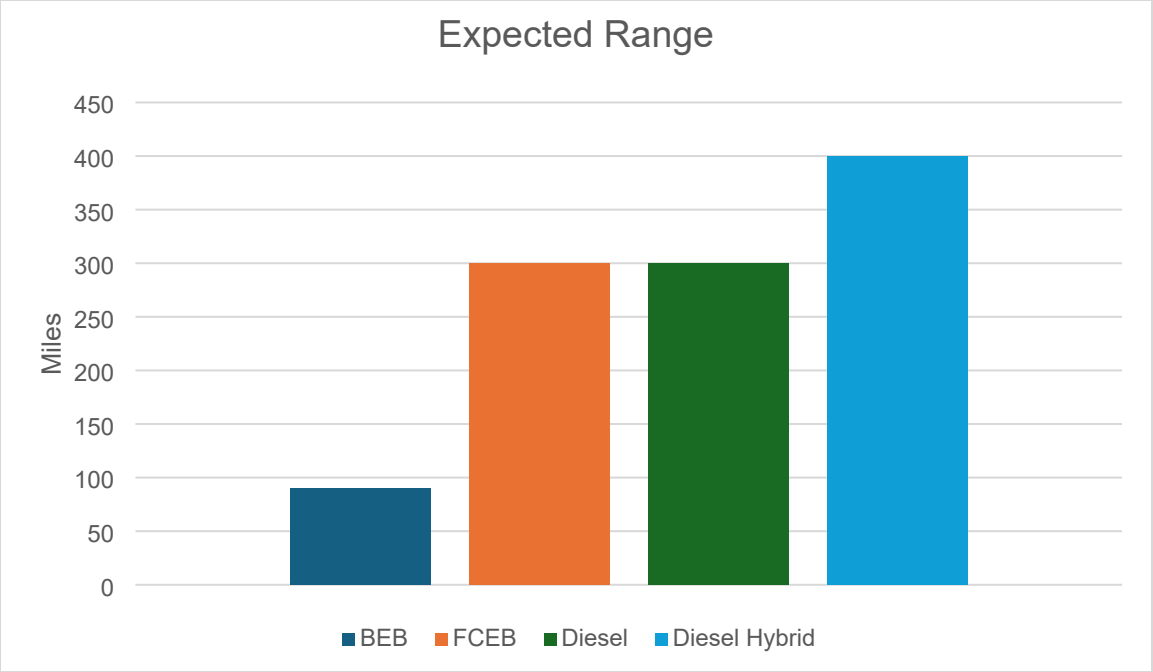
The Regional Transportation Commission (RTC) of Washoe County has consistently demonstrated its commitment to sustainability and innovation in public transportation. As the primary transit provider for the region, RTC has integrated environmentally friendly practices into its operations, including the adoption of alternative fuel technologies and the development of innovative transportation systems.

The Regional Transportation Commission (RTC) of Washoe County currently operates a diverse fleet of 62 vehicles, including diesel hybrid, battery electric (Proterra BEB), and fuel cell electric buses (FCEB). Additionally, fourteen diesel vehicles remain in daily use as contingency units, while eight FCEBs are poised for full-time service pending completion of a permanent hydrogen fueling facility. This mix of technologies reflects RTC's ongoing commitment to innovation and sustainability, as well as the practical realities of operating a reliable transit system in a region with varied geography and service demands.

Battery Electric Buses (Proterra BEB): Lessons Learned

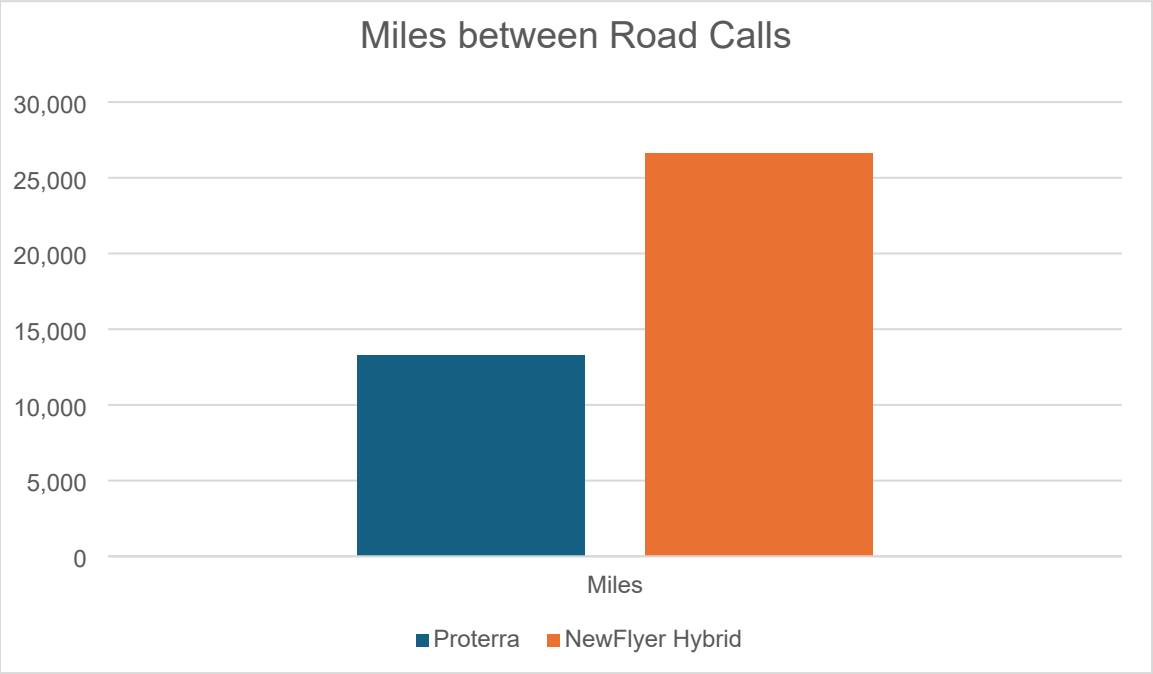
RTC was an early adopter of battery electric buses, integrating Proterra BEBs into its fleet beginning in 2013. These vehicles now comprise about one-third of the fleet. The BEBs have delivered on several promises: they are quieter, produce zero emissions, and have lower power and predicted maintenance costs due to fewer moving parts. However, the experience has also revealed significant challenges:

- **Operational Limitations:** BEBs have limited range, which is further affected by seasonal changes and route topography (e.g., hills). This limitation restricts their deployment to certain routes, such as Bus Rapid Transit (BRT), and can no longer continue the practice of a 1:1 bus replacement. Scheduling now requires careful planning to accommodate these limitations.
- **Infrastructure and Scalability:** Expanding BEB operations requires substantial upgrades to electrical infrastructure, and managing demand charges and energy use is complex, especially as there is a need to balance vehicle availability against the cost of peak hour charging.
- **Supply Chain and Technology Risks:** Proterra's bankruptcy and resulting supply chain issues have led to longer wait times for parts, higher prices for necessary components, and concerns about obsolete batteries and chargers.



Hybrid Buses: The Reliable Workhorse

Hybrid diesel-electric buses, primarily from New Flyer and Gillig, make up 46% of the fleet but account for 68% of all miles traveled. These vehicles have proven to be highly reliable, with strong manufacturer support and a track record of excellent performance. Their established technology and broad applicability across routes make them the backbone of RTC's service, especially as the agency navigates the transition to zero-emission vehicles.



Hydrogen Fuel Cell Electric Buses (FCEB): The Next Step

RTC's investment in hydrogen FCEBs is a strategic move to address the limitations of BEBs. The expected advantages of hydrogen include:

- **Extended Range:** FCEBs can travel up to 300 miles on a single fueling, making them suitable for longer and more demanding routes.
- **Scalability and Refueling:** While FCEBs have higher upfront costs, their incremental costs are lower than BEBs as the fleet grows. Refueling is fast (7–10 minutes), compared to the 4–5 hours required for overnight BEB charging.
- **Deployment Readiness:** Six of eight FCEBs have been delivered, with fueling infrastructure expected to be operational by late fall, enabling future deployment.

Due to several factors listed above, RTC is at a crossroads regarding its vehicle replacement strategy. After lengthy review, staff has created the following recommendations based on the analysis of current fleet performance, infrastructure challenges, and funding opportunities:

1. **Discontinue the Purchase of Additional Battery Electric Buses (BEBs):** RTC's experience with multi-generational Proterra BEBs has highlighted significant operational issues, including limited driving range, frequent breakdowns, long repair times, and challenges in sourcing replacement parts. These issues have resulted in increased operational costs and reduced service reliability. Additionally, Proterra's recent bankruptcy has further complicated maintenance and support for these vehicles and their charging infrastructure by making replacement of major components either unavailable or cost prohibitive.
2. **Monitor Hydrogen Fuel Cell Bus Usage:**
   RTC currently operates two hydrogen fuel cell buses, with six additional units scheduled for delivery in summer 2025. Hydrogen fuel cell technology offers significant advantages, including longer range (300 miles compared to 90-150 miles for BEVs) and faster refueling times (7-10 minutes versus overnight charging). However, the technology is still emerging, and its long-term operational viability needs to be assessed. RTC should closely monitor the performance, maintenance costs, and infrastructure requirements of its HFCVs to determine their suitability for broader adoption.
3. **Pursue Grant Funding for Hybrid Electric Buses (HEBs):**
   Hybrid electric vehicles provide a balanced solution, combining the benefits of reduced emissions with operational reliability. RTC has already received Federal Transit Administration (FTA) approval to transfer federal interest from first generation Proterra buses to New Flyer hybrid buses, demonstrating federal

support for this transition. Additionally, hybrid buses are less dependent on extensive charging or fueling infrastructure, making them a practical choice for immediate fleet expansion. RTC should actively pursue grants, such as the Low-No Emission Vehicle Program, to fund the acquisition of hybrid electric buses.

By implementing these recommendations, RTC can enhance fleet reliability, reduce operational costs, and align with sustainability goals while leveraging available funding opportunities.

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.4.3**

To: Regional Transportation Commission

From: James Gee, Director of Public Transportation and Operations

SUBJECT: Marathon Finishing Systems, Inc., Amendment No. 2

RECOMMENDED ACTION

Approve Amendment No. 2 to the contract with Marathon Finishing Systems, Inc., for additional Phase 2 services to complete the installation of the hydrogen fuel cell service bay at RTC's 6th Street facility, in the amount of $21,935.45, for a new total not-to-exceed amount of $817,740.03.

BACKGROUND AND DISCUSSION

In February 2023, the Board approved a project to modify the existing maintenance structure located at 1301 East Sixth Street for the installation of a Hydrogen Fueled Service Bay in support of the Hydrogen Fuel Cell Electric Bus and Infrastructure Deployment project. Phase 1 included project design. On January 19, 2024, the Board approved Amendment No. 1 for Marathon to begin the Installation Services Phase 2, in February 2024. Amendment No. 2 approves additional costs related to RTC directed changes within the scope of work including modifications to the fire system to tie in with the existing system, relocation of the purge line and sensor calibration equipment, and required permit fees.

FISCAL IMPACT

Funding for this project is included in the FY 2026 budget.

PREVIOUS BOARD ACTION

01/19/2024 - Approved Amendment No. 1 to the Marathon Finishing Systems, Inc. contract to add the Phase 2 installation services to complete the installation of the hydrogen fuel cell service bay at RTC's 1301 East 6th Street facility in the amount of $527,705.00, for a new total not-to-exceed amount of $795,804.58.

02/24/2023 - Approved a contract with Marathon Finishing Systems, Inc. to modify an existing maintenance structure at 1301 East Sixth Street to design and install a Hydrogen Fueled Service Bay in support of the Hydrogen Fuel Cell Electric Bus and Infrastructure Deployment project, in an amount not to exceed $268,099.58.

AMENDMENT NO. 2

The Regional Transportation Commission of Washoe County ("RTC") and Marathon Finishing Services ("Contractor") entered into an agreement dated March 2, 2023, as previously amended by Amendment No. 1 dated January 19, 2024 (the "Agreement"). This Amendment No. 2 is dated and effective as of July 1, 2025.

RECITALS

WHEREAS, RTC approached Marathon Finishing Systems, Inc. (Contractor) and requested a Proposal to perform design and installation services in connection with RTC's Hydrogen Fuel Cell Project as outlined in the FY2021 Low or No Emission Bus Grant Program (5339(c)); and

WHEREAS, RTC directed minor additional changes within the Scope of Work (Attachment A) including compensation for permit fees at a cost reimbursable amount without markup; and

WHEREAS, the owner directed changes increase the total not to exceed amount including the permit fees by $21,935.45; and

NOW, THEREFORE, in consideration of the mutual promises of the parties and other good and valuable consideration, the parties do agree as follows:

1. Article 3. The Contract Sum is replaced in its entirety as follows:
    a. Article 3. The Contract Sum. The RTC shall pay Contractor, as full compensation for furnishing all materials and labor and doing all the work in strict accordance with the Scope of Work and to the satisfaction of the RTC, amounts as set forth in Contractor's Scope of Work. The Scope of Work not to exceed amount of $817,740.03 includes all work and materials to perform the basic scope of work as defined in Article 1.

2. Attachment A: Scope of Services Exhibit B (Cost Breakdown) is replaced in its entirety, as attached hereto.

3. All other provisions of the Agreement shall remain in full force and effect.

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SAMPLE

IN WITNESS WHEREOF, the parties hereto have made and executed this amendment.

REGIONAL TRANSPORTATION COMMISSION
OF WASHOE COUNTY

By:_____
Bill Thomas, AICP
Executive Director

MARATHON FINISHING SYSTEMS, INC.

By:_____
Christian Rerucha, President/CEO

SAMPLE

EXHIBIT B to ATTACHMENT A
Scope of Work

COST BREAKDOWN

DESIGN AND INSTALLATION PHASE 1 COSTS

Marathon Finishing Services Design and Installation Phase 1 project scope cost breakdown per task is detailed below.

Item	Description	Total Price
1	Marathon Finishing H2 Hydrogen Service Bus Bay Model: HSB144815-13L	$ 136,300.00
2	Mechanical and electrical installation of the Marathon H2 Service Bay including all supplied components	$ 25,199.58
3	Shipping	$ 5,600.00
4	MEP/Fire Protection Design	$ 30,897.23
5	Permitting Assistance	$ 14,088.22
6	Project Management	$ 6,900.00
7	Commissioning	$ 5,750.00
8	HVAC System Design	$ 33,000.00
9	Concrete Engineering Design	$ 22,000.00
	Design & Installation Phase 1	**$ 279,735.03**

INSTALLATION PHASE 2 SERVICES COST

Marathon Finishing Services Installation Phase 2 Services project scope cost breakdown per task is detailed below.

Item	Description	Total Price
1	General Requirements	$ 53,903.00
2	Overhead Cost	$ 4,536.00
3	Demolition	$ 7,452.00
4	Concrete	$ 105,432.00
5	Rough Carpentry	$ 3,036.00
6	Insulation	$ 79,909.00
7	Roofing	$ 17,595.00
8	Mechanical	$ 91,369.00
9	Electrical	$ 166,773.00
10	Contingency	$ 8,000.00
	Installation Phase 2 Services	**$ 538,005.00**
TOTAL NOT TO EXCEED PROJECT COST:		**$ 817,740.03**

SAMPLE

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.4.4**

To: Regional Transportation Commission

From: James Gee, Director of Public Transportation and Operations

SUBJECT: Interlocal Cooperative Agreement (ICA) with the Nevada Department of Transportation to provide continued funding for the RTC ED Pass Program

RECOMMENDED ACTION

Approve an Interlocal Cooperative Agreement (ICA) with the Nevada Department of Transportation to provide continued funding to the RTC for the ED Pass Program, in the amount of $350,000.

BACKGROUND AND DISCUSSION

The ED Pass program allows all University of Nevada, Reno and Truckee Meadows Community College students, faculty and staff to ride all RTC fixed route services by showing the driver their school ID. Since its inception, ridership at both schools continues to increase monthly year over year. Ridership at UNR through May 2025 totaled 144,942. TMCC ridership through May 2025 totaled 116,161. Approval of this Cooperative Agreement (ICA) with the Nevada Department of Transportation will allow the RTC to continue to receive funding for the ED Pass Program. The current Transportation Act provides funding for all modes of transportation under which the ED Pass Program is eligible for ninety-five percent (95%) federal funds and five percent (5%) RTC funds. This agreement authorizes the state to utilize $350,000 in CMAQ funds to reimburse the RTC for 95% of program related expenses. The remaining 5% of the expenses are paid by the RTC in the amount of $18,421 as the required local sales tax match for these federal funds. The project is included in the current Regional Transportation Improvement Program (RTIP).

FISCAL IMPACT

The reimbursable not to exceed amount is $350,000, and the local sales tax required match is $18,421. Funding for the ED Pass Program is included in the FY2026 Board Approved Budget.

PREVIOUS BOARD ACTION

8/18/2023 - Approved an Interlocal Cooperative Agreement (ICA) with the Nevada Department of Transportation to provide funding to the RTC for implementation of the ED Pass Program.

Docusign Envelope ID: 7D0651A8-AF96-4805-B950-F9EC06F91736

COOPERATIVE AGREEMENT

This Agreement is made and entered into on , by and between the State of Nevada, acting by and through its Department of Transportation, hereinafter called the "DEPARTMENT", and Regional Transportation Commission (RTC) of Washoe County, 1105 Terminal Way, Reno, NV 89502, hereinafter called the "RTC."

WITNESSETH:

WHEREAS, a Cooperative Agreement is defined pursuant to Nevada Revised Statutes (NRS) 277.110 as an agreement between two or more public agencies for the joint exercise of powers, privileges, and authority; and

WHEREAS, pursuant to the provisions contained in Chapter 408 of the Nevada Revised Statutes, the Director of the DEPARTMENT may enter into those agreements necessary to carry out the provisions of the Chapter; and

WHEREAS, NRS 277.110 authorizes any two or more public agencies to enter into agreements for joint or cooperative action; and

WHEREAS, the parties to this Agreement are public agencies and authorized to enter into agreements in accordance with NRS 277.080 to 277.110, inclusive; and

WHEREAS, the purpose of this Agreement is to provide funding to the RTC for the implementation of the ED PASS Grant Program which will provide transit passes to all University of Nevada, Reno (UNR) and Truckee Meadows Community College (TMCC) students, faculty, and staff in Washoe County, (hereinafter called the "PROJECT"); and

WHEREAS, the current Transportation Act provides funding for all modes of transportation under which this PROJECT is eligible for ninety-five percent (95%) federal funds and five percent (5%) matching funds; and

WHEREAS, the PROJECT has been approved for Federal Congestion Mitigation and Air Quality (CMAQ) funds, Catalog of Federal Domestic Assistance (CFDA) Number CFDA 20.205; and

WHEREAS**,** the ED PASS Program to be provided by the RTC shall be of benefit to the DEPARTMENT, the RTC, and to the people of the State of Nevada; and

WHEREAS, the parties hereto are willing and able to perform the services described herein.

NOW, THEREFORE, in consideration of the premises and of the mutual covenants herein contained, it is agreed as follows:

ARTICLE I **-** RTC AGREES

1. To provide the DEPARTMENT with an analysis of student, faculty, and staff commuting needs, Program design and implementation, ongoing Program evaluation and consulting, Bus Pass Subsidy Program newsletters and mass mailings, print/radio/TV promotion, community education programs, student and university target marketing, flex-fare transit programs, and coordinated transportation programs.

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2. To bill the DEPARTMENT upon completion of the PROJECT for actual PROJECT costs not to exceed Three Hundred Sixty-Eight Thousand Four Hundred Twenty-One and No/100 Dollars ($368,421.00). Funding shall consist of ninety-five percent (95%) CMAQ funds for reimbursement of eligible PROJECT costs not to exceed Three Hundred Fifty Thousand and No/100 Dollars ($350,000.00) per year. The RTC shall be responsible for the five percent (5%) match of Eighteen Thousand Four Hundred Twenty-One and No/100 Dollars ($18,421.00) per year. The RTC shall provide supporting documentation to be audited to confirm that work performed conforms to DEPARTMENT and Federal Highway Administration guidelines.

3. During the performance of this Agreement, the RTC, for itself, its assignees, and successors in interest agrees as follows:

a. Compliance with Regulations: The RTC shall comply with all of the regulations relative to nondiscrimination in federally-assisted programs of 49 CFR Part 21 as they may be amended from time to time (hereinafter "Regulations"), which are herein incorporated by reference and made a part of this Agreement.

b. Nondiscrimination: The RTC, with regard to the professional services performed by it during the Agreement, shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity or expression, age, disability or national origin in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The RTC shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices, when this Agreement covers a program set forth in Appendix B of the Regulations.

c. Solicitations for Subcontracts, Including Procurement of Materials, and Equipment: In all solicitations either by competitive bidding or negotiation made by the RTC for professional services to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the RTC of the subcontractor's obligations under this Agreement and the Regulations relative to nondiscrimination on the grounds of race, color, religion, sex, sexual orientation, gender identity or expression, age, disability or national origin.

d. Information and Reports: The RTC shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its facilities as may be determined by the DEPARTMENT or the Federal Highway Administration (FHWA) to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of the RTC is in the exclusive possession of another who fails or refuses to furnish this information, the RTC shall so certify to the DEPARTMENT, or the FHWA as appropriate, and shall set forth what efforts it has made to obtain the information.

e. Sanctions for Noncompliance: In the event of the RTC noncompliance with the nondiscrimination provisions of this Agreement, the DEPARTMENT shall impose such Agreement sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:

1. Withholding of payments to the RTC under this Agreement until the RTC complies, and/or

2. Cancellation, termination or suspension of this Agreement, in whole or in part.

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f. Agreements with subcontractors shall include provisions making all subcontractor records available for audit by the DEPARTMENT and/or the FHWA.

g. Incorporation of Provisions: The RTC shall include the provisions of Paragraphs (a) through (f) above in every subcontract, including procurement of materials and leases of equipment, unless exempt by Regulations, order, or instructions issued pursuant thereto. The RTC shall take such action with respect to any subcontract or procurement as the DEPARTMENT or the FHWA may direct as a means of enforcing such provisions, including sanctions for non-compliance. In the event the RTC becomes involved in, or is threatened with, litigation by a subcontractor or supplier as a result of such direction, the RTC may request the DEPARTMENT to enter into such litigation to protect the interests of the DEPARTMENT, and the RTC may request the United States to enter into such litigation to protect the interests of the United States.

ARTICLE II - DEPARTMENT AGREES

1. To fund ninety-five percent (95%) of the PROJECT with CMAQ funds, estimated to be and not to exceed Three Hundred Fifty Thousand and No/100 Dollars ($350,000.00) per year.

2. To establish and maintain a budget for the ED Pass Program PROJECT. This budget shall be maintained by the DEPARTMENT's Multimodal and Program Development (MPD) Division**,** and all invoices shall be submitted to the MPD Division for approval and reimbursement.

In Process

ARTICLE III - IT IS MUTUALLY AGREED

1. The term of this Agreement shall be from the date first written above through and including September 30, 2026.

2. This Agreement shall not become effective until and unless approved by appropriate official action of the governing body of each party.

3. In the event that the RTC performs or causes to be performed any work after: (a) the Agreement's expiration date as set forth within this Agreement, as it may be amended from time to time through written amendment signed by the parties hereto and approved by appropriate official action of the DEPARTMENT's governing body, prior to such expiration date; or (b) termination of this Agreement prior to the expiration date set forth within this Agreement; then the DEPARTMENT shall make no payment for work performed following the expiration or termination dates, and the **RTC** shall forfeit any and all right to payment for such work.

4. The RTC on behalf of itself, its spouses, heirs, executors, administrators, successors, subrogees, servants, insurers, attorneys, independent representatives, personal representatives, agents, and assigns, does hereby waive, release, and forever discharge the State of Nevada, the DEPARTMENT, and each and every of their departments, divisions, agencies, officers, directors, agents, contractors, and employees, from any and all claims, demands, liens, liability, actions, causes of action, and suits for damages, at law and in equity , in any way connected with or arising from the RTC's provision of services and work performed following termination of this Agreement and/or following the expiration date of this Agreement, as it may be amended from time to time through written amendment signed by the parties hereto and approved by appropriate official action of the DEPARTMENT's governing body, prior to such expiration date.

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5. Neither the State of Nevada, the DEPARTMENT, nor any of their departments, divisions, agencies, officers, directors, agents, contractors, and employees, shall have authority to extend this Agreement beyond the expiration date set forth within this Agreement, unless such extension is set forth within a written amendment signed by the parties hereto and approved by appropriate official action of the DEPARTMENT's governing body prior to such expiration date. The RTC shall not rely upon any oral or written representations expressed extrinsic to a written amendment signed by the parties hereto and approved by appropriate official action of the DEPARTMENT's governing body prior to such expiration date, purporting to alter or amend this Agreement, including, but not limited to, representations relating to the extension of the Agreement's expiration date.

6. Paragraphs 1 through 6 of this Article III - It is Mutually Agreed, shall survive the termination and expiration of this Agreement.

7. This Agreement may be terminated by either party prior to the date set forth above, provided that a termination shall not be effective until thirty (30) calendar days after a party has served written notice upon the other party. This Agreement may be terminated by mutual consent of both parties or unilaterally by either party without cause. The parties expressly agree that this Agreement shall be terminated immediately if for any reason Federal and/or State Legislature funding ability to satisfy this Agreement is withdrawn, limited, or impaired.

8. All notices or other communications required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been duly given if delivered personally in hand, by telephonic facsimile or electronic mail with simultaneous regular mail, or mailed certified mail, return receipt requested, postage prepaid on the date posted, and addressed to the other party at the address set forth below:

FOR DEPARTMENT:

Tracy Larkin Thomason, P.E., Director
Attn.: Sondra Rosenberg, Assistant Director, Planning
Nevada Department of Transportation
Division: Multimodal and Program Development
1263 South Stewart Street
Carson City, NV 89712
Phone: (775) 888-7440
Fax: (775) 888-7202
Email: srosenberg@dot.nv.gov

FOR RTC:

Alexis Hill, Executive Director
Regional Transportation Commission (RTC) of Washoe County
1105 Terminal Way
Reno, NV 89502
Phone: (775) 328-2003
Fax: (775) 348-3240
Email: ahill@washoecounty.gov

9. The RTC's match shall be calculated as the applicable percentage of the total PROJECT costs eligible for federal funding, plus all costs not eligible for federal funding.

10. Should this Agreement be terminated by the RTC prior to completion of the PROJECT, the RTC shall reimburse the DEPARTMENT for all improvement costs incurred up to the point of Agreement termination and all costs incurred by the DEPARTMENT because of this Agreement's termination.

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11. The RTC agrees to pay actual PROJECT costs whether they be greater than or less than the estimates shown herein.

12. The RTC shall ensure that any reports, materials, studies, photographs, negatives, drawings or other documents prepared in the performance obligations under this Agreement shall be the exclusive, joint property of the RTC and the DEPARTMENT. The RTC shall ensure any subconsultant shall not use, willingly allow or cause to have such documents used for any purpose other than performance of obligations under this Agreement without the written consent of both the RTC and the DEPARTMENT. The RTC shall not utilize (and shall ensure any subconsultant shall not utilize) any materials, information, or data obtained as a result of performance of this Agreement in any commercial or academic publication or presentation without the express written permission of the DEPARTMENT. The RTC (and any subconsultant) shall not reference an opinion of an employee or agent of the DEPARTMENT obtained as a result of performance of this Agreement in any publication or presentation without the written permission of the employee or agent to whom the opinion is attributed, in addition to the written permission of the DEPARTMENT.

13. Neither party shall be deemed to be in violation of this Agreement if it is prevented from performing any of its obligations hereunder due to strikes, failure of public transportation, civil or military authority, act of public enemy, accidents, fires, explosions, or acts of God, including, without limitations, earthquakes, floods, winds or storms. In such an event, the intervening cause must not be through the fault of the party asserting such an excuse, and the excused party is obligated to promptly perform in accordance with the terms of the Agreement after the intervening cause ceases.

In Process

14. To the fullest extent of NRS Chapter 41 liability limitations, each party shall indemnify, hold harmless, and defend, not excluding the other's right to participate, the other from and against all liability, claims, actions, damages, losses, and expenses, including, but not limited to, reasonable attorneys' fees and costs, caused by the negligence, errors, omissions, recklessness, or intentional misconduct of its own officers, employees, and agents. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described herein. This indemnification obligation is conditioned upon the performance of the duty of the party seeking indemnification (indemnified party) to serve the other party (indemnifying party) with written notice of an actual or pending claim, within thirty (30) calendar days of the indemnified party's notice of such actual or pending claim or cause of action. The indemnifying party shall not be liable for reimbursement of any attorney's fees and costs incurred by the indemnified party due to said party exercising its right to participate with legal counsel.

15. The parties do not waive and intend to assert available NRS Chapter 41 liability limitations in all cases. Agreement liability of both parties shall not be subject to punitive damages. Actual damages for any DEPARTMENT breach shall never exceed the amount of funds which have been appropriated for payment under this Agreement, but not yet paid, for the fiscal year budget in existence at the time of the breach.

16. Failure to declare a breach or the actual waiver of any particular breach of this Agreement or any of its material or nonmaterial terms by either party shall not operate as a waiver by such party of any of its rights or remedies as to any other breach, including a breach of the same term.

17. An alteration ordered by the DEPARTMENT, which substantially changes the services provided for by the expressed intent of this Agreement shall be considered extra work and shall be specified in a written amendment which shall set forth the nature and scope thereof. The method of payment for extra work shall be specified at the time the amendment is written.

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18. This Agreement and the rights and obligations of the parties hereto shall be governed by, and construed according to, the laws of the State of Nevada. The parties consent to the exclusive jurisdiction of the Nevada state district courts for enforcement of this Agreement.

19. The illegality or invalidity of any provision or portion of this Agreement shall not affect the validity of the remainder of the Agreement, and this Agreement shall be construed as if such provision did not exist. The unenforceability of such provision shall not be held to render any other provision or provisions of this Agreement unenforceable.

20. Except as otherwise expressly provided within this Agreement, all or any property presently owned by either party shall remain in such ownership upon termination of this Agreement, and there shall be no transfer of property between the parties during the course of this Agreement.

21. It is specifically agreed between the parties executing this Agreement that it is not intended by any of the provisions of any part of this Agreement to create in the public or any member thereof a third party beneficiary status hereunder or to authorize anyone not a party to this Agreement to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of this Agreement.

22. Each party agrees to keep and maintain under generally accepted accounting principles full, true, and complete records and documents pertaining to this Agreement and present, at any reasonable time, such information for inspection, examination, review, audit, and copying at any office where such records and documentation are maintained. Such records and documentation shall be maintained for three (3) years after final payment is made.

23. The parties are associated with each other only for the purposes and to the extent set forth in this Agreement. Each party is, and shall be, a public agency separate and distinct from the other party and shall have the right to supervise, manage, operate, control, and direct performance of the details incident to its duties under this Agreement. Nothing contained in this Agreement shall be deemed or construed to create a partnership or joint venture, to create relationships of an employer-employee or principal-agent, or to otherwise create any liability for one agency whatsoever with respect to the indebtedness, liabilities, and obligations of the other agency or any other party.

24. Neither party shall assign, transfer or delegate any rights, obligations, or duties under this Agreement without the prior written consent of the other party.

25. The parties hereto represent and warrant that the person executing this Agreement on behalf of each party has full power and authority to enter into this Agreement and that the parties are authorized by law to engage in the cooperative action set forth herein.

26. Pursuant to NRS 239 information or documents may be open to public inspection and copying. The parties shall have the duty to disclose unless a particular record is confidential by law or a common law balancing of interests.

27. Each party shall keep confidential all information, in whatever form, produced, prepared, observed, or received by that party to the extent that such information is confidential by law or otherwise required to be kept confidential by this Agreement.

28. This Agreement shall not become effective until and unless approved by appropriate official action of the governing body of each party.

Docusign Envelope ID: 7D0651A8-AF96-4805-B950-F9EC06F91736

29. This Agreement constitutes the entire agreement of the parties and such is intended as a complete and exclusive statement of the promises, representations, negotiations, discussions, and other agreements that may have been made in connection with the subject matter hereof. Unless an integrated attachment to this Agreement specifically displays a mutual intent to amend a particular part of this Agreement, general conflicts in language between any such attachment and this Agreement shall be construed consistent with the terms of this Agreement. Unless otherwise expressly authorized by the terms of this Agreement, no modification or amendment to this Agreement shall be binding upon the parties unless the same is in writing and signed by the respective parties hereto and approved by the Attorney General.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year first above written.

Regoinal Transportation Commission
RTC of Washoe County

Alexis Hill
Name and Title (Print)

State of Nevada, acting by and through its
DEPARTMENT OF TRANSPORTATION

Director

Approved as to Legality and Form:

Signed by:
Brian W. Goldman
DB4634727E97417...
Deputy Attorney General

In Process

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.4.5**

To: Regional Transportation Commission

From: James Gee, Director of Public Transportation and Operations

SUBJECT: Architectural and Engineering Services for Relocation of RTC's Villanova Maintenance Facility

RECOMMENDED ACTION

Approve a contract with CDM Smith, Inc., for architectural and engineering services to complete a feasibility study and the environmental process for relocation of RTC's fixed route maintenance and operations facility on Villanova Drive, in an amount not-to-exceed $1,091,365.19.

BACKGROUND AND DISCUSSION

The Nevada Department of Transportation (NDOT), in preparation for continued population growth of the region, is improving portions along Interstate 80, Interstate 580, and U.S. 395, with particular attention to the I-80/I-580 Interchange, also known as the Spaghetti Bowl. RTC's current fixed route maintenance and operations facility located at 2050 Villanova Drive is directly beneath Interstate 580. Phase Four of NDOT's Spaghetti Bowl Project could remove the maintenance and operations facility from under the freeway as early as 2035. This facility, known as the Jerry L. Hall Maintenance and Operations facility, was originally constructed in 1983 and sits on an approximately 7 acre parcel of land. RTC leases the property from NDOT under a 99-year lease agreement. Under the terms of the lease, NDOT is responsible for reimbursing the RTC for the market value of improvements made at the site if NDOT were to terminate the lease to widen the freeway. To date, RTC has made approximately $25 million dollars of improvements.

RTC is preparing for the possibility that it may need to relocate its fixed route maintenance and operations facility and bus maintenance facility replacement is one of our current 2025 Federal Priorities. In March 2023, with support from Nevada Senators Rosen and Cortez Masto, the United States Congress appropriated $3 million in Community Project Funding (CFP) to the RTC for this project. In response to that award, the RTC issued a Request for Proposal (RFP) in September of 2024 to perform all design work for an operations and maintenance facility, to perform all tasks necessary to obtain all environmental clearances required for the project including compliance with FTA and National Environmental Policy Act (NEPA) regulations, and to develop a bid package to be used to advertise for construction bidding.

Proposals were received by the RTC from five qualified firms. Staff is recommending an award to CDM Smith, Inc.

FISCAL IMPACT

Federal funding (80%) and Local Sales Tax match (20%) appropriations for this project are included in the FY26 capital budget for this action.

PREVIOUS BOARD ACTION

12/20/2024 - Approved the RTC federal priorities.

AGREEMENT
FOR
PROFESSIONAL SERVICES

This agreement (this "Agreement") is dated and effective as of August 1, 2025, by and between the Regional Transportation Commission of Washoe County ("RTC") and CDM Smith, Inc. ("CONSULTANT").

WITNESSETH:

WHEREAS, RTC issued a Request for Proposals for interested persons and firms to perform Architectural and Engineering Work for a Public Transit Operations and Maintenance Facility in connection with RTC 23-09; and

WHEREAS, CONSULTANT submitted a proposal (the "Proposal") and was selected to perform the work.

NOW, THEREFORE, RTC and CONSULTANT, in consideration of the mutual covenants and other consideration set forth herein, do hereby agree as follows:

SAMPLE

ARTICLE 1 – TERM AND ENGAGEMENT

1.1. The term of this Agreement shall be from the date first written above through July 31, 2026, unless terminated at an earlier date, or extended to a later date, pursuant to the provisions herein.

1.2. CONSULTANT will perform the work using the project team identified in Exhibit A – Scope Proposal. Any changes to the project team must be approved by RTC's Project Manager.

1.3. CONSULTANT will promptly, diligently and faithfully execute the work to completion in accordance with applicable professional standards subject to any delays due to strikes, acts of God, act of any government, civil disturbances, or any other cause beyond the reasonable control of CONSULTANT.

1.4. CONSULTANT shall not proceed with work until both parties have executed this Agreement and a purchase order has been issued to CONSULTANT. If CONSULTANT violates that prohibition, CONSULTANT forfeits any and all right to reimbursement and payment for that work and waives any and all claims against RTC, its employees, agents, and affiliates, including but not limited to monetary damages, and any other remedy available at law or in equity arising under the terms of this Agreement. Furthermore, prior to execution and issuance of a purchase order, CONSULTANT shall not rely on the terms of this Agreement in any way, including but not limited to any written or oral representations, assurances or warranties made by RTC or any of its agents, employees or affiliates, or on any dates of performance, deadlines, indemnities, or any term contained in this Agreement or otherwise.

ARTICLE 2 - SERVICES OF CONSULTANT

2.1. SCOPE OF SERVICES

The scope of services consists of the tasks set forth in Exhibit A.

2.2. SCHEDULE OF SERVICES

Tasks and subtasks shall be completed in accordance with the schedule in Exhibit A. Any change(s) to the schedule must be approved by RTC's Project Manager.

2.3. CONTINGENCY

Contingency line items identified in the scope of services are for miscellaneous increases within the scope of work. Prior to the use of any contingency amounts, CONSULTANT shall provide a letter to RTC's Project Manager detailing the need, scope, and not-to-exceed budget for the proposed work. Work to be paid for out of contingency shall proceed only with the RTC Project Manager's written approval.

2.4. OPTIONS

RTC shall have the right to exercise its option(s) for all or any part of the optional tasks or subtasks identified in Exhibit A. CONSULTANT will prepare and submit a detailed scope of services reflecting the specific optional services requested, a schedule for such services, and a cost proposal. RTC will review and approve the scope of services and RTC and CONSULTANT will discuss and agree upon compensation and a schedule. CONSULTANT shall undertake no work on any optional task without written notice to proceed with the performance of said task. RTC, at its sole option and discretion, may select another individual or firm to perform the optional tasks or subtasks identified in Exhibit A.

2.5. ADDITIONAL SERVICES

CONSULTANT will provide additional services when agreed to in writing by RTC and CONSULTANT.

2.6. PERFORMANCE REQUIREMENTS

Any and all design and engineering work furnished by CONSULTANT shall be performed by or under the supervision of persons licensed to practice architecture, engineering, or surveying (as applicable) in the State of Nevada, by personnel who are careful, skilled, experienced and competent in their respective trades or professions, who are professionally qualified to perform the work, and who shall assume professional responsibility for the accuracy and completeness of documents prepared or checked by them, in accordance with appropriate prevailing professional standards. Notwithstanding the provision of any

SAMPLE

drawings, technical specifications, or other data by RTC, CONSULTANT shall have the responsibility of supplying all items and details required for the deliverables required hereunder.

Any sampling and materials testing shall be performed by an approved testing laboratory accredited by AASHTO or other ASTM recognized accrediting organization in the applicable test methods. If any geotechnical or materials testing is performed by a sub-consultant, that laboratory shall maintain the required certification. Proof of certification shall be provided to RTC with this Agreement. If certification expires or is removed during the term of this Agreement, CONSULTANT shall notify RTC immediately, and propose a remedy. If an acceptable remedy cannot be agreed upon by both parties, RTC may terminate this Agreement for default.

CONSULTANT shall provide only Nevada Alliance for Quality Transportation Construction (NAQTC) qualified personnel to perform field and laboratory sampling and testing during the term of this Agreement. All test reports shall be signed by a licensed NAQTC tester and notated with his/her license number.

2.7. ERRORS AND OMISSIONS

CONSULTANT shall, without additional compensation, correct or revise any deficiencies, errors, or omissions caused by CONSULTANT in its analysis, reports, and services. CONSULTANT also agrees that if any error or omission is found, CONSULTANT will expeditiously make the necessary correction, at no expense to RTC. If an error or omission was directly caused by RTC, and not by CONSULTANT and RTC requires that such error or omission be corrected, CONSULTANT may be compensated for such additional work.

ARTICLE 3 - COMPENSATION

3.1. CONSULTANT shall be paid for hours worked at the hourly rates and rates for testing in Exhibit B. RTC shall not be responsible for any other costs or expenses except as provided in Exhibit B.

3.2. The maximum amount payable to CONSULTANT to complete each task is equal to the not-to-exceed amounts identified in Exhibit B. CONSULTANT can request in writing that RTC's Project Manager reallocate not-to-exceed amounts between tasks. A request to reallocate not-to-exceed amounts must be accompanied with a revised fee schedule, and must be approved in writing by RTC's Project Manager prior to performance of the work. In no case shall CONSULTANT be compensated in excess of the following not-to exceed amounts:

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Design Services	$1,091,365.19
Optional Design Services	$0.00
Design Contingency	$0.00
Engineering During Construction Services	$0.00
Optional Engineering During Construction Services	$0.00
Engineering During Construction Services Contingency	$0.00
Total Not-to-Exceed Amount	$1,091,365.19

3.3. For any work authorized under Section 2.5, "Additional Services," RTC and CONSULTANT will negotiate not-to-exceed amounts based on the standard hourly rates and rates for testing in Exhibit B. Any work authorized under Section 2.5, "Additional Services," when performed by persons who are not employees or individuals employed by affiliates of CONSULTANT, will be billed at a mutually agreed upon rate for such services, but not more than 105% of the amounts billed to CONSULTANT for such services.

3.4. CONSULTANT shall receive compensation for preparing for and/or appearing in any litigation at the request of RTC, except: (1) if such litigation costs are incurred by CONSULTANT in defending its work or services or those of any of its sub-consultants; or (2) as may be required by CONSULTANT's indemnification obligations. Compensation for litigation services requested by RTC shall be paid at a mutually agreed upon rate and/or at a reasonable rate for such services.

ARTICLE 4 - INVOICING

4.1. CONSULTANT shall submit monthly invoices in the format specified by RTC. Invoices must be submitted to accountspayable@rtcwashoe.com. RTC's payment terms are 30 days after the receipt of the invoice. Simple interest will be paid at the rate of half a percent (0.5%) per month on all invoices approved by RTC that are not paid within thirty (30) days of receipt of the invoice.

4.2. RTC shall notify CONSULTANT of any disagreement with any submitted invoice for consulting services within thirty (30) days of receipt of an invoice. Any amounts not in dispute shall be promptly paid by RTC.

4.3. CONSULTANT shall maintain complete records supporting every request for payment that may become due. Upon request, CONSULTANT shall produce all or a portion of its records and RTC shall have the right to inspect and copy such records.

ARTICLE 5 - ACCESS TO INFORMATION AND PROPERTY

5.1. Upon request and without cost to CONSULTANT, RTC will provide all pertinent information that is reasonably available to RTC including surveys, reports and any other data relative to design and construction.

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5.2. RTC will provide access to and make all provisions for CONSULTANT to enter upon RTC facilities and public lands, as required for CONSULTANT to perform its work under this Agreement.

ARTICLE 6 - OWNERSHIP OF WORK

6.1. Plans, reports, studies, tracings, maps, software, electronic files, licenses, programs, equipment manuals, and databases and other documents or instruments of service prepared or obtained by CONSULTANT in the course of performing work under this Agreement, shall be delivered to and become the property of RTC. Software already developed and purchased by CONSULTANT prior to the Agreement is excluded from this requirement. CONSULTANT and its sub-consultants shall convey and transfer all copyrightable interests, trademarks, licenses, and other intellectual property rights in such materials to RTC upon completion of all services under this Agreement and upon payment in full of all compensation due to CONSULTANT in accordance with the terms of this Agreement. Basic survey notes, sketches, charts, computations and similar data prepared or obtained by CONSULTANT under this Agreement shall, upon request, also be provided to RTC.

6.2. CONSULTANT represents that it has secured all necessary licenses, consents, or approvals to use the components of any intellectual property, including computer software, used in providing services under this Agreement, that it has full legal title to and the right to reproduce such materials, and that it has the right to convey such title and other necessary rights and interests to RTC.

6.3. CONSULTANT shall bear all costs arising from the use of patented, copyrighted, trade secret, or trademarked materials, equipment, devices, or processes used on or incorporated in the services and materials produced under this Agreement.

6.4. CONSULTANT agrees that all reports, communications, electronic files, databases, documents, and information that it obtains or prepares in connection with performing this Agreement shall be treated as confidential material and shall not be released or published without the prior written consent of RTC; provided, however, that CONSULTANT may refer to this scope of work in connection with its promotional literature in a professional and commercially reasonable manner. The provisions of this subsection shall not apply to information in whatever form that comes into the public domain. The provisions of this paragraph also shall not restrict CONSULTANT from giving notices required by law or complying with an order to provide information or data when such order is issued by a court, administrative agency, or other entity with proper jurisdiction, or if it is reasonably necessary for CONSULTANT to defend itself from any suit or claim.

ARTICLE 7 - TERMINATION

7.1. CONTRACT TERMINATION FOR DEFAULT

If CONSULTANT fails to perform services in the manner called for in this Agreement or if CONSULTANT fails to comply with any other provisions of this Agreement, RTC may

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terminate this Agreement for default. Termination shall be effected by serving a notice of termination on CONSULTANT setting forth the manner in which CONSULTANT is in default. CONSULTANT will only be paid the contract price for services delivered and accepted, or services performed in accordance with the manner of performance set forth in this Agreement.

If it is later determined by RTC that CONSULTANT had an excusable reason for not performing, such as a fire, flood, or events which are not the fault of or are beyond the control of CONSULTANT, RTC, after setting up a new performance schedule, may allow CONSULTANT to continue work, or treat the termination as a termination for convenience.

7.2. CONTRACT TERMINATION FOR CONVENIENCE

RTC may terminate this Agreement, in whole or in part, at any time by written notice to CONSULTANT when it is in RTC's best interest. CONSULTANT shall be paid its costs, including contract closeout costs, and profit on work performed up to the time of termination. CONSULTANT shall promptly submit its termination claim to RTC to be paid CONSULTANT. If CONSULTANT has any property in its possession belonging to RTC, CONSULTANT will account for the same, and dispose of it in the manner RTC directs.

ARTICLE 8 - INSURANCE

8.1. CONSULTANT shall not commence any work or permit any employee/agent to commence any work until satisfactory proof has been submitted to RTC that all insurance requirements have been met.

8.2. In conjunction with the performance of the services/work required by the terms of this Agreement, CONSULTANT shall obtain all types and amounts of insurance set forth in Exhibit C, and shall comply with all provisions set forth therein.

ARTICLE 9 - HOLD HARMLESS

9.1. CONSULTANT's obligation under this provision is as set forth in Exhibit C. Said obligation would also extend to any liability of RTC resulting from any action to clear any lien and/or to recover for damage to RTC property.

ARTICLE 10 - RESOLUTION OF CLAIMS AND DISPUTES

10.1. NEGOTIATED RESOLUTION

In the event that any dispute or claim arises under this Agreement, the parties shall timely cooperate and negotiate in good faith to resolve any such dispute or claim. Such cooperation shall include providing the other party with all information in order to properly

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evaluate the dispute or claim and making available the necessary personnel to discuss and make decisions relative to the dispute or claim.

10.2. MEDIATION

If the parties have been unable to reach an informal negotiated resolution to the dispute or claim within thirty (30) days following submission in writing of the dispute or claim to the other party, or such longer period of time as the parties may agree to in writing, either party may then request, in writing, that the dispute or claim be submitted to mediation (the "Mediation Notice"). After the other party's receipt or deemed receipt of the Mediation Notice, the parties shall endeavor to agree upon a mutually acceptable mediator, but if the parties have been unable to agree upon a mediator within ten (10) days following receipt of the Mediation Notice, then each party shall select a mediator and those two selected mediators shall select the mediator. A mediator selected by the parties' designated mediators shall meet the qualification set forth in as provided in Rule 4 of Part C., "Nevada Mediation Rules" of the "Rules Governing Alternative Dispute Resolutions adopted by the Nevada Supreme Court." Unless otherwise agreed to by the parties, in writing, the mediator shall have complete discretion over the conduct of the mediation proceeding. Unless otherwise agreed to by the parties, in writing, the mediation proceeding must take place within thirty (30) days following appointment of the mediator. The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in Washoe County, Nevada, unless otherwise agreed to by the parties, in writing. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

10.3. LITIGATION

In the event that the parties are unable to settle and/or resolve the dispute or claim as provided above, then either party may proceed with litigation in the Second Judicial District Court of the State of Nevada, County of Washoe.

10.4. CONTINUING CONTRACT PERFORMANCE

During the pendency of any dispute or claim the parties shall proceed diligently with performance of this Agreement and such dispute or claim shall not constitute an excuse or defense for a party's nonperformance or delay.

ARTICLE 11 – PROJECT MANAGERS

11.1. RTC's Project Manager is Ian Chamberlain or such other person as is later designated in writing by RTC. RTC's Project Manager has authority to act as RTC's representative with respect to the performance of this Agreement.

11.2. CONSULTANT' Project Manager is Brian Stewart, PE or such other person as is later designated in writing by CONSULTANT. CONSULTANT's Project Manager has

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authority to act as CONSULTANT's representative with respect to the performance of this Agreement.

ARTICLE 12 - NOTICE

12.1. Notices required under this Agreement shall be given as follows:

RTC:
Bill Thomas, AICP
Executive Director
Ian Chamberlain
RTC Project Manager
Regional Transportation Commission
1105 Terminal Way
Reno, Nevada 89502
Email: ichamberlain@rtcwashoe.com
(775)335-0023

CONSULTANT:
Brian Stewart, PE
Project Manager
CDM Smith, Inc.
98555 Double R Blvd. Suite 100
Reno, Nevada 89521
Email: stewartba@cdmsmith.com
(775)315-4943 (cell)

ARTICLE 13 - DELAYS IN PERFORMANCE

13.1. TIME IS OF THE ESSENCE

It is understood and agreed that all times stated and referred to herein are of the essence. The period for performance may be extended by RTC's Executive Director pursuant to the process specified herein. No extension of time shall be valid unless reduced to writing and signed by RTC's Executive Director.

13.2. UNAVOIDABLE DELAYS

If the timely completion of the services under this Agreement should be unavoidably delayed, RTC may extend the time for completion of this Agreement for not less than the number of days CONSULTANT was excusably delayed. A delay is unavoidable only if the delay is not reasonably expected to occur in connection with or during CONSULTANT's performance, is not caused directly or substantially by acts, omissions, negligence or mistakes of CONSULTANT, is substantial and in fact causes CONSULTANT to miss specified completion dates, and cannot adequately be guarded against by contractual or legal means.

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13.3. NOTIFICATION OF DELAYS

CONSULTANT shall notify RTC as soon as CONSULTANT has knowledge that an event has occurred or otherwise becomes aware that CONSULTANT will be delayed in the completion of the work. Within ten (10) working days thereafter, CONSULTANT shall provide such notice to RTC, in writing, furnishing as much detail on the delay as possible and requesting an extension of time.

13.4. REQUEST FOR EXTENSION

Any request by CONSULTANT for an extension of time to complete the work under this Agreement shall be made in writing to RTC. CONSULTANT shall supply to RTC documentation to substantiate and justify the additional time needed to complete the work and shall provide a revised schedule. RTC shall provide CONSULTANT with notice of its decision within a reasonable time after receipt of a request.

ARTICLE 14 - GENERAL PROVISIONS

14.1. SUCCESSORS AND ASSIGNS

RTC and CONSULTANT bind themselves and their successors and assigns to the other party and to the successors and assigns of such party, with respect to the performance of all covenants of this Agreement. Except as set forth herein, neither RTC nor CONSULTANT shall assign or transfer interest in this Agreement without the written consent of the other. Nothing herein shall be construed as creating a personal liability on the part of any officer or agent or any public body which may be a party hereto, nor shall it be construed as giving any rights or benefits hereunder to anyone other than RTC and CONSULTANT.

14.2. NON TRANSFERABILITY

This Agreement is for CONSULTANT's professional services, and CONSULTANT's rights and obligations hereunder may not be assigned without the prior written consent of RTC.

14.3. SEVERABILITY

If any part, term, article, or provision of this Agreement is, by a court of competent jurisdiction, held to be illegal, void, or unenforceable, or to be in conflict with any law of the State of Nevada, the validity of the remaining provisions or portions of this Agreement are not affected, and the rights and obligations of the parties shall be construed and enforced as if this Agreement did not contain the particular part, term, or provision held invalid.

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14.4. RELATIONSHIP OF PARTIES

CONSULTANT is an independent contractor to RTC under this Agreement. Accordingly, CONSULTANT is not entitled to participate in any retirement, deferred compensation, health insurance plans or other benefits RTC provides to its employees. CONSULTANT shall be free to contract to provide similar services for others while it is under contract to RTC, so long as said services and advocacy are not in direct conflict, as determined by RTC, with services being provided by CONSULTANT to RTC.

14.5. WAIVER/BREACH

Any waiver or breach of a provision in this Agreement shall not be deemed a waiver of any other provision in this Agreement and no waiver is valid unless in writing and executed by the waiving party. An extension of the time for performance of any obligation or act shall not be deemed an extension of time for the performance of any other obligation or act. This Agreement inures to the benefit of and is binding upon the parties to this Agreement and their respective heirs, successors and assigns.

14.6. REGULATORY COMPLIANCE

A. CONSULTANT shall comply with all applicable federal, state and local government laws, regulations and ordinances. CONSULTANT shall be responsible for obtaining all necessary permits and licenses for performance of services under this Agreement. Upon request of RTC, CONSULTANT shall furnish RTC certificates of compliance with all such laws, orders and regulations.

B. CONSULTANT represents and warrants that none of the services to be rendered pursuant to this Agreement constitute the performance of public work, as that term is defined by Section 338.010(17) of the Nevada Revised Statutes. To the extent CONSULTANT does engage in such public work, CONSULTANT shall be responsible for paying the prevailing wage as required by Chapter 338 of the Nevada Revised Statutes.

14.7. EXCLUSIVE AGREEMENT

There are no verbal agreements, representations or understandings affecting this Agreement, and all negotiations, representations and undertakings are set forth herein with the understanding that this Agreement constitutes the entire understanding by and between the parties.

14.8. AMENDMENTS

No alteration, amendment or modification of this Agreement shall be effective unless it is in writing and signed by both parties.

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14.9. CONTINUING OBLIGATION

CONSULTANT agrees that if, because of death or any other occurrence it becomes impossible for any principal or employee of CONSULTANT to render the services required under this Agreement, neither CONSULTANT nor the surviving principals shall be relieved of any obligation to render complete performance. However, in such event, RTC may terminate this Agreement if it considers the death or incapacity of such principal or employee to be a loss of such magnitude as to affect CONSULTANT's ability to satisfactorily complete the performance of this Agreement.

14.10. APPLICABLE LAW AND VENUE

The provisions of this Agreement shall be governed and construed in accordance with the laws of the State of Nevada. The exclusive venue and court for all lawsuits concerning this Agreement shall be the Second Judicial District Court of the State of Nevada, County of Washoe, and the parties hereto submit to the jurisdiction of that District Court.

14.11. ATTORNEYS' FEES

In the event of a dispute between the parties result in a proceeding in any Court of Nevada having jurisdiction, the prevailing party shall be entitled to an award of costs and any reasonable attorneys' fees.

14.12. CERTIFICATION REQUIRED BY NEVADA SENATE BILL 27 (2017)

CONSULTANT expressly certifies and agrees, as a material part of this Agreement, that it is not currently engaged in a boycott of Israel. CONSULTANT further agrees, as a material part of this Agreement, it will not engage in a boycott of Israel for the duration of this Agreement. If, at any time during the formation or duration of this Agreement, CONSULTANT is engaged or engages in a boycott of Israel, it will constitute a material breach of this Agreement.

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ARTICLE 15 - FEDERAL FORMS AND CLAUSES

15.1. CONSULTANT has completed and signed the following: (1) Affidavit of Non-Collusion; (2) Certification Required by 31 U.S.C. § 1352, Restrictions on Lobbying Using Federal Appropriated Funds, and "Instructions for Completion of SF-LLL, Disclosure of Lobbying Activities; (3) Certification Regarding Suspension and Debarment; (5) Organizational Conflict of Interest Certification; and (6) Tax Liability Certification. CONSULTANT affirms that such certifications remain valid and shall immediately notify RTC if circumstances change that affect the validity of these certifications.

15.2. This Agreement is funded in whole or in part with money administered by the Federal Transit Administration. As a condition for receiving payment under this Agreement, CONSULTANT agrees to comply with the federally required clauses set forth in Exhibit D.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement the day and year first above written.

REGIONAL TRANSPORTATION COMMISSION
OF WASHOE COUNTY

By: _____
Bill Thomas, AICP, Executive Director

CDM SMITH, INC.

By: _____
David Jensen, Senior Vice President
CDM Smith, Inc.

SAMPLE

Exhibit A

Scope of Services

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9855 Double R Blvd.
Suite 100
Reno, Nevada 89521

RTC Washoe – Public Transit Operations and Maintenance Facility
Scope Proposal
STAGE 1- FEASIBILITY
July 2, 2025

Scope of Work

The following scope describes the work to be performed for the feasibility stage of the contract. Optional work will be defined after the feasibility study and the NEPA documents for the selected site are completed, and a fee will be negotiated for those future stages at a time when a final scope of work can be developed. Optional tasks in this Scope Proposal are listed in the general sense only, and no fee is included.

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General Assumptions

CONSULTANT will gain direction from RTC Project Manager for specific items of work. While the scope is developed with careful consideration, the unpredictable nature of site selection necessitates some flexibility. Adjustments to the scope and fees may be required as more details emerge during evaluations. Each site's location is unique and may demand varying levels of effort.

CONSULTANT will obtain all operations and background information regarding maintenance requirements from the RTC. This includes future growth projections and plans as defined in various regional planning documents.

CONSULTANT will obtain a list of internal stakeholders to be involved in the evaluation and data collection needs with RTC assistance. External and internal stakeholders will be identified for the Public Outreach and Site Selection efforts in collaboration with RTC.

CONSULTANT understands the urgency of the project schedule and is aggressively moving to deliver on time. Currently, the schedule is estimated at 12 months, with early work being completed in 9 months. It is anticipated RTC will work with CONSULTANT to extend schedule as needed for items outside the control of the CONSULTANT. Hours estimated in scope are provided for approximations only. Task will be managed at the task level for budgeting and progress.

Task 1 – Project Management and Quality Assurance

It is anticipated that Task 1 will be amended at the time optional tasks are defined and negotiated such that CONSULTANT can continue to perform required Project Management tasks. It is assumed 9 months will be required to complete this Feasibility Stage once notice to proceed has been issued.

1.1 Kickoff Meeting: CONSULTANT will host a project kickoff meeting with RTC which will include a Project Quality Management (PQM) workshop (Via Teams).

***Assumption*:** The Kickoff meeting will be two hours. Ten members of the CONSULTANT team will attend (14 hours). A meeting agenda and post-meeting documentation are included (14 hours)**.**

1.2 Weekly Meetings: CONSULTANT will hold weekly meetings with RTC to discuss project progress.

***Assumption*:** Meetings will be one half hour and will be for the duration of this Feasibility Stage of the project. Up to four members of the CONSULTANT team will attend these meetings (72 hours) as defined by the meeting agenda. CONSULTANT will prepare agendas and meeting minutes for each meeting (36 hours).

1.3 Project Management: CONSULTANT will provide communications, coordination, and project management for the duration of the project. CONSULTANT's scope of services for this task includes monthly invoicing and progress reporting, quality assurance, project accounting, scheduling, budget tracking, subcontractor management, and maintenance of project files. A proactive approach to project management is needed on this project including a clear definition of activities and responsibilities; clear lines of communication; effective quality assurance/quality control (QA/QC) procedures; direct access to resources and professional staff; and rapid, effective implementation and control of work assignments. Project success will require close and ongoing coordination with RTC staff and the management of a multi-disciplinary team. Timely and accurate invoices with progress reports are required to track progress and costs incurred. Changes in conditions that may result in impacts to the project budget or schedule must be reported immediately upon identification so that corrective actions may be made in a timely manner.

***Assumption*:** Eight hours per month for the duration of this Feasibility Stage of the project (72 hours). 40 hours for other administrative support and 24 hours for other project management support (64 hours).

1.4 Coordination: CONSULTANT will coordinate with RTC Facilities, RTC Contractors, Utilities, permitting agencies, and stakeholders.

***Assumption*:** 20 hours per month for the project manager or assistant project manager or CONSULTANT expert for the duration of this Feasibility Stage of the project (180 hours).

1.5 Quality Assurance/Quality Control: CONSULTANT will provide reviews of work before deliverables are considered final. The CONSULTANT will follow an approved QA/QC

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procedure. The QA/QC plan will be developed in this Feasibility Stage to guide the initial stage while also providing a framework for future design and construction milestones.

***Assumption*:** Five hours per month for the Principle in Charge or other senior leadership for the duration of this Feasibility Stage of the project (45 hours).

1.6 Public Engagement/Presentations: CONSULTANT will engage with SUBCONSULTANT to assist with developing a Public Engagement Plan (PEP). The PEP will focus on engaging residents in the vicinity of the selected site(s) and satisfying the NEPA Public Involvement requirements. The PEP is intended to guide this initial stage of project while also providing a framework for future efforts. The PEP will be developed with consideration of the needs and expectations of RTC's PIO and the RTC's Project Manager. Implementation of the approved PEP will be budgeted for in future phases.

Assumptions: 20 hours is estimated to prepare the PEP and receive RTC approval with 8 hours per month allocated for maintaining and executing the approved plan during this Feasibility Stage of the project.

Deliverable: Public Engagement Plan

1.7 Board presentation: In coordination with RTC's Project Manager, CONSULTANT will attend one RTC Washoe Board meeting to present the results of feasibility study toward the end of this Feasibility Stage of the project.

Assumptions: The Board meeting is planned to be attended in person by two staff members. The total estimated effort for the Board meeting, inclusive of presentation materials, meeting notes, and meeting attendance, is 20 hours.

1.8 Travel and Other Direct Costs (ODC): ODC includes any costs incurred that are directly relevant to this project. Costs may include but are not limited to: travel, reproduction and printing, costs for obtaining regulatory permits or clearances, subcontractor services, shipping, and courier services.

Assumptions: Costs incurred when technical staff travel for project-related work, will be itemized on invoices with per-diem and hotel expenses not to exceed the daily GSA allowance per person. All travel will be booked at economy fare, and/or mileage reimbursed at current GSA rate. Receipts or supporting documentation will be provided for all ODC reimbursement requested.

Task 2 – Needs Assessment

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2.1 Fleet Assessment: CONSULTANT will review the existing vehicle inventory and fuel types and identify the hours of operation estimates for each of the vehicles in the fleet. CONSULTANT will work with RTC to determine potential future fleet growth needs.

***Assumption*:** 40 hours to review the vehicle inventory, 20 hours to identify operation estimates for each of the vehicles, both present and future.

2.2 Infrastructure Assessment: CONSULTANT team will review records of existing facilities and collect data to determine the current operations needs for improvement or continuation of successful systems. Future growth and plans for fixed route transit will be reviewed and included in the infrastructure assessment with quantifiable data produced to aid with evaluating potential sites.

Assumption: Assessment will take 80 hours and include stakeholder interviews and document reviews.

2.3 Perceived Gap Assessment: CONSULTANT will interview RTC staff and stakeholders, inclusive of operators, maintenance, supervisors, administration, and leadership; and hold an on-site workshop to gain insight into any perceived gaps that may be considered with the development of the new facility.

Assumption: One two-hour workshop will be held with RTC staff and the stakeholders with four members of CONSULTANT team in attendance for coordination and information gathering (8 hours). Prep time and meeting summary will take an additional eight hours. Individual meetings will be held with stakeholders who are unable to attend the workshop. It is anticipated an additional 32 hours will be required for individual meetings.

2.4 Needs Analysis Summary: CONSULTANT will aggregate all information gathered from Tasks 2.1, 2.2, and 2.3 into a summary Needs Assessment report, allowing RTC to review and compare the findings from multiple information sources. Information will be synthesized to produce recommendations for minimum site size, location, circulation, building functions, efficiencies, and miscellaneous site elements.

Assumption: Assume 160 hours for preparation of the Needs Assessment report.

Deliverable: Needs Assessment Report

Task 3 – Site Suitability Analysis

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3.1 Site Requirement Layout: CONSULTANT will be responsible for developing a conceptual site layout and renderings based on recommendations presented in the Needs Assessment Report. The conceptual site layout and renderings will be vetted through the RTC and refined to meet the goals of the RTC.

Assumption: Assume 300 hours for preparation of conceptual level site layout and renderings.

Deliverable: Draft and Final conceptual level site layout and renderings in PDF format.

3.2 Comparative Site Analysis: CONSULTANT will apply the conceptual layout to properties identified (general sites that fulfill the basic needs for the RTC Maintenance Facility) as meeting the minimum size requirements, including 600 Sutro Street, such that a comparison can be completed to evaluate risks and benefits of each site. Appropriately sized properties that can accommodate the conceptual layout will be further evaluated based on quantifiable criteria, until such time a minimum of 2 and maximum of 4 potential properties remain as viable candidates for further development. Results of the comparative site analysis will be published in a matrix format showing each of the minimum 2 and maximum 4 sites on a vertical axis and evaluation criteria on a horizontal axis. The resulting site/criteria grid will be rated by how well each site aligns with each criterion, allowing RTC to assess the findings and determine the site(s) that is (are) most suitable for continued investigation and development. Example quantifiable measurements may include site access (traffic and operations), hazardous materials remediation requirements, impact on fixed routes, zoning, past use, transit operations, permitting requirements, potential NEPA issues, future compatibility, aesthetics, landscaping, security, maintenance of facility, operational hours, lighting, snow/ice control, conceptual cost, future compatibility, etc.

Assumption: Assume 500 hours of developing individual site layouts, comparing alternatives and preparing risk assessments associated with each site.

Deliverable: Comparative matrix summarizing each alternative's performance against evaluation criteria. Sites with the highest performance score will be recommended for further analysis, with a goal to find one preferred site.

Task 4 – Candidate Site(s) Early Investigation and Development

CONSULTANT will use the comparative matrix developed in Task 3.2 to further investigate the identified candidate site(s) for development. The candidate site(s) will have the following work completed as needed to advance the evaluation for further studies, including NEPA.

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4.1 Planning/Desktop Surveys: CONSULTANT will research planning requirements for potential sites. This effort will aid in defining the requirements for Task 4.2-4.5 in more detail such that only the required work is completed after a preferred site is established.

CONSULTANT will provide a zoning code analysis for the project to identify potential permitting requirements and risk. The analysis will be restricted to local controlling land use requirements, anticipated to include City of Reno Zoning Code, City of Reno Master Plan and Truckee Meadows Regional Plan.
CONSULTANT will prepare a zoning report pertaining to the subject property to include summarizing requirements for the following items:

- Building setbacks
- Minimum landscaping requirements
- Parking requirements
- Other miscellaneous requirements from zoning code

CONSULTANT will identify and outline the entitlement process based on the project, proposed conceptual design, use, etc. Said outline will be high-level and identify if public hearings, CUPs, or other entitlements will be required based of available information.
CONSULTANT planning staff will attend coordination meetings with the team upon request.

4.2 Geotechnical Investigation: CONSULTANT will research existing geotechnical studies and reports, perform a geotechnical investigation/analysis that includes a field review of existing conditions and existing geotechnical information. Intrusive field work, sampling and testing will be defined and conducted under a future phase after the preferred site is selected.

4.3 Topographic Survey: CONSULTANT will compile and review available GIS data for up to four properties. The following data will be collected for each property.
1) Washoe County Assessor GIS Parcel Line for subject property and adjacent property for reference.
2) Washoe County Aerial Photo of the subject property including view of adjacent properties and roadways back to closest major intersections.
3) Existing ground surface based on published Washoe County LiDAR data. Surface will be provided as a Civil3d TINN surface. Please note this is not design level topography and should only be used for conceptual design and due diligence purposes.

A detailed ground topographic and boundary survey will be completed after a preferred site is established

4.4 Right Of Way Mapping and Engineering: The CONSULTANT will obtain recorded right-of-way based upon Washoe County GIS information. The right-of-way will be shown on the project plans and used as the basis for right-of-way engineering services. A certified boundary survey will be required for final design plans, however the certified boundary survey will be

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completed after the feasibility study is completed as part of the final design and is not included in this scope for feasibility.

4.5 Subsurface Utilities: CONSULTANT will research, investigate, and locate subsurface utilities within proposed area of improvements, roadway right of way, and areas reasonably effected. A complete subsurface utilities investigation will be completed after a preferred site is selected with an appropriate fee established for the selected site

Assumption: Assume 168 hours of effort for Task 4 to get started on planning efforts only. Due to the uncertainty of site size and nature of work the estimated hours are of a rough order of magnitude and will be updated as more information is gathered. Subtask 4.2-4.5 will be defined in more detail as more information is obtained for preferred sites. An updated scope and fee will be developed to perform the detailed work.

Task 5 – Environmental Services

CONSULTANT will provide environmental services up to and including completion of the NEPA process for the preferred site. CONSULTANT will identify foreseeable potential actions that would require federal agency review and provide recommendations as to the potential project development considerations that may be encountered. The CONSULTANT shall prepare a Purpose and Need of the project along with project description, review and document environmental resources within the project area, provide technical memos for warranted areas of study, and complete the Categorical Exclusion checklist. Any required public meetings or public engagement are also included in this task. The environmental tasks, activities, and deliverables provided by the CONSULTANT may include, but not be limited to, the following:

- Data collection and field investigation
- NEPA coordination with FTA and resource agencies
- Preparation of a NEPA document
- NEPA studies and technical reports – Traffic, Air Quality, Noise, Phase 1, SHPO/Tribal Consultation, Biology

Assumption: A Categorical Exclusion level NEPA document will be developed for this project. Assume 2500 hours of effort for Task 5. Due to the uncertainty of site size and nature of work the estimated hours are of a rough order of magnitude and will be updated as more information is gathered. For a complete NEPA process, the CONSULTANT is dependent on the FTA and can't control the schedule directly. CONSULTANT will attempt to complete NEPA within 12 months of NTP. If an EA is required a significant increase in effort is anticipated and amendment negotiated for scope and fee.

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Task 6 – Preliminary Design (OPTIONAL)

The CONSULTANT shall be responsible for developing the plans for the proposed relocation of the fixed route operations transit facility. Preliminary engineering tasks, activities, and deliverables are expected to include, but may not be limited to, the following:

- Development of Preliminary (30%) Plans for site and buildings
- Preliminary list of technical specifications
- Conceptual construction cost estimate
- Identify long lead items that may need special attention
- Prepare color rendering
- Conduct Design Review Workshop

***Assumption*:** This task will be defined after the feasibility stage is concluded, and a fee negotiated with the RTC Project Manager.

Task 7 – Final Design (OPTIONAL)

CONSULTANT shall prepare Final Construction Plans and Technical Specifications and provide technical support and coordination with the RTC to successfully finalize the design and prepare cost effective construction bid package, suitable for construction. Final Construction Plans and Technical Specifications shall be in accordance with RTC's standards and requirements and applicable building codes. The Final Design tasks, activities, and deliverables provided by the CONSULTANT include, but may not be limited to, the following:

- Assisting RTC at Bid opening and during bid evaluations.
- Prepare plans, construction estimates and specifications to deliver a complete project.

Develop all plans and estimates according to RTC procedures. Coordinate with RTC to produce plans and construction estimates. Submit progress plans at 60% and 90% completion. Provide specification notes for any special items of work or phasing construction to be included in the Special Provisions. Provide technical support and coordination to successfully complete all building permitting requirements.

- Regular design review meetings with RTC PM and RTC Transit Department
- Plan production and distribution
- Provide 100% Design Plans, Specifications, and Engineer's Estimate
- Provide necessary support required for applicable building permit submission
- Prepare, compile, and support RTC to generate final bid documents for Design-Bid- Build construction contractor procurement

SAMPLE

Provide support throughout the bidding process

***Assumption*:** This task will be defined after the feasibility stage is concluded, and a fee negotiated with the RTC Project Manager.

Task 8 – Construction Administration (OPTIONAL)

8.1. Contract Administration: CONSULTANT shall provide effective construction administration that will deliver the Project within established schedules and budgets. The initial construction administration tasks, activities, and deliverables are expected to include, but may not be limited to, the following:

- Facilitate the preconstruction conference
- Facilitate weekly construction meetings
- Perform construction coordination working directly with the RTC Project Manager
- Provide document control (submittals, RFI's, etc.) to track and manage these documents
- Responsible for obtaining and reviewing baseline schedule and monthly schedule updates from the contractor
- Review and provide recommendations on contractor's traffic control plans
- Review and provide recommendations on material test results
- Review construction for acceptance and/or mitigation
- Provide verification and approval of contractor's monthly pay request
- Supervise the inspection, surveying and material testing activities
- Provide recommendations to the RTC for any necessary construction changes due to field conditions
- Assist in change order review and approval
- Prepare letter of substantial completion

The CONSULTANT shall provide sufficient personnel who possess the experience, knowledge, and character to adequately perform the requested services. The CONSULTANT's Construction Manager shall have experience in successful public works construction management in the northern Nevada area.

8.2. Construction Surveying: CONSULTANT shall provide construction staking as required on the project. it is assumed survey will consist of a minimum of the following items:

- Recover survey control
- Delineating the saw-cut lines for pavement demolition
- Offset stakes to foundation with cut/fill to top of platform elevation

SAMPLE

- Offset stakes to face of curb, sidewalk, platform and driveway angle points, points of curvature, and grade breaks with cut/fill to finished grade elevation

8.3. **Inspection:** CONSULTANT shall provide one (1) inspector during construction activities as warranted by the activities within the contractor's schedule. This inspector will:

- Monitor the work performed by the Contractor and verify that the work is in accordance with the plans and specifications
- Assist in issue resolution with the RTC, contractor personnel, utility agencies, the public and others
- Prepare daily inspection reports, submitted weekly to RTC
- Provide quantity reports and assist in contractor's monthly progress payments
- Provide verification of the distribution of public relation notices required to be delivered by the contractor
- Assist in preparation of the Punch List
- Verify that contractor is maintaining a field blueline set of drawings to incorporate contractor record drawing mark- ups

8.4. **Materials Testing:** CONSULTANT shall provide materials testing for compliance with the specifications and testing requirements per the latest edition of the Standard Specifications for Public Works Construction (Orange Book). The CONSULTANT shall provide certified testing personnel in accordance with the Nevada Alliance for Quality Transportation Construction/Western Alliance for Quality Transportation Construction (NAQTC/WAQTC) guidelines. The CONSULTANT shall provide an AASHTO accredited laboratory equipped to provide material testing for compliance with the specifications per the latest edition of the Standard Specifications for Public Works (Orange Book) and International Building Code (IBC) test procedures.

8.5. **Record Drawings:** CONSULTANT shall provide record drawings for the completed project. The final record drawings must be identified, dated, and signed as the record drawings and must also contain the Engineer of Record's stamp and signature.

***Assumption*:** Tasks 6-8 will be refined after the feasibility stage (Tasks 2-5) is concluded, and a fee will be negotiated with the RTC Project Manager. Task 1 will be ongoing throughout the project and amended as needed after this Feasibility Stage.

SAMPLE

Exhibit B

Compensation

SAMPLE

EXHIBIT B - FEE SCHEDULE FOR

Architectural and Engineering Work

for a Public Transit Operations and Maintenance Facility

	Prime and Sub Contractor Summary	CDM Smith	WR	H+K	MJT	G2	LAGE (NOT PART of Feasiblity Work)	PK Elec (NOT part of Feasiblity Work)	Total Costs
									Total Costs
1	Project Management and Quality Assurance	$ 162,892.00	$ 5,995.00	$ 22,750.00	$ 30,500.00	$ -	$ -	$ -	$ 222,137.00
2	Needs Assessment	$ 83,908.00		$ 14,750.00					$ 98,658.00
3	Site Suitablity Analysis	$ 169,528.00		$ 6,900.00					$ 176,428.00
4	Candidate Site Early Investigation and Devlopment	$ 33,234.00	$ 31,005.19	$ 5,600.00					$ 69,839.19
5	Environmental Services	$ 520,549.00				$ 3,754.00			$ 524,303.00
6	*Prelimnary Design (Not Part of Feasiblity - Optional)*								
7	*Final Design (Not Part of Feasiblity - Optional)*								
8	*Construction Admistration (Not Part of Feasiblity - Optional)*								
		$ 970,111.00	$ 37,000.19	$ 50,000.00	$ 30,500.00	$ 3,754.00	$ -	$ -	$ 1,091,365.19

SAMPLE

Exhibit C

Indemnification and Insurance Requirements

SAMPLE

EXHIBIT C

INDEMNIFICATION AND INSURANCE REQUIREMENTS FOR PROFESSIONAL SERVICE AGREEMENTS
[NRS 338 DESIGN PROFESSIONAL]
2022-07-08 Version

1. INTRODUCTION

IT IS HIGHLY RECOMMENDED THAT CONSULTANTS CONFER WITH THEIR INSURANCE CARRIERS OR BROKERS TO DETERMINE THE AVAILABILITY OF THESE INSURANCE CERTIFICATES AND ENDORSEMENTS IN ADVANCE OF PROPOSAL SUBMISSION. IF THERE ARE ANY QUESTIONS REGARDING THESE INSURANCE REQUIREMENTS, IT IS RECOMMENDED THAT THE AGENT/BROKER CONTACT RTC'S FINANCE DIRECTOR AT (775) 332-9511.

2. INDEMNIFICATION

CONSULTANT agrees, subject to the limitations in Nevada Revised Statutes Section 338.155, to save and hold harmless and fully indemnify RTC, Washoe County, City of Reno and City of Sparks including their elected officials, officers, employees, and agents (hereafter, "Indemnitees") from and against any and all claims, proceedings, actions, liability and damages, including reasonable attorneys' fees and defense costs incurred in any action or proceeding (collectively "Damages") arising out of the:

A. Negligence, errors, omissions, recklessness or intentional misconduct of CONSULTANT or CONSULTANT's agents, employees, officers, directors, subconsultants, or anyone else for whom CONSULTANT may be legally responsible, which are based upon or arising out of the professional services of CONSULTANT; and

B. Violation of law or any contractual provisions or any infringement related to trade names, licenses, franchises, patents or other means of protecting interests in products or inventions resulting from the use by the Indemnitees of any materials, devices, processes, equipment, or other deliverable (including software) supplied by CONSULTANT under or as a result of this Agreement, but excluding any violation or infringement resulting from the modification or alteration by the Indemnitees of any materials, devices, processes, equipment, or other deliverable (including software) not consented to by CONSULTANT.

CONSULTANT further agrees to defend, save and hold harmless and fully indemnify the Indemnitees from and against any and all Damages arising out the negligence, errors, omissions, recklessness or intentional misconduct of CONSULTANT or CONSULTANT's agents, employees, officers, directors, subconsultants, or anyone else for whom CONSULTANT may be legally responsible, which are not based upon or arising out of the professional services of CONSULTANT.

The Damages shall include, but are not limited to, those resulting from personal injury to any person, including bodily injury, sickness, disease or death and injury to real property or personal property, tangible or intangible, and the loss of use of any of that property, whether or not it is physically injured.

SAMPLE

If the Indemnitees are involved in defending actions of CONSULTANT or anyone else for whom CONSULTANT is legally responsible, CONSULTANT shall reimburse the Indemnitees for the time spent by such personnel at the rate of the Indemnitees pay or compensation for such services.

If an Indemnitee is found to be liable in the proceeding, then CONSULTANT'S obligation hereunder shall be limited to the proportional share of the liability attributed to CONSULTANT.

In determining whether a claim is subject to indemnification, the incident underlying the claim shall determine the nature of the claim.

In the event of a violation or an infringement under paragraph 2.B above and the use is enjoined, CONSULTANT, at its sole expense, shall either (1) secure for the Indemnitees the right to continue using the materials by suspension of any injunction or by procuring a license or licenses for the Indemnitees; or (2) modify the materials so that they become non-infringing. This covenant shall survive the termination of the Professional Services Agreement.

The provisions of this Agreement are separate and severable and it is the intent of the Parties hereto that in the event any provision of this Agreement should be determined by any court of competent jurisdiction to be void, voidable or too restrictive for any reason whatsoever, the remaining provisions of this Agreement shall remain valid and binding upon said Parties. It is also understood and agreed that in the event any provision should be considered, by any court of competent jurisdiction, to be void because it imposes a greater obligation on CONSULTANT than is permitted by law, such court may reduce and reform such provisions to limitations which are deemed reasonable and enforceable by said court.

3. GENERAL REQUIREMENTS

Prior to the start of any work on a RTC project, CONSULTANT shall purchase and maintain insurance of the types and limits as described below insuring against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by CONSULTANT, its subconsultants, or their employees, agents, or representatives. The cost of all such insurance shall be borne by CONSULTANT.

4. VERIFICATION OF COVERAGE

CONSULTANT shall furnish RTC with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth herein, on forms acceptable to RTC. All deductibles and self-insured retentions requiring RTC approval shall be shown on the certificate. All certificates and endorsements are to be addressed to RTC's Finance Director and be received by RTC before work commences. Upon request, CONSULTANT agrees that RTC has the right to review CONSULTANT'S and the Sub's insurance policies, or certified copies of the policies. Copies of applicable policy forms or endorsements confirming required additional insured, waiver of subrogation and notice of cancellation provisions are required to be provided with any certificate(s) evidencing the required coverage.

SAMPLE

5. NOTICE OF CANCELLATION

CONSULTANT or its insurers shall provide at least thirty (30) days' prior written notice to RTC prior to the cancellation or non-renewal of any insurance required under this Agreement. An exception may be included to provide at least ten (10) days' written notice if cancellation is due to non-payment of premium. CONSULTANT shall be responsible to provide prior written notice to RTC as soon as practicable upon receipt of any notice of cancellation, non-renewal, reduction in required limits or other material change in the insurance required under this Agreement.

6. SUBCONSULTANTS & SUBCONTRACTORS

CONSULTANT shall include all Subcontractors and Subconsultants (referred to collectively as "Subs") as insureds under its liability policies OR shall cause Subs employed by CONSULTANT to purchase and maintain separate liability coverages and limits of the types specified herein. If any Subs maintain separate liability coverages and limits, each shall include the RTC, Washoe County, City of Reno and City of Sparks as additional insureds under its commercial general liability policy, subject to the same requirements stated herein, without requiring a written contract or agreement between each of the additional insureds and any sub-consultant or sub-contractor. Any separate coverage limits of liability maintained by Subs shall be at least **$1,000,000** per occurrence and at least **$2,000,000** for any applicable coverage aggregates or the amount customarily carried by the Sub, whichever is GREATER. If any Subs provide their own insurance with limits less than required of the Contractor, Contractor shall include Subs in their coverage up to the full limits required of the Contractor. When requested by RTC, CONSULTANT shall furnish copies of certificates of insurance evidencing coverage for each subconsultant. CONSULTANT need not require its non-design subcontractors to carry Professional Errors and Omissions Liability insurance.

7. DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductibles or self-insured retentions that exceed $25,000 per occurrence or claim must be declared to RTC's Finance Director prior to signing this Agreement. RTC is entitled to request and receive additional documentation, financial or otherwise, prior to giving its approval of the deductibles and self-insured retentions. Any changes to the deductibles or self-insured retentions made during the term of this Agreement or during the term of any policy must be declared to RTC's Finance Director prior to the change taking effect.

8. ACCEPTABILITY OF INSURERS

Required insurance is to be placed with insurers with a Best's rating of no less than A-VII and acceptable to RTC. RTC may accept coverage with carriers having lower Best's ratings upon review of financial information concerning CONSULTANT and the insurance carrier. RTC reserves the right to require that CONSULTANT'S insurer(s) be licensed and admitted in the State of Nevada or meet any applicable state and federal laws and regulations for non-admitted insurance placements.

SAMPLE

9. OTHER CONDITIONS

A. Failure to furnish the required certificate(s) or failure to maintain the required insurance may result in termination of this Agreement at RTC's option.

B. If CONSULTANT fails to furnish the required certificate or fails to maintain the required insurance as set forth herein, RTC shall have the right, but not the obligation, to purchase said insurance at CONSULTANT's expense.

C. Any waiver of CONSULTANT's obligation to furnish such certificate or maintain such insurance must be in writing and signed by an authorized representative of RTC. Failure of RTC to demand such certificate or other evidence of full compliance with these insurance requirements or failure of RTC to identify a deficiency from evidence that is provided shall not be construed as a waiver of CONSULTANT's obligation to maintain such insurance, or as a waiver as to the enforcement of any of these provisions at a later date.

D. By requiring insurance herein, RTC does not represent that coverage and limits will necessarily be adequate to protect CONSULTANT, and such coverage and limits shall not be deemed as a limitation on CONSULTANT's liability under the indemnities granted to RTC in this contract.

E. If CONSULTANT'S liability policies do not contain the standard ISO separation of insureds condition, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.

10. COMMERCIAL GENERAL LIABILITY

CONSULTANT shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella insurance with a limit of not less than **$2,000,000** each occurrence. If such CGL insurance contains a general aggregate limit, it shall be increased to equal twice the required occurrence limit or revised to apply separately to this project.

CGL insurance shall be written on ISO occurrence form CG 00 01 04 13 (or a substitute form providing equivalent coverage) and shall cover liability arising from premises, operations, products-completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

RTC and any other Indemnitees listed in Section 2. INDEMNIFICATION of this Agreement shall be included as an additional insured under the CGL, using ISO additional insured endorsement CG 20 10 07/04 or CG 20 33 07/04 or a substitute providing equivalent coverage, and under the commercial umbrella, if any.

This insurance shall apply as primary insurance with respect to any other insurance or self-insurance programs afforded to RTC or any other Indemnitees under this Agreement.

SAMPLE

CONSULTANT waives all rights against RTC and any other Indemnitees listed in section 2. INDEMNIFICATION of this Agreement for recovery of damages to the extent these damages are covered by the commercial general liability or commercial umbrella liability insurance maintained pursuant to this agreement. CONSULTANT's insurer shall endorse CGL policy to waive subrogation against RTC with respect to any loss paid under the policy.

11. COMMERCIAL AUTOMOBILE LIABILITY

CONSULTANT shall maintain automobile liability and, if necessary, commercial umbrella liability insurance with a limit of not less than **$1,000,000** each accident. Such insurance shall cover liability arising out of any auto (including owned, hired, and non-owned autos).

Coverage shall be written on ISO form CA 00 01, CA 00 05, CA 00 25, or a substitute form providing equivalent liability coverage for all owned, leased, hired (rented) and non-owned vehicles (as applicable). RTC may agree to accept auto liability for non-owned and hired (rented) vehicles under the CGL if CONSULTANT does not own or operate any owned or leased vehicles.

CONSULTANT waives all rights against RTC, its officers, employees and volunteers for recovery of damages to the extent these damages are covered by the automobile liability or commercial umbrella liability insurance obtained by CONSULTANT pursuant to this Agreement.

12. INDUSTRIAL (WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY) INSURANCE

It is understood and agreed that there shall be no Industrial (Worker's Compensation and Employer's Liability) Insurance coverage provided for CONSULTANT or any subconsultants by RTC. CONSULTANT, and any subconsultants, shall procure, pay for and maintain the required coverages.

CONSULTANT shall maintain workers' compensation and employer's liability insurance meeting the statutory requirements of the State of Nevada, including but not limited to NRS 616B.627 and NRS 617.210. The employer's liability limits shall not be less than **$1,000,000** each accident for bodily injury by accident or **$1,000,000** each employee for bodily injury by disease.

CONSULTANT shall provide a Final Certificate for itself and each subconsultant evidencing that CONSULTANT and each subconsultant maintained workers' compensation and employer's liability insurance throughout the entire course of the project.

If CONSULTANT, or any subconsultant is a sole proprietor, coverage for the sole proprietor must be purchased and evidence of coverage must appear on the Certificate of Insurance and Final Certificate.

CONSULTANT waives all rights against RTC, its elected officials, officers, employees and agents for recovery of damages to the extent these damages are covered by the workers compensation and employer's liability or commercial umbrella liability insurance obtained by Tenant pursuant to this agreement. CONSULTANT shall obtain an endorsement equivalent to WC 00 03 13 to affect this waiver.

SAMPLE

13. PROFESSIONAL ERRORS AND OMISSIONS LIABILITY

CONSULTANT shall maintain professional liability insurance applying to liability for a professional error, omission, or negligent act arising out of the scope of CONSULTANT'S services provided under this Agreement with a limit of not less than **$1,000,000** each claim and annual aggregate. CONSULTANT shall maintain professional liability insurance during the term of this Agreement and, if coverage is provided on a "claims made" or "claims made and reported" basis, shall maintain coverage or purchase an extended reporting period for a period of at least three (3) years following the termination of this Agreement.

SAMPLE

Exhibit D

Federally Required Clauses

SAMPLE

EXHIBIT D

FTA REQUIRED CLAUSES

It is a requirement of the Federal Government that activities financed, in part, with Federal funds and performed by a third-party contractor and its subcontractors on behalf of a Federal grantee must be carried out in accordance with applicable Federal requirements.

Activities performed under this Agreement, and any other prior or subsequent amendments thereto, may be financed in part, by a grant from the United States Department of Transportation (DOT), Federal Transit Administration (FTA) to the Regional Transportation Commission of Washoe County (RTC), and if so, would therefore be subject to the applicable grant terms, conditions, and regulations. Accordingly, the Contractor and its subcontractors performing activities under this Agreement must adhere to the Federal requirements stated herein as a condition of satisfactory performance.

All subcontracts and subcontractors employed as a result of this Agreement are subject to the same conditions and requirements as set forth herein unless specifically exempted. The Contractor shall ensure that these Federal requirements are incorporated into its subcontracts and its subcontractors at all tiers comply with these Federal requirements. The Contractor will be held liable for compliance failures by its subcontractors. Failure to comply will render the Contractor responsible for damages and/or contract termination.

SAMPLE

1 - NO GOVERNMENT OBLIGATION TO THIRD PARTIES

A. The RTC and Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying Agreement, absent the express written consent by the Federal Government, the Federal Government is not a party to the Agreement and shall not be subject to any obligations or liabilities to the RTC, the Contractor, or any other party (whether or not a part to that Agreement) pertaining to any matter resulting from the underlying Agreement.

B. The Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

2 - PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS AND RELATED ACTS [49 U.S.C. § 5323(l)(1); 31 U.S.C. §§ 3801-3812; 18 U.S.C. § 1001; 49 C.F.R. part 31]

A. The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § 3801, et seq., and U.S. DOT regulations, “Program Fraud Civil Remedies”, 49 C.F.R. Part 31, apply to its actions pertaining to the Agreement. Upon execution of the Agreement, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the Agreement

or the FTA assisted project for which the work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.

B. The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. § 5307, the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5323(l)(1) on the Contractor, to the extent the Federal Government deems appropriate.

C. The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.

3 - ACCESS TO CONTRACTOR RECORDS AND SITES OF PERFORMANCE [49 U.S.C. § 5325(g); 2 C.F.R. § 200.333; 49 C.F.R. part 633]

The following access to records requirements apply to the Agreement:

A. The Contractor agrees to provide the RTC, the FTA Administrator, the DOT Office of Inspector General, Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor including such records and information the RTC or the Contractor may regard as confidential or proprietary which are related in whole or in part to the Agreement for the purposes of making audits, examinations, excerpts, and transcriptions, and as may be necessary for the RTC to meet its obligations under 2 CFR Part 200. This access includes timely and reasonable access to personnel for interviews and discussions related to the records. This right of access shall survive the expiration or termination of the Agreement and the record retention period described below.

B. The Contractor agrees to permit any of the foregoing parties to inspect all work and materials, to audit any information under the control of the Contractor within books, records, accounts or other locations, and to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

C. The Contractor agrees to comply with the record retention requirements of 2 C.F.R. §200.333. The Contractor shall maintain complete and readily accessible records related in whole or in part to the Agreement, including but not limited to data, documents, reports, statistics, subagreements, leases, third party contracts, arrangements, other third party agreements of any type, and supporting materials

SAMPLE

related to those records, The Contractor shall retain such records until all pending matters are closed or for a period of not less than three years from the date of final payment, whichever is longer. except in the event of litigation or settlement of claims arising from the performance of the Agreement, in which case the Contractor agrees to maintain such materials until the disposition of all such litigation, appeals, claims, or exceptions related thereto.

D. The Contractor agrees to permit the Federal Transit Administration to have access to the sites of performance of the Agreement, any amendments thereto, and to make site visits as reasonably may be required.

E. The Contractor shall include this clause in all subcontracts and shall require all subcontractors to include the clause in their subcontracts, regardless of tier.

4 - FEDERAL CHANGES

The Contractor shall at all times comply with all applicable FTA regulations, policies, procedures, and directives, including without limitation those listed directly or by reference in the Master Agreement between the RTC and the FTA, as they may be amended or promulgated from time to time during the term of the Agreement. The Contractor's failure to so comply shall constitute a material breach of the Agreement.

5 - ENERGY CONSERVATION [42 U.S.C. 6321 et seq.; 49 C.F.R. part 622, subpart C]

The Contractor agrees to comply with the mandatory standards and policies relating to energy efficiency that are contained in the State Energy Conservation Plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. § 6321, et seq.).

6 - CIVIL RIGHTS LAWS AND REGULATIONS [FTA Master Agreement (32 and 33), Section 12]

The Contractor agrees to comply with all applicable civil rights laws and regulations in accordance with applicable federal directives. The Contractor agrees to include these requirements in each subcontract, modified only if necessary to identify the affected parties. These include, but are not limited to, the following:

A. Nondiscrimination in Federal Public Transportation Programs:
Contractor shall prohibit discrimination on the basis of race, color, religion, national origin, sex (including sexual orientation), disability, or age. Contractor shall prohibit the (i) exclusion from participation in employment or a business opportunity for reasons identified in 49 U.S.C. § 5332; (ii) denial of program benefits in employment or a business opportunity identified in 49 U.S.C. § 5332; or (iii) discrimination identified in 49 U.S.C. § 5332, including discrimination in employment or a business opportunity. Contractor shall follow the most recent edition of Federal Transit Administration Circular 4702.1, "Title VI Requirements and Guidelines for Federal Transit Administration Recipients," to the extent

SAMPLE

consistent with applicable Federal laws, regulations, requirements, and guidance, and other applicable Federal guidance that may be issued.

B. Nondiscrimination—Title VI of the Civil Rights Act:

1. Contractor shall prohibit discrimination on the basis of race, color, or national origin.
2. Contractor shall comply with (i) Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000d et seq.; (ii) U.S. Department of Transportation regulations, "Nondiscrimination in Federally-Assisted Programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964," 49 CFR Part 21, including any amendments thereto; and (iii) Federal transit law, specifically 49 U.S.C. § 5332.
3. Contractor shall follow (i) the most recent edition of Federal Transit Administration Circular 4702.1, "Title VI Requirements and Guidelines for Federal Transit Administration Recipients," to the extent consistent with applicable Federal laws, regulations, requirements, and guidance; (ii) U.S. Department of Justice "Guidelines for the enforcement of Title VI, Civil Rights Act of 1964," 28 CFR 50.3; and (iii) all other applicable Federal guidance that may be issued.

C. Equal Employment Opportunity:

1. Federal Requirements and Guidance. Contractor shall prohibit discrimination on the basis of race, color, religion, sex, sexual orientation, or national origin, and (i) comply with Title VII of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000e et seq.; (ii) comply with Title I of the Americans with Disabilities Act of 1990, as amended, 42 U.S.C. §§ 12101, et seq.; (iii) comply with Federal transit law, specifically 49 U.S.C. § 5332, as provided in section 12 of FTA's Master Agreement (32); (iv) comply with Federal Transit Administration Circular 4704.1 "Equal Employment Opportunity (EEO) Requirements and Guidelines for Federal Transit Administration Recipients;" and (v) follow other Federal guidance pertaining to equal employment opportunity laws, regulations, and requirements, and prohibitions against discrimination on the basis of disability.
2. Indian Tribes. Contractor agrees to, and assures that it will recognize that Title VII of the Civil Rights Act of 1964, as amended, exempts Indian Tribes under the definition of "Employer."

D. Nondiscrimination on the Basis of Sex:
The Contractor agrees to comply with Title IX of the Education Amendments of 1972, as amended, 20 U.S.C. § 1681 et seq. and implementing Federal regulations, "Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance," 49 CFR Part 25, and federal transit law, specifically 49 U.S.C. § 5332.

SAMPLE

E. Nondiscrimination on the Basis of Age:
The Contractor agrees to comply with federal prohibitions against discrimination based on age, including the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. §§ 621-634; Federal transit law at 49 U.S.C. § 5332; the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6101 et seq.; U.S. Health and Human Services regulations, 45 CFR Part 90, U.S. Equal Employment Opportunity Commission regulations, and 29 CFR Part 1625., In addition, Contractor agrees to comply with applicable Federal implementing regulations.

F. Nondiscrimination on the Basis of Disability:
Contractor agrees to comply with the following federal prohibitions against discrimination based on disability: Section 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. § 794; the Americans with Disabilities Act of 1990, as amended, 42 U.S.C. § 12101 et seq.; the Architectural Barriers Act of 1968, as amended, 42 U.S.C. § 4151 et seq.; Federal transit law at 49 U.S.C. § 5332, and other applicable federal laws, regulations, and requirements pertaining to access for seniors or individuals with disabilities. . Contractor further agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 CFR Part 1630, pertaining to employment of persons with disabilities. In addition, Contractor agrees to comply with applicable Federal implementing regulations.

G. Drug or Alcohol Abuse - Confidentiality and Other Civil Rights Protections:
Contractor agrees to comply with the confidentiality and civil rights protections of the Drug Abuse Office and Treatment Act of 1972, as amended, 21 U.S.C. § 1101, et seq., the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act of 1970, as amended, 42 U.S.C. § 4541, et seq., and the Public Health Service Act, as amended, 42 U.S.C. §§ 290dd-290dd-2.

H. Access to Services for Persons with Limited English Proficiency:
Contractor agrees to provide meaningful access to public transportation services to persons with limited understanding of English to comply with Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000d, et seq., and its implementing regulation at 28 CFR § 42.405(d), and appliable U.S. Department of Justice guidance.

I. Federal Anti-Discrimination. (1) Pursuant to section (3)(b)(iv)(A), Executive Order 14173, Ending Illegal Discrimination and Restoring Merit-Based Opportunity, the Contractor agrees that its compliance in all respects with all applicable Federal antidiscrimination laws is material to the government's payment decisions for purposes of section 3729(b)(4) of title 31, United States Code. (2) Pursuant to section (3)(b)(iv)(B), Executive Order 14173, Ending Illegal Discrimination and Restoring Merit-Based Opportunity, by entering into this Agreement, the Contractor certifies that it does not operate any programs promoting diversity, equity, and inclusion (DEI) initiatives that violate any applicable Federal anti-discrimination laws.

SAMPLE

7 - INCORPORATION OF FTA TERMS

The provisions of this FTA Required Clauses document include, in part, certain standard terms and conditions required by DOT, whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by DOT, as set forth in FTA's Circular 4220.1F, and FTA's Master Agreement and 2 C.F.R. Part 200, are hereby incorporated by reference and are binding on the Contractor. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any RTC requests which would cause the RTC to be in violation of the FTA terms and conditions.

8 - SAFE OPERATION OF MOTOR VEHICLES [23 U.S.C. part 402; Executive Order No. 13043; Executive Order No. 13513; U.S. DOT Order No. 3902.10]

A. Seat Belt Use. Contractor is encouraged to adopt and promote on-the-job seat belt use policies and programs for its employees and other personnel that operate company-owned vehicles, company-rented vehicles, or personally operated vehicles. The terms "company-owned" and "company-leased" refer to vehicles owned or leased either by Contractor or the RTC.

B. Distracted Driving. Contractor agrees to adopt and enforce workplace safety policies to decrease crashes caused by distracted drivers, including policies to ban text messaging while using an electronic device supplied by an employer, and driving a vehicle the driver owns or rents, a vehicle contactor owns, leases, or rents, or a privately-owned vehicle when on official business in connection with the work performed under this Agreement. The Contractor agrees to conduct workplace safety initiatives in a manner commensurate with its size, such as establishing new rules and programs to prohibit text messaging while driving, re-evaluating the existing programs to prohibit text messaging while driving, and providing education, awareness and other outreach to employees about the risks associated with texting while driving.

C. Contractor shall require the inclusion of these requirements in subcontracts of all tiers.

9 - PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT [2 CFR § 200.216]

A. Pursuant to Public Law 115-232, section 889 and 2 C.F.R. 216 and 200.471, RTC is prohibited from procuring or obtaining equipment, services, or systems that use "Covered Telecommunications Equipment or Services" as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, 'Covered Telecommunications Equipment or Services" is:

SAMPLE

1. telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

2. For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

3. Telecommunications or video surveillance services provided by such entities or using such equipment.

4. Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

B. The Contractor shall not use or provide to the RTC "Covered Telecommunications Equipment or Services" in the performance of this Agreement. If the Contractor learns that prohibited telecommunication services, equipment or systems have been supplied, installed, or used under this Agreement, the Contractor shall immediately inform the RTC in writing. The RTC may treat such occurrence as an act of default under the Agreement and the RTC may require the Contractor to promptly replace such prohibited services, equipment, and systems at the Contractor's sole cost and take such other actions under the default provisions of the Agreement.

10 - NOTICE TO FTA AND U.S. DOT INSPECTOR GENERAL OF INFORMATION RELATED TO FRAUD, WASTE, ABUSE, OR OTHER LEGAL MATTERS [FTA Master Agreement (31), Section 39(b)]

Notification to FTA; Flow Down Requirement. If a current or prospective legal matter that may affect the Federal Government emerges, Contractor must promptly notify RTC, which will promptly notify the FTA Chief Counsel and FTA Regional Counsel for the Region in which RTC is located. Contractor must include an equivalent provision in its sub-agreements at every tier, for any agreement that is a "covered transaction" according to 2 C.F.R. §§ 180.220 and 1200.220.

A. The types of legal matters that require notification include, but are not limited to, a major dispute, breach, default, litigation, or naming the Federal Government as a party to litigation or a legal disagreement in any forum for any reason.

B. Matters that may affect the Federal Government include, but are not limited to, the Federal Government's interests in the Award, the accompanying Underlying Agreement, as those terms are defined in FTA's Master Agreement, and any

SAMPLE

amendments thereto, or the Federal Government's administration or enforcement of federal laws, regulations, and requirements.

C. Additional Notice to U.S. DOT Inspector General. Contractor must promptly notify RTC, which will promptly notify the U.S. DOT Inspector General in addition to the FTA Chief Counsel or Regional Counsel for the Region in which RTC is located, if Contractor has knowledge of potential fraud, waste, or abuse occurring on a project receiving assistance from FTA. The notification provision applies if a person has or may have submitted a false claim under the False Claims Act, 31 U.S.C. § 3729, et seq., or has or may have committed a criminal or civil violation of law pertaining to such matters as fraud, conflict of interest, bid rigging, misappropriation or embezzlement, bribery, gratuity, or similar misconduct involving federal assistance. This responsibility occurs whether the project is subject to the Master Agreement or another agreement involving a principal, officer, employee, agent, or the Contractor. It also applies to subcontractors at any tier. Knowledge, as used in this paragraph, includes, but is not limited to, knowledge of a criminal or civil investigation by a Federal, state, or local law enforcement or other investigative agency, a criminal indictment or civil complaint, or probable cause that could support a criminal indictment, or any other credible information in the possession of Contractor. In this paragraph, "promptly" means to refer information without delay and without change. This notification provision applies to all divisions of Contractor, including divisions tasked with law enforcement or investigatory functions.

11 - GOVERNMENT-WIDE DEBARMENT AND SUSPENSION [2 C.F.R. part 180; 2 C.F.R part 1200; 2 C.F.R. § 200.213; 2 C.F.R. part 200 Appendix II (I); Executive Order 12549; Executive Order 12689]

A. Contractor shall comply and facilitate compliance with U.S. Department of Transportation regulations, "Non-procurement Suspension and Debarment," 2 CFR Part 1200, which adopts and supplements the U.S. Office of Management and Budget "Guidelines to Agencies on Government wide Debarment and Suspension (Non-procurement)," 2 CFR Part 180. These provisions apply to each contract at any tier of $25,000 or more, and to each contract at any tier for a federally required audit (irrespective of the contract amount), and to each contract at any tier that must be approved by a Federal Transit Administration official irrespective of the contract amount. As such, in executing this Agreement the Contractor verifies that its principals, affiliates, and subcontractors are eligible to participate in this federally funded Agreement and are not presently declared by any Federal department or agency to be:

1. Debarred from participation in any federally assisted award;
2. Suspended from participation in any federally assisted award;
3. Proposed for debarment from participation in any federally assisted award;
4. Declared ineligible to participate in any federally assisted award;
5. Voluntarily excluded from participation in any federally assisted award; or
6. Disqualified from participation in any federally assisted award.

SAMPLE

B. Contractor has provided the RTC a certification addressing its debarment and suspension status and that of its principals, affiliates, and subcontractors. Contractor shall promptly inform the RTC of any change in the suspension or debarment status of Contractor or its principals, affiliates, and subcontractors during the term of the Agreement. Further, Contractor shall include a provision requiring compliance with the requirements of 2 CFR Part 180, Subpart C, as supplemented by 2 CFR Part 1200 in its lower-tier covered transactions.

C. The certification provided by the Contractor is a material representation of fact relied upon by RTC. If it is later determined by the RTC that Contractor knowingly rendered an erroneous certification, in addition to remedies available to the RTC, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

D. Contractor agrees to comply with the requirements of 2 CFR Part 180, Subpart C, as supplemented by 2 CFR Part 1200, throughout the term of the Agreement.

E. The Contractor agrees that it will not enter into any "covered transaction" (as defined in 2 C.F.R. §§ 180.2220 and 1200.220) with any third party participant (as defined in section 1 of FTA's Master Agreement) that is, or whose principal is suspended, debarred, or otherwise excluded from participating in covered transactions except as otherwise authorized by applicable Federal laws, regulations, or requirements regarding participation with debarred or suspended recipients or third party participants. The Contractor further agrees that it will review the Federal Government's "System for Award Management – Lists of Parties Excluded from Federal Procurement and Nonprocurement Programs," if required by U.S. DOT regulations (2 C.F.R. Part 1200).

12 - LOBBYING RESTRICTIONS [31 U.S.C. § 1352; 2 C.F.R. § 200.450; 2 C.F.R. part 200 appendix II (J); 49 C.F.R. part 20]

Contractors who apply or bid for an award of $100,000 or more shall complete and file the disclosure form required by 49 C.F.R. Part 20, "New Restrictions on Lobbying." (Standard Form LLL: Disclosure Form to Report Lobbying"). The Contractor shall obtain such disclosures from its subcontractors at any tier for whom a subcontract in excess of $100,000 is contemplated. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. § 1352. Such disclosures shall be forwarded from tier to tier up to the RTC. The Contractor shall include this clause in each subcontract and require its subcontractors to apply this clause to any lower tier subcontractors.

SAMPLE

13 - CONTRACT WORK HOURS AND SAFETY STANDARDS ACT—NON-CONSTRUCTION

A. Contractor shall comply with all Federal laws, regulations, and requirements providing wage and hour protections for non-construction employees, in accordance with 40 U.S.C. § 3702, Contract Work Hours and Safety Standards Act, and other relevant parts of that Act, 40 U.S.C. § 3701 et seq., and U.S. Department of Labor regulations, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction (also Labor Standards Provisions Applicable to Non-construction Contracts Subject to the Contract Work Hours and Safety Standards Act)," 29 CFR Part 5.

B. Contractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three (3) years from the completion of the Agreement for all laborers and mechanics, including guards and watchmen, working on the Agreement. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid.

C. Such records maintained under this section shall be made available by Contractor for inspection, copying, or transcription by authorized representatives of the Federal Transit Administration and the U.S. Department of Labor, and Contractor will permit such representatives to interview employees during working hours on the job.

D. Contractor shall require the inclusion of the language of this section in subcontracts of all tiers.

14 - CLEAN WATER REQUIREMENTS [33 U.S.C. §§ 1251-1387; 2 C.F.R. part 200, Appendix II (G)]

A. The Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. § 1251, et seq. The Contractor agrees to report each violation to the RTC and understands and acknowledges that the RTC will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

B. The Contractor also agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FTA.

15 - CLEAN AIR ACT [42 U.S.C. §§ 7401 – 7671q; 2 C.F.R. part 200, Appendix II (G)]

A. The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §§ 7401,

SAMPLE

et seq. The Contractor agrees to report each violation to the RTC and understands and agrees that the RTC will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

B. The Contractor also agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FTA.

16 - EMPLOYEE PROTECTIONS

The Contractor agrees to comply with all federal laws, regulations, and requirements providing protections to employees. Such protections include, but are not limited to, prevailing wage requirements, wage and hour requirements, anti-kickback prohibitions, safety requirements, work-hour prohibitions, the Fair Labor Standards Act, and 49 U.S.C. §5333(b), including applicable transit employee protective arrangements, U.S. Department of Labor certifications, special warranties, and special arrangements for Federal assistance under 49 U.S.C. § 5310.

17 - FEDERAL TAX LIABILITY AND RECENT FELONY CONVICTIONS [FTA Master Agreement (31), Section 4(g)]

The Contractor agrees that prior to entering into any subcontract, it will require the subcontractor to provide a certification that it; (A) does not have any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability; and (B) was not convicted of the felony criminal violation under any Federal law within the preceding 24 months. The Contractor also agrees to include these requirements in each subcontract, without regard to the value of any subcontract.

18 - ENVIRONMENTAL PROTECTIONS [FTA Master Agreement (32), Section 26]

Contractor shall comply with all applicable environmental and resource use laws, regulations, and requirements, and follow applicable guidance, now in effect or that may become effective in the future, including state and local laws, ordinances, regulations, and requirements and follow applicable guidance.

A. National Environmental Policy Act.

1. Contractor shall comply and facilitate compliance with federal laws, regulations, and requirements, including, but not limited to: (a) federal transit laws, such as 49 U.S.C. §5323(c)(2), and 23 U.S.C. §139; (b) the National Environmental Policy Act of 1969 (NEPA), as amended, 42 U.S.C. §§4321 et seq., as limited by 42 U.S.C. §5159, and CEQ's implementing regulations 40 C.F.R. part 1500 – 1508; (c) joint FHWA and FTA regulations, "Environmental Impact and Related Procedures," 23 C.F.R. part 771 and 49 C.F.R. part 622; (d) Executive Order No. 11514,

SAMPLE

as amended, “Protection and Enhancement of Environmental Quality,” March 5, 1970, 42 U.S.C. §4321 note; and (e) other federal environmental protection laws, regulations, and requirements applicable to Contractor.

2. Contractor shall follow federal guidance to the extent that the guidance is consistent with applicable authorizing legislation, which may include: (a) joint FHWA and FTA final guidance, “Interim Guidance on MAP-21 Section 1319, Accelerated Decision making in Environmental Reviews,” January 14, 2013; (b) joint FHWA and FTA final guidance, “SAFETEA-LU Environmental Review Process (Pub. L. 109-59),” 71 Fed. Reg. 66576, November 15, 2006; and (c) other federal environmental guidance applicable to the Contractor.

B. Other Environmental Federal Laws.
Contractor shall comply and facilitate compliance with all applicable federal laws, regulations, and requirements, and will follow applicable guidance, including, but not limited to, the Clean Air Act, Clean Water Act, Wild and Scenic Rivers Act of 1968, Coastal Zone Management Act of 1972, the Endangered Species Act of 1973, Magnuson Stevens Fishery Conservation and Management Act, Resource Conservation and Recovery Act, Comprehensive Environmental Response, Compensation, and Liability Act, Executive Order No. 11990 relating to “Protection of Wetlands,” and Executive Order Nos. 11988 and 13690 relating to “Floodplain Management.”

C. Use of Certain Public Lands.
Contractor shall comply with U.S. DOT laws, specifically 49 U.S.C. §303 (often referred to as “section 4(f)”), and joint FHWA and FTA regulations, “Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites,” 23 C.F.R. part 774, and referenced in 49 C.F.R. part 622.

D. Historic Preservation.
Contractor shall comply with: (1) U.S. DOT laws, including 49 U.S.C. §303 (often referred to as “section 4(f)”), which requires certain findings be made before an Award may be undertaken if it involves the use of any land from a historic site that is on or eligible for inclusion on the National Register of Historic Places; (2) federal historic and archaeological preservation requirements of section 106 of the National Historic Preservation Act, as amended, 54 U.S.C. §306108; (3) the Archeological and Historic Preservation Act of 1974, as amended, 54 U.S.C. §312501 et seq.; (4) U.S. Advisory Council on Historic Preservation regulations, “Protection of Historic Properties,” 36 C.F.R. part 800; and (5) other federal requirements and federal guidance to avoid or mitigate adverse effects on historic properties.

E. Indian Sacred Sites.
Contractor shall comply with federal efforts to promote the preservation of places and objects of religious importance to American Indians, Eskimos, Aleuts, and Native Hawaiians, and facilitate compliance with the American Indian Religious Freedom Act, 42 U.S.C. §1996, and Executive Order No. 13007, “Indian Sacred

SAMPLE

Sites," May 24, 1996, 42 U.S.C. §3161 note.

19 - ELECTRONIC AND INFORMATION TECHNOLOGY [FTA Master Agreement (31), Section 16(t)]

The Contractor agrees that reports or information it provides to the RTC or to or on behalf of the Federal Government will use electronic or information technology that complies with the accessibility requirements of Section 508 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. § 794d, and U.S. ATBCB regulations, "Electronic and Information Technology Accessibility Standards," 36 CFR Part 1194.

SAMPLE

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.5.1**

To: Regional Transportation Commission

From: Bill Thomas, Executive Director

SUBJECT: RTC Goals for Fiscal Year FY 2026

RECOMMENDED ACTION

Approve the RTC Goals for Fiscal Year (FY) 2026 (July 1, 2025 to June 30, 2026). (For Possible Action)

BACKGROUND AND DISCUSSION

The attached draft goals for the Agency for FY 2026 have been developed based on the updated RTC Strategic Roadmap, March 2025 Board Retreat, and FY 2026 budget process. In accordance with RTC's Personnel Rules, the Board sets performance goals for the Agency. Each year, the Board is asked to approve goals for the agency at or near the beginning of each fiscal year. The attached draft goals are aligned with the RTC's Strategic Roadmap and reflect the Board's priorities for the Agency. They are also measurable and achievable, and they are aligned with the Agency's resources.

FISCAL IMPACT

Funding for this item is included in the approved FY 2026 budget and there is no additional cost in connection with this agenda item

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Engineering & Construction • Public Transportation & Operations

Metropolitan Planning Organization of Washoe County, Nevada

FY 2026 RTC GOALS

Engineering

1) Begin Design:
   a. Active Transportation 26-01
   b. Highland Ranch Parkway Widening
   c. McCarran Boulevard Safety and Operational Improvements
   d. Moya Boulevard Capacity
   e. Wedekind Road Sidewalk and Safety
2) Begin Project Construction:
   a. 2026 Pavement Preservation Program
   b. Biggest Little Bike Network
   c. Eagle Canyon Safety and Operations
   d. W 4th Street Safety
   e. White Fir Rehabilitation
3) Complete Project Construction:
   a. 2025 Preventative Maintenance Program
   b. Arlington Avenue Bridges
   c. Meadowood Mall Rehabilitation
   d. Mill Street Capacity & Safety
   e. Vista Boulevard/Disc Drive Intersection Improvement
4) Launch full operations of the Regional Traffic Management Center (TMC).
5) Complete the La Posada to TRIC Feasibility Study.
6) Complete the University-area Implementation Study.
7) Identify and implement process improvements to enhance project bidding and procurement efficiency.

Planning

8) Initiate:
   a. Congestion Management Plan
   b. Kirman/Locust/Wells/Taylor Corridor/Area Study
   c. Neighborhood Network Plans #3 & #4
   d. Regional Safety Action Plan
   e. Rock Blvd Corridor/Area Study
9) Complete:
   a. FY 25-FY 29 RTIP Approval
   b. Neighborhood Network Plans #1 and #2
   c. Truckee River Path Implementation Plan
10) Adopt updated Public Participation Plan to reflect current conditions.
11) Implement quick build transportation improvements in Neighborhoods 1 & 2.

Public Transportation & Operations

12) Complete the update to TOPS Plan.
13) Begin free fares for youth program with Washoe County School District.
14) Identify and implement strategies to improve accessibility within the transportation system, including budgeted bus stop improvements.
15) Begin design of replacement maintenance facility.
16) Deploy first hydrogen-powered buses into active transit service.

Executive

17) Explore regional transportation and funding needs in the Tahoe area.
18) Increase executive visibility and community engagement by attending civic and community events to strengthen external relationships and elevate the RTC's public profile.
19) Develop a clear, prioritized communications framework tailored to Engineering project characteristics.
20) Tell the story of RTC projects and their impact in the community.
21) Identify funding strategy for construction of Sun Valley Boulevard Project Phase 2.
22) Implement program audits to support continuous improvement and accountability.
23) Complete Evaluation of current systems with vendor chosen through ERP evaluator and integration RFP. Draft procurement documents and timeline for system replacement with evaluator.
24) Take next steps toward implementing Board recommended actions from Guinn Center Study.
25) Launch a family day event to promote employee engagement, community awareness, and education about RTC's mission.
26) Strategically adjust goals as needed throughout the year to respond to Board direction in a prompt manner.

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 4.5.2**

To: Regional Transportation Commission

From: Bill Thomas, Executive Director

SUBJECT: RTC Strategic Roadmap Update for FY 2026-2027

RECOMMENDED ACTION

Acknowledge receipt of the updated RTC Strategic Roadmap for FY 2026-2027.

BACKGROUND AND DISCUSSION

At the Board's workshop in March 2025, the Board discussed the strategic plan for our community network experience. The RTC Strategic Roadmap for FY 2025–2027 has been updated to reflect Board direction from the March 2025 retreat and to guide agency focus areas for FY 2026 & 2027. The updated roadmap includes specific objectives, outcomes, and key performance indicators for each strategic goal, and continues to align RTC's work with our mission of building a better community through quality transportation.

Updates to the roadmap include revised Goal Language to better reflect Board direction:

- Goal #3 updated to "Reimagine the Truckee River as a transportation corridor."
- Goal #6 updated to "Sustainable transportation funding."
- Goal #7 updated to "Be a high-functioning organization."

These updates support the Board's vision for our community network experience. Staff will return to the Board with individual policy recommendations or finalized implementation plans as needed.

FISCAL IMPACT

Funding for this item is included in the approved FY 2026 budget, and there is no additional cost in connection with this agenda item.

PREVIOUS BOARD ACTION

03/14/2025 - Board Workshop.

07/19/2024 - Acknowledged receipt of the RTC Strategic Roadmap for FY 2025-2027 and provide input and direction regarding next steps.

VISION BOARD FOR OUR COMMUNITY NETWORK EXPERIENCE

As Summary 2024 Board Retreat

What we value in our community network experience…

Transit

Planning for the future growth of our community. Reaching & serving diverse populations.





Connected Neighborhoods

Connected bike network with connected neighborhoods.

River Corridor

Downtown planning designed for walking, biking, and cars. Connecting both downtowns.





Systemwide Performance

Maintain the system to achieve 20-30 min network.



Safety

Safe school zones, safe pedestrian walkways, and equal access for ADA communities.

Sustainable Maintenance

Sustainable approach to maintenance.





Communication & Collaboration

Increased community collaboration, outreach, and inclusivity of Spanish-speaking population.

Long-term Planning & Financial Stewardship

Stop being reactive and start being proactive. Less “prioritizing the squeaky wheel.”

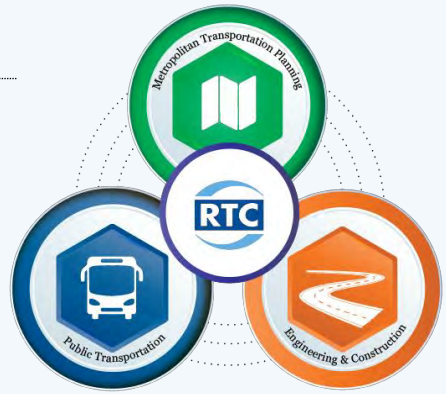


STRATEGIC ROADMAP FY25-27

Strategic Plan Summary *as of Summer 2025*

OUR MISSION

Building a better community through quality transportation.



STATEMENT OF CULTURE

RESPECT

Respect is demonstrated through our work as subject matter experts, by actively listening and effectively communicating with others, and interacting ethically.

TRUST

Trust is shown through accountability in our tasks, acting with integrity, and being responsive to stakeholders.

COMMITMENT

Commitment is illustrated by exceeding expectations, being collaborative, and keeping public service at the forefront of our actions.

STRATEGIC GOALS

#1	Expand public transportation utilization.
#2	
#3	Reimagine the Truckee River as a transportation corridor.
#4	Proactively manage congestion.
#5	Improve network safety.
#6	Sustainable transportation funding.
#7	Be a high-functioning organization.

STRATEGIC ROADMAP

FY25 27 I As of Summer 2025



Mission and Culture

Mission Statement

Building a better community through quality transportation.

Statement of Culture

The Regional Transportation Commission of Washoe County is committed to a culture that exhibits respect, trust, and commitment in our work and interactions between employees and with the public, businesses, regional partners, and other agencies.

RESPECT

Respect requires understanding and appreciating the expertise and contributions of others and interacting with others in a way that reflects that understanding and appreciation. Respect is demonstrated through our work as subject matter experts by actively listening and effectively communicating with others and interacting ethically.

TRUST

Trust requires giving others the benefit of the doubt with regard to their motives and character and by giving others the opportunity to express their beliefs and be accountable for their actions. Trust is shown through accountability in our tasks, acting with integrity, and being responsive to stakeholders.

COMMITMENT

Commitment requires embracing individual responsibility for achieving team goals and taking the action that is necessary to follow through on that responsibility and achieve those goals. Commitment is illustrated by exceeding expectations, being collaborative, and keeping public service at the forefront of our actions.

Strategic Goals

#1	Expand public transportation utilization.
#2	
#3	Reimagine the Truckee River as a transportation corridor.
#4	Proactively manage congestion.
#5	Improve network safety.
#6	Sustainable transportation funding.
#7	Be a high-functioning organization.

Strategic Goal

#1 Expand public transportation utilization.

Success looks like… an increase in ridership.

Why? Provide access to everyone who needs and wants public transportation through a suite of options to meet current ridership and deliver additional opportunities to serve more of our residents.

Champion: Director of Public Transportation **Detailed Plan**: TOPS

OUR APPROACH

Equitable and Accessible Ridership: The RTC is committed to increasing ridership by improving equity and ensuring access to its services. This effort will particularly focus on the needs of Spanish-speaking and student populations.

Reliable and Safe Service: The agency continuously works to enhance RTC public transit, aiming to deliver a service that is both safe and reliable. A friendly customer environment remains a high priority.

Service Innovation: The RTC places a strong emphasis on service innovation to upgrade public transit and enrich the customer experience. These innovations are designed to meet evolving user needs and preferences.

Financial Sustainability: The agency strives to use its resources efficiently, focusing on maximizing ridership while expanding service coverage. This approach ensures the financial sustainability of RTC services.

OUTCOMES & FY26 FOCUS

Agency Outcomes	FY25 Initiatives
Enhance service frequency & availability.	Implement service changes.
Focus on attracting the next generation of riders to include Spanish-speaking population and youth.	Revise facilities (specifically 4SS & CP) to make more inviting for all passengers. Pilot program for Youth Ride Free.
Proactively plan for the future growth of our system and service demand.	Complete Tahoe Study to determine our role. Begin design of Replacement Maintenance Facility. Complete the TOPS Update. Continue Bus Stop Improvement Program. Update vehicle replacement strategy for RIDE.

KPIs

KPIs	YTD FY25 Actuals	Target Direction
Increase system ridership.	9.19% increase	Up
Increase in jobs accessible with transit.	570 increase	Up
Increase in population with transit available.	200 increase	Up
On-time performance (RIDE).	91%	Maintain
On-time performance (FlexRIDE).	94.4%	Maintain
On-time performance (ACCESS).	90.6%	Maintain
Passengers per service hour (RIDE).	21.91	Up
Number of Higher Ed students riding buses (EdPass)	211K in riders	Up
Number of WCSD Students riding buses	New	Baseline
Number of Spanish language contacts (Transit app usage)	437.2%	Increase total contacts

Strategic Goal
#2 Promote neighborhood mobility.

Success looks like… More people choosing to walk or ride bikes within neighborhoods and expand the interconnection between neighborhoods.

Why? Increase accessibility and mobility options as well as reduce congestion and emissions in our region.

Champion: Director of Planning **Detailed Plan**: Active Transportation Plan

OUR APPROACH

Sustainable, Dedicated Approach to Active Transportation: The RTC has established an Active Transportation Program committed to planning, funding, and implementing neighborhood networks. This approach aims to support sustainable transportation options across the community.

Complete, Connected Neighborhoods: Through the development of Neighborhood Network Plans, the agency will establish localized priorities tailored to specific neighborhood connectivity needs. These plans are designed to foster complete and connected communities.

OUTCOMES & FY26 FOCUS

Agency Outcomes	FY26 Initiatives
Expand mode share: Increase trips by biking, walking, and rolling.	Begin implementation of quick build bicycle and pedestrian improvements Initiate the construction of the Biggest Little City Bike Network.
All neighborhoods in the greater Reno-Sparks area have a neighborhood plan.	Create two Neighborhood Plans.
All 12 neighborhoods in the greater Reno-Sparks area have a neighborhood plan.	Identify connectivity barriers through corridor and area planning studies

KPIs

KPI	YTD FY25 Actuals	Target Direction
Number of pedestrian and bicycle trips	-	Baseline Year
Number of miles of bicycle facilities constructed	7.43	Maintain
Number of miles of pedestrian facilities constructed	5.11	Maintain
Miles of low-stress network (biking and ped) within a .25 mile walk and 1 mile bike ride mile of schools	-	Baseline Year

Strategic Goal
#3

Reimagine the Truckee River as a transportation corridor.

Success looks like... Exploring opportunities to improve the Truckee River as a transportation corridor.

Why? To support community efforts around the Truckee River.

Champion: Director of Planning

Detailed Plan: Corridor Plan

OUR APPROACH

Capitalize on Transportation Opportunities: The RTC will intensify its efforts to redefine the utilization of the Truckee River for transportation purposes. This strategic focus includes identifying areas for improvement and specific projects aimed at enhancing transportation infrastructure and services along the river.

Work With All Jurisdictions: The agency's efforts will be inherently cross-jurisdictional, involving close collaboration with regional partners and community groups. This cooperative approach is designed to ensure that transportation initiatives are comprehensive, well-coordinated, and beneficial across multiple jurisdictions.

OUTCOMES & FY26 FOCUS

Outcomes	FY26 Initiatives
Create a community-coordinated Implementation Plan for the Truckee River Path which identifies shared governance, funding, and maintenance responsibilities.	Deliver a coordinated Implementation Plan by end of FY26.

Strategic Goal

#4 Proactively manage

Success looks like... maintaining or improving systemwide performance without capacity reduction by maximizing the current roadway capacities.

Why? Maximize our existing resources and manage quality of life as the region grows.

Champion: Director of Engineering

Detailed Plan: ITS SMP & Corridor Studies

OUR APPROACH

Regional Traffic Management: In collaboration with regional partners, the RTC is set to establish a Traffic Management Center. This center will centralize proactive and reactive management of arterial operations, enhancing efficiency and response times across the network.

Addressing Key Growth Areas in North Valleys and TRIC: The RTC's strategic focus includes enhancing reliability through the development of the Traffic Management Center, conducting corridor studies, and creating new connections. These initiatives are designed to support rapid growth areas, improving overall transportation fluidity and connectivity.

OUTCOMES & FY26 Focus

Outcomes	FY26 Initiatives
Dynamically manage traffic across the region.	Launch TMC. Complete the Regional Congestion Management Plan.
Increase transportation options that connect to growth areas outside of Washoe County Metropolitan Area.	Complete Reno-Sparks-TRIC Rail Alt. Modes Study. Complete the La Posada to TRI Center Feasibility Study.

KPIs

KPIs	YTD FY25 Actuals	Proposed Direction
Number of green traffic lights/every red traffic light	2.7	Maintain
Number of signal timing improvements	54	Maintain
% of signals connected to high-speed fiber	78%	Up
Peak Travel Time	10.58 minutes	Maintain
Congestion Delay Per Mile	0.66	Down
Average Commute Time	22.5 minutes	Maintain

Strategic Goal

#5 Improve network safety.

Success looks like... Realize a tangible reduction in both the severity and frequency of traffic crashes.

Why? Safety is our number one priority.

Champion: Directors of Engineering & Planning

Detailed Plan: Intersection Safety Priority Plan & RTP

OUR APPROACH

Strategic Safety Planning: Implementing an agency-specific Comprehensive Safety Action Plan involves advanced data collection and analysis to identify and prioritize safety improvements across the regional road network. This method focuses on developing a strategic approach to systematically enhance road safety based on empirical data.

Enhanced Data Utilization and Risk Prediction: Updating the high-injury network and collecting comprehensive roadway attribute data are crucial to improving safety. This includes developing a predictive safety tool to estimate crash risks and severity across different corridors and intersections, enabling a proactive approach to roadway safety.

Equity & Vulnerability Focus: Prioritizing vulnerable road users and underserved communities ensures that safety interventions address those most at risk. By focusing on reducing fatalities, serious injuries among these groups and considering the equity impact of safety plans, this method aims to create a more inclusive, effective road safety approach.

Rapid Implementation & Community Engagement: Utilizing quick-build projects allows for the swift testing and evaluation of low-cost, high-impact safety countermeasures. Engaging stakeholders through outreach ensures that the safety initiatives align with community needs, fostering a collaborative approach to improving roadway safety.

OUTCOMES & FY26 FOCUS

Outcomes	FY26 Initiatives
Focus on improvements to roadway segments and intersections identified on the High-Injury Network.	Complete the University-area Implementation Study. Construction of the West 4th Safety Project. Complete the design for the Sixth Street Safety Project.
Develop a more data-driven approach to Road Safety.	Utilize federal funding to improve corridor safety on West 4th Street and Sixth Street. Initiate a process for data collection related to road safety.

KPIs

KPI	YTD FY25 Actuals	Target Direction
Number of projects improved on High-Injury Network	8	Up
Roadway Fatalities	52 (CY24)	Down

Strategic Goal
#6

Sustainable transportation funding.

Success looks like... Finding the optimal balance within the region on what we spend on maintenance and investing in developing new roads.

Why? To ensure we are optimizing available funding to maximize the overall health of our regional roadway network.

Champion: Director of Finance **Detailed Plan**: Roadway Maintenance Needs Study

OUR APPROACH

Lead Regional Coordination: Create a regional approach to road maintenance in partnership with regional partners and the Nevada Department of Transportation (NDOT). This strategy will streamline efforts and resources, ensuring more efficient and consistent road maintenance across jurisdictions.

Long-Term Financial Planning: Align revenue and expenses with the Capital Improvement Plan (CIP) and the Regional Transportation Plan (RTP) to deliver projects when the community needs them most. This alignment ensures that financial resources are efficiently utilized to meet long-term transportation infrastructure goals.

Federal Funding: Identify and secure federal funding for large infrastructure projects, safeguarding limited resources through prudent management and the application of Street and Highways Policy. This approach enhances the financial stability of transportation projects and ensures adherence to high infrastructure development standards.

OUTCOMES & FY26 FOCUS

Outcomes	FY26 Initiatives
Collaboratively implement data-driven improvements to optimize maintenance of the regional transportation system & find opportunities for long-term solutions.	Review and make recommendations based on the Study.
Support local jurisdictions effort for federal funding for roadway maintenance needs.	Monitor new funding types and continue to assist local jurisdictions with applications.
Recommendations for policy options for taxes and fees for EVs in Washoe County.	Craft the language policy adjustments as needed.

KPIs

KPI	YTD FY25 Actuals	Target Direction
Miles of road surface replaced	128,250,000	Maintain
PCI for Regional Roads	80	Maintain
Federal funding applied for with local jurisdictions	$6.7 million	Maintain
Annual budget adherence within 5% (Capital).	48.5%	Up
Funding available to deliver scheduled projects coming within 5% of estimate (Capital).	64.1%	Up
% of preventative maintenance completed	100%	Maintain

Strategic Goal
#7

Be a high-functioning organization.

Success looks like... a proactive approach to our work that is responsive to the needs of our staff and community.

Why? Planning ahead is critical to our effectiveness. We are the builders of our community's transportation future.

Champion: Director of Administrative Services

OUR APPROACH

Foster Staff Engagement and Development: Integrate employee feedback into strategic decisions to better align everyone with the organizational direction and foster a sense of inclusion and purpose. This integration is complemented by continuous professional growth opportunities that enhance staff engagement and support, ultimately building a more dedicated and skilled workforce.

Enhance Communication Dynamics: Strengthen both internal and external communications by establishing clear, feedback-inclusive channels within the organization, extending to contract employees and riders. This approach ensures that all stakeholders are informed and can contribute to the dialogue, enhancing overall communication effectiveness and responsiveness.

OUTCOMES & FY26 FOCUS

Outcomes	FY26 Initiatives
Foster engaged, developing & supporting staff.	Complete evaluation of current systems with vendors chosen through ERP evaluator and integration RFP.
Strengthen contractor-employee relationships.	Ongoing
Tell Our "Public Benefit" Story.	Build a Clear and Prioritized Communications Framework. Tell the Story of RTC Projects in the Community Refresh RTC website in compliance with accessibility standards.

KPIs

KPI	FY25 Actuals	Target Direction
Number of public engagement interactions (2-way conversations)	33	Maintain
Social media engagement scores	7,100	Up
Advertising value equivalency of earned media	New	Baseline
Number of Snap Surveys	2	Up
Community engagement opportunities	New	6
Op-Eds or equivalent	New	2

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 5.1.**

To: Regional Transportation Commission

From: Paul Nelson, Government Affairs Officer

SUBJECT: Special Report on the 2025 Nevada Legislature

RECOMMENDED ACTION

Discuss and provide potential direction to staff regarding any legislative measures from the 83rd Session of the Nevada Legislature (2025).

BACKGROUND AND DISCUSSION

Special Report on the 2025 Nevada Legislature by Michael Hillerby of Kaempfer Crowell, Ltd., RTC's Government Affairs Representative.

FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

KAEMPFER CROWELL

2025 SESSION OF THE NEVADA LEGISLATURE
Summary Report – July 10, 2025

Session Overview

The 2025 Nevada Legislature convened February 3 on the heels of a hotly contested race for several seats in both the Assembly and Senate. Governor Joe Lombardo and his team were able to pick up enough seats in each house to deny the Democrats the 2/3 majority needed to override a gubernatorial veto. The tough nature of the campaign would influence the dynamics of the session and the relationship between the Governor and legislative leaders.

When the Governor announced a budget of $12.7 billion (a 9% increase over last biennium) in his State of the State address on January 15th, 2025, his proposal faced immediate skepticism from Democratic leadership, who questioned the adequacy of revenue to support increased spending. The budget also contained several mistakes and was unbalanced, prompting consternation from the Dems, budget amendments from the Governor, and the sudden departure of his Finance Director.

After the Economic Forum on May 1st reported a tax revenue shortfall of $191 million and a State Education Fund decrease of $160 million, the finance committees got to work cutting the budget, removing more than $450 million, largely by rejecting requests for new positions and programs. This is not to say all those programs have been terminated, as many were passed as one-time appropriations in other bills. The Legislature also notably cut $130 million out of Lombardo's recommended Medicaid allotment, because the state expects to spend $38 million less in general fund money due to federal immigration policies expected to dampen enrollment numbers. The committees also expect to spend $41 million less on Medicaid managed care payments in FY 2026 because of a surplus of allocated money in the current fiscal year. By the end of the Legislative session, all five mandatory budget bills passed through.

Governor Lombardo started the session on the heels of a successful campaign to pick up enough seats to deny the Democrats a 2/3 majority (needed to override any vetoes or raise new taxes). This gave him some bargaining power, and both he and his staff used that and the experience gained from his first session in 2023 to achieve some meaningful successes this year. He ended up achieving much of what he wanted in his budget and used his veto pen to limit the damage to businesses and impacts on state and local government. One key success was the passage of the Nevada Health Authority, creating a new department to centralize Medicaid, the Public Employee Benefits Program, the Silver State Health Insurance Exchange and other programs in one department to hopefully realize efficiency and cost savings.

Thanks to push back from the Democratic majorities, his priority policy initiatives saw mixed results. The Governor introduced five main priority bills: AB 540 (housing), AB 584 (education reform), SB 461 (economic development), SB 457 (crime reform), and SB 495 (healthcare reform). Of the five bills, only the housing bill passed both houses and was sent to the Governor, although some of the provisions in his education bill were added into Senate Majority Leader Nicole Cannizzaro's SB 460, which successfully made it out of the Legislature. SB 461 never received a floor vote. SB 457 received some heavy amendments, and time ran out before it

could be considered. Lombardo's healthcare bill, SB 495, got out of the Senate by a party line vote, where the Senate Republicans, in an act of protest to an unfriendly amendment from Senate Dems, all voted no on the measure. Once in the Assembly, the Republican members opted not to suspend legislative rules that would have kept the legislation alive, and it died on the Assembly floor.

For many of the remaining bills on the Senate floor, time ran out due to a controversial last-minute emergency measure by Majority Leader Cannizzaro to alter the makeup of the Legislative Commission, which is the legislative body that approves regulations. The makeup of the Legislative Commission has an equal number of Democrats and Republicans. SCR 8 would change this makeup, giving the majority party in the Legislature a majority control of the Commission. The SCR and its subsequent Senate Resolution that assigned the makeup of the Commission ultimately passed out of the Senate, but not before the clock struck midnight and no other business could be tended to. The result of this is that many industry groups in the state are upset with Senate leadership that several bills needlessly died, and we suspect that at least a handful of the Governor's vetoes were due to negotiations faltering by these deaths.

Aside from the Governor's four priorities failing, other major priorities that didn't pass include the following: AB 500 (Speaker Yeager's payment banking bill), the film tax abatement proposals, boards and commissions reform bills, and SB 199 (Senator Neal's omnibus AI regulation bill). However, AB 499, a bill that would expand mail-ballot drop box access and institute some requirements for voter ID, did pass with bi-partisan support but was vetoed by the Governor.

Governor Lombardo came into the 2025 Session having set a record of 75 vetoes in 2023. He surpassed that record with a total of 87 vetoes this year, with the majority occurring after the adjournment of the Legislature. Some of these vetoes were of almost identical bills vetoed last session. Key vetoes included the Attorney General's price manipulation bill, prohibiting the carrying of firearms in a polling place, a variety of elections bills, mandatory nurse staffing ratios in hospitals, and prescription pricing. One should expect to see many of these arise again in campaign materials next year.

Transportation Issues

Transportation issues were again front and center this session as legislators dealt with highway funding, bus driver and rider safety, traffic enforcement, a toll road proposal, and the usual bills impacting government operations. The latter included open meeting law, public records, meeting accessibility, public works and prevailing wage and numerous other subjects.

One high profile bill this session, and one supported by RTC Washoe, was the Southern Nevada RTC bill to extend fuel revenue indexing through 2036. The bill allows the Clark County Commission to extend the current tax indexing through December 31, 2036, with a 2/3 vote of the commissioners. For the tax to continue past January 1, 2037, it will need to be approved by a majority vote at the general election in November 2036. A similar bill was vetoed by Governor Lombardo last session, but with the 2/3 County Commission vote change the Governor signed the bill this year.

We supported the efforts of our Southern Nevada colleagues by working with Washoe legislators and providing information on the history and benefits of RTC-5 here. Because of the ongoing challenges to the State Highway Fund, any move to help Clark County with their funding needs will be helpful to the rest of Nevada and the equitable distribution of limited highways funds.

We again saw a driver safety bill from the Teamsters introduced; this session by newly elected Assemblymember Linda Hunt in the form of AB 361. As introduced, the bill required driver enclosures and signage, as well as providing for criminal trespassing penalties for a passenger convicted of assaulting a transit operator. The trespass provisions directly conflicted with a related bill from Southern Nevada RTC (SB 290), and we worked with them and a large coalition of groups to remove these provisions from AB 361 in favor of their passenger removal bill. While the bill's enclosure requirements duplicated work both large RTCs were already doing, we worked with the sponsor and Teamsters on a final version of the language we could implement and that was limited to the large buses in the fleet.

After considerable work during the past interim, the Legislature considered three bills dealing with automated traffic enforcement. While the need for more enforcement is clear to transportation professionals and law enforcement, the idea of automated enforcement devices has always been controversial with some legislators. The bills included a very narrow provision for cameras on school bus stop arms, speed enforcement cameras in construction zones, and a broader bill allowing red light cameras and other technology.

The broader bill was clearly in trouble from the beginning and did not advance. We worked extensively on the construction zone camera bill with the AGC and Assemblymember Torres-Fossett to address the concerns of a variety of public defender and civil liberties groups, and to educate the parties on how construction zone speed limits are set and where the cameras might be used. The bill passed out of the Assembly but died in the Senate Committee. The only bill to move forward was the narrow provision for school bus stop arm cameras. In addition to the extensive data on injuries and fatalities we already have, it is hoped the school bus bill may provide useful data for a future effort to advance automated traffic enforcement in high-risk areas.

AB 61 was the City of Sparks' toll road bill designed to provide a mechanism to build a northern route from the Truckee Meadows to the Tahoe Reno Industrial Complex in Storey County. While Nevada has had many toll roads in its past, there is no modern use of the roads and a change in law was necessary to create a framework. The bill faced strong opposition on both sides of the aisle among legislators and the bill did not advance.

There will be two interim studies regarding transportation that RTC will actively follow and participate in. One is a study on regional rail transit sponsored by Assemblymember La Rue Hatch and the other creates a Transit-to-Trails task force to identify priority areas for public access to outdoor recreation. While neither bill provided the funding necessary to implement the projects, it is hoped the data produced may help guide possible federal funding or state budget decisions in future years. These will both face strong competition for the limited transportation funding available.

The Legislature did not address the issue of electric and other alternative fuel vehicles and the associated loss of gas tax dollars this session. While the problem only grows worse the political challenges of enacting a new scheme for such vehicles, or the much more ambitious idea of overhauling the entire current scheme, remain a daunting obstacle to enacting any necessary change.

Among Governor Lombardo's vetoes were several bills impacting state and local government operations, including bills on public works, labor relations and collective bargaining. The attached report shows the results on the bills tracked for RTC Washoe. Please let us know if you need any additional information.

Tracking List

Bills	Sponsors	Title	Topics/Notes	Last Action	Latest Version	Bill Lists
AB 14	Assembly Committee on Government Affairs	Revises provisions relating to certain public officers. (BDR 20-453)	County public officer requirement, register to vote	executive, May 28, 2025: Approved by the Governor. Chapter 63.	As Enrolled	Enacted
AB 28	Assembly Committee on Government Affairs	Revises provisions related to transportation. (BDR 22-463)	RTCs, retail sales tax	executive, May 28, 2025: Approved by the Governor. Chapter 65.	As Enrolled	Enacted Priority
AB 29	Assembly Committee on Natural Resources	Revises provisions relating to motor vehicle fuel. (BDR 51-271)	Motor vehicle fuel, pump labeling and advertising	executive, Jun 3, 2025: Approved by the Governor. Chapter 218.	As Enrolled	Enacted
AB 55	Assembly Committee on Judiciary	Revises provisions relating to motor vehicle crashes. (BDR 43-250)	Motor vehicle crashes	executive, May 27, 2025: Chapter 17.	As Enrolled	Enacted
AB 64	Assembly Committee on Government Affairs	Revises provisions relating to public meetings. (BDR 19-445)	Public meetings (for AG) [Waiver Granted]	executive, Jun 6, 2025: Chapter 326.	As Enrolled	Enacted Priority
AB 111	Brian Hibbetts	Revises provisions relating to certain traffic violations. (BDR 43-161)	Driving upon divided highway, wrong-way driving	executive, May 29, 2025: Approved by the Governor. Chapter 108.	As Enrolled	Enacted
AB 125	Tanya Flanagan	Revises provisions relating to public bodies. (BDR 18-909)	Schedule of public meetings to be posted on state website	executive, May 28, 2025: Approved by the Governor. Chapter 70.	As Enrolled	Enacted
AB 128	Assembly Committee on Government Affairs	Creates the Public Records Task Force. (BDR S-400)	Public Records Task Force	executive, Jun 3, 2025: Approved by the Governor. Chapter 228.	As Enrolled	Enacted
AB 192	Shea Backus	Makes various changes relating to real property. (BDR 10-971)	Uniform Easement Relocation Act, Uniform Mortgage Modification Act	executive, May 29, 2025: Approved by the Governor. Chapter 112.	As Enrolled	Enacted
AB 197	Shea Backus Gregory Hafen	Enacts provisions strengthening certain protections for certain activities under the First Amendment. (BDR 19-136)	Confidential personal info, nonprofit affiliation	executive, May 29, 2025: Approved by the Governor. Chapter 115.	As Enrolled	Enacted
AB 249	Assembly Committee on Ways and Means	Revises provisions relating to fiscal notes. (BDR 17-932)	Fiscal notes	executive, Jun 6, 2025: Chapter 309.	As Enrolled	Enacted

AB 256	Selena La Rue Hatch Cecelia González Erica Roth	Directs the Legislative Commission to appoint a Regional Rail Transit Advisory Working Group to conduct an interim study relating to regional rail transit. (BDR S-614)	Regional rail transit, interim study	executive, May 28, 2025: Approved by the Governor. Chapter 77.	As Enrolled	**Enacted** **Priority**
AB 263	Erica Mosca Max Carter Venicia Considine	Revises provisions relating to homelessness. (BDR 20-96)	Clean-up of homeless encampments (Clark Co.)	executive, Jun 3, 2025: Approved by the Governor. Chapter 242.	As Enrolled	**Enacted**
AB 296	Howard Watts	Revises various provisions relating to motor vehicles. (BDR 43-231)	VMT pilot program extension, digital license plates	executive, Jun 11, 2025: Chapter 466.	As Enrolled	**Enacted**
AB 325	Assembly Committee on Government Affairs	Revises provisions relating to artificial intelligence. (BDR 36-393)	Emergency response planning, use of AI	executive, May 30, 2025: Approved by the Governor. Chapter 123.	As Enrolled	**Enacted**
AB 333	Ken Gray Alexis Hansen Erica Roth	Revises provisions relating to governmental administration. (BDR 49-833)	Washoe County land lease	executive, May 30, 2025: Approved by the Governor. Chapter 125.	As Enrolled	**Enacted**
AB 361	Linda Hunt	Revises provisions relating to public mass transportation. (BDR 22-1066)	Transit operator safety	executive, May 27, 2025: Chapter 26.	As Enrolled	**Enacted** **Priority**
AB 417	Linda Hunt Venicia Considine Reuben D'Silva	Revises provisions relating to public safety. (BDR 43-647)	Trick driving, speed contests	executive, May 30, 2025: Approved by the Governor. Chapter 148.	As Enrolled	**Enacted**
AB 429	Assembly Committee on Natural Resources	Revises provisions relating to natural resources. (BDR 10-679)	Conservation easements	executive, May 30, 2025: Approved by the Governor. Chapter 130.	As Enrolled	**Enacted**
AB 444	Gregory Hafen Dina Neal	Revises provisions relating to governmental administration. (BDR 18-772)	Regulation and ordinance adoption, impact fee ordinances	executive, Jun 9, 2025: Approved by the Governor. Chapter 427.	As Enrolled	**Enacted** **Priority**
AB 462	Shea Backus	Revises provisions relating to economic development. (BDR 22-823)	Inland ports and industrial parks, career pathways	executive, Jun 9, 2025: Approved by the Governor. Chapter 428.	As Enrolled	**Enacted**
AB 486	Assembly Committee on Natural Resources	Makes various changes related to transportation. (BDR 35-678)	Wildlife crossings, highway projects	executive, Jun 6, 2025: Chapter 310.	As Enrolled	**Enacted**
AB 502	Assembly Committee on Government Affairs	Revises provisions relating to public works. (BDR 28-401)	Public works compliance	executive, Jun 6, 2025: Chapter 331.	As Enrolled	**Enacted**
AB 509	Assembly Committee on Commerce and Labor	Revises provisions relating to the access of public rights-of-way by broadband providers. (BDR 58-664)	Broadband providers, local govt. agreements to access public right-of-way	executive, May 30, 2025: Approved by the Governor. Chapter 155.	As Enrolled	**Enacted**
AB 523	Assembly Committee on Growth and Infrastructure	Revises provisions relating to transportation. (BDR 57-1138)	TNCs, DNCs	executive, May 19, 2025: Approved by the Governor. Chapter 5.	As Enrolled	**Enacted**
AB 527	Assembly Committee on Growth and Infrastructure	Authorizes the installation and use of school bus infraction detection systems on school buses. (BDR 43-421)	School bus infraction detection systems	executive, Jun 6, 2025: Chapter 306.	As Enrolled	**Enacted** **Priority**
AB 530	Assembly Committee on Growth and Infrastructure	Revises provisions relating to the imposition by certain counties of additional taxes on fuels for motor vehicles. (BDR 32-783)	Fuel revenue indexing (Clark Co.)	executive, May 22, 2025: Chapter 6.	As Enrolled	**Enacted** **Priority**
AB 545	Assembly Committee on Ways and Means	Increases certain fees relating to emissions testing. (BDR 40-1150)	Emissions testing fee increases	executive, Jun 6, 2025: Chapter 340.	As Enrolled	**Enacted**

AB 553	Assembly Committee on Ways and Means	Transfers the Division of Emergency Management of the Office of the Military to the Office of the Governor. (BDR 18-1126)	Gov's Office of Emergency Management	executive, Jun 6, 2025: Chapter 279.	As Enrolled	**Enacted**
AB 576	Assembly Committee on Ways and Means	Makes appropriations to the Nevada Highway Patrol Division of the Department of Public Safety for the purchase and replacement of motorcycles, vehicles and equipment. (BDR S-1214)	NHP vehicle and motorcycle replacement, appropriation	executive, Jun 6, 2025: Chapter 344.	As Enrolled	**Enacted**
AB 595	Assembly Committee on Ways and Means	Revises provisions governing fiscal information for legislative measures. (BDR 17-1239)	Fiscal notes, Executive Budget notation	executive, Jun 11, 2025: Chapter 509.	As Enrolled	**Enacted**
SB 28	Senate Committee on Government Affairs	Revises provisions relating to municipalities. (BDR 22-411)	Affordable housing and transportation, tax increment area	executive, May 28, 2025: Approved by the Governor. Chapter 54.	As Enrolled	**Enacted** **Priority**
SB 196	Nicole Cannizzaro	Authorizes a heavy equipment rental company to charge a recovery fee to offset taxes levied on certain heavy equipment. (BDR 32-19)	Heavy equipment rental, recovery fee	executive, May 31, 2025: Approved by the Governor. Chapter 180.	As Enrolled	**Enacted**
SB 260	Edgar Flores Fabian Doñate Cinthia Zermeño Moore	Revises provisions relating to air quality. (BDR 53-961)	Workplace air quality from wildfire smoke	executive, Jun 11, 2025: Chapter 499.	As Enrolled	**Enacted**
SB 290	Senate Committee on Growth and Infrastructure	Revises provisions relating to regional transportation commissions. (BDR 22-743)	RTC removal of persons	executive, May 28, 2025: Approved by the Governor. Chapter 84.	As Enrolled	**Enacted** **Priority**
SB 298	Senate Committee on Government Affairs	Revises provisions relating to peace officers. (BDR 23-1031)	Peace officer, punitive action definition	executive, Jun 9, 2025: Approved by the Governor. Chapter 395.	As Enrolled	**Enacted**
SB 315	Skip Daly	Authorizes the Department of Transportation to enter into a progressive design-build contract for a certain project. (BDR S-626)	I-80 improvements, progressive design-build contract	executive, May 28, 2025: Approved by the Governor. Chapter 86.	As Enrolled	**Enacted** **Priority**
SB 320	Melanie Scheible	Revises provisions relating to crosswalks. (BDR 43-9)	Crosswalks	executive, May 31, 2025: Approved by the Governor. Chapter 196.	As Enrolled	**Enacted** **Priority**
SB 358	Angela Taylor	Requires certain units of government of this State to accept certain forms of payment. (BDR 19-759)	Credit card and electronic payment, govt. entities	executive, Jun 9, 2025: Approved by the Governor. Chapter 449.	As Enrolled	**Enacted**
SB 359	Senate Committee on Judiciary	Makes various changes relating to drivers. (BDR 43-900)	Traffic offenses, hearings and citations, DUI, drivers involved in a crash	executive, Jun 6, 2025: Chapter 260.	As Enrolled	**Enacted**
SB 405	Senate Committee on Natural Resources	Creates the Transit-to-Trails Task Force. (BDR 35-382)	Transit-to-Trails Task Force	executive, May 31, 2025: Approved by the Governor. Chapter 209.	As Enrolled	**Enacted** **Priority**
SB 426	Senate Committee on Natural Resources	Establishes provisions relating to the Lake Tahoe Basin Scenic Byway Corridor Recreation Safety Zone. (BDR 43-374)	Lake Tahoe Basin Scenic Byway Corridor Safety Zone, parking	executive, Jun 9, 2025: Approved by the Governor. Chapter 452.	As Enrolled	**Enacted** **Priority**
SB 454	Senate Committee on Finance	Revises provisions governing the State Highway Fund. (BDR 35-1128)	State Highway Fund, costs of administering	executive, Jun 6, 2025: Approved by the Governor. Chapter 394.	As Enrolled	**Enacted**
SB 467	Senate Committee on Finance	Revises provisions relating to cybersecurity. (BDR 19-1149)	Cybersecurity	executive, Jun 11, 2025: Chapter 513.	As Enrolled	**Enacted**

SB 493	Senate Committee on Finance	Makes appropriations to the Department of Transportation for the replacement of the Nevada Shared Radio System. (BDR S-1218)	Nevada Shared Radio System replacement, NDOT appropriation	executive, Jun 9, 2025: Approved by the Governor. Chapter 413.	As Enrolled	**Enacted**
SB 496	Senate Committee on Finance	Makes appropriations to the Department of Motor Vehicles for information technology system projects. (BDR S-1219)	DMV modernization projects, appropriations	executive, Jun 6, 2025: Chapter 361.	As Enrolled	**Enacted**
AB 44	Assembly Committee on Commerce and Labor	Prohibits manipulating the price of an essential good or service in this State. (BDR 52-503)	Manipulating price of essential good or service	executive, Jun 5, 2025: Vetoed by the Governor.	As Enrolled	**Vetoed, Return to 2027 Session**
AB 112	Duy Nguyen	Removes an exemption from provisions providing certain employees with the right to use sick leave to assist family members. (BDR 53-318)	Use of sick leave, collective bargaining agreement	executive, Jun 5, 2025: Vetoed by the Governor.	As Enrolled	**Vetoed, Return to 2027 Session**
AB 213	Daniele Monroe-Moreno	Revises provisions governing public works projects. (BDR 28-816)	Prevailing wage, public works, custom fabrication	executive, Jun 10, 2025: Vetoed by the Governor.	As Enrolled	**Vetoed, Return to 2027 Session**
AB 388	Selena La Rue Hatch Cecelia González Natha Anderson	Revises provisions relating to employment. (BDR 23-1027)	Paid family leave	executive, Jun 11, 2025: Vetoed by the Governor.	As Enrolled	**Vetoed, Return to 2027 Session**
SB 71	Senate Committee on Government Affairs	Revises provisions relating to governmental administration. (BDR 27-366)	Purchasing, website postings, Commission to Study Governmental Purchasing	executive, Jun 9, 2025: Vetoed by the Governor. (Return to 84th Session.)	As Enrolled	**Vetoed, Return to 2027 Session**
SB 447	Senate Committee on Government Affairs	Revises provisions relating to public works. (BDR 28-968)	Public works, alternate writ of mandamus, attorney's fees	executive, Jun 10, 2025: Vetoed by the Governor. (Return to 84th Session.)	As Enrolled	**Vetoed, Return to 2027 Session**
SB 99	Senate Committee on Government Affairs	Authorizes, under certain circumstances, certain governing bodies of a city or county to impose linkage fees on certain developers. (BDR 22-373)	TRPA area linkage fee for affordable housing	executive, Jun 2, 2025: Vetoed by the Governor. Returned to Senate with Governor's veto message.	As Enrolled	**Vetoed**
SB 410	Senate Committee on Health and Human Services	Revises provisions relating to public employees. (BDR 23-562)	Local govt. employee, dependent insurance benefits	executive, Jun 2, 2025: Vetoed by the Governor. Returned to Senate with Governor's veto message.	As Enrolled	**Vetoed** **Priority**
AB 33	Assembly Committee on Government Affairs	Creates the Nevada Office of the Inspector General. (BDR 18-435)	Inspector General, entities receiving public money	Assembly, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
AB 51	Assembly Committee on Government Affairs	Revises provisions relating to public records. (BDR 19-430)	Public records, requests	Assembly, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
AB 54	Assembly Committee on Growth and Infrastructure	Revises penalties for failing to take certain precautions when approaching a traffic incident. (BDR 43-244)	Approaching a traffic incident, precautions	Assembly, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
AB 61	Assembly Committee on Growth and Infrastructure	Authorizes the Regional Transportation Commission of Washoe County or any local government within Washoe County to establish a demonstration project for a certain toll road. (BDR 43-468)	Toll road	Assembly, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration** **Priority**

AB 74* of the 82nd (2023) Session		Revises provisions relating to agreements entered into by public bodies. (BDR 34-377)	Public-private partnerships (Vetoed 2023)	Assembly, Feb 6, 2025: Bill read. No further consideration.	As Introduced	**No Further Consideration**
AB 84	Gregory Koenig	Revises provisions relating to county roads. (BDR 35-152)	County roads, bids	Assembly, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
AB 94	PK O'Neill	Revises provisions relating to public works. (BDR 28-193)	E-Verify employment system, public works	Assembly, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
AB 124	Jill Dickman	Revises provisions relating to public office. (BDR 24-829)	Elected official to resign before running for other office, judges excepted	Assembly, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
AB 127	Assembly Committee on Ways and Means	Makes an appropriation to the Office for New Americans in the Office of the Governor to provide grants to counties and cities to implement language access plans. (BDR S-396)	Language access plan grants, counties and cities	Assembly, Jun 3, 2025: (No further action taken.)	As Introduced	**No Further Consideration**
AB 152	Ken Gray	Revises provisions relating to public records. (BDR 19-209)	Public books and public records, authorized for disposal	Assembly, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
AB 154	Brittney Miller	Creates the Nevada Office of the Inspector General. (BDR 18-334)	Office of the Inspector General	Assembly, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
AB 168	Heather Goulding Tracy Brown-May Jill Dickman	Revises provisions relating to bicycles. (BDR 43-598)	Bicycles	Senate, May 17, 2025: (Pursuant to Joint Standing Rule No. 14.3.3, no further action allowed.)	Reprint 1	**No Further Consideration** **Priority**
AB 175	Brian Hibbetts	Revises provisions relating to public safety. (BDR 43-162)	DUI offenses within 10 year period	Assembly, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
AB 191	Natha Anderson	Revises provisions relating to collective bargaining. (BDR 23-889)	Collective bargaining, state professional employers and graduate assistants	Assembly, Jun 3, 2025: (No further action taken.)	Reprint 1	**No Further Consideration**
AB 222	Jovan Jackson	Revises provisions relating to public works. (BDR 28-675)	Public works, employment preferences	Assembly, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration** **Priority**
AB 224* of the 82nd (2023) Session		Revises provisions governing collective bargaining. (BDR 23-155)	Collective bargaining (Vetoed 2023)	Assembly, Feb 6, 2025: Bill read. No further consideration.	As Introduced	**No Further Consideration**
AB 247	Tracy Brown-May	Revises provisions relating to persons with disabilities. (BDR 19-574)	Public meetings, real time translation, qualified interpreter	Assembly, Jun 3, 2025: (No further action taken.)	Reprint 1	**No Further Consideration** **Priority**
AB 303	Venise Karris Ira Hansen Jovan Jackson	Revises provisions governing public works. (BDR 28-866)	Broadband projects, records	Senate, May 17, 2025: (Pursuant to Joint Standing Rule No. 14.3.3, no further action allowed.)	Reprint 1	**No Further Consideration**

AB 305* of the 82nd (2023) Session		Revises provisions governing public works. (BDR 28-112)	Public works, apprentices (Vetoed 2023)	Assembly, Feb 6, 2025: Bill read. No further consideration.	As Introduced	**No Further Consideration**
AB 311	Gregory Hafen	Revises provisions relating to transportation network companies. (BDR 57-771)	TNC vehicle insurance	Assembly, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
AB 334* of the 82nd (2023) Session		Revises provisions relating to insurance for motor vehicles. (BDR 57-949)	Motor vehicle insurance (Vetoed 2023)	Assembly, Feb 6, 2025: Bill read. No further consideration.	As Introduced	**No Further Consideration**
AB 349	David Orentlicher	Makes revisions relating to health care. (BDR 23-343)	Hospital maximum rates for public employee coverage, posting of hospital pricing	Assembly, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
AB 357	Linda Hunt Michelee Cruz-Crawford Reuben D'Silva	Revises provisions relating to background checks. (BDR 38-646)	Background checks, public employers	Assembly, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
AB 402	Selena Torres-Fossett	Creates a pilot program authorizing the installation and use of automated traffic enforcement systems in temporary traffic control zones. (BDR 43-184)	Pilot program, traffic cameras in temporary control zones	Senate, Jun 3, 2025: (No further action taken.)	Reprint 2	**No Further Consideration** **Priority**
AB 438	Jill Dickman Danielle Gallant Ken Gray	Revises provisions relating to nonemergency medical transportation. (BDR 40-1042)	Nonemergency medical transportation	Assembly, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
AB 446	Max Carter	Revises provisions relating to transportation. (BDR 58-207)	Railroads and railroad companies	Assembly, Jun 3, 2025: (No further action taken.)	Reprint 1	**No Further Consideration**
AB 492	Assembly Committee on Growth and Infrastructure	Revises provisions relating to limousines. (BDR 58-1114)	Limousines	Assembly, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
AB 524	Assembly Committee on Growth and Infrastructure	Revises provisions governing motor carriers. (BDR 43-784)	Motor carriers, special services	Assembly, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
AB 525	Assembly Committee on Growth and Infrastructure	Provides for the issuance of special license plates and registration certificates for certain antique kei vehicles. (BDR 43-1145)	Antique kei vehicles	Assembly, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
SB 2	Senate Committee on Government Affairs	Revises provisions relating to collective bargaining. (BDR 23-417)	Collective bargaining	Senate, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
SB 22	Senate Committee on Revenue and Economic Development	Revises provisions governing the amount of the penalty for late payment of certain taxes and fees administered by the Department of Motor Vehicles. (BDR 32-303)	Failure to pay DMV tax or fee, 10 percent penalty	Senate, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**

SB 23	Senate Committee on Growth and Infrastructure	Revises provisions related to the use of cellular telephones and other handheld wireless communications devices by minors while operating a motor vehicle. (BDR 43-251)	Cellular use while driving, minors	Senate, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
SB 37	Senate Committee on Growth and Infrastructure	Prohibits engaging in road rage. (BDR 43-242)	Road rage	Senate, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
SB 53	Senate Committee on Growth and Infrastructure	Establishes certain requirements relating to notices of road hazards and road closures. (BDR 35-406)	Navigation provider, real-time data of traffic and road closures	Senate, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
SB 77	Senate Committee on Growth and Infrastructure	Revises provisions relating to highways. (BDR 35-302)	Highway projects	Senate, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
SB 81* of the 82nd (2023) Session		Revises provisions governing regional planning. (BDR S-536)	Regional planning, I-80 corridor (Vetoed 2023)	Senate, Feb 11, 2025: Bill read. No further consideration.	As Introduced	**No Further Consideration**
SB 104* of the 82nd (2023) Session		Revises provisions relating to traffic offenses. (BDR 43-309)	Traffic offenses (Vetoed 2023)	Senate, Feb 11, 2025: Bill read. No further consideration.	As Introduced	**No Further Consideration**
SB 147	Marilyn Dondero Loop	Creates the Southern Nevada Regional Planning for Economic Resiliency Pilot Program. (BDR S-683)	So. NV Regional Planning for Economic Resiliency Pilot Program; infrastructure, transit and economic development, committee and plan	Assembly, Jun 3, 2025: (No further action taken.)	Reprint 2	**No Further Consideration**
SB 230	John Steinbeck James Ohrenschall	Revises provisions relating to the testing of emissions from motor vehicles. (BDR 40-661)	Vehicle emissions, biennial inspection (Clark & Washoe)	Senate, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
SB 247	Senate Committee on Legislative Operations and Elections	Provides for health notes to be requested and prepared for certain legislative measures by the Research Division of the Legislative Counsel Bureau. (BDR 17-512)	Health notes for legislation	Senate, Jun 3, 2025: (No further action taken.)	As Introduced	**No Further Consideration**
SB 259	Dina Neal	Revises provisions relating to taxation. (BDR 32-703)	Use of sales tax for homelessness and public transit, not affordable housing	Senate, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration** **Priority**
SB 265	Lori Rogich Duy Nguyen Rebecca Edgeworth	Revises provisions relating to governmental administration. (BDR 19-918)	Collection of info regarding ethnicity	Senate, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
SB 270	Rochelle Nguyen	Revises provisions relating to governmental administration. (BDR 28-778)	Public works, documents for inspection	Senate, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration** **Priority**
SB 272* of the 82nd (2023) Session		Revises provisions relating to governmental administration. (BDR 27-876)	Public contracts, posted info (Vetoed 2023)	Senate, Feb 11, 2025: Bill read. No further consideration.	As Introduced	**No Further Consideration**

SB 287	Senate Committee on Commerce and Labor	Revises provisions relating to public works. (BDR 28-949)	Public works, record keeping	Assembly, May 17, 2025: (Pursuant to Joint Standing Rule No. 14.3.3, no further action allowed.)	Reprint 1	**No Further Consideration**
SB 296	James Ohrenschall	Revises provisions relating to governmental administration. (BDR 19-944)	Public records, confidentiality, ordinance or regulation deliberations	Senate, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration** **Priority**
SB 301* of the 82nd (2023) Session		Revises provisions governing public works. (BDR 28-967)	Public work, removal of construction material, prevailing wage (Vetoed 2023)	Senate, Feb 11, 2025: Bill read. No further consideration.	As Introduced	**No Further Consideration**
SB 340	Skip Daly	Revises provisions relating to governmental administration. (BDR 18-1008)	Legislative power to suspend or nullify regulations, judicial review	Assembly, May 17, 2025: (Pursuant to Joint Standing Rule No. 14.3.3, no further action allowed.)	Reprint 1	**No Further Consideration**
SB 364	Michelee Cruz-Crawford	Revises provisions relating to economic development. (BDR 32-799)	Rail infrastructure, partial tax abatements	Senate, Jun 3, 2025: (No further action taken.)	Reprint 1	**No Further Consideration**
SB 382	Ira Hansen	Revises provisions relating to vehicles. (BDR 43-316)	Autonomous vehicle marker lamps, trailer registration	Assembly, Jun 4, 2025: From printer. To reengrossment. Reengrossed. Second reprint.	Reprint 2	**No Further Consideration**
SB 395	James Ohrenschall	Revises provisions relating to autonomous vehicles. (BDR 43-61)	Autonomous vehicles, human operator requirements	Assembly, May 24, 2025: (Pursuant to Joint Standing Rule No. 14.3.4, no further action allowed.)	As Introduced	**No Further Consideration**
SB 401	Edgar Flores	Revises provisions relating to certain redevelopment plans. (BDR 22-331)	Reno redevelopment plans	Senate, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration**
SB 415	Senate Committee on Growth and Infrastructure	Authorizes the installation and use of an automated traffic enforcement system under certain circumstances. (BDR 43-422)	Automated traffic enforcement	Senate, Apr 12, 2025: (Pursuant to Joint Standing Rule No. 14.3.1, no further action allowed.)	As Introduced	**No Further Consideration** **Priority**
SB 420	Senate Committee on Natural Resources	Authorizes the creation of business improvement districts. (BDR 22-372)	Business improvement districts, TRPA	Senate, Jun 3, 2025: (No further action taken.)	Reprint 1	**No Further Consideration**
SB 431	Senate Committee on Revenue and Economic Development	Revises provisions relating to the excise tax on live entertainment. (BDR 32-692)	LET, resales (sporting events exempt), funds to RTC of So. NV	Assembly, Jun 3, 2025: (No further action taken.)	Reprint 2	**No Further Consideration**
SB 457	Senate Committee on Judiciary	Revises provisions relating to public safety. (BDR 15-1038)	Crime, public safety, DUI, retail theft, order-out corridors (Gov's bill) [Waiver Granted]	Assembly, Jun 4, 2025: From printer. To reengrossment. Reengrossed. Second reprint.	Reprint 2	**No Further Consideration**
SB 505	Robin Titus Gregory Hafen	Establishes the Nevada Energy Resiliency Task Force. (BDR S-1250)	Energy Resiliency Task Force, energy and fuel supply chain	Senate, Jun 3, 2025: (No further action taken.)	As Introduced	**No Further Consideration**
BDR 67	Yeager, Steve	BDR 67: Makes various changes related to transportation network companies. - 7/2/2024				**Not Introduced**
BDR 428	Joint Interim Standing Committee on Growth and Infrastructure (NRS 218E.320)	BDR 51-428: Revises provisions governing fuel. - 8/29/2024				**Not Introduced**

BDR 732	Rogich, Lori	BDR S-732: Revises provisions relating to governmental administrative regulations. -- Withdrawn - 12/10/2024				**Not Introduced**
BDR 766	Hansen, Alexis M.	BDR 15-766: Revises provisions relating to public safety. -- Withdrawn - 12/10/2024				**Not Introduced**
BDR 798	Cruz-Crawford, Michelee	BDR 23-798: Revises provisions relating to protections for government employees. -- Withdrawn - 12/10/2024				**Not Introduced**
BDR 804	Senate Committee on Growth and Infrastructure	BDR 804: Revises provisions relating to public safety. - 12/10/2024				**Not Introduced**
BDR 831	Gray, Ken	BDR 831: Revises provisions relating to electric vehicles. -- Withdrawn - 12/10/2024				**Not Introduced**
BDR 993	Speaker of the Assembly	BDR 993: Revises provisions regarding qualifications for government jobs. -- Withdrawn - 2/2/2025				**Not Introduced**
BDR 995	Speaker of the Assembly	BDR 995: Revises provisions regarding qualifications for elected or appointed office. -- Withdrawn - 2/2/2025				**Not Introduced**
BDR 1139	Assembly Committee on Growth and Infrastructure	BDR 1139: Revises provisions relating to transportation network companies. -- Withdrawn - 2/17/2025				**Not Introduced**

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 5.2.**

To: Regional Transportation Commission

From: Marquis Williams, Senior Transportation Planner

SUBJECT: Draft Central Reno/Midtown Neighborhood Network Plan

RECOMMENDED ACTION

Receive a presentation on the draft Central Reno/Midtown Neighborhood Network Plan. (Informational Only)

BACKGROUND AND DISCUSSION

The Central Reno/Midtown Neighborhood Network Plan (NNP) kicked off in October 2024 based on a recommendation from the Active Transportation Plan (approved in September 2024). The NNP is meant to increase the number of walking and biking trips within the Central Reno/Midtown neighborhood by improving safety and comfort along key corridors. The Plan recommends traditional bicycle and pedestrian infrastructure improvements as well as low-cost, quick-build improvements. The Plan also recommends before and after improvement data collection to measure the effectiveness of the improvements in the creation of a comprehensive and responsive active transportation network accessible to a broader cross-section of our community.

The Central Reno/Midtown NNP recommends 14 corridors for quick-build style transportation improvements. In total, 13.3 miles of roadways are recommended for improvements across the neighborhood, including 8.4 miles of neighborhood byways, 4.5 miles of protected bike lanes, and over 50 intersections enhancements. The NNP includes a cutsheet for each corridor project recommendation, detailing the project extents, approximate cost, potential intersection enhancements, and a conceptual cross-section. Based on funding availability and construction feasibility, selected quick-build projects are expected to be implemented using funds from the RTC Active Transportation Program.

The Central Reno NNP is currently available for public review and comment at rtcwashoe.com/neighborhood.

FISCAL IMPACT

Funding for this item has been budgeted for in the FY2024-FY2025 Unified Planning Work Program (UPWP) and is included in the FY 2026 RTC budget.

PREVIOUS BOARD ACTION

9/20/2024 - Approved a contract with Alta Planning + Design, Inc. for consulting services on Neighborhood Network Plans 1 & 2.



Central Reno/Midtown

Neighborhood Network Plan
DRAFT

July 2025

Acknowledgments

The Central Reno/Midtown Neighborhood Network Plan was developed through collaboration with partner agencies and local organizations. Additionally, this project involved RTC staff from all departments including Planning, Public Transit, and Engineering. This planning process relied on engaging with residents and staff at local agencies with direct knowledge of current challenges within the neighborhood. Staff from partner agencies and members of the public provided detailed feedback and input during the planning process as part of the Neighborhood Network Plan Steering Committee. This group helped provide context to the public comments and inform the identification of recommended improvements. Those listed below helped to guide the development of the plan and will continue to support the implementation of project recommendations at their various roles at agencies and organizations throughout the community.

RTC Washoe Project Team

- Marquis Williams, RTC Planning
- Graham Dollarhide, RTC Planning
- LaShonn Ford, RTC Engineering
- Sara Going, RTC Engineering

Neighborhood Network Plan Steering Committee Member Organizations

- City of Reno (Fire, Police, Public Works)
- Reno-Sparks Indian Colony
- One Truckee River
- Midtown Merchants
- Washoe County School District
- Washoe County (Sustainability)

Each organization above was represented by one or more staff members during Steering Committee meetings. The Steering Committee also included two members of the public from the Central Reno/Midtown neighborhood.

Consultant Team

Cole Peiffer – Alta Planning + Design

Dave Foster – Alta Planning + Design

Chloe Ward – Alta Planning + Design

Sierra Rodriguez-Torres – Alta Planning + Design

Lauren Ball – MJT

Table of Contents

Acknowledgments i

Table of Contents ii

Chapter 1: Introduction 1

Neighborhood Description 1

Connections with Other Plans 3

Plan Process 3

Plan Contents 3

Chapter 2: Neighborhood Profile 4

Neighborhood Demographics 4

Existing Neighborhood Network 6

Chapter 3: Biking and Walking in Central Reno/Midtown Today 10

Community Engagement 10

Data Insights and Analysis: Understanding Trends 17

Chapter 4: Addressing Central Reno/Midtown Needs 32

Neighborhood Network Plan Implementation Strategy 32

Programmatic and Policy Enhancements 33

Neighborhood Network Improvements 40

Implementation 46

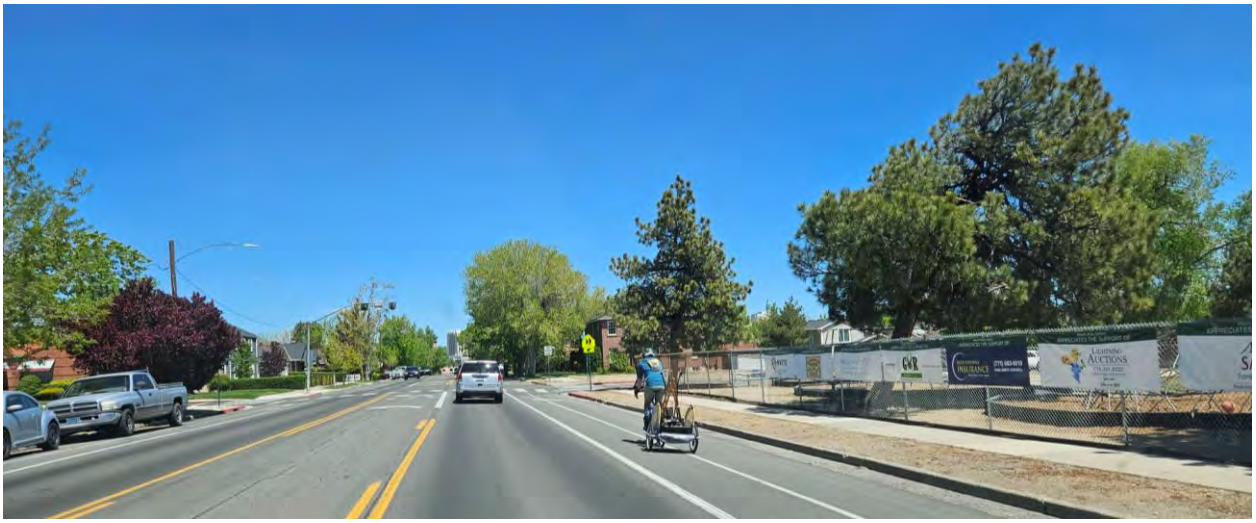
Stay Connected 46

Chapter 1: Introduction

This Central Reno/Midtown Neighborhood Network Plan (NNP) focuses on enhancing active transportation options in the Central Reno/Midtown neighborhood by improving pedestrian and bicycling connections through quick-build style improvements. This NNP applies the regional vision, goals, and priorities from the regional RTC Washoe Active Transportation Plan while identifying quick-build improvements that can be rapidly implemented across the neighborhood to provide increased connectivity and comfort to people walking and biking. The RTC developed this plan through collaboration with partner agencies and direct engagement with members of the public through a variety of in-person and virtual methods. Combined with in-depth data analysis, the NNP focuses on issues for people walking and biking within the Central Reno/Midtown neighborhood and identifies immediate improvements to address needs through quick-build improvements.

Neighborhood Description

The Central Reno/Midtown neighborhood—generally defined by I-580 to the east, the Truckee River, S. McCarran Boulevard, Keystone Avenue, Plumb Lane, and Plumas Street—offers a variety of destinations (**Figure 1**). It features over 30 schools, parks with playgrounds, sports courts, and trails, including Virginia Lake Park. Entertainment is centered around the Virginia Street corridor, with venues like casinos, theaters, and museums. Employment hubs include Renown Regional Health Center and commercial areas along Virginia Street and Kietzke Lane. The neighborhood also offers community spaces like churches, libraries, and local markets.



Bicyclist using the existing bike lane on Arlington Avenue in front of Mount Rose Elementary School.

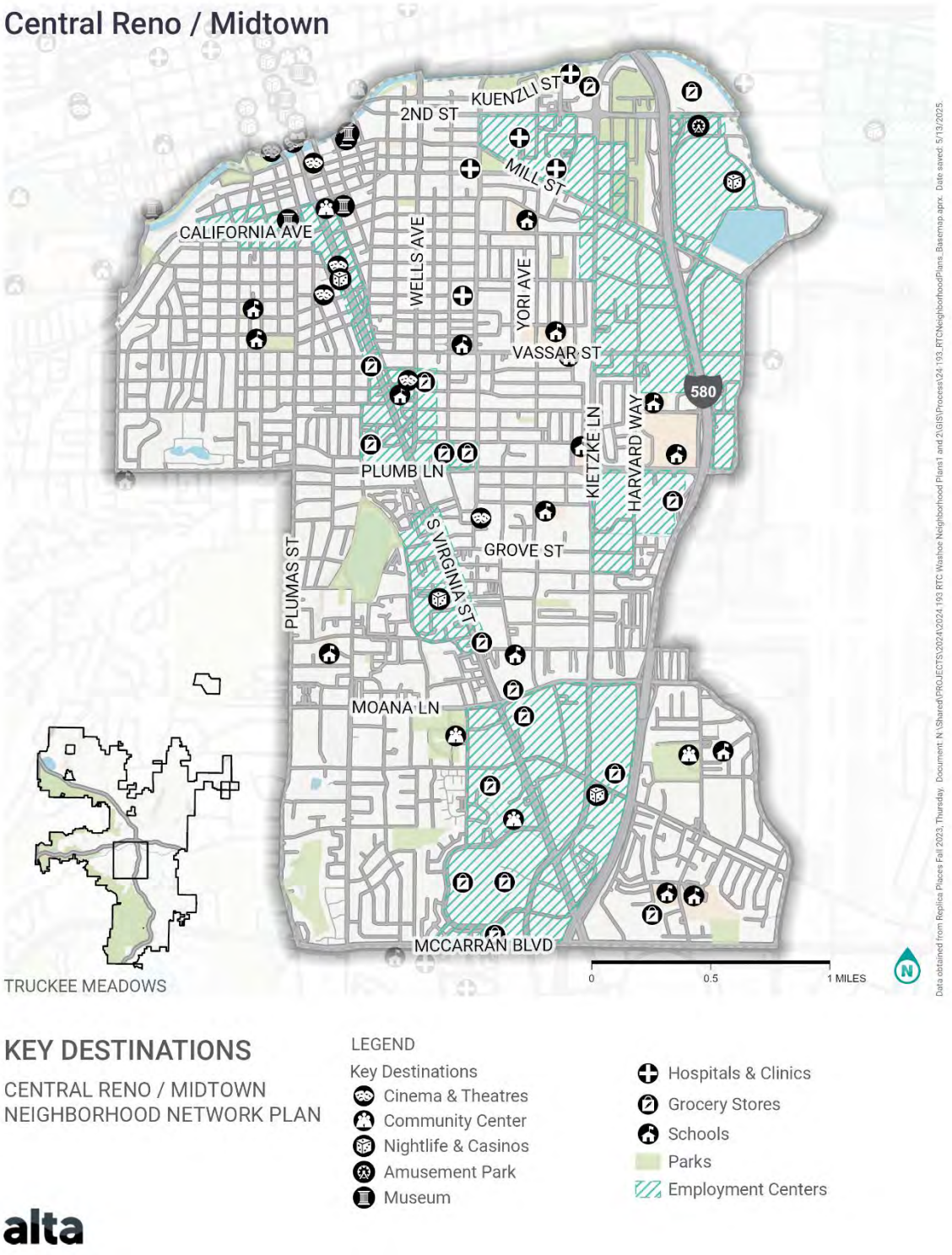


Figure 1. Central Reno/Midtown Neighborhood Area

Connections with Other Plans

This NNP discusses projects recommended for quick-build implementation through RTC's Active Transportation Program. Improvements identified in this plan are intended to be implemented rapidly throughout the neighborhood and are not inclusive of large-scale improvements, which are addressed through other planning processes such as the Regional Transportation Plan, specific area plans, corridor studies, and others.

Plan Process

This NNP follows the process outlined in the RTC Washoe Active Transportation Plan and applies a regional vision, goals, and analysis to the Central Reno/Midtown neighborhood. This process included two phases of public engagement featuring multiple in-person events and online elements. In addition to public engagement, the RTC used regional data analysis to identify neighborhood issues and areas of need based on demographics, roadway context, and crash history. By integrating community insights with data findings, the plan highlights and addresses the most pressing challenges for people walking and biking. The result is a quick-build implementation strategy designed to rapidly enhance connectivity and comfort throughout the neighborhood.

Plan Contents

This plan describes the planning process, data analysis findings, community engagement findings, and recommended improvements across four chapters as described below.

- Chapter 1 – Introduction
    - This chapter provides an overview of the project and connection with other planning processes.
- Chapter 2 – Neighborhood Profile
    - This chapter highlights demographic and socioeconomic data across the neighborhood and identifies areas of need.
- Chapter 3 – Biking and Walking in Central Reno/Midtown Today
    - This chapter presents key findings from community engagement and data analysis, offering a snapshot of current walking and biking conditions in the Central Reno/Midtown neighborhood.
- Chapter 4 – Addressing Central Reno/Midtown Needs
    - This chapter provides an overview of quick-build style improvements and identifies recommended quick-build improvements throughout the neighborhood.

Chapter 2: Neighborhood Profile

To better understand the context and needs of the neighborhood, the RTC reviewed various datasets to compare the Central Reno/Midtown neighborhood with the broader Reno/Sparks area—also known as the greater Truckee Meadows region—to identify focused needs within the neighborhood. This section includes a summary of socioeconomic data and a summary of the common destinations throughout the neighborhood for context. Additional information about datasets and analysis methodologies are included in Appendix A.

Neighborhood Demographics

The Central Reno/Midtown neighborhood has a young, diverse population with a high population density compared to the broader Reno/Sparks area. It is notably younger, with a higher proportion of people aged 20 to 39 and fewer people over 60. The neighborhood also has a larger percentage of Hispanic, Black, Native American, Asian, and multiracial individuals than the regional average.

Population density in Central Reno/Midtown is approximately 23 times higher than the regional average, with the densest areas around Plumb Lane, Kietzke Lane, and Virginia Street. The median household income varies significantly across the neighborhood, with some areas having very low incomes, particularly near Liberty Street and Virginia Street as seen in **Figure 2**. The average household income in the neighborhood is approximately $63,325, which is over $22,000 below the Reno/Sparks regional average of $85,969.

A significant portion of households (15%) in Central Reno/Midtown lack access to a vehicle, far surpassing the regional average of 7%. Areas like Plumb Lane and Kietzke Lane have the highest concentrations of vehicle-inaccessible households. Furthermore, the neighborhood faces housing affordability challenges, with 42% of households being cost-burdened—meaning they pay over 30% of their income on housing—which is higher than the regional rate of 31% of households being cost-burdened.



Bicyclist using the crosswalk to cross Plumb Lane at Virginia Street.

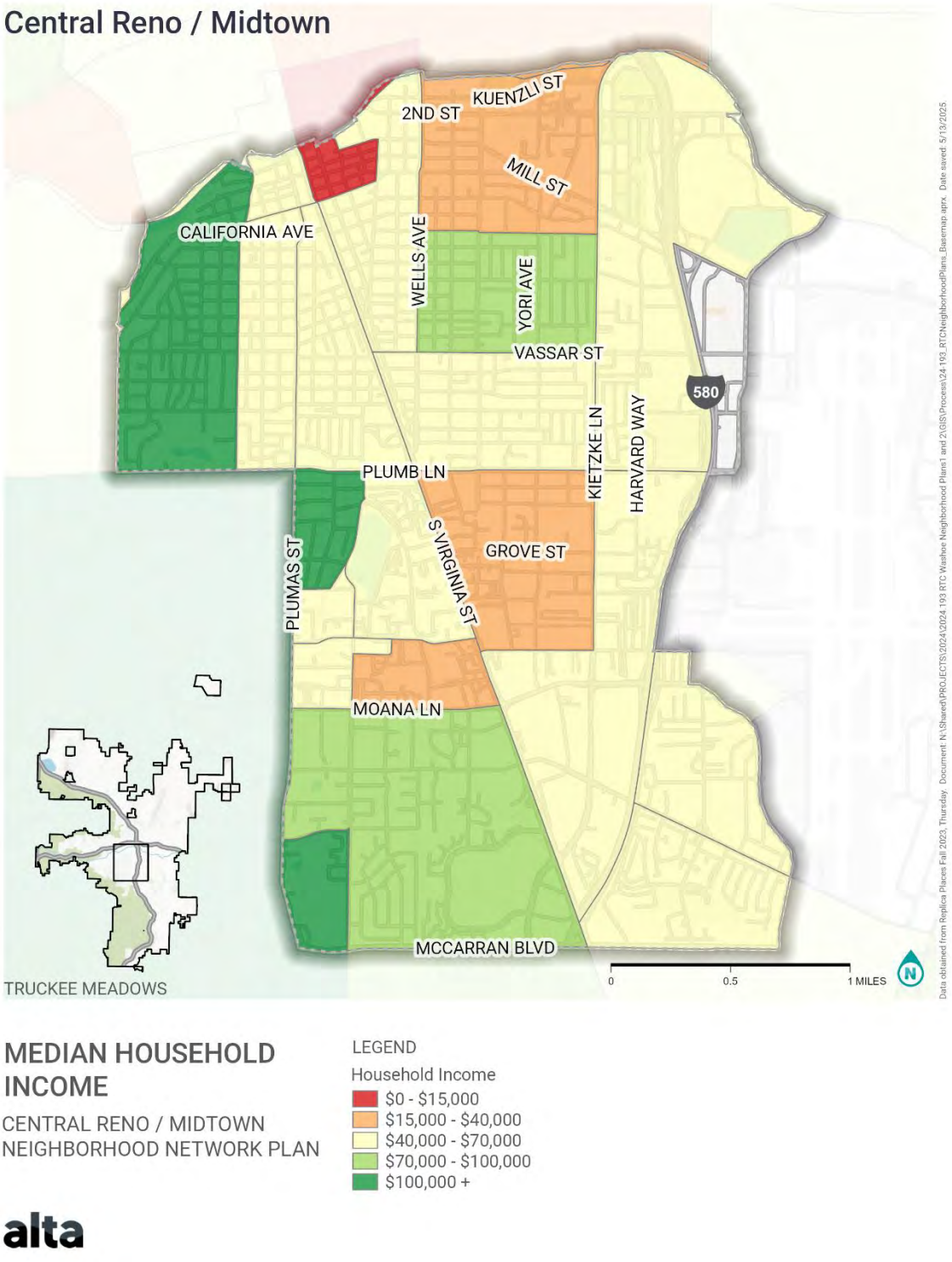


Figure 2. Median Household Income in Central Reno/Midtown

Existing Neighborhood Network

Pedestrian Facilities



Section of Vassar Street near Harvard Way with sidewalk gap.

The current sidewalk network in the neighborhood provides sidewalks on at least one side of the roadway for many streets; however, there are areas where sidewalk gaps exist (as shown to the right), which cause pedestrians to walk along or within the roadway and impacts overall connectivity. The RTC assessed sidewalk availability on arterials and collectors,[1] scoring them from zero (no sidewalks) to two (sidewalks on both sides) as shown in **Figure 3**. In Central Reno/Midtown, arterials scored an average of 1.71, and collectors scored 1.81, showing a generally well-connected network. However, gaps and a lack of sidewalk buffers along major roadways in the southeast corner of the neighborhood are safety concerns for community members, especially where missing facilities cause pedestrians to walk within the roadway. Refer to Appendix A for more details.

Bicycle Facilities



Existing bike lanes on roadways above 30 mph, such as on Kietzke Lane (shown above) can feel uncomfortable for most users because there is no physical separation between bicyclists and people driving.

The Central Reno/Midtown area has 23.4 miles of bike facilities as shown in **Table 1**. Of these, 20.3 miles (over 90%) are unprotected facilities (bike lanes and shared lanes), which can create higher-stress environments for people biking compared to protected facilities such as shared-use paths or protected bike lanes. Overall, the existing bicycle network in the neighborhood covers 51% of the 45.8 miles on arterial and collector streets in the neighborhood (**Figure 4**). Unprotected facilities such as bike lanes on roads above 30 miles per hour (mph) can be uncomfortable for most users. As a result, many long stretches of bike lanes, such as those on Kietzke Lane or Mill Street, provide connectivity but remain difficult routes. Additionally, the existing bike network in the neighborhood includes multiple gaps such as along Plumb Lane between Virginia Street and Harvard Avenue, Moana Lane between Plumas Street and Virginia Street, and multiple segments of Virginia Street. These gaps highlight opportunities to expand and improve the bike network in the area. For a more in-depth analysis, refer to Chapter 4 or Appendix A.

[1] **Arterials** provide longer through travel between major trip generators while **collectors** "collect" traffic from the local roads and connect smaller cities and towns with each other. For more information on the Functional Classification of Roadways, visit https://www.dot.nv.gov/home/showdocument?id=6654.

Table 1. Bicycle Facilities in Central Reno/Midtown by Mileage (Sept. 2024)

Protection	Facility Type	Mileage
Unprotected	Bike Lanes	16.7
	Shared Lane Facilities	4.6
Protected	Shared-Use Paths	2.1
	Separated Bike Lanes	0.0
	Total	23.4

Protected facilities – Facilities that are separate from vehicle traffic by a physical barrier or are in a separate right-of-way from vehicle traffic.





Unprotected facilities – On-street facilities marked with roadway striping that indicate the shared use of a travel lane by bicycles or dedicated space in a bike lane.

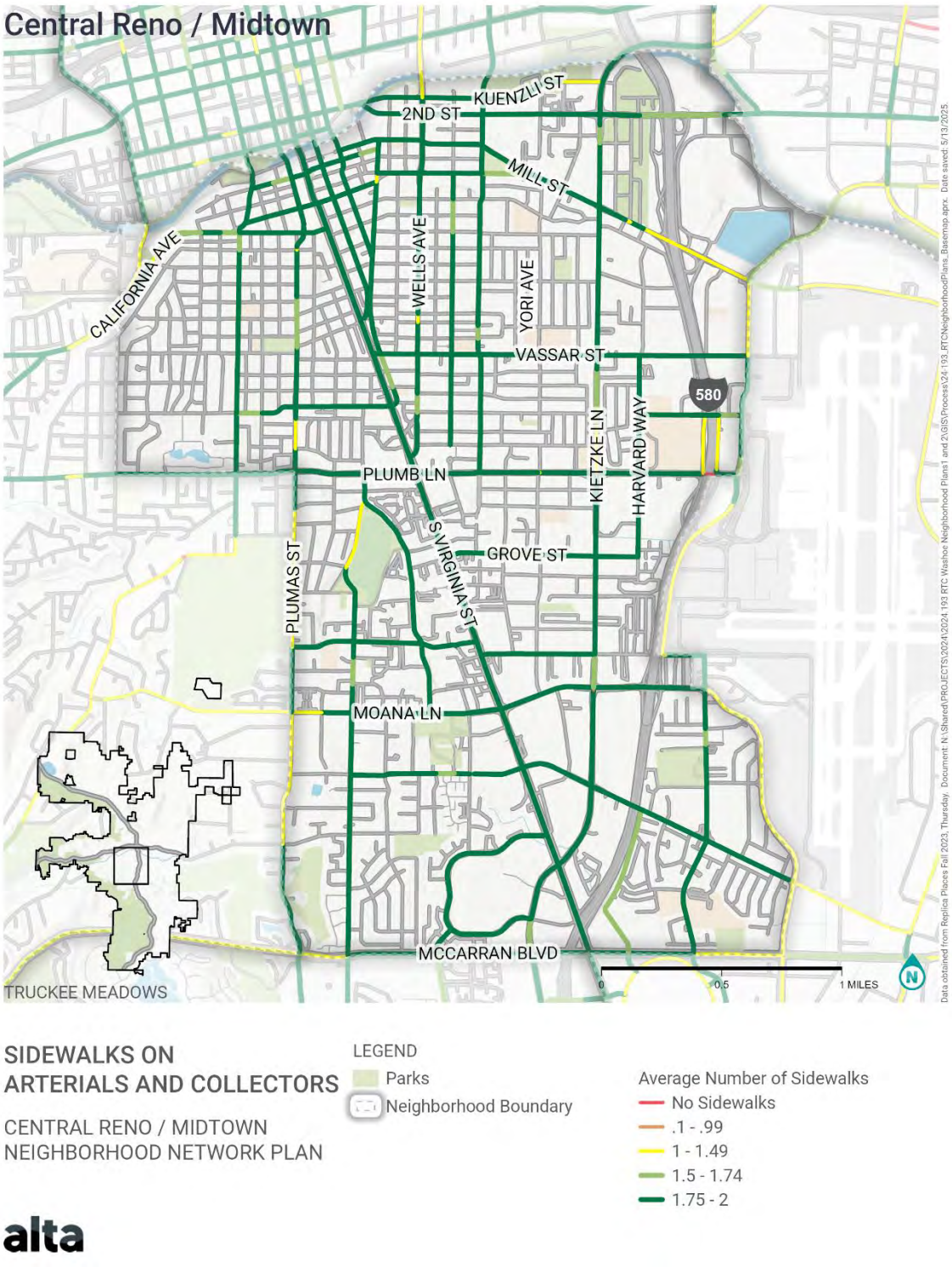


Figure 3. Sidewalks on Arterial and Collector Roads in Central Reno/Midtown

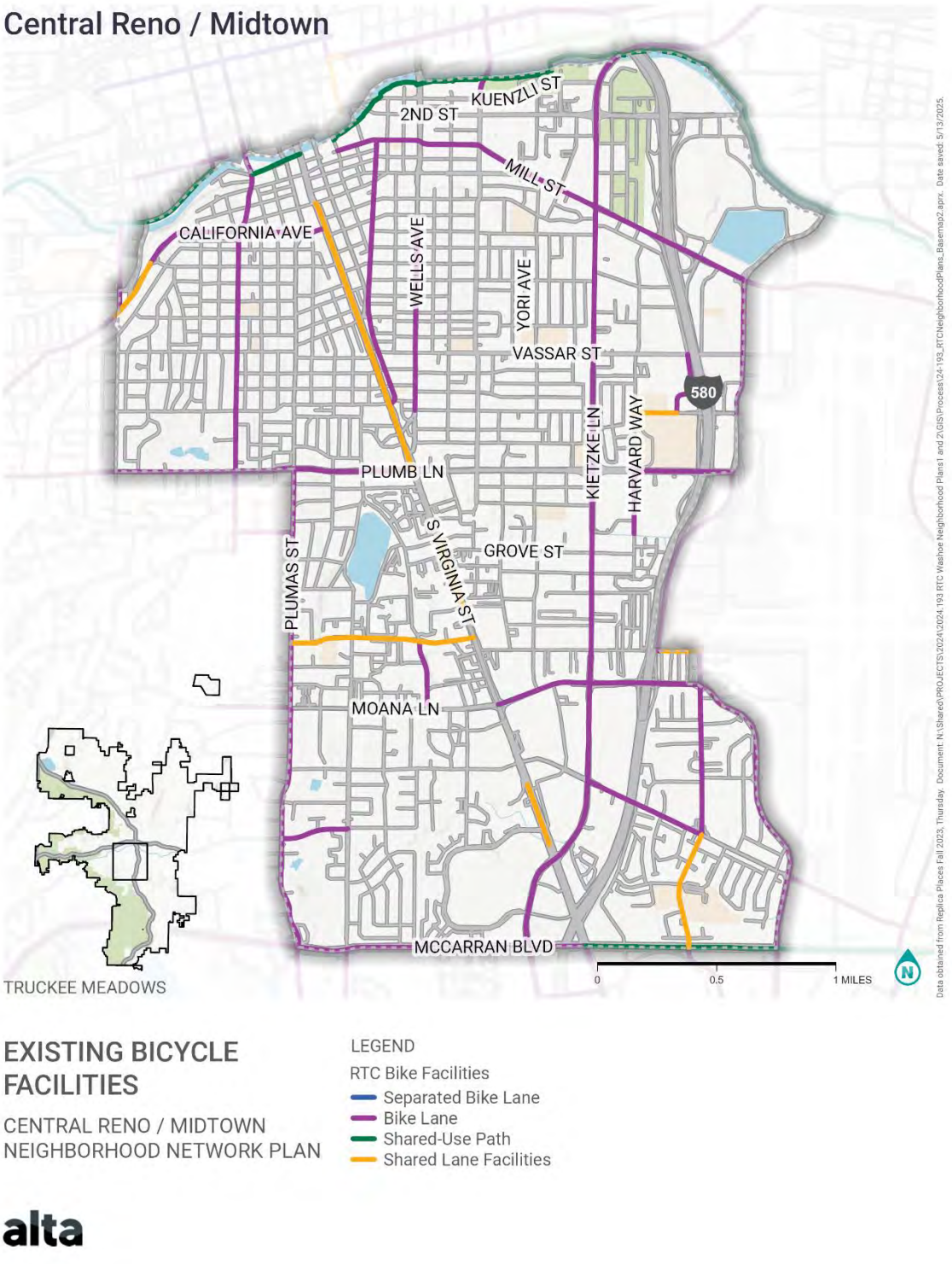


Figure 4. Existing Bicycle Facilities in Central Reno/Midtown

Chapter 3: Biking and Walking in Central Reno/Midtown Today

Community Engagement

The RTC engaged with community members and organizations within the Central Reno/Midtown neighborhood throughout the development of this Central Reno/Midtown Neighborhood Network Plan (NNP) across a variety of strategies including in-person and virtual meetings, in-person pop-ups, a walking audit, an interactive map, and Neighborhood Network Plan Steering Committee meetings. Engagement occurred across two distinct phases with the first phase focused on listening to the community and identifying issues and the second phase focused on community review and refinement of draft recommendations. This section summarizes the engagement efforts and findings from the Central Reno NNP process. For greater detail about specific meetings, please refer to Appendix B.

Phase 1

Community Workshop and Pop-Ups



Community Workshop at the Boys and Girls Club.

During the first phase of engagement, the RTC connected with the community through a workshop and two pop-up events, collectively attended by over 125 participants. Engagement workshops are semi-structured events. Community members attend a presentation to learn about a project and are then invited to discuss issues and provide detailed feedback through facilitated activities. Pop-up events are informal outreach activities held in public spaces or community events to gather quick feedback and provide information and resources about projects. The community engagement workshop for this NNP took place at the Boys and Girls Club Carano Facility from 5:00 p.m. to 7:00 p.m. on November 13, 2024. The first pop-up event took place on December 5, 2024, at the Reno Public Market from 5:00 p.m. to 8:30 p.m. The second pop-up event was at the Reno-Sparks Convention Center on December 7, 2024, from 10:00 a.m. to 1:00 p.m.

These events provided an opportunity for community members to share their concerns related to walking, biking, and accessing transit in the neighborhood. Large, detailed maps of the neighborhood were provided, along with sticky notes and pens for attendees to note locations of concern or highlight missing infrastructure or other challenges directly on the maps. In addition to the map exercise, participants were provided with an overview of the project and were connected with project resources to stay engaged, including the interactive online map and project website. All outreach materials were provided in both English and Spanish, including the interactive map.



Pop-up event at the Reno Public Market.



Pop-up event at the Reno-Sparks Convention Center.

Interactive Map

The interactive map allowed community members to identify areas of concern and provide comments on the existing network. Over 150 comments and over 500 votes on comments were received through the interactive map, as shown in **Figure 5**. Community members highlighted issues across the neighborhood, which included the following major themes:

1. **Crosswalk Safety**: Several comments emphasize the need for better crosswalk infrastructure, including light-up signs, pedestrian refuges, better visibility, and traffic signals that prioritize pedestrians.

2. **Lack of Bike Lanes**: Numerous comments highlight areas where bike lanes are either missing, inconsistent, or inadequate, urging for safer, continuous bike lanes, especially on popular routes (e.g., Vassar Street, Moana Lane, and Plumas Street).

3. **Traffic Calming**: High-speed vehicle traffic is a common issue, with requests for traffic calming measures such as roundabouts, stop signs, and road redesigns to make streets safer for pedestrians.

4. **Lighting Issues**: Poor street lighting, particularly in high-traffic areas or near bus stops, is a recurring concern for pedestrian and bicyclist safety.

5. **Sidewalks and Pathways**: There were calls for wider, more accessible sidewalks, particularly for wheelchairs and strollers, and improved connections for pedestrians, especially near hospitals, schools, and transit hubs. Additionally, many suggest creating or extending connected bike paths, particularly along the Truckee River, and improving access to key destinations such as Midtown, the airport, and shopping areas.

Additionally, community members frequently identified specific streets and intersections as barriers for walking and biking including Plumb Lane, Virginia Street, Kietzke Lane, and South Wells Avenue. Community members noted concerns about interactions with high-speed vehicles and a lack of separation on these streets generally.

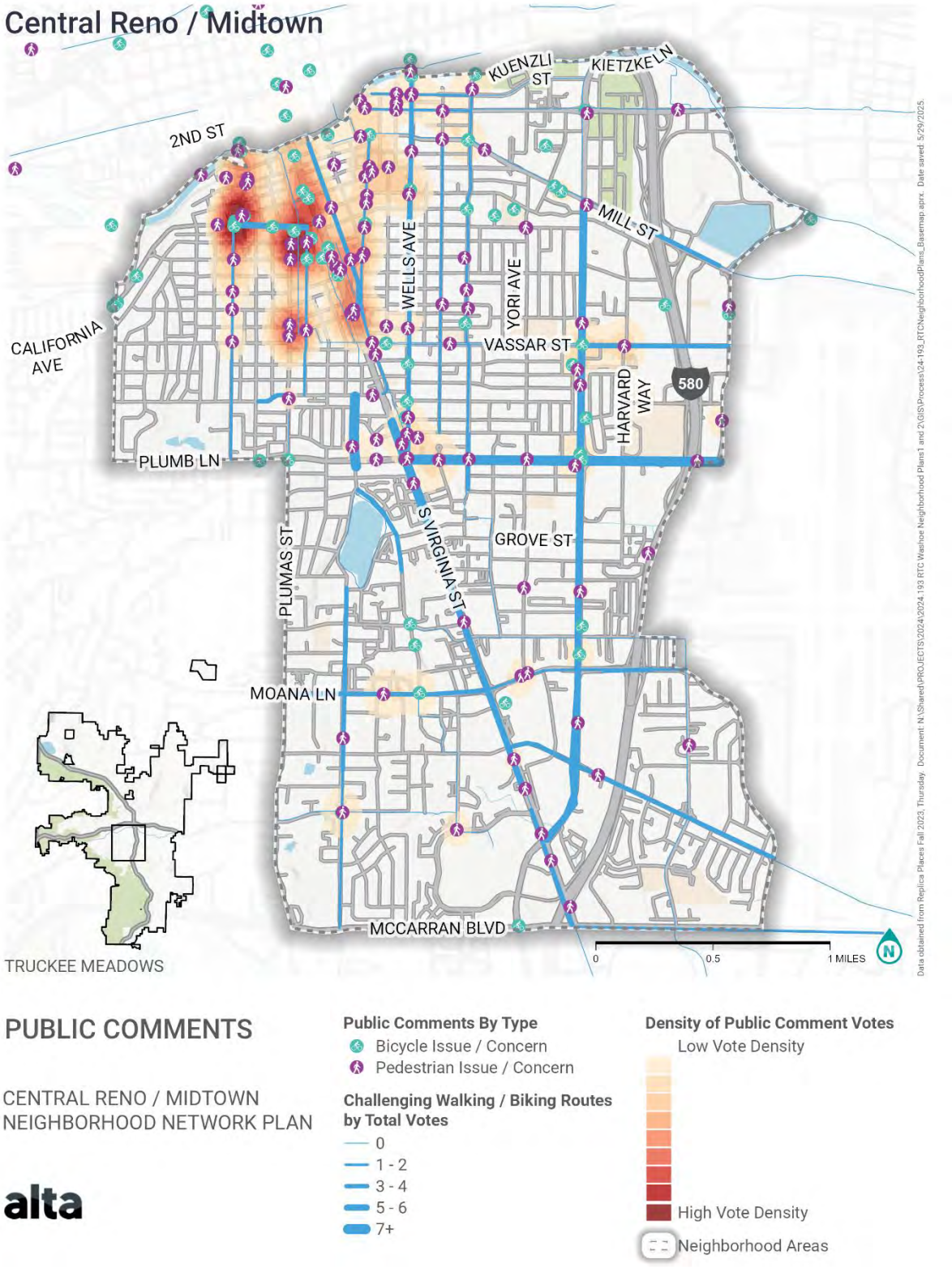


Figure 5. Interactive Map Comments

Neighborhood Network Plan Steering Committee

The Steering Committee was composed of community members and representatives from the City of Reno, Reno Fire Department, Reno Police Department, Washoe County School District (WCSD) Safe Routes to School, Reno-Sparks Indian Colony, Chamber of Commerce, Midtown Merchants, Northern Nevada Public Health, and One Truckee River. Community members were invited to join the committee during engagement events, where they could sign up to participate and share their insights throughout the planning process. Members met to assess existing conditions and take part in a walk audit, which identified key areas for improvement and directly informed the plan's recommendations.



Steering Committee small group exercise to identify known issues and potential solutions.

Walk Audit

On January 10, 2025, the Steering Committee conducted a walk audit within the Central Reno/Midtown neighborhood—an on-the-ground assessment in which participants walk through specific areas to evaluate infrastructure, accessibility, and overall safety for people walking and biking. The half-day effort focused on 10 key barriers identified through public comments and the existing conditions analysis. At each location, participants documented challenges and shared observations, which were then compiled into a summary of issues for further review (Appendix C). While not all sites reviewed are suitable for quick-build implementation, the findings helped shape the plan's recommendations and will continue to inform future large-scale roadway projects.



Members of the Steering Committee using a crosswalk on Kietzke Lane during the walk audit.

Phase 2

Steering Committee

Drawing on feedback from the community engagement process and the Steering Committee, the project team developed a draft set of recommendations. During the Steering Committee's final meeting, members reviewed the draft in small groups using three interactive online maps, which allowed them to explore and provide targeted comments on proposed improvements. This input played a key role in refining and finalizing the recommendations for the NNP.



Steering Committee discussing conceptual improvements as a group.

Active Transportation Plan (ATP) Process

During the development of the ATP (from 2023 to 2024), the RTC received 89 comments specific to the Central Reno/Midtown neighborhood. These comments highlighted challenges faced by people walking, biking, and accessing transit, and provided an early understanding of key issues in the area. These public comments helped provide a baseline understanding of existing issues within the neighborhood and provided context for the feedback gathered during the Central Reno NNP engagement process. A full summary of the ATP comments is provided in Appendix B of this Plan.

What We Heard from the Community

Engagement Totals



500+ Votes on Comments



250+ Specific Comments



125+ Residents Engaged

Over the course of the project, we engaged directly with over 125 community members and received over 750 interactions including comments and votes through the interactive map. Comments gathered during the project covered all elements of active transportation, from connections to transit stops to concerns about using shared-use paths. The project team focused on comments related to active transportation that could be addressed through quick-build implementation as part of this project but have archived all comments for future consideration. Across all comments received through this project, three key themes emerged as reoccurring concerns from community members as the leading issues for people walking and biking in the neighborhood:

Safety

- Community members expressed safety concerns related to crossing and traveling along roadways with high speeds and high volumes, with a particular emphasis on marked crosswalks around schools and parks.

Connectivity

- Sidewalk gaps and a disconnected bike network were identified by community members as leading issues impacting their decision to walk or bike.

Slower Speeds

- Community members expressed a desire for increased traffic calming elements and lower vehicle speeds on residential streets to improve safety and make walking and biking more welcoming for all users.

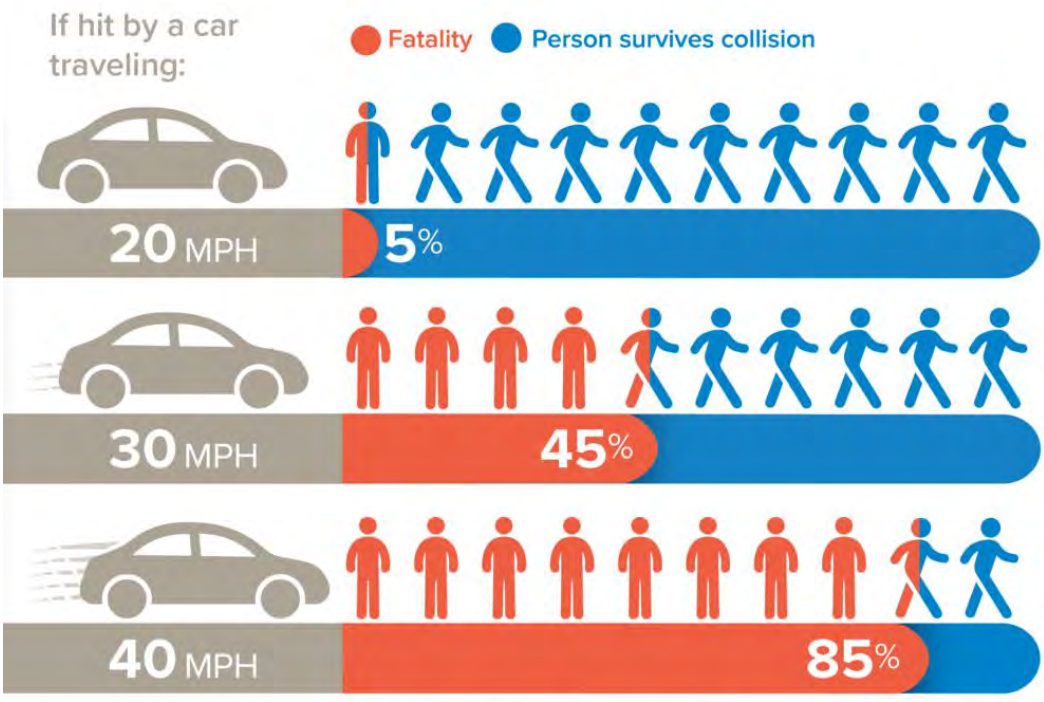
The themes identified through community input, combined with data analysis, played a central role in shaping the recommendation scenarios and determining which projects to move forward. Each recommendation was developed to respond directly to these priorities while remaining feasible within the neighborhood's scope and funding limitations.

Data Insights and Analysis: Understanding Trends

To better understand current conditions and identify opportunities to increase active transportation, the RTC analyzed datasets related to safety, equity, and roadway conditions for people walking and biking, as well as the potential for shifting short trips away from vehicle use. This analysis builds on the regional work completed for the ATP, with a focused lens on Central Reno to identify priority areas for improvement—particularly where data insights align with community feedback. For additional details on data sources and methodologies, refer to Appendix A.

Roadway Speeds

The posted speed limits for vehicles are a key factor in ensuring the safety and comfort of active transportation users across the transportation network. Higher vehicle speeds increase the risk of serious injury or death in the event of a crash, particularly for people walking and biking (**Figure 6**). Although this graphic is from 2000, the physics of vehicle-pedestrian crashes remain the same, making the data on injury risk by vehicle speed still relevant today. Within the Central Reno/Midtown neighborhood, roads with high-speed limits include McCarran Boulevard, South Virginia Street, E. Mill Street, and Kietzke Lane (). It is crucial to consider speed not only for safety but also for the comfort of people walking and biking, as higher vehicle speeds generally lead to a greater need for separation between vehicles and active transportation users. For this reason, posted speeds are a primary factor in the determination of the Bicycle Level of Traffic Stress (BLTS) and Pedestrian Experience Index, which are both further described below.



National Traffic Safety Board (2017) Reducing Speeding-Related Crashes Involving Passenger Vehicles. Available from: https://www.ntsb.gov/safety/safety-studies/Documents/SS1701.pdf

Figure 6. Risk of injury for people walking based on vehicle speeds.

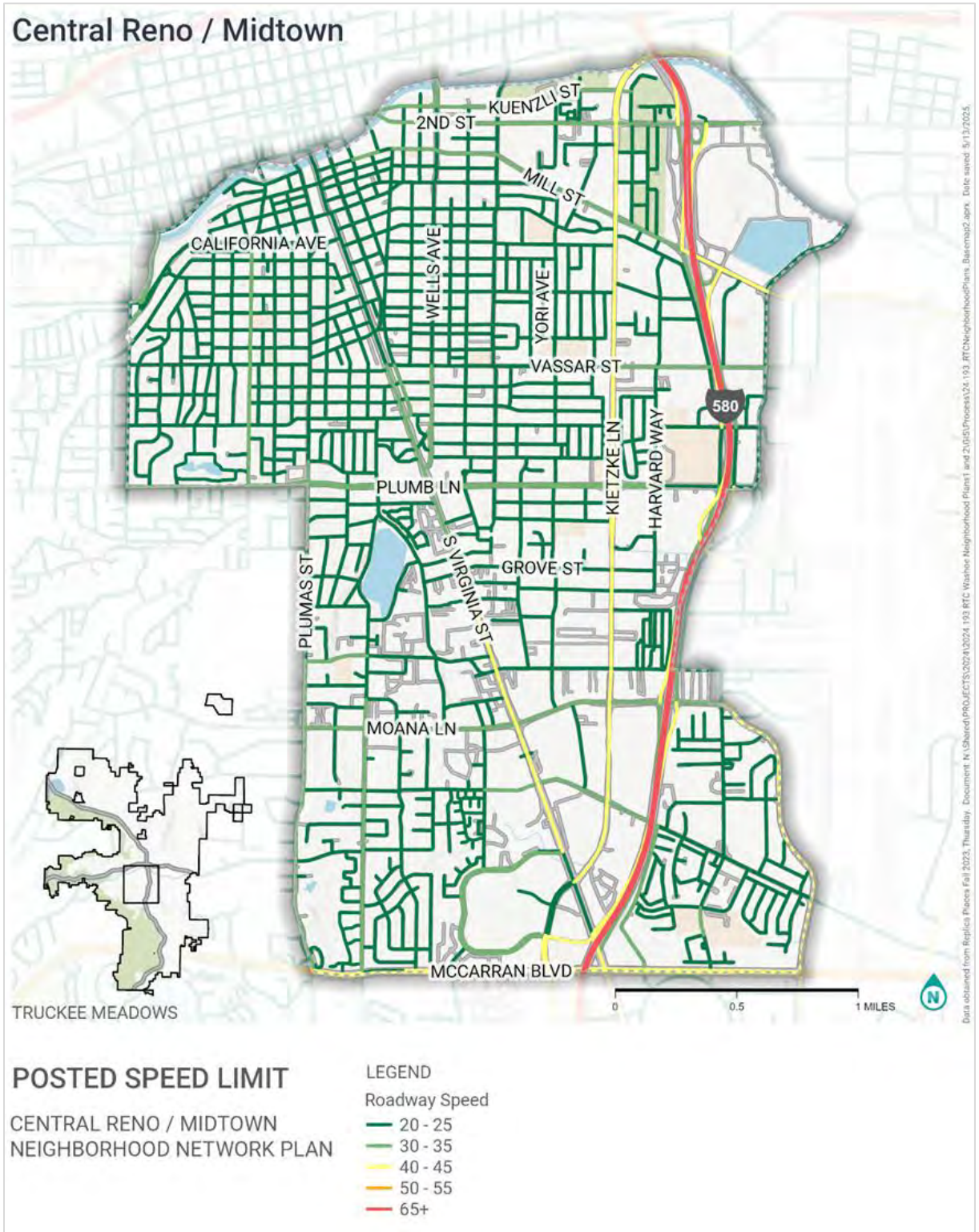


Figure 7. Posted Speed Limits in Central Reno/Midtown

Safety

The RTC conducted an analysis of arterials and collectors to identify roads and intersections with the greatest safety needs as part of the Truckee Meadows Vision Zero Action Plan. As a part of this plan, the RTC developed a High-Injury Network for the region, which identifies the places with the highest crash rates, level of frequency, and crash severity across the county. The Central Reno/Midtown area contains 21 High-Injury Network corridors and 32 intersections, representing a significant portion of the region's dangerous roadways (**Figure 8**). These findings highlight the need for targeted safety improvements, particularly on high-speed road segments and high-crash corridors.

Additionally, recent crash data (2019 to 2023[2]) highlights an ongoing need for safety improvements with a total of 305 crashes, including 19 fatalities and 271 injuries involving a person walking or biking. Of these, the majority (212) involved pedestrians, while 93 were related to bicyclists.

Table 2. Total Crashes by Mode

Total Crashes by Mode			
Crash Severity	**Pedestrians**	**Bicyclists**	**Total**
Fatal	18	1	19
Injury	179	92	271
Property	15	0	15
Grand Total	212	93	305



The intersection of Kietzke Lane and Roberts Street (shown above) is an example of a High Injury Network (HIN) intersection along a HIN corridor (Kietzke Lane from Kuenzli Street to Plumb Lane)

[2] *Data provided by Nevada Department of Transportation. Data excludes December 2023 due to limited availability.*

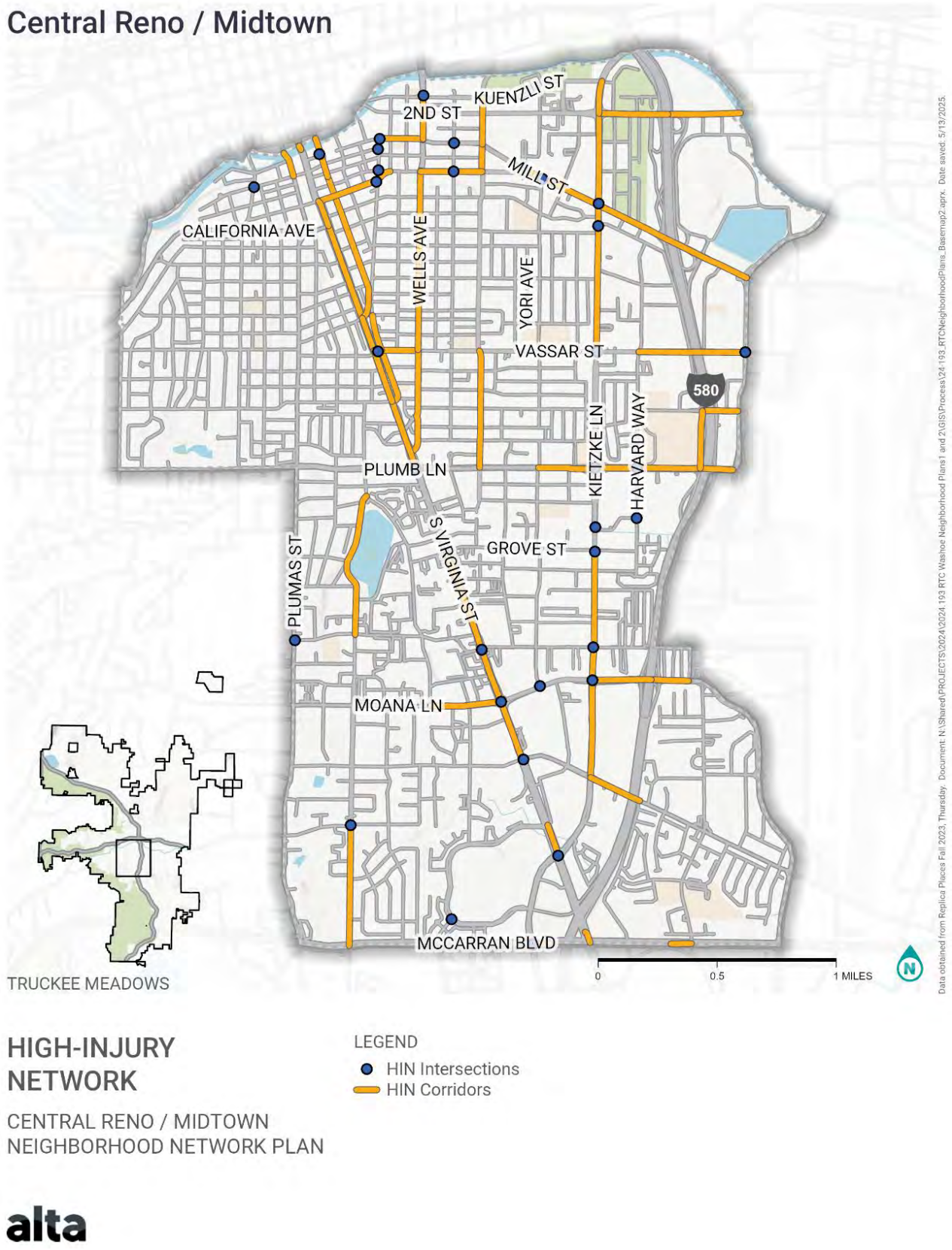


Figure 8. High-Injury Network in Central Reno/Midtown

Intersections vs. Segments

Crashes occurred nearly equally at intersections and roadway segments, but crashes resulting in a fatality or injury were more prevalent on road segments, accounting for 63% of fatalities and 54% of injuries. Notably, Kietzke Lane stands out among the top 15 corridors with seven fatal pedestrian crashes, which is as many crashes as the other 14 corridors combined.

Table 3. Corridors with High Crash Totals (2019 – 2023) (NDOT)

Rank	*Street Name*	Pedestrian Crashes		Bicycle Crashes		Total	Corridor Mileage	Crashes Per Mile
		Fatal	*Injury*	*Fatal*	*Injury*			
1	Virginia St.	1	32	0	16	49	3.6	13.73
2	Kietzke Ln.	7	11	0	14	32	3.9	8.29
3	Mill St.	0	12	0	5	17	1.9	9.18
4	Wells Ave.	1	14	0	2	17	1.6	10.52
5	Moana Ln.	0	6	1	4	11	1.7	6.37
6	Plumb Ln.	0	6	0	5	11	1.9	5.85
7	2nd St.	3	6	0	1	10	1.6	6.29
8	Kirman Ave.	1	4	0	4	9	1.7	5.29
9	Gentry Wy.	0	5	0	3	8	0.8	9.98
10	Sierra St.	0	5	0	2	7	0.3	20.47
11	Vassar St.	1	2	0	4	7	1.6	4.48
12	E. Peckham Ln.	0	2	0	4	6	2.0	3.06
13	Grove St.	0	5	0	1	6	1.0	6.23
14	Lakeside Dr.	0	5	0	1	6	2.3	2.59
15	Center St.	0	3	0	3	6	0.8	7.49



Intersections with multiple lanes such as the Plumb Lane and Virginia Street intersection (shown to the left) can be difficult for people walking and biking to navigate. For example, multi-lane intersections which lack dedicated space for bicyclists may result in a greater level of sidewalk riding as bicyclists seek a safe path through the intersection.

Equity

The ATP conducted a transportation-focused equity analysis to evaluate equity in active transportation, considering factors like health outcomes, socioeconomic status, vehicle access, health issues, and environmental impact. These variables were combined into a final composite equity index. In the Central Reno/Midtown neighborhood, most census tracts ranked in the top 20% for equity, indicating higher needs for active transportation improvements (**Figure 9**). However, two census tracts in the old southwest area (west of Plumas Street) ranked in the lowest 20%, highlighting disparities between the east and west sides of the neighborhood.



Areas with greater equity needs often have a higher dependence on walking, biking, and transit. Improvements to the active transportation network in these areas can provide more pronounced benefits based on the higher level of people using active transportation modes.

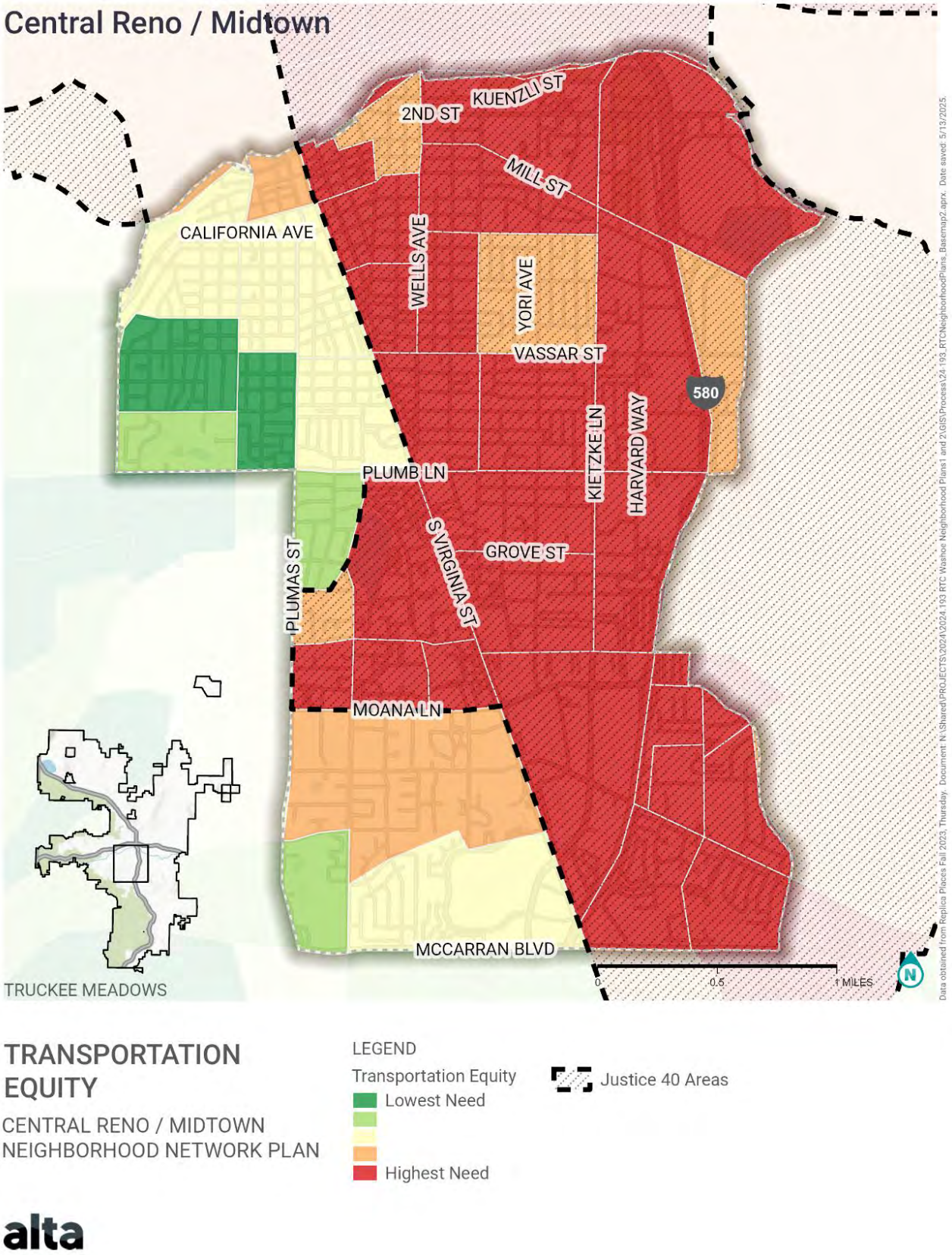


Figure 9. Transportation Equity in Central Reno/Midtown

Bicycle Level of Traffic Stress (BLTS)

BLTS measures how comfortable bicyclists feel on a roadway, considering factors like speed, number of lanes, and bike lane presence (**Figure 10**). BLTS is rated from level one (comfortable for bicyclists of all ages and abilities) to level four (high stress, suitable only for strong and fearless bicyclists). In the Central Reno/Midtown neighborhood, many roadways rank as BLTS 3 or 4, including Kietzke Lane, Virginia Street (south of Gentry Lane), Plumb Lane (Kietzke Lane to Virginia Street), Moana Lane (west of Virginia Street), and Vassar Street (east of Wells Avenue). These roads present challenging conditions for people biking due to high vehicle speeds, heavy traffic, and a lack of adequate bike infrastructure, creating a stressful and discouraging environment for biking.



Roadway conditions that are too stressful for bicyclists may result in greater levels of sidewalk riding despite the presence of a bike lane (as shown above).

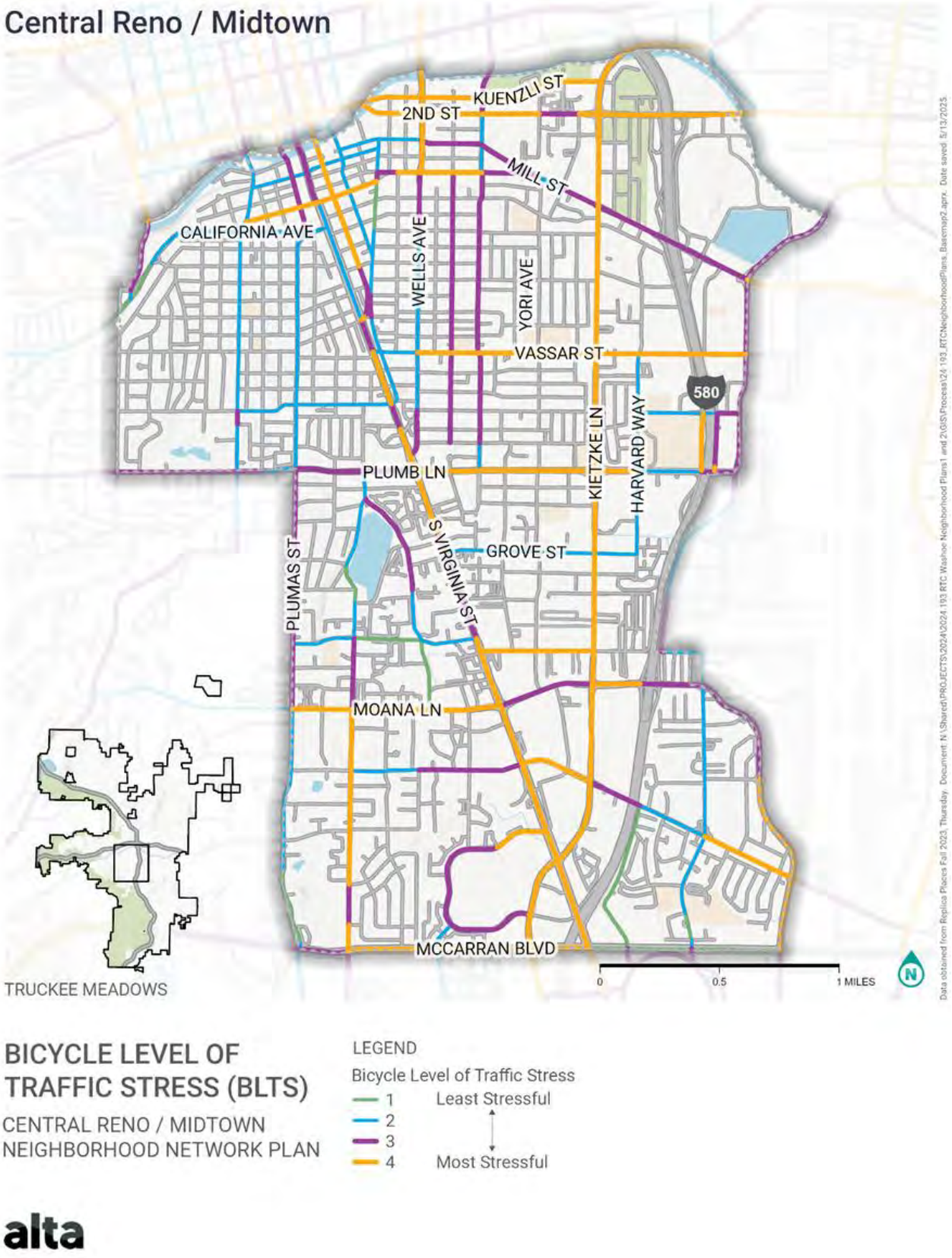


Figure 10. Bicycle Level of Traffic Stress in Central Reno/Midtown

Pedestrian Experience Index

A pedestrian-focused quantitative analysis conducted by researchers at University of Nevada, Reno, assessed the pedestrian experience along roadways in the Central Reno/Midtown neighborhood (**Figure 11**). The analysis assigned scores based on factors such as sidewalk presence, width, buffer space from vehicles, number of vehicle lanes, and roadway speed. Roadways received scores up to 85 points, with higher scores indicating a more comfortable pedestrian experience. The average score for Central Reno/Midtown was 57.63, indicating that most sidewalks are five to six feet wide and are present on one or both sides of the roadway, though buffer space is intermittent, and some areas have higher vehicle speeds and lane numbers. While many roadways scored relatively high, segments like Virginia Street (south of Plumb Lane), S. McCarran Boulevard, Moana Lane, and Greg Street had lower scores. Overall, 36% of the roadways in the area scored as bad or poor for pedestrian experience. Compared to the broader Reno/Sparks area, the Central Reno/Midtown network had a higher average pedestrian experience score, particularly for major and minor arterial roads.







The pedestrian experience is heavily influenced by sidewalk obstructions, poor sidewalk quality, a lack of sidewalks, and being too close to high traffic speeds and volumes as shown in the examples from Kietzke Lane above.

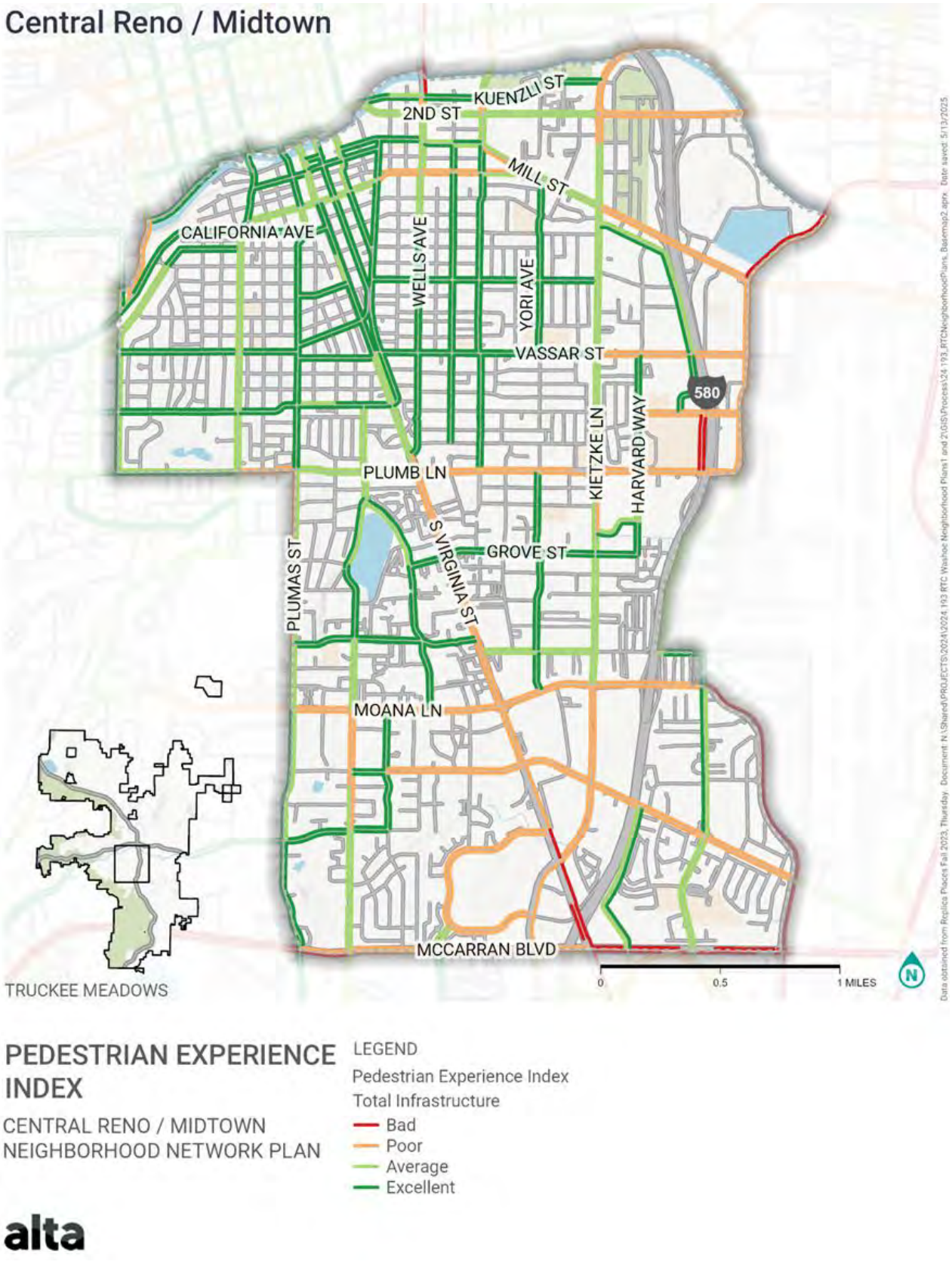


Figure 11. Pedestrian Experience Index in Central Reno/Midtown

Active Trip Potential

In addition to identifying current active transportation routes, it's crucial to recognize areas with strong potential for increased active transportation trips. This analysis is done by pinpointing regions where people commonly make short vehicle trips. These trips are categorized by distance, which helps determine the potential for mode shifts. Trips under one mile are seen as potential walking trips, trips between one and three miles as potential biking trips, trips between three and six miles as potential e-bike trips, and trips over six miles are considered less suitable for active modes (**Figure 12**). Within the Central Reno/Midtown neighborhood, there are several areas that see a high percentage of vehicle trips that are less than or equal to six miles and which have the potential to be converted to other modes. Overall, Central Reno/Midtown sees 10% more trips under three miles than the Reno/Sparks area, highlighting the significant potential for increased mode shift in the neighborhood. For additional description of these findings, please refer to Appendix A.

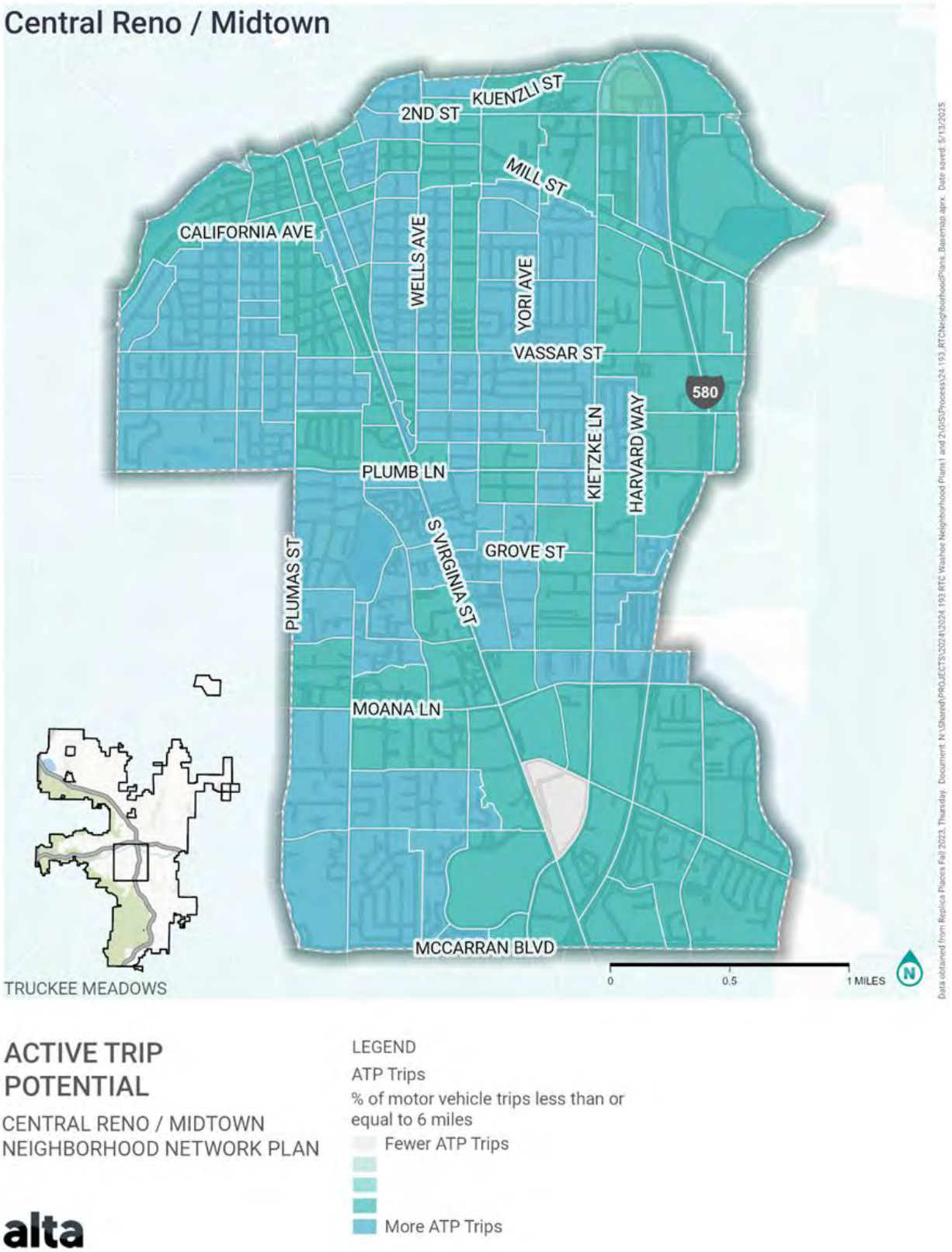


Figure 12. Active Trip Potential in Central Reno/Midtown

Gap Analysis

The Active Transportation Gap Analysis conducted by the RTC as part of the ATP assessed gaps in the region's network by combining evaluation factors (**Figure 13**) like Safety, Bicycle Level of Traffic Stress, Pedestrian Experience, Equity, and Active Trip Potential.[3] Each roadway segment was assigned a score between 0 and 40, with higher scores indicating more significant gaps in active transportation infrastructure. The Central Reno/Midtown area had an average score of 23.3, with most streets scoring between 20 and 30.

The top 10 streets with the highest average gap analysis scores, representing the greatest barriers to active transportation (**Figure 14**), include:

- Kietzke Lane
- Center Street
- S. Virginia Street
- Moana Lane
- Vassar Street
- Plumb Lane
- Wells Avenue
- Smithridge Drive
- Matley Lane
- Villanova Drive

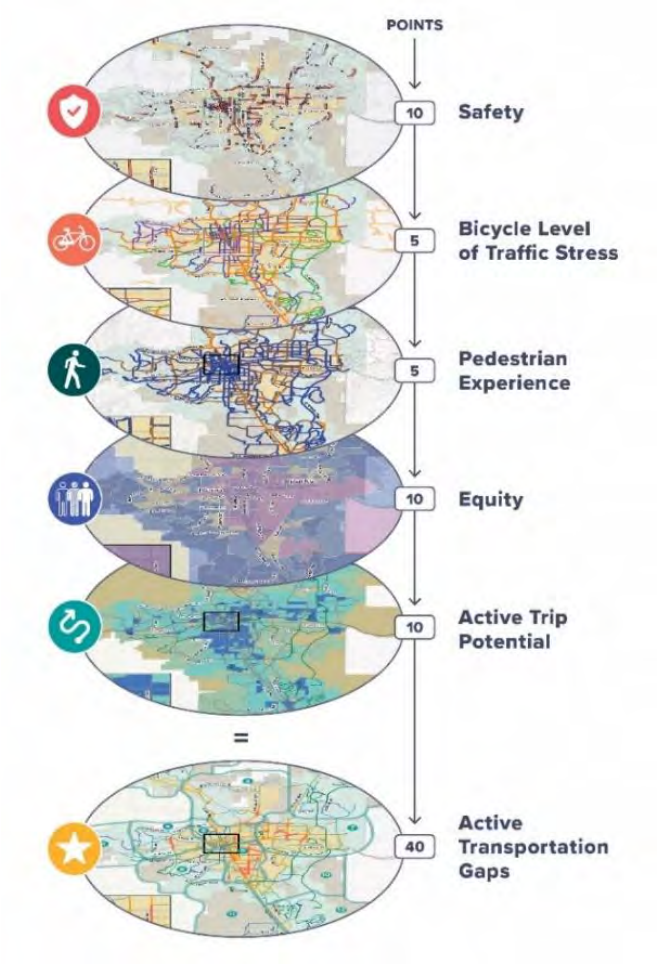


Figure 13. Active Transportation Gap Analysis Variables

[3] *The term "gap" represents a roadway section that acts as a barrier to active transportation in the region.*



Figure 14. Top 10 highest scoring corridors in Central Reno/Midtown

Chapter 4: Addressing Central Reno/Midtown Needs

The Neighborhood Network Plan (NNP) is a short-term plan that identifies roadway improvements, as well as policies and programs, to increase walking and biking in the neighborhood. This approach provides improvements to the existing network while also providing policies and programs that encourage, educate, and engage with the community about active transportation group rides, rules, and resources. This chapter describes the recommended programmatic and policy enhancements and network improvements within the Central Reno/Midtown neighborhood.

Neighborhood Network Plan Implementation Strategy

This NNP's recommendations are focused on short-term improvements to quickly address identified community needs while considering long-term improvements for future enhancements. Short-term improvements identified in this NNP use a quick-build implementation style that involves using low-cost materials and avoiding significant implementation costs such as moving curbs, building sidewalks, or reconstructing sections of the road. By working within the existing roadway space, these projects can be rapidly put in place to begin providing benefits to the community. This NNP also identifies potential projects for long-term implementation that applied the preferred facility type to the roadway from the RTC Street Typology Guide.[4] **Table 4** highlights the preferred separation of modes on arterials and collectors by land use context in Truckee Meadows from the Typology Guide. These long-term projects represent roadways with more complex challenges than may be addressed through quick-build implementation alone and therefore will be best addressed through a corridor-wide improvement project that holistically addresses the various transportation challenges for each unique corridor.

Table 4. Preferred Separation of Modes on Arterials and Collectors by Land Use Context (RTC Street Typology Guide)

Separation of modes	Example facility / facilities	Urban	Suburban	Rural
	One-way Cycle Tracks and sidewalk	★★★	★★	★★
	Shared Use Path	★★	★★★	★★★
	Bike lanes, traffic calmed streets	★	★	★
★★★ - Optimal level ★★ - Secondary level ★ - Least preferred level				

[4] *The RTC Street Typology Guide represents a systematic approach to prioritizing the safety and comfort of pedestrians and cyclists in Washoe County. For more information about the RTC Street Typology Guide, follow the hyperlink: RTC Active Transportation Plan.*

Programmatic and Policy Enhancements

Programmatic enhancements help active transportation users to be more confident while walking or biking and encourage them to get out into their community using a mode other than driving. Additionally, recommendations also consider policies to bolster accommodations for people walking and biking throughout the community by addressing potential barriers to active transportation. All recommendations are highlighted in **Table 5** with greater detail about each recommendation under each of the six Es of traffic safety (Equity, Education, Encouragement, Engineering, Engagement, and Evaluation). This approach represents a holistic approach to enhancing transportation safety beyond making updates to roadway design. **Table 6** through **Table 10** describe each recommendation, note the lead agency, provide an example of similar programs/policies, and highlight an order of magnitude of the level of effort for implementation on a scale of 1 through 5.

Table 5. Recommendations for the Six E's of Traffic Safety (described in greater detail in the tables below)

	Recommendation	Lead Agency	Level of Effort
Equity	*Guaranteed Ride Home Program*	RTC	♦♦♦
	Community-Based Organizations Outreach Programs	RTC	♦
Education	*Urban Biking and Scooting Class*	Department of Motor Vehicles/RTC	♦♦♦♦
	Traffic Ticket Reduction	Reno Police Department/Sparks Police Department/Washoe Sheriff's Office	♦♦♦♦
Encouragement	*Bike Maps*	RTC	♦
	Walk and Roll to Work/Wherever Days	RTC/Northern Nevada Public Health	♦♦
	Washoe County School District (WCSD) Bike Buses	WCSD/RTC	♦♦♦
Engineering	*Wayfinding Program*	RTC/City of Reno/City of Sparks/Washoe County	♦♦♦♦♦
	Develop a Construction Detour Policy	RTC/City of Reno/City of Sparks/Washoe County	♦♦♦♦♦
	Develop an Open Streets Program	RTC in collaboration with Sparks/Reno	♦
Engagement	*Neighborhood Mobility Listening Labs*	RTC in collaboration with Sparks/Reno	♦
	Farmers' Market Monthly Booths	RTC in collaboration with Sparks/Reno	♦
	Monitor Crash Data	RTC in collaboration with Sparks, Reno, and Washoe County	♦♦
Evaluation	*Assess Local Bicycle and Pedestrian Trips*	RTC in collaboration with Sparks, Reno, and Washoe County	♦
	Active Transportation Dashboard	RTC in collaboration with Truckee Meadows Regional Planning Agency (TMRPA)	♦

Equity

Equity is a major component throughout these proposed recommendations to focus efforts within areas that are heavily dependent on public transit or active transportation. Table 6 provides an overview of recommended bicycle and pedestrian equity policies and programs.

Table 6. Recommended Equity Policies/Programs

Recommendation	Description	Lead Agency	Level of Effort	Example Program / Policy
Guaranteed Ride Home Program	Provide bicyclists and pedestrians an option to receive a ride home when the individual is unable to bike or walk home up to a certain number of times per year. The alternative options could consist of late and frequent public transit times, car-sharing programs, and other forms of transportation support. This would operate similarly to the Guaranteed Ride Home Program for SmartTrips.	RTC	♦♦♦	Breaking Down Barriers to Bicycling in the US ACTC Guaranteed Ride Home
Community-Based Organizations Outreach Programs	Collaborate with community-based organizations in disadvantaged areas with a focus on Spanish-language organizations to improve the community's comfort and interest in planning projects such as the Reno Bike Project, Northern Nevada HOPES, Nevada Urban Indians, or the Children's Cabinet. This may include directed meetings with organizations that are project specific or at regular intervals to provide an update on projects and hear current issues. Working directly with interpreters, community-based organizations, and community champions to convene outreach events promoting walking and biking safety.	RTC	♦	Partnerships with Community-Based Organizations on Engagement Projects City of Lodi: Love Your Block Program

Education

Bicycle and pedestrian education helps those who are interested in active transportation to feel more comfortable, safe, and confident navigating streets and shared-use paths. **Table 7** outlines potential policies and programs that the RTC could consider.

Table 7. Recommended Education Policies/Programs

Recommendation	Description	Lead Agency	Level of Effort	Example Program / Policy
		Department of Motor Vehicles/ RTC		Urban Bicycling and Scooting 101 Class - Downtown Sacramento Partnership
Traffic Ticket Reduction	Work with local police departments to create a program that provides a bicyclist with a safety education course as a traffic court option. People who receive a safety-related citation/ infraction for moving violations would be permitted to attend a Basic Street Skills class to reduce or waive fines.	Reno Police Department/ Sparks Police Department/ Washoe Sheriff's Office	♦♦♦♦	Marin Traffic Citation Fee Active Transportation Commission (ATC)

Encouragement

Encouragement policies and programs help to create a lasting active transportation culture and can encourage overall mode share shifts. **Table 8** provides an overview of recommended bicycle and pedestrian encouragement policies and programs.

Table 8. Recommended Encouragement Policies/Programs

Recommendation	Description	Lead Agency	Level of Effort	Example Program / Policy
		RTC	♦	Bicycle Friendly Community Idea book City of Oakland Bicycle Facilities Tour Map
Walk and Roll to Work/Wherever Days	Bolster collaboration with local community groups such as the Reno Bike Project, Truckee Meadows Bike Alliance, or the Kiwanis Club to sponsor more public walking and biking events such as Walk and Roll to Work/Wherever Days, Biketober, or May Bike Month.	RTC/ Northern Nevada Public Health	♦♦	Sacramento Area Bicycle Advocates
		WCSD/ RTC	♦♦♦	How to Start a Bike Bus-PBOT Safe Routes to School

Engineering

Engineering recommendations support facilities that provide increased comfort and ease for people who bike and walk. **Table 9** summarizes proposed engineering policies and programs that work with existing bicycle and pedestrian infrastructure to improve the experience for people walking, biking, or accessing transit.

Table 9. Recommended Engineering Policies/Programs

Recommendation	Description	Lead Agency	Level of Effort	Example Program / Policy
	Implement a region-wide, well-branded, and wayfinding program in concert with all roadway which include an active to highlight low-stress connectivity for those walking, biking, rolling, or taking transit.	RTC/City of Reno/ City of Sparks/ Washoe County	♦♦♦♦♦	Denver Pedestrian and Bicycle (D-Route) Wayfinding
Develop a Construction Detour Policy	The RTC could work with local agencies on a collaborative effort to update standards for accommodating people walking and biking when construction or events impact sidewalks, on-street bikeways, and shared-use paths.	RTC/City of Reno/ City of Sparks/ Washoe County	♦♦♦♦♦	City of Sacramento Draft Work Zone Detour Policy

Engagement

Engaging with residents on a regular basis can institutionalize safe walking and biking transportation systems. By prioritizing people who walk and bike, these programs help create safe environments for all users. **Table 10** displays the proposed engagement policies and programs for the RTC.

Table 10. Recommended Engagement Policies/Programs

Recommendation	Description	Lead Agency	Level of Effort	Example Program / Policy
Develop Open Streets Program	Promotes active transportation and people-centered spaces and emphasizes the potential of streets designed for people. Collaborate with local leaders, climate advocacy groups, and bike and pedestrian coalitions to offer informative booths for the public.	RTC in collaboration with City of Reno/City of Sparks/Washoe County	♦	Open Streets MPLS Open Streets Project
Neighborhood Mobility Listening Labs	Conducting informal listening sessions within the neighborhood presents a regular opportunity for residents to engage with active transportation planners and voice their specific concerns within the neighborhood. These could be held on a rotating basis as stand-alone events or as part of a larger community event.	RTC in collaboration with City of Reno/City of Sparks/Washoe County	♦	Multnomah County SRTS Community Event Tabling
Farmers' Market Monthly Booths	Regularly occurring community events such as the Idlewild Farmers' Market is a good opportunity for RTC planners to meet people where they are and gather key feedback. Hosting a regular booth at these events (on a monthly or quarterly basis) would present a strong opportunity for area residents to engage with active transportation planners and voice their specific concerns while hearing about project updates.	RTC in collaboration with City of Reno/City of Sparks/Washoe County	♦	Multnomah County SRTS Community Event Tabling

Evaluation

Efforts to evaluate and track progress toward reaching the NNP's goals are important for long-term success and project implementation. **Table 11** lists proposed policies and programs that can identify what's working, what's not working, and where additional efforts are needed following the completion of the plan.

Table 11. Recommended Evaluation Policies/Programs

Recommendation	Description	Lead Agency	Level of Effort	Example Program / Policy
Monitor Crash Data	Regularly review crash data for collisions involving people walking, biking, and rolling. The local police department can help the RTC assess traffic safety issues and track progress toward a safer community for people walking and biking.	RTC in collaboration with City of Reno/City of Sparks/Washoe County	♦♦	San Francisco Collision Report
Assess Local Bicycle and Pedestrian Trips	Conduct a regular assessment of bicycle and pedestrian trips on major roadways and recently improved corridors. Consider adding bicycle and pedestrian counting technology as an element of roadway projects that include multimodal elements.	RTC in collaboration with City of Reno/City of Sparks/Washoe County	♦	SFMTA Bicycle Counts NYC Bicycle Counts
Active Transportation Dashboard	Create and maintain an active transportation dashboard showing existing, planned, and in progress active transportation infrastructure. This GIS dashboard will display quarterly bicycle- and pedestrian-involved collision statistics and may include links to projects with specific benefits for active transportation and other resources throughout Truckee Meadows.	RTC in collaboration with Truckee Meadows Regional Planning Agency	♦	City of Oakland, Bicycle Facilities and Projects

Neighborhood Network Improvements

This section outlines the process used to make project recommendations and breaks those recommendations into three categories: (1) existing RTP projects, (2) Active Transportation Program projects, and (3) long-term needs. All recommendations are based on feedback the project team heard during the public engagement process, professional insights, and data described earlier in this document. These projects will be supplemented by planned projects from other programs including the Peckham Lane Multimodal Project, Moana Lane Rehabilitation Project, and Plumb Lane Multimodal Project (**Figure 15**).

Existing RTP Projects

Table 12 provides a breakdown of all improvements to the neighborhood network from the Regional Transportation Plan, RTC's 20 year long-range plan, which are in addition to Active Transportation Program projects. As these projects are designed and constructed, they will be supplemented by the short-term Active Transportation Program projects to create a more connected network. All neighborhood network recommended improvements (Active Transportation Program projects and RTP projects) in the Central Reno/Midtown neighborhood are shown in **Figure 15**.

Table 12. RTP Projects within Central Reno/Midtown Neighborhood (2025–2034)

Corridor	Extent	Project Type
Kietzke Ln.	Virginia St. to Mill St.	Multimodal
Mill St.	Kietzke Ln. to Terminal Wy.	Capacity
Mill St.	Lake St. to Gould St.	Multimodal
Peckham Ln.	Lakeside Dr. to Airway Dr.	Multimodal
Plumb Ln.	Kietzke Ln. to Terminal Way	Multimodal
S. Virginia St.	Plumb Ln. to Peppermill	Multimodal
S. Virginia St.	Moana Ln. to Meadowwood Mall Cir.	Multimodal

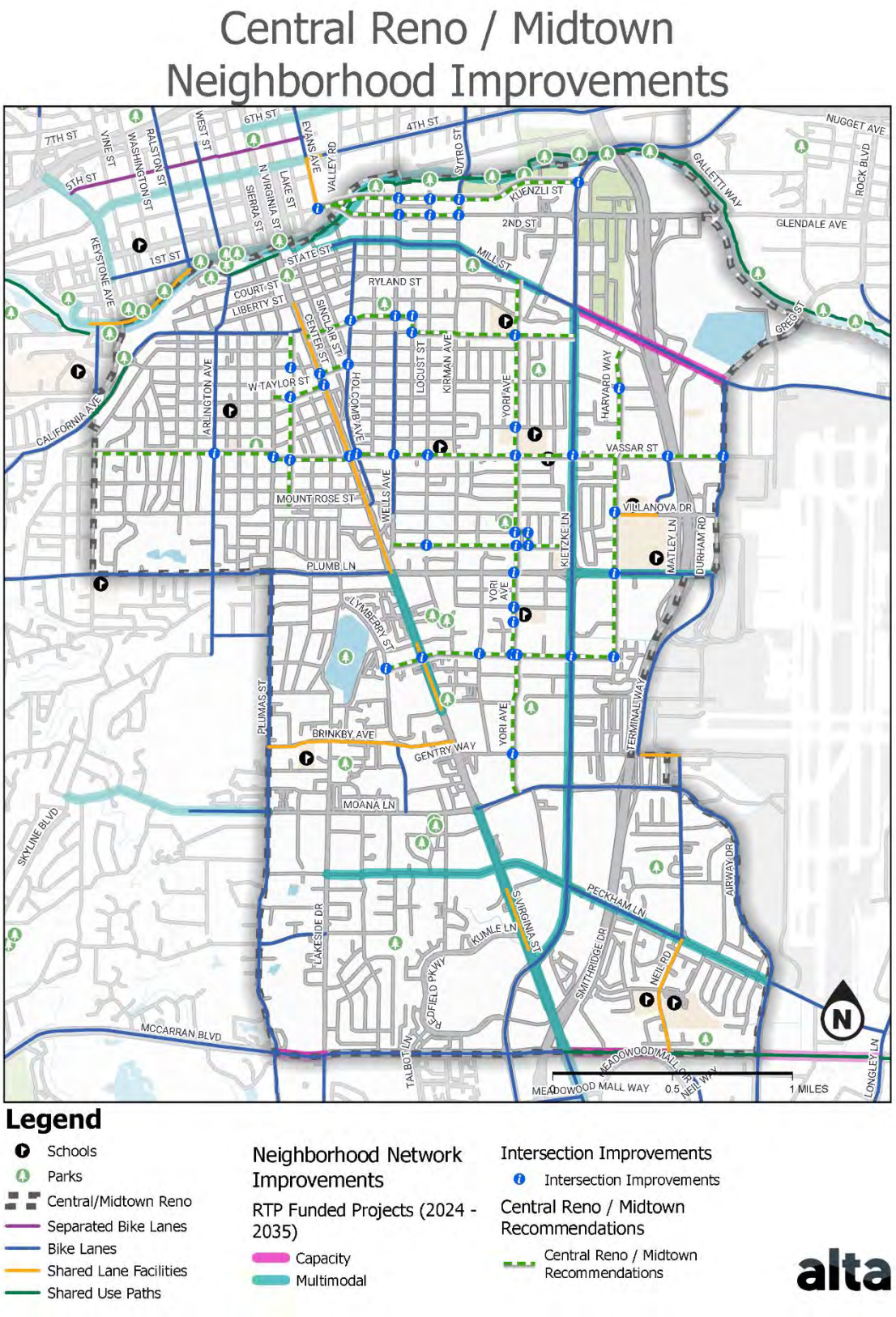


Figure 15. Central Reno/Midtown Neighborhood Network Improvements

Recommendation Selection Process

The project team identified three unique scenarios for Active Transportation Program projects in the neighborhood based on feedback from the community and data analysis findings. Each scenario considered a different overarching theme, which represented a key goal from the community engagement process including connecting north-south, building off the Biggest Little Bike Network, and connecting to schools and parks. To compare between scenarios, the project team evaluated each scenario based on elements of three key metrics:

1. Impact on achieving Active Transportation Plan goals
2. Improving access to key community destinations
3. Implementation considerations

Table 13. Project Evaluation Metrics

Evaluation Metric	Element
Active Transportation Plan Goals	• *Safety* • *Mode Share* • *Community Enhancement* • *Maintenance*
Community Access	• *Access to Hospitals* • *Access to Schools* • *Access to Parks*
Implementation Considerations	• *Primary Emergency Vehicle Route Considerations* • *Operational/Parking Considerations* • *Planning Level Cost Estimate*

Table 13 highlights each element of the evaluation metric. The final recommendations represent a combination of recommendations across all three scenarios. For more details about the project selection process, please refer to **Appendix D**.

Active Transportation Program Projects

The recommended improvements identified as Active Transportation (AT) Program projects in ***Figure 16*** will be considered for implementation as quick-build style projects using funds from the AT Program. In total, the Plan recommends 13.3 miles of roadways across the neighborhood to enhance walking and biking (**Table 14**). This includes just over 8.4 miles of new neighborhood byways, 4.5 miles of new protected bike lanes, and enhancements at over 45 intersections along these corridors. These projects are highlighted in **Table 15** and shown in ***Figure 16***; each project is further described in a standalone project cutsheet provided in Appendix E. Project cutsheets represent the planning level project concept with potential intersection improvements and conceptual corridor improvements. Additionally, each concept includes a typical cross section of each proposed facility type to showcase the potential configuration along the corridor. The exact layout of each improvement will be refined during the design phase of implementation.

Table 14. Central Reno/Midtown Active Transportation Improvements by Facility Type

Facility Type	Total Mileage	Total Estimated Cost
Neighborhood Byway	8.4	$ 3,151,061
Bike Lane	0.4	$ 11,790
Protected Bike Lane	4.5	$ 1,833,465
Total	13.3	$ 4,996,316

Table 15. Central Reno/Midtown Active Transportation Improvements

Corridor	Extent	Improvement Type	Mileage	Cost
2nd St.	Lake St. to Sutro St.	Protected Bike Lane	0.53	**$$$**
Kuenzli St.	Lake St. to Kietzke Ln.	Protected Bike Lane	1.05	**$$$$**
Kirman St.	2nd St. to Kuenzli St.	Protected Bike Lane	0.07	**$**
Yori Wy.	Mill St. to Moana Ln.	Neighborhood Byway	2.21	**$$$$**
Grove St.	Lymberry St. to Harvard Wy.	Neighborhood Byway	0.96	**$$$**
Casazza Dr.	Wells Ave. to Kietzke Ln.	Neighborhood Byway	0.71	**$$**
Vassar St.	Terminal Wy. to Kietzke Ln.	Protected Bike Lane	0.71	**$$$$**
Vassar St.	Kietzke Ln. to S Virginia St.	Neighborhood Byway	0.86	**$$$**
Harvard Wy.	Lake St. to Sutro St.	Neighborhood Byway	0.96	**$$$**
Taylor St./ Cheney St.	Lake St. to Kietzke Ln.	Neighborhood Byway	0.35	**$$**
Moran St.	2nd St. to Kuenzli St.	Neighborhood Byway	0.64	**$$**
Roberts St.	Mill St. to Moana Ln.	Neighborhood Byway	0.61	**$$**
Forest St.	Lymberry St. to Harvard Wy.	Cycle Track	0.72	**$$$**
Caliente St.	Wells Ave. to Kietzke Ln.	Neighborhood Byway	0.32	**$$**
Monroe St.	Terminal Wy. to Kietzke Ln.	Neighborhood Byway	0.74	**$$**
$ = Less than $100,000, **$$** = $101K–$250K, **$$$** = $251K–$500K, **$$$$** = $501K–$1M, **$$$$$** = $1M+				

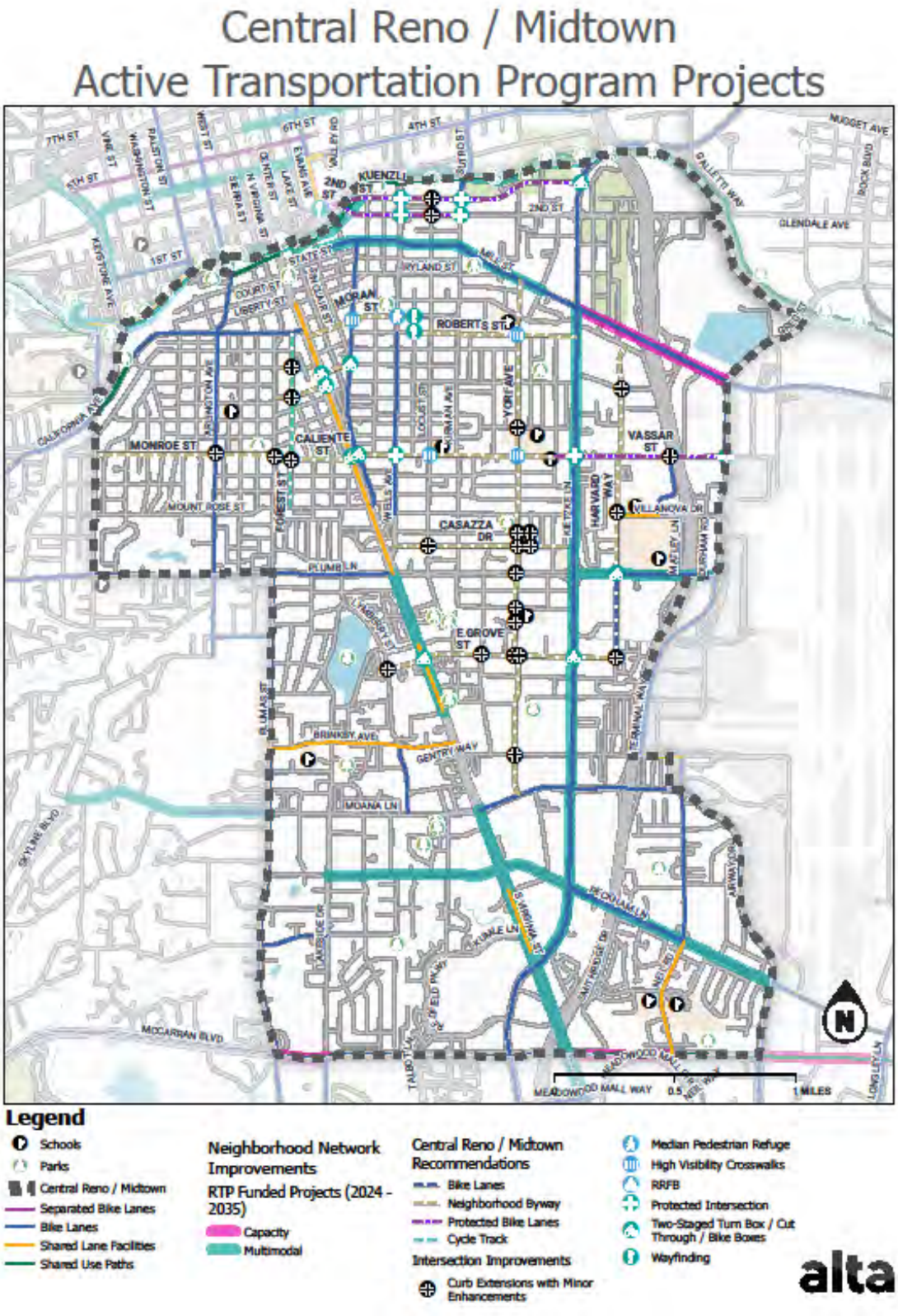


Figure 16. Central Reno/Midtown Active Transportation Program Projects

Long-Term Needs

Quick-build style improvements provide the added benefit of quickly addressing community needs. More complex roadways that require higher levels of improvements and more significant redesign to address identified needs are best addressed through more comprehensive roadway improvement projects. **Table 16** highlights roadway extents that were identified as barriers to active transportation in the neighborhood but that cannot be addressed through quick-build improvements alone. The Preferred Facility Type noted below is based on the Street Typology Guide from the Active Transportation Plan. These may be considered for long-term improvements during future planning efforts or implementation programs.

Table 16. Central Reno/Midtown Long-Term Needs

Corridor	Extent	Typology	Preferred Facility Type
2nd St.	Truckee River to Truckee River	Urban Arterial Major	One-Way or Two-Way Cycle Track 8' - 12' Sidewalk w/ 5' - 7' Buffer
Airway Dr.	Neil Rd. to McCarran Blvd.	Urban Arterial Major	One-Way or Two-Way Cycle Track 8' - 12' Sidewalk w/ 5' - 7' Buffer
Kietzke Ln.	Truckee River to McCarran Blvd.	Urban Arterial Major	One-Way or Two-Way Cycle Track 8' - 12' Sidewalk w/ 5' - 7' Buffer
McCarran Blvd.	Airway Dr. to Plumas St.	Urban Arterial Major	One-Way or Two-Way Cycle Track 8' - 12' Sidewalk w/ 5' - 7' Buffer
Plumb Ln.	Terminal Way to Sharon Way	Urban Arterial Major	One-Way or Two-Way Cycle Track 8' - 12' Sidewalk w/ 5' - 7' Buffer
Virginia St.	Wells Ave. to McCarran Blvd.	Urban Arterial Major	One-Way or Two-Way Cycle Track 8' - 12' Sidewalk w/ 5' - 7' Buffer
Wells Avenue	Virginia St. to Truckee River	Urban Arterial Major	One-Way or Two-Way Cycle Track 8' - 12' Sidewalk w/ 5' - 7' Buffer
Moana Ln.	Neil Rd. to Plumas St.	Urban Arterial Major/Minor	One-Way or Two-Way Cycle Track 8' - 12' Sidewalk w/ 5' - 7' Buffer / One-Way or Two-Way Cycle Track 6' - 8' Sidewalk w/ 5' - 7' Buffer
Terminal Way/Greg St.	Plumb Ln. to Truckee River	Urban Arterial Major/Minor	One-Way or Two-Way Cycle Track 8' - 12' Sidewalk w/ 5' - 7' Buffer / One-Way or Two-Way Cycle Track 6' - 8' Sidewalk w/ 5' - 7' Buffer
Arlington Avenue	Truckee River to Plumb Ln.	Urban Arterial Minor	One-Way or Two-Way Cycle Track 6' - 8' Sidewalk w/ 5' - 7' Buffer
California Avenue	Virginia St. to Keystone Ave.	Urban Arterial Minor	One-Way or Two-Way Cycle Track 6' - 8' Sidewalk w/ 5' - 7' Buffer
Kuenzli St.	Truckee River to Sutro St.	Urban Arterial Minor	One-Way or Two-Way Cycle Track 6' - 8' Sidewalk w/ 5' - 7' Buffer
Lakeside Dr.	Eastshore Dr. to McCarran Blvd.	Urban Arterial Minor	One-Way or Two-Way Cycle Track 6' - 8' Sidewalk w/ 5' - 7' Buffer
Liberty St./Ryland St.	Mill St. to Arlington Ave.	Urban Arterial Minor	One-Way or Two-Way Cycle Track 6' - 8' Sidewalk w/ 5' - 7' Buffer
Mill St.	Lake St. to Terminal Way	Urban Arterial Minor	One-Way or Two-Way Cycle Track 6' - 8' Sidewalk w/ 5' - 7' Buffer
Plumas St./ Sierra St.	Moana Ln. to Liberty St.	Urban Arterial Minor	One-Way or Two-Way Cycle Track 6' - 8' Sidewalk w/ 5' - 7' Buffer
Sutro St./ Kirman Avenue	Truckee River to Ryland St.	Urban Arterial Minor	One-Way or Two-Way Cycle Track 6' - 8' Sidewalk w/ 5' - 7' Buffer
Plumas St.	Moana Ln. to McCarran Blvd.	Suburban Arterial Minor	Shared-Use Path (12' path / 7' buffer) 5' -7' Sidewalk with 5' - 7' Buffer

Implementation

The AT Program projects recommended by this plan will be considered for implementation using AT Program funds and are intended to be implemented quickly across the neighborhood. The RTC will begin project design for identified quick-build improvements in 2025, with a goal to begin construction in Summer 2026. Projects will be constructed based on AT Program funds availability.

Stay Connected

We encourage you to stay connected through the process as project designs are refined and projects are implemented. RTC will regularly post project updates noting progress toward design and implementation for projects on the Central Reno/Midtown neighborhood webpage. You can also stay connected to RTC's broader efforts through the Citizens Multimodal Advisory Committee, RTC Board, and ongoing public announcements from the RTC.

A

Appendix A: Neighborhood Profile



Central Reno / Midtown

Neighborhood Profile

Neighborhood Network Plan

December 2024

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Table of Contents

Introduction, Plan Review, and Neighborhood Demographics 2
Key Neighborhood Destinations 16
Existing Neighborhood Network 20
Neighborhood Network Gaps 39
Neighborhood Profile Summary 41

Introduction, Plan Review, and Neighborhood Demographics

Introduction

As part of the *Walk and Roll Truckee Meadows Active Transportation Plan* (ATP), the Regional Transportation Commission (RTC) of Washoe County is developing Neighborhood Network Plans (NNPs) which aim to enhance active transportation options by improving pedestrian and bicycling infrastructure in twelve identified neighborhood areas. The NNPs will apply the regional vision, goals, and priorities while taking a community-driven approach that provides each community the opportunity to express their specific values, needs and desired solutions. Central Reno/Midtown is one of the first two communities engaged in this process as designated in the ATP. These areas encompass communities with some of the greatest active transportation need in the region, with high levels of pedestrian stress, low scores for pedestrian experience, and high levels of injuries on the network. This Neighborhood Network Plan will provide an in-depth look at the neighborhood area specific data that came out of the ATP process, as well as a review of relevant plans and demographic data.

Plan Review

Reimagine Reno is the City of Reno's Master Plan which guides development through the year 2036. Adopted in 2017, the plan has undergone several amendments and is meant to serve as a living document as the City continues to grow and evolve. The plan addresses a variety of issues that are either directly or indirectly related to active transportation and are relevant to the development of the Central Reno / Midtown Neighborhood Network Plan. While the plan is comprehensive in nature, it contains guiding principles and associated policies that are supportive of expanding and enhancing bicycle and pedestrian connections throughout the city.

Guiding principle four – Vibrant Neighborhoods and Centers

This guiding principle from *Reimagine Reno* emphasizes the need for the City to actively encourage the development of more diverse neighborhoods that are oriented around and designed for people. This is achieved through the implementation of several strategies, including encouraging the development of walkable community centers that provide services and amenities, and encouraging pedestrian and bicycle connections as part of new development. To foster the development of walkable communities, the plan sets policies such as supporting the development of walkable community centers[1], and designing community centers to facilitate safe and convenient pedestrian and bicycle access[2]. To encourage pedestrian and bicycle connections, the plan sets policies such as promoting safe, clear, and direct connections with adjacent and regional destinations[3], and prioritizing sidewalk and trail improvements that complete gaps between existing neighborhoods and other community destinations[4].

[1] Policy 4.4A: Walkable Centers

[2] Policy 4.4F: Multi-Modal Hubs

[3] Policy 4.5A: Connectivity and Access

[4] Policy 2.5B: Missing Links

Guiding principle five – Well Connected City and Region

This guiding principle from *Reimagine Reno* emphasizes the need for Reno to use its existing transportation facilities more efficiently, increase transit ridership and coverage, and improve access for all road users. It stresses the critical role that improving pedestrian and bicycle connectivity plays in filling gaps in the transportation network, and highlights the importance of higher intensity, walkable development. To achieve these goals, the plan employs numerous strategies, several of which support pedestrian and bicycle infrastructure. These include continuing to develop a well-connected and balanced transportation system that enhances mobility for all modes, actively managing the transportation system to improve reliability, efficiency, and safety, and encouraging the use of bicycling, walking, and other forms of alternative transportation. To support development of a balanced transportation system, the plan establishes policies such as striving to balance the safety and needs of all road users in the planning, development review, and decision-making in the City[5], collaborating with RTC, the City of Sparks, and other regional entities on the implementation of the *Reno Sparks Bicycle and Pedestrian Plan*[6] and *Complete Streets Master Plan*[7], and requiring the dedication of the necessary right-of-way to implement multi-modal improvements[8].

To actively manage the transportation system while supporting pedestrian and bicycle connections, the plan employs policies such as designing and managing the City's transportation system to ensure the needs and safety of road users are considered as part of capacity and congestion management[9], and requiring the consideration of pedestrian travel patterns, access to schools and parks, and opportunities to integrate multi-modal facilities, among others, when designing or redeveloping new or existing roadways[10]. The use of traffic calming and pedestrian safety features is encouraged to support neighborhood character and safety[11], and Safe Routes to School planning is recommended to reduce vehicle congestion and enhance transit, bicycle, and pedestrian connections in school zones[12]. To stimulate the use of bicycling, walking, and other forms of alternative transportation, the plan sets policies such as prioritizing pedestrian and bicycle improvements in places where transit service exists[13], and encouraging bikeways as part of coordinated trip reduction programs to support the use of bicycles for commuting[14].

[5] Policy 5.1A: Balanced Modes

[6] Policy 5.1C: Bicycle and Pedestrian Plan

[7] Policy 5.1D: Complete Streets Master Plan

[8] Policy 5.1F: Right-of-Way Preservation

[9] Policy 5.2D: System Capacity

[10] Policy 5.2E: Roadway Design and Classification

[11] Policy 5.2I: Traffic Calming and Pedestrian Safety

[12] Policy 5.2J: Safe Routes to School

[13] Policy 5.4D: First and Last Mile Connections

[14] Policy 5.4E: Bikeways and Supporting Facilities

Neighborhood Demographics

Data Explanation

Part of the development of the ATP involved an in-depth analysis of demographics and socioeconomic characteristics of the region and communities within it. This included leveraging data from the American Community Survey (ACS), crash data from the Nevada Department of Transportation (NDOT), the RTC Travel Demand Model, and Replica Places. This type of analysis is critical for better understanding the context and needs of a place and is used to inform the development of the plan and the strategies and policies it recommends. Each of the neighborhood network profiles will also include an overview of some of the important data relevant to the neighborhood context, and a comparison of the neighborhoods to the Reno/Sparks area as a whole.

Demographics

The Central Reno/Midtown neighborhood has a population that is younger and more diverse than the Reno/Sparks area with a higher level of population density than is typical across the region. As shown in Figure 1, this neighborhood has a larger proportion of people aged 20 to 39 than compared to the Reno/Sparks area and a slightly smaller proportion of adults over the age of 60. For example, those aged 25 to 29 represent over eleven percent of the total population within the neighborhood compared to approximately eight percent for the Reno/Sparks area. Additionally, those over 60 represent 22.6 percent of the total population in the Reno Sparks area compared to 20.2 percent in this neighborhood.

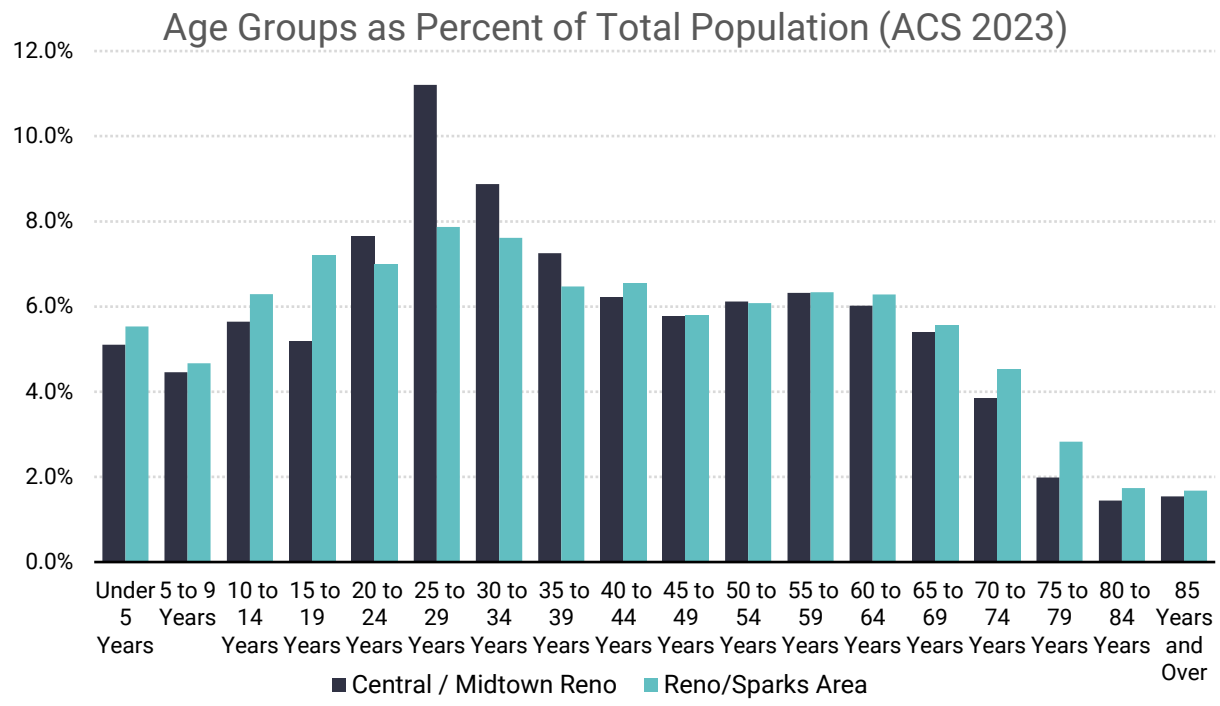


Figure 1 Age groups as percent of total population in Central Reno / Midtown and Reno / Sparks area

The Central Reno/Midtown neighborhood has a larger percentage of people of color than the Reno/Sparks area. The neighborhood has a larger population of Hispanic or Latino residents as well as Black, Native American, Asian, Native Hawaiian, and those who identify as two or more races, as shown in Figure 2.

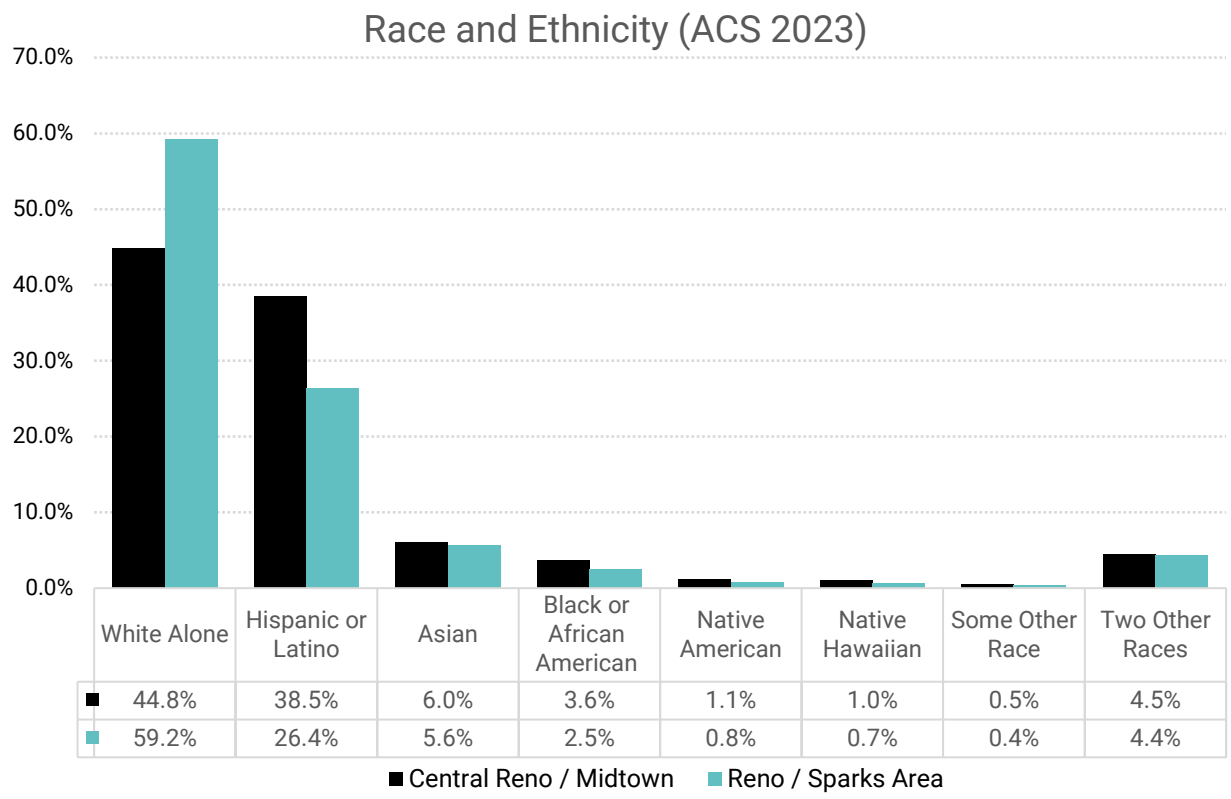


Figure 2 Race and ethnicity in Central Reno / Midtown and Reno / Sparks area

Population Density

Central Reno/Midtown has a population density that is approximately 23 times higher than the regional average, with about 6,903 people per square mile compared to just 300 people per square mile in the Reno/Sparks area. Within the neighborhood, the area with the highest population density is located between Plumb Ln, Kietzke Ln, Gentry Wy, and Virginia St, as shown in Figure 3.

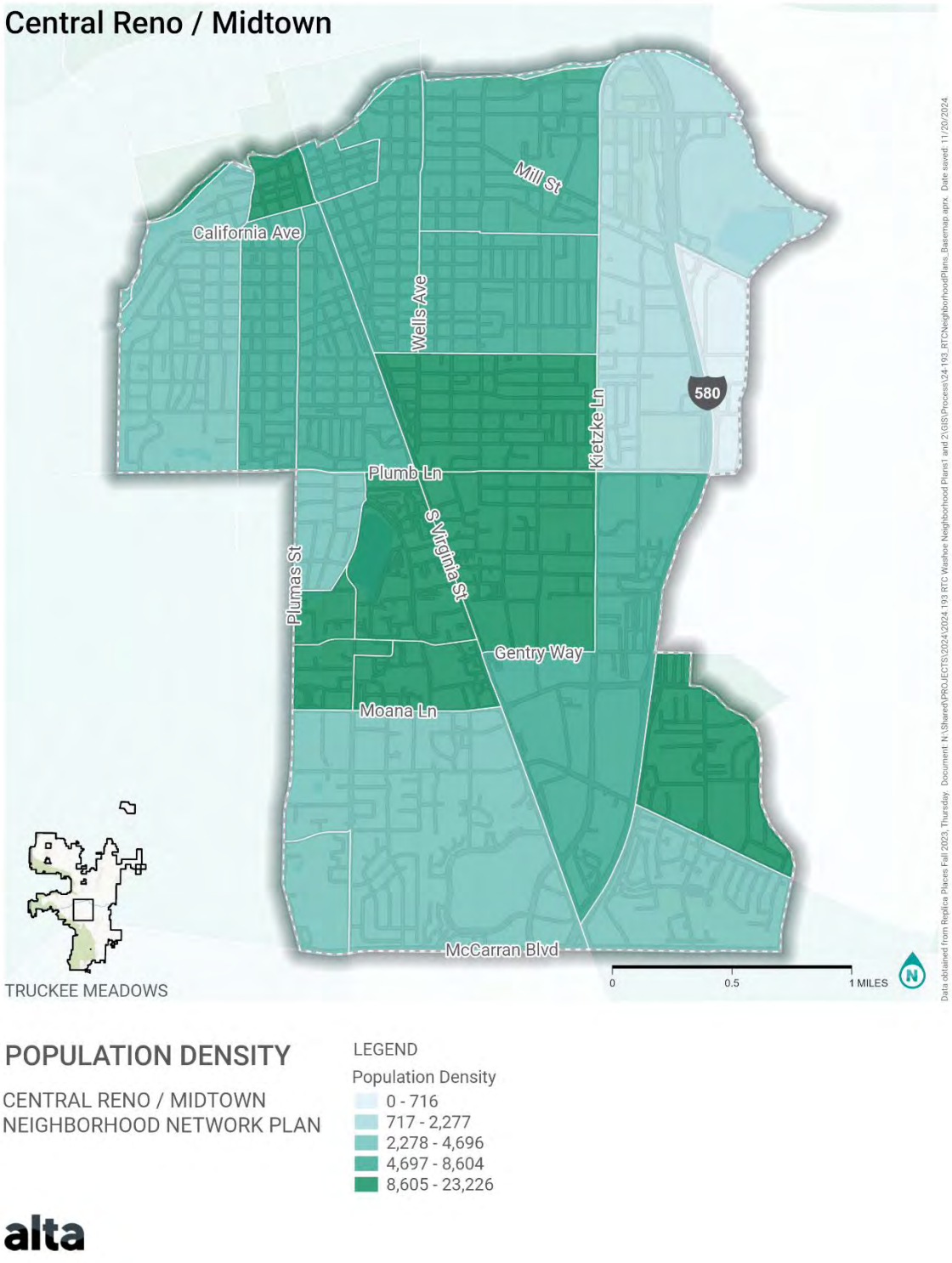


Figure 3 Population density in Central Reno / Midtown

Median Household Income

The Central Reno/Midtown neighborhood has a large array of household incomes as shown in Figure 4. There is a significant difference in household incomes across the neighborhood. Figure 4 highlights an area to the north in the neighborhood near Liberty St and Virginia St, which has a median household income of $14,621 compared to the northwest portion of the neighborhood (between Keystone Ave and Arlington Ave) which has a median household income of $125,625. It's important to note that the area shown in red includes subsidized housing and a low total number of households. Other areas such as between Plumb Ln, Virginia St, Kietzke Ln, and Gentry Wy, also have below average income levels with median household incomes of $35,396. On average, the median household income across the neighborhood ($63,325) is below the Reno/Sparks median household income ($85,969) by just over $22,000.

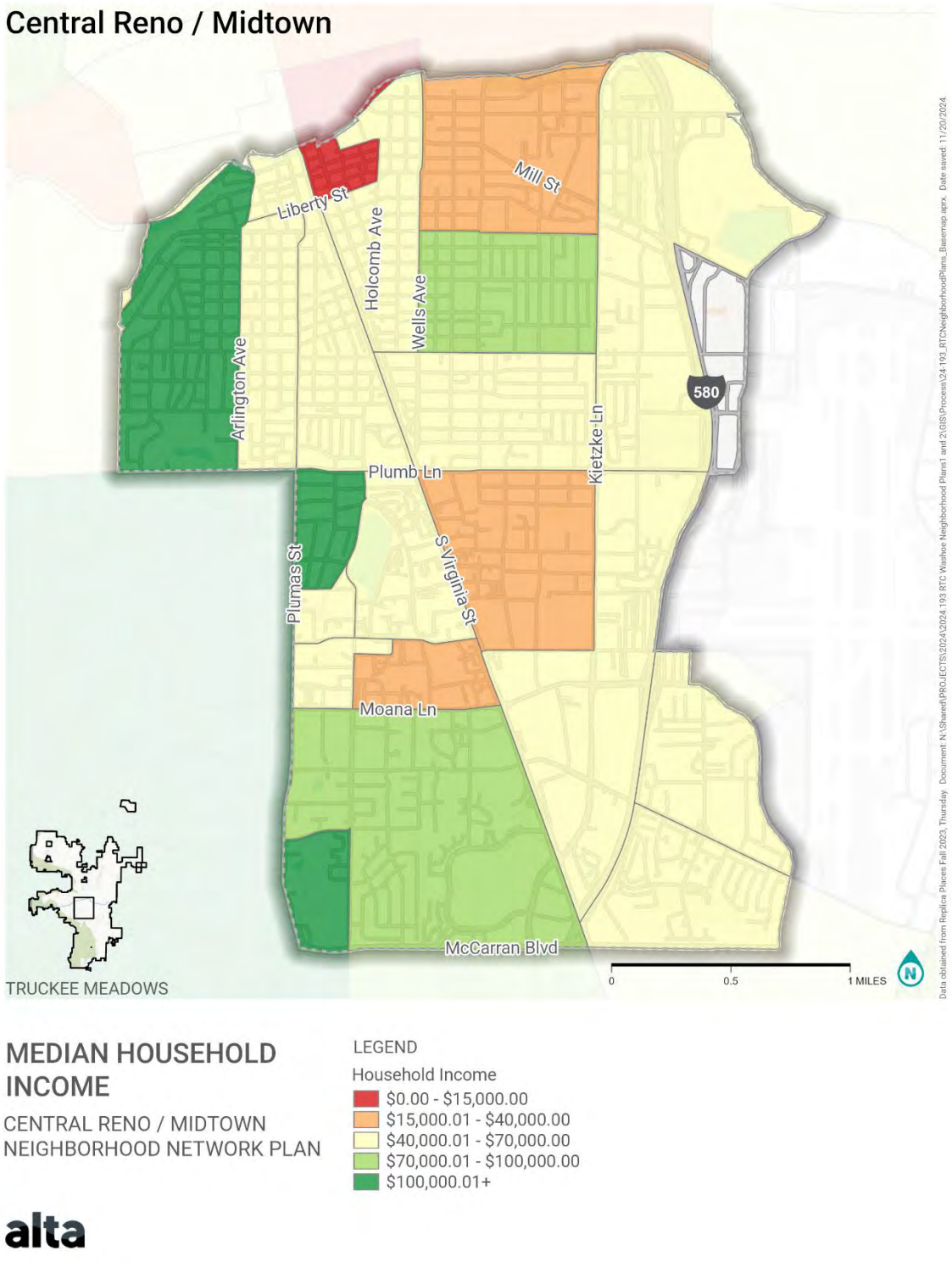


Figure 4 Median household income in Central Reno / Midtown

People without Access to a Vehicle

Figure 5 below shows the distribution of households in Central Reno/Midtown without access to a vehicle. In Central Reno/Midtown, **3,363 household- 15 percent of all households in the neighborhood-lack access to a vehicle**. This figure significantly exceeds the regional average, as only **7 percent of households across the Reno/Sparks area** experience similar challenges, totaling **12,223 households**. The area with the highest concentration of vehicle inaccessibility is located west of Virginia St, between Plumb Ln, Kietzke Ln, and Gentry Wy, where **30% of households** are without a vehicle. Additionally, a notable cluster of households without access to a vehicle exists along Kietzke Lane and in the northeast area of the neighborhood around Wells Ave and Mill St.

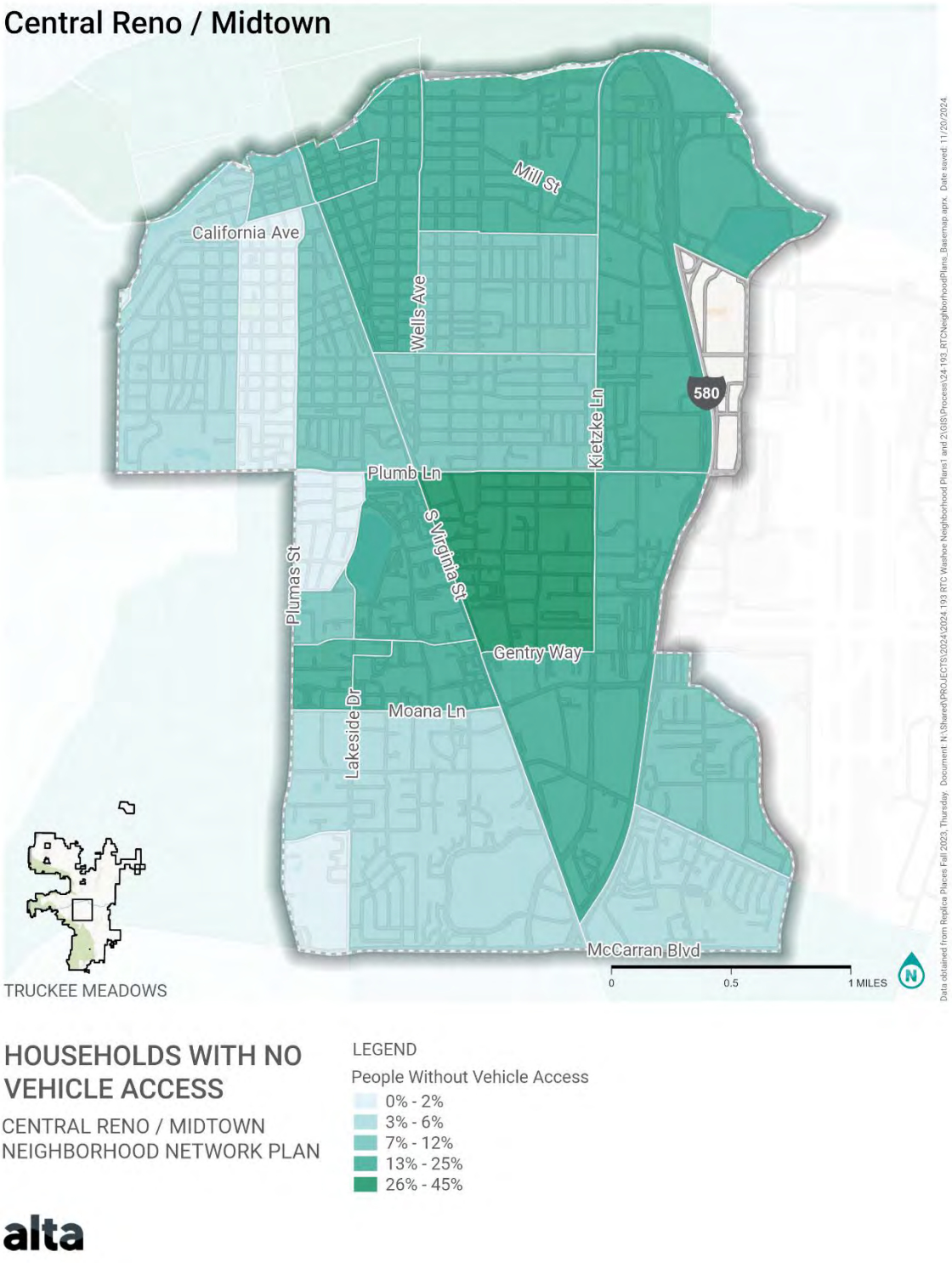


Figure 5 Percent of households without access to a vehicle in Central Reno / Midtown

Owner- and Renter-Occupied Household Burden

Housing cost burden refers to households that are paying 30 percent or more of their monthly income for their rent or mortgage payments. Figure 6 below shows the distribution of cost-burdened households throughout the Central Reno/Midtown area. Many of the census tracts throughout the neighborhood contain high rates of households that are cost burdened. The area bounded by Plumb Ln, Virginia St, Moana Ln, and Plumas St contains a tract with 61 percent of households paying more than 30 percent of their income, and 57 percent of households in the tract bounded by Wells Ave, Virginia St, and the Truckee River is housing cost burdened. Approximately 42 percent of households in the Central Reno/Midtown neighborhood are cost-burdened, compared to only 31 percent for the Reno/Sparks area.

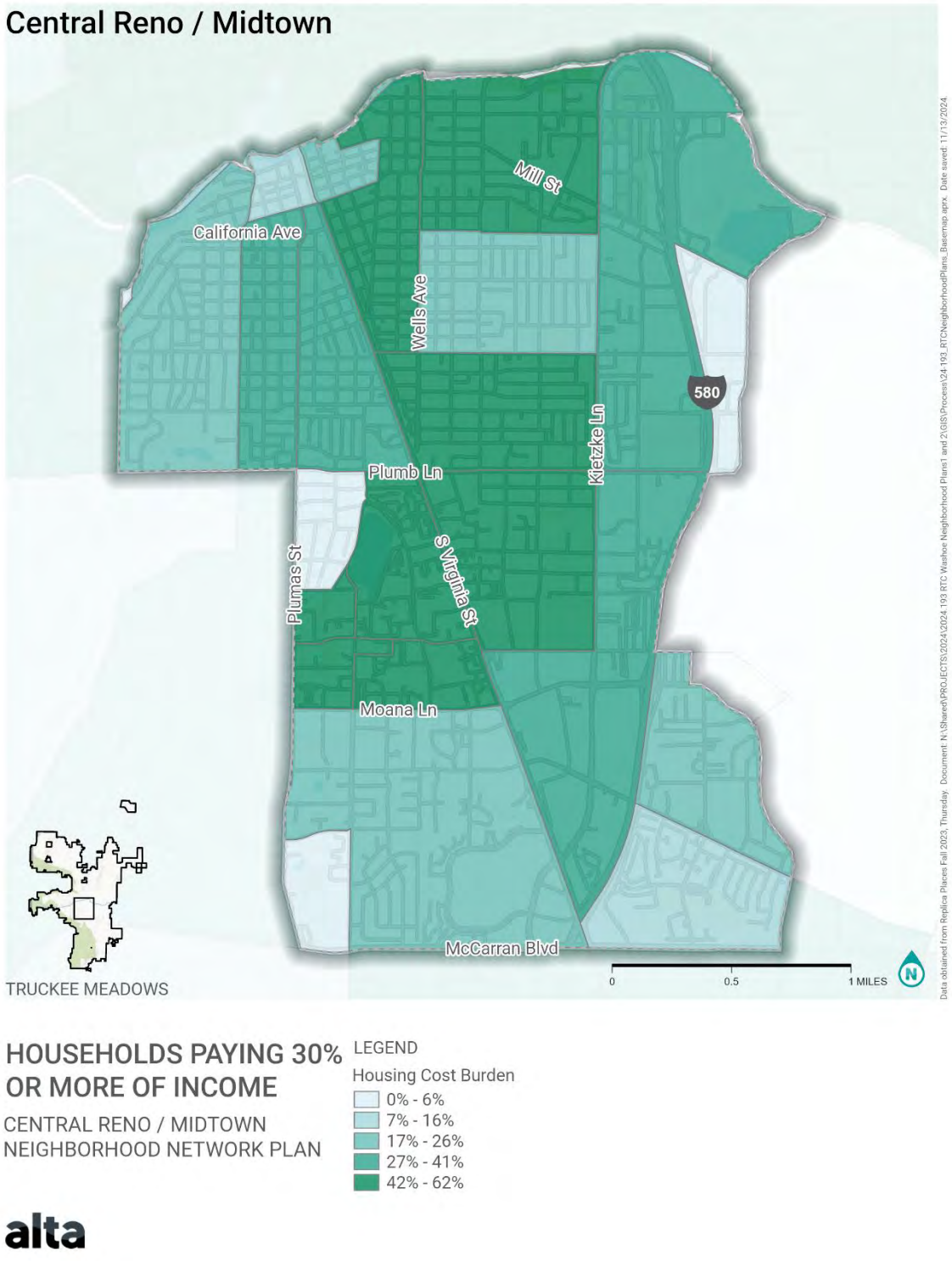


Figure 6 Percent of households who are paying 30 percent or more of their income for housing costs

Equity Index

The ATP used a transportation-focused equity analysis to measure equity through various criteria that are related to or impacted by active transportation usage. These included things such as health outcomes, socio-economic factors like poverty level, access to a vehicle, health issues, and environmental impact (Figure 7). The variables were assigned a percentile rank and combined together into a final composite index for the entire study area[15]. Figure 8 highlights the results of that regional analysis within the Central Reno/Midtown neighborhood. As shown, the majority of census tracts in the neighborhood fall within the top 20 percent in terms of equity. Two census tracts ranked in the lowest 20 percent of needs are located in the old Southwest to the west of Plumas Street. This highlights the significant difference across the neighborhood and the stark contrast between the west side and east side of the neighborhood with all census tracts to the east of Virginia St falling in the top 40 percent of equity needs across the region. Additionally, as shown in Figure 8, these areas are identified as part of the Justice 40 initiative, the latest federal equity analysis from the US Department of Transportation, which prioritizes investments towards historically underserved communities based on their own broad set of data criteria[16].

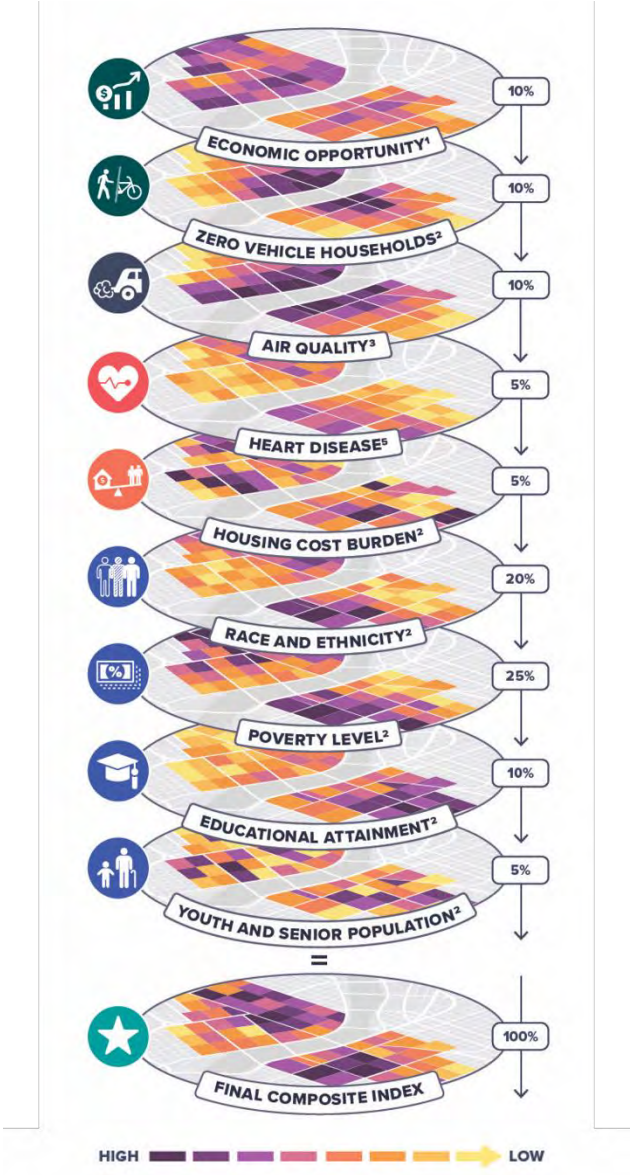


Figure 7 Equity Analysis Variables

[15] More information on the Equity Composite methodology available in the RTC ATP (page 25-26)

[16] More information on this analysis is available here: Justice40 Initiative | US Department of Transportation

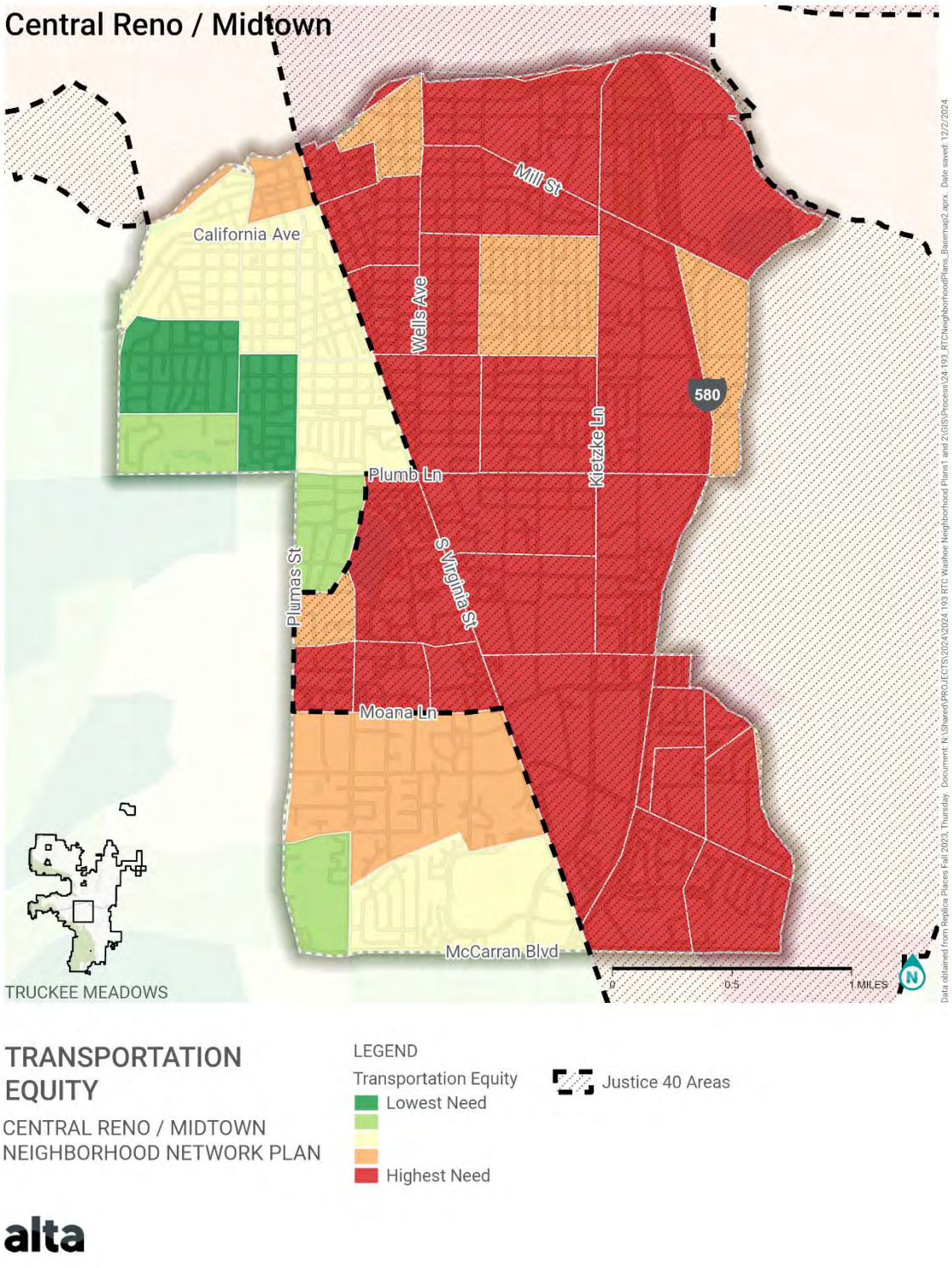


Figure 8 Transportation equity index and Justice 40 areas in Central Reno / Midtown

Key Neighborhood Destinations

Central Reno/Midtown is a dynamic neighborhood that contains a wealth of places for residents to engage with their community, access recreation, and meet the needs of their daily lives. This section highlights key destinations within the neighborhood including schools, parks, entertainment, employment, and community center; key destinations throughout the neighborhood area are highlighted in Figure 9.

Schools

There are several schools in the area for a variety of grade levels from preschool to 12th grade which are listed in Table 1.

Table 1 Schools that service Central Reno / Midtown

School Level	School Name
Early Education	• MunchkinLand Preschool • Sunflower Preschool • Little Golden Goose • Wooster Head Start • Aleph Academy • Brookfield School Little Campus • A Plus Learning Center • Kids R Us • Under the Magic Pine Tree • Smiling Hearts Preschool • Granny Purple's Kids-E-Care • UNR Early Head Start • Creative World Children's Academy • All about Kids 2 • Huc's Early Learning • Purple Door Preschool • Minds N Motion • Jovie of Reno • Little Learners • Beginnings Infant Toddler
Elementary / Middle Schools	• Echo Loder Elementary School • Corbett Elementary School • Little Flower Catholic School • Veterans Memorial Elementary School • Mount Rose K-8 • Our Lady of the Snows • Anderson Elementary School • Libby Booth Elementary School • Bailey Charter Elementary School • Pine Middle School • Vaughn Middle School

School Level	School Name
High Schools	• Earl Wooster High School • Reno High School* • Encompass Academy* • St. Nicholas Orthodox Academy • Academy For Career Education*

**Schools outside of the neighborhood but serving students within the neighborhood area.*
***List is not exhaustive*

Parks

Parks play an important role in the success and vitality of a community, providing opportunities for relaxation, recreation, and gathering, supplying vital ecosystem services like heat and air pollution mitigation, and contributing to the health of community members and cities. The Truckee River at the northern edge of the neighborhood provides a key recreation and leisure opportunity for residents and includes the Truckee River Path which is an important east/west connection for people walking and biking. The neighborhood is also dotted with numerous parks providing residents with opportunities to partake in a variety of outdoor activities and experience several types of natural environments. Parks like Powning, Riverwalk, Newlands, Liston, Yori, Plumas, and Stewart provide smaller, accessible community spaces with minimal amenities like children's playgrounds and walking paths. Larger parks like Wilkinson, Miguel Ribera, Tighe, Manzanita, Barbara Bennett, Pickett, and the Moana Springs Recreational Complex provide amenities like sports courts and fields, trails, and skateparks. Near the middle of Midtown is Virginia Lake Park which provides playgrounds, exercise equipment, paths, and a fishing dock.

Entertainment Centers

Entertainment centers are places and areas that provide residents with diverse opportunities for nightlife, dining, sporting events, theater, live music, performing arts, and cultural activities. Much of Central Reno/Midtown's entertainment occurs around or along the Virginia St corridor, including the Reno-Sparks Convention Center, the Atlantis and Peppermill Casinos, the Grand Sierra Resort and Casino, the Reno Little Theater, The Discovery Science Museum, the Nevada Museum of Art, and the Pioneer Center for the Performing Arts. Additional corridors of entertainment include Wells Ave, California Ave, Plumb Ln, Moana Ln, and Lakeside Dr.

Employment Centers

Employment centers are areas that are more densely populated with commercial, retail, and healthcare spaces, providing communities with ample employment opportunities, as well as opportunities to shop, eat, and socialize. There are several areas that comprise employment centers in the Central Reno/Midtown neighborhood, including Firecreek Crossing, the Renown Regional Health Center, Grand Sierra Resort, and the Wells Ave, Virginia St, and Kietzke Ln corridors. Additionally, the industrial area near the airport, including Terminal Wy, Mill St, and Vassar St, as well as California Ave with its concentration of insurance agencies and law offices, also serve as significant employment hubs.

Community Destinations

Community destinations provide additional spaces for residents to gather and build the social networks that foster thriving and resilient communities. These types of spaces can include churches, community centers, or other destinations that are visited frequently.

Table 2 Community destinations in Central Reno / Midtown

Community Destination Type	Location
Churches	• Living Stones Church • Faith Alive Christian Center • Pathfinder Church • Saint Therese Church of the Little Flower • Reno Revival Church • Cordero Church • Our Lady of the Snows Catholic Church • Lutheran Church of the Good Shepherd • Reno Buddhist Center • Saint Anthony Greek Orthodox Church • Skyline Church • Community Bible Church • Potters House Christian Fellowship Church • Rhema Christian Church • Slavic Christian Center • Center for Spiritual Living
Community Centers	• Neil Road Recreation Center • Moana Springs Community Aquatics and Fitness Center • Boys and Girls Club Carano Facility • Boys and Girls Club Neil Road Facility
Other Frequented Destinations	• Downtown Reno Library • Sierra View Library • Reno Public Market • Shirley's Farmers Market • Washoe County Court House • US District Court • City of Reno Municipal Court • Sparks Municipal Court • Bruce R. Thompson Courthouse and Federal Bulding

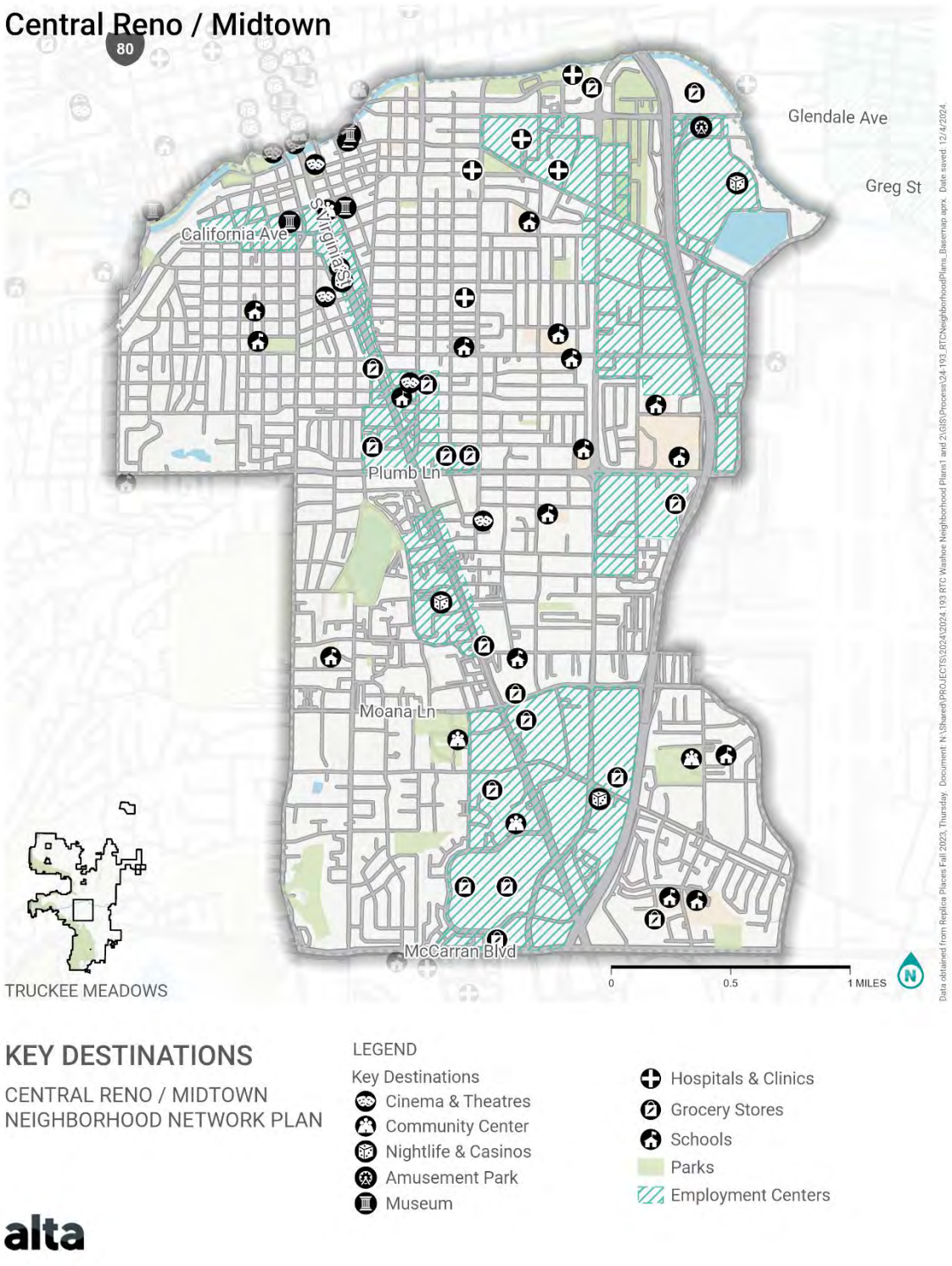


Figure 9 Key destinations in Central Reno / Midtown

Existing Neighborhood Network

Pedestrian Facilities

The pedestrian network is made up of sidewalks and crossing facilities like crosswalks and rectangular rapid flashing beacons (RRFBs). The RTC evaluated the presence of sidewalks along regional roadways as part of the ATP. Sidewalks help enhance safety and accessibility for pedestrians and those using mobility scooters or devices. The RTC recently collected sidewalk data to assess the availability of sidewalks on regional roadways. The analysis assigned a score to each roadway between zero and two, with zero indicating there were no sidewalks present on either side of the street and two indicating there were sidewalks on both sides. Within Central Reno/Midtown, the arterial street network earned an average score of 1.71, indicating a higher percentage of arterials in the area have sidewalks on both sides of the street. The collectors earned an average score of 1.81, indicating that even more collectors in the area have sidewalks on both sides of the street. In contrast, the Reno/Sparks area arterials and collectors earned average scores of 1.25 and 1.39 respectively. These scores point to a generally well-connected sidewalk network in the Central Reno/Midtown neighborhood. However, minor gaps in the network can still present significant challenges for people who are walking or using a mobility device. A gap where no sidewalk exists presents a major safety hazard if users are forced to walk in the roadway.

Bicycle Facilities

The bicycle network is made up of a variety of bicycle facilities, each providing bicyclists with varying degrees of safety and accessibility. Within the Central Reno/Midtown neighborhood there are a variety of facility types with the majority of miles provided as bike lanes (Figure 10). The area provides 4.6 miles of shared lane facilities, 16.7 miles of bike lanes, 2.1 miles of shared use paths and no separated bike lanes, for a total of 23.4 miles of bicycle facilities in the area (Table 3). This accounts for 51 percent of the area's 45.8 miles of regional roadway network. Much of this mileage comes in the form of standard bike lanes along higher speed arterials such as Kietzke Ln, Plumas St, Arlington Ave, and Mill St. Additionally, many gaps exist within the area's bicycle network, such as Plumb Ln between Virginia St and Harvard Ave, Moana Ln between Plumas St and Virginia St, and along multiple segments of Virginia St, where no bicycle facilities exist at all but would provide essential connections in the neighborhood. Overall, many opportunities exist in Central Reno/Midtown for expanding and enhancing the bicycle network.

Bicycle Facility Types:

- **Shared-Use Paths:** Pathways for pedestrians, bicyclists, and others, which are separate from vehicle traffic and include connections that are outside of the right-of-way.



Picture 1. Shared-Use Path example

- **Separated Bike Lanes:** Dedicated paths for bicyclists, which are physically separated from vehicle traffic by a barrier.
- **Bike Lanes:** Dedicated spaces for bicyclists on the roadway, which are marked by pavement markings and can be accompanied by additional signage.
- **Shared Lane Facilities**: Markings that indicate the shared use of a travel lane by bicycles and vehicles, including signed bicycle routes, "sharrows", and bike / bus lanes.

Table 3 Bicycle facilities in Central Reno / Midtown by mileage

Facility Type	Mileage
Shared-Use Paths	2.1
Separated Bike Lanes	0
Bike Lanes	16.7
Shared Lane Facilities	4.6
Total	23.4



Picture 2. Separated bike lane example



Picture 3. Bike lane example



Picture 4. Shared lane facility example



Figure 10 Existing bicycle facilities in Central Reno / Midtown

Network Context

Roadway Speeds

The posted speed for vehicles on the road is a major factor for active transportation safety and comfort throughout the transportation network. As vehicle speeds increase, there is a greater risk for serious injury and death in the event of a crash, especially for people walking or biking (Figure 11). The existing speed limits for roadways in the neighborhood are shown in Figure 12. This element is important for safety as well as overall comfort for people walking and biking because as the posted vehicle speeds increase, people walking and biking typically desire a greater level of separation from vehicles. For this reason, posted speeds are a primary factor in the determination of the Bicycle Level of Traffic Stress (BLTS) and Pedestrian Experience Index (PEI) which are both further described below.

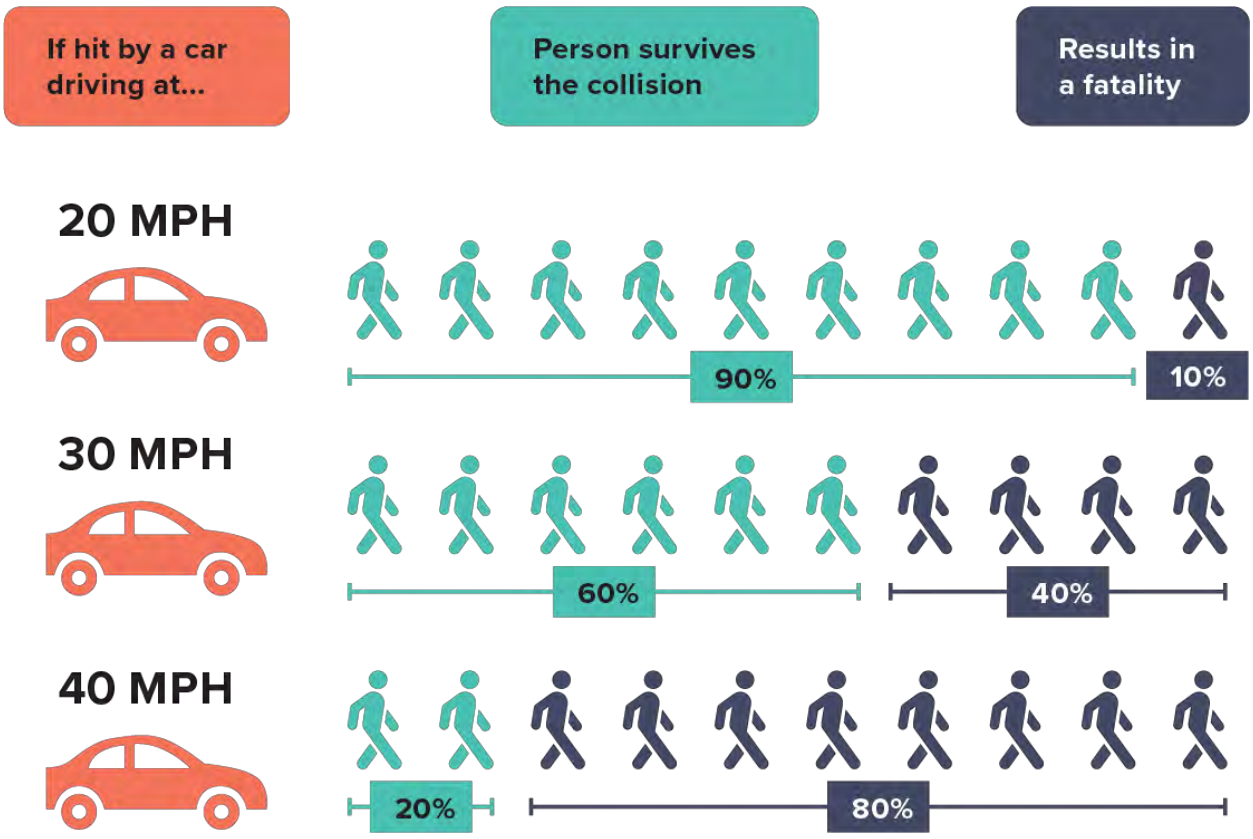


Figure 11. Risk of injury for people walking based on vehicle speeds (US Department of Transportation, Literature Reviewed on Vehicle Travel Speeds and Pedestrian Injuries. March 2000)

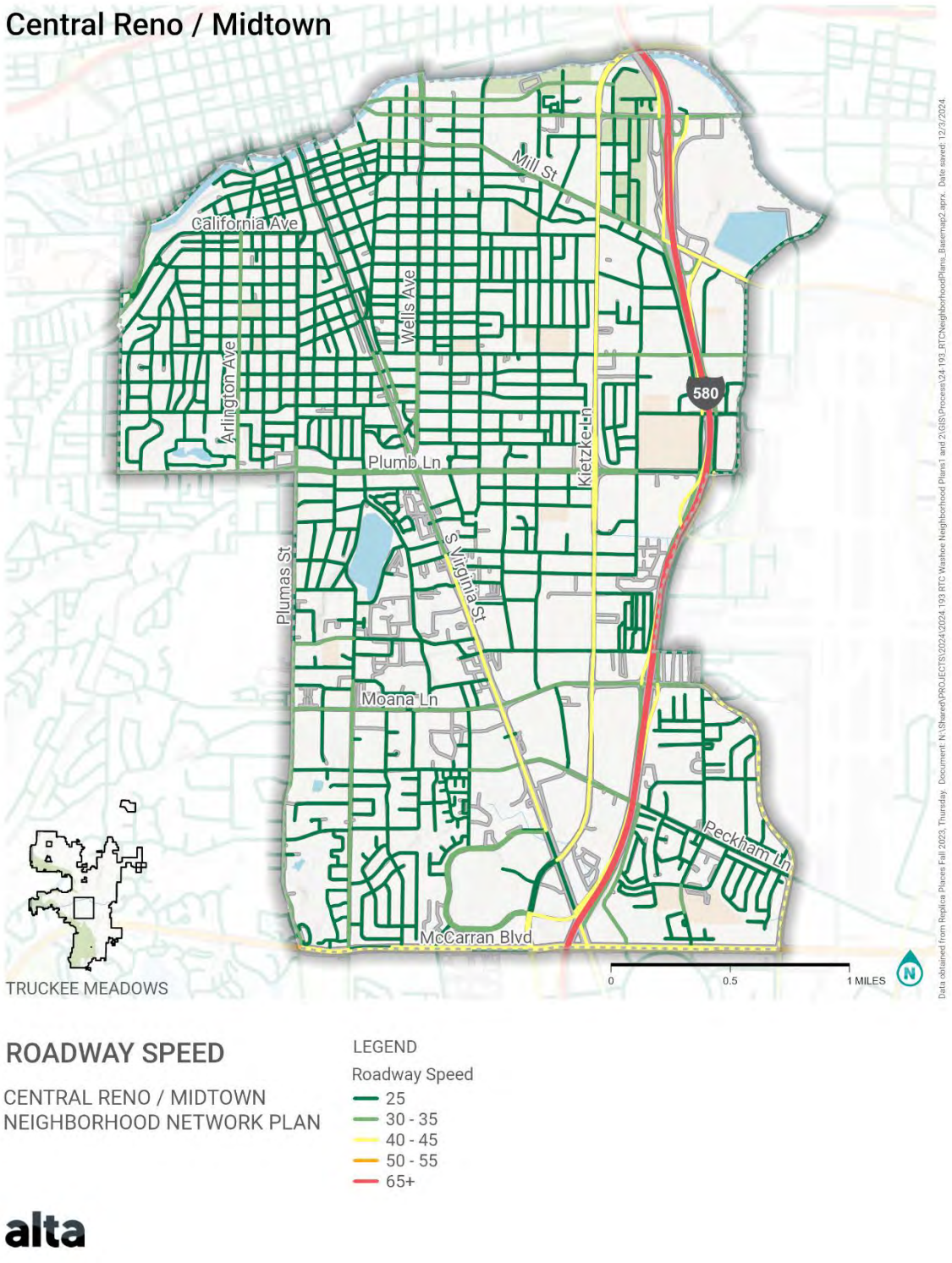
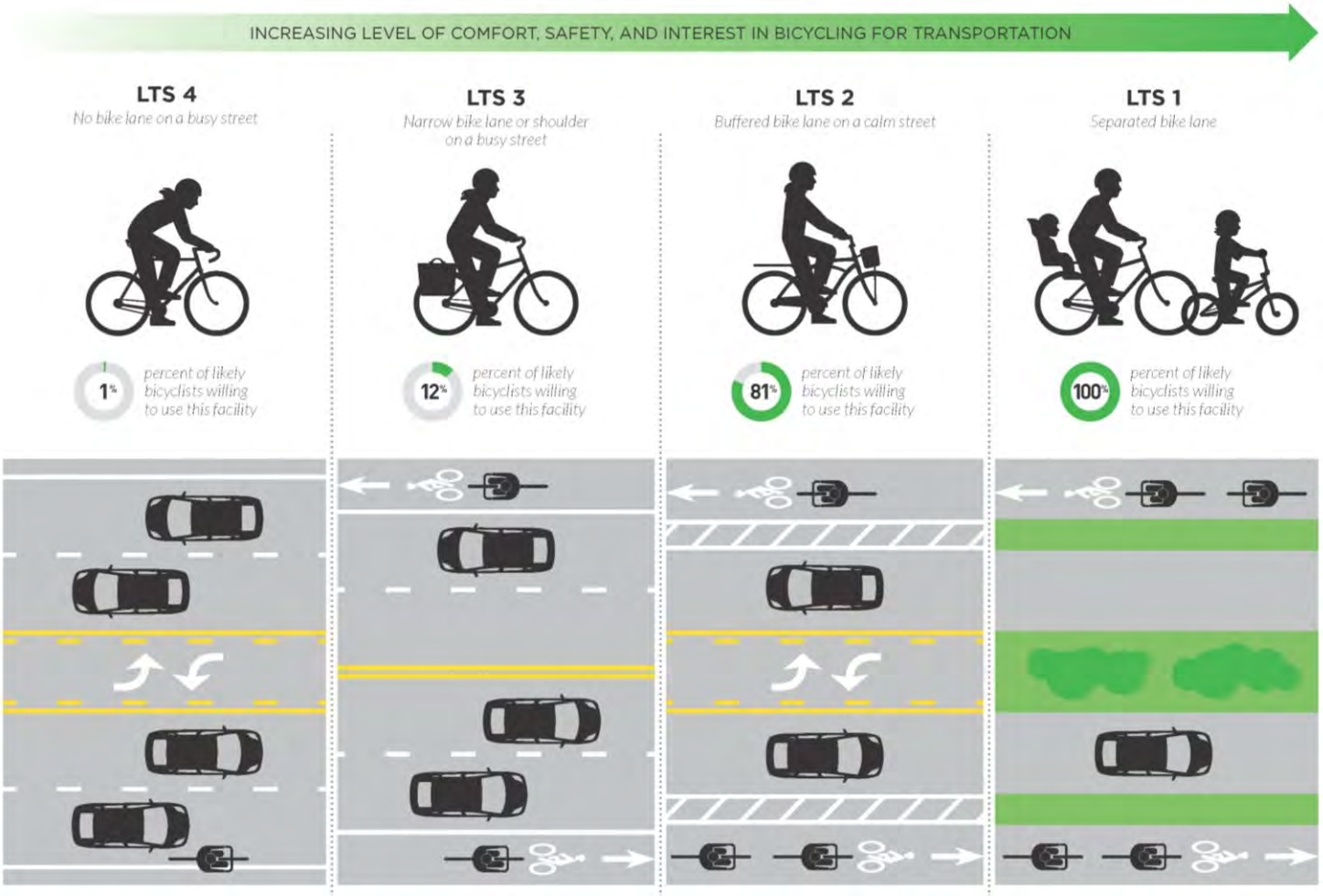


Figure 12 Existing speed limits on roadway network

Bicycle Level of Traffic Stress

Bicycle level of traffic stress (BLTS) estimates the level of comfort that bicyclists experience on a given roadway segment. It considers things such as posted speed, number of travel lanes, and the presence and type of bike lanes, and can help identify where gaps in a bike network exist. BLTS is measured from level one to four, with one representing roadways where bicyclists of all ages and abilities would feel comfortable riding, and level four representing high-stress roadways where only strong and fearless bicyclists would feel comfortable (Figure 13).

Figure 13 Diagram showing the four levels of bicycle level of traffic stress



The BLTS for regional roadways in the neighborhood is highlighted in Table 4. As shown in Figure 14, there are many roadways which rank as BLTS 3 or 4 across the neighborhood, including Kietzke Ln, Virginia St (south of Gentry), Plumb Ln (Kietzke Ln to Virginia St), Moana Ln (west of Virginia St), and Vassar St (east of Wells Ave). These roadways create challenging conditions for bicyclists, making them uncomfortable to navigate and difficult to cross. High vehicle speeds, significant traffic volumes, and the absence of adequate bicycle facilities or separation from motor vehicles contribute to a stressful and discouraging environment for biking.

Table 4 Average bicycle level of traffic stress scores for arterials and collectors

Roadway Classification	Central Reno/Midtown	Reno/Sparks Area
Arterials	3.1	3.06
Collectors	2.34	2.32
Average Total	3.01	2.91

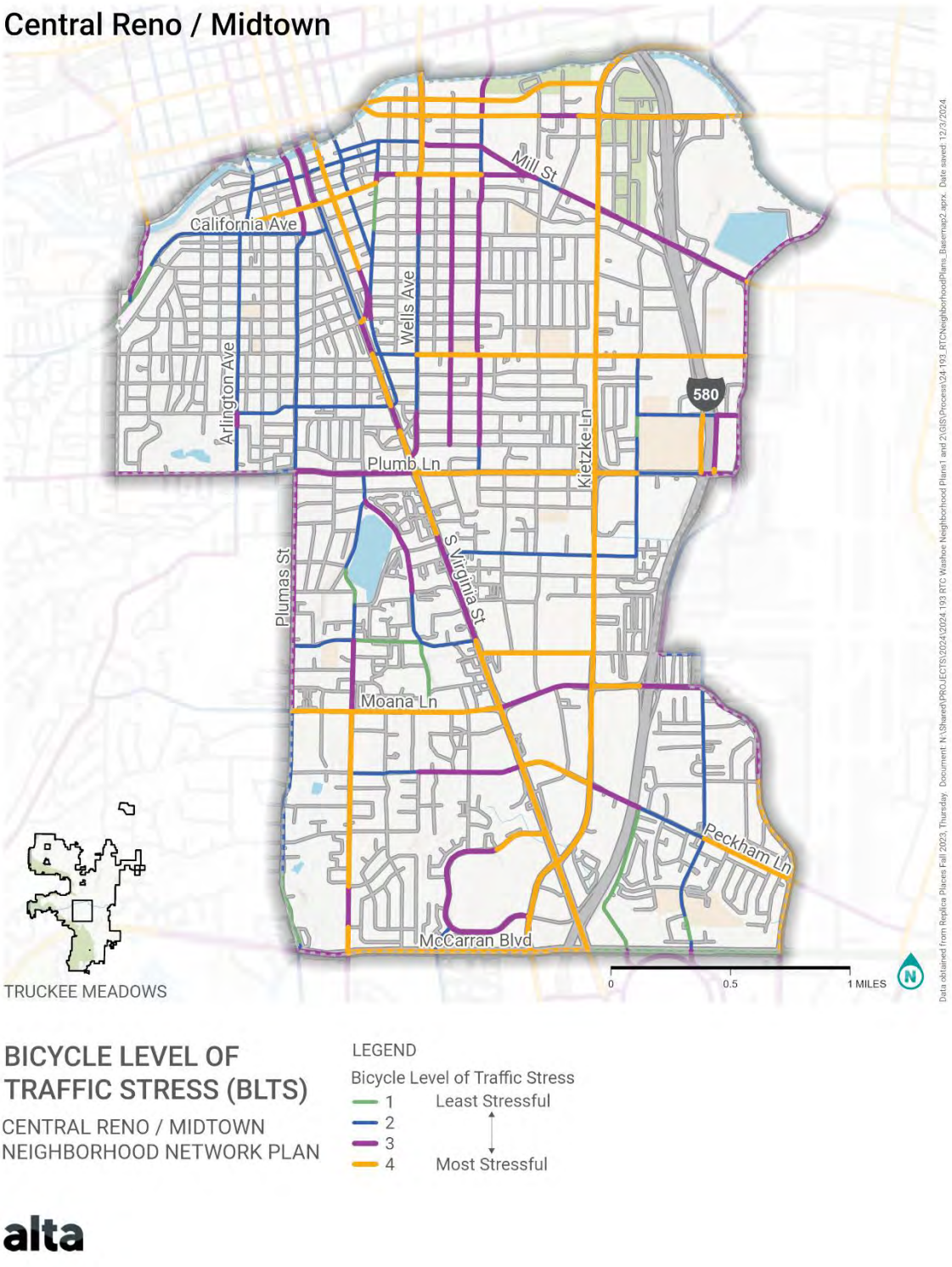


Figure 14 Bicycle level of traffic stress scores for the streets in the regional roadway network

Pedestrian Experience Index

Researchers at UNR conducted a pedestrian-focused quantitative analysis meant to provide a planning level understanding of the pedestrian experience along roadways. The metric they developed assigns scores based on factors such as the presence of sidewalks and their associated widths, existing buffer space from moving vehicles, number of vehicle lanes, and roadway speed. The cumulative score is assigned to each side of a roadway, with a total of 85 points possible. Higher scores represent roadways that provide a more comfortable pedestrian experience. The results of this analysis within the Central Reno / Midtown neighborhood are highlighted in Figure 15.

Central Reno/Midtown earned an average score of 57.63 for the pedestrian experience across all of its regional roadways. A score of 57 falls within the average range and means that sidewalks are typically five to six feet wide, are present on one or both sides of the road, provide buffer space between vehicles and pedestrians only intermittently, or may have higher speeds and number of lanes. Most of the roadways, as shown in Figure 15, have relatively high pedestrian experience scores. However, certain roadway segments, such as Virginia St (south of Plumb Ln), S McCarran Blvd, Moana Ln, and Greg St have lower PEI scores. Overall, 16.6 miles (36 percent) of the regional roadway network within Central Reno/Midtown have a pedestrian experience score that ranks as Bad or Poor.

Urban arterial roads in the Reno/Sparks area earned average pedestrian experience scores of 36 for major arterials and 50 for minor arterials. Urban collectors in the region earned average pedestrian experience scores of 53 for commercial collectors and 57 for residential collectors. When compared to the Reno/Sparks area, the regional roadway network in Central Reno/Midtown, which includes both types of arterial and collector typologies, earned a higher average pedestrian experience score.

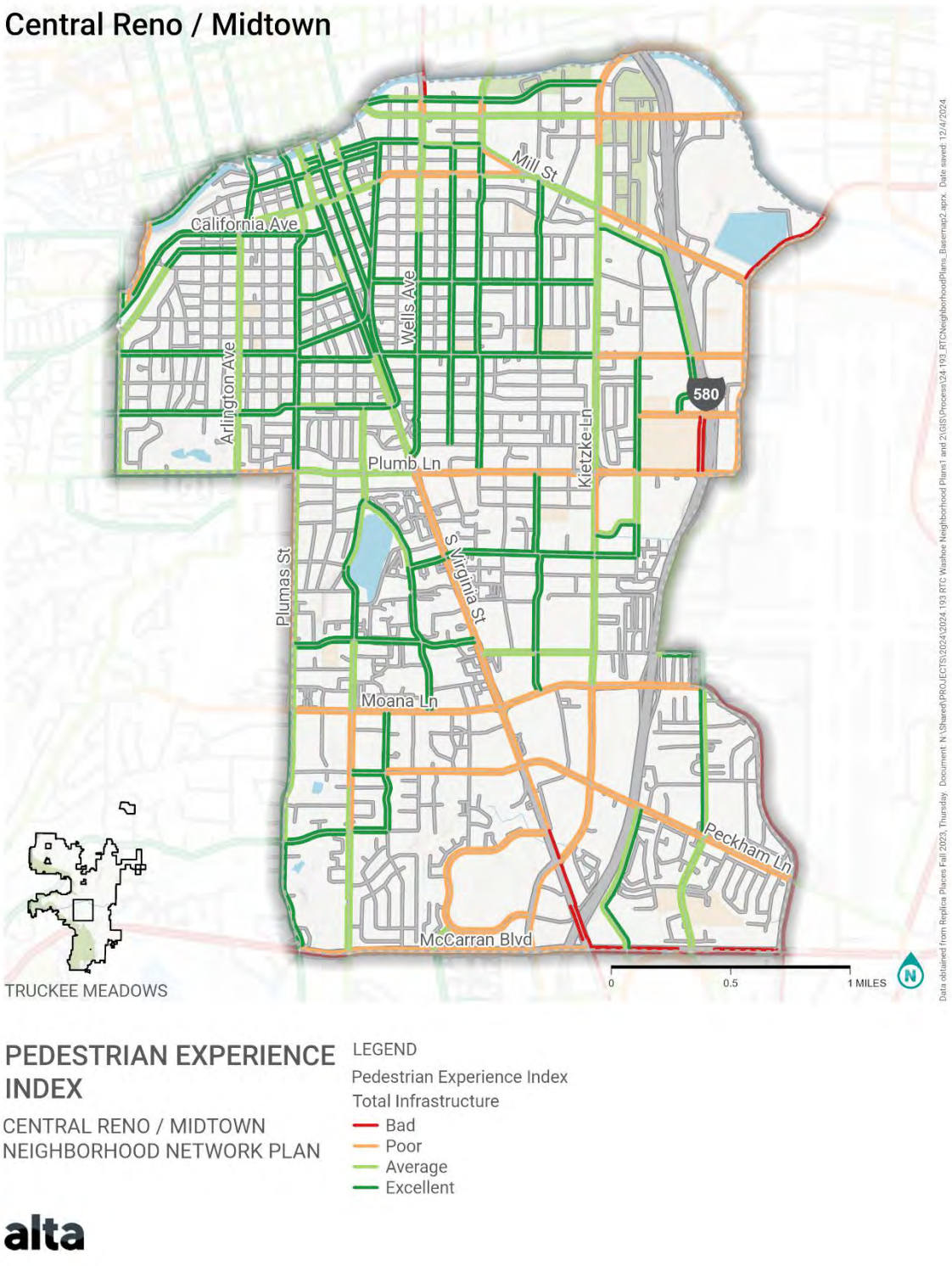


Figure 15 Pedestrian experience scores for the sidewalks in the regional roadway network

Traffic Safety

Crash Data

The project team reviewed the most recent five years of available crash data which covers 2019 - 2023[17]. Over this period, there were a total of 305 crashes involving someone walking or biking within the Central Reno/Midtown neighborhood, with 19 fatal crashes and 271 crashes causing an injury (Table 5). Many of these crashes involved a person walking, with 212 total pedestrian crashes, while 93 crashes involved a person biking.

Table 5 Total crashes by mode

Total Crashes by Mode			
Crash Severity	**Pedestrians**	**Bicyclists**	**Total**
Fatal	18	1	19
Injury	179	92	271
Property	15	0	15
Grand Total	212	93	305

Intersections vs. segments

There are roughly an even split of crashes between intersections and roadway segments (the area between intersections) for people walking and biking. However, **crashes on roadway segments accounted for two-thirds (63 percent)** of fatalities for people walking and biking and over half of all injury crashes (54 percent). Comparatively, 60 percent of crashes involving a person walking or biking which only resulted in property damage occurred at an intersection (Table 6). This difference highlights the higher likelihood of injury and even death on roadway segments for people walking or biking due to the typically higher vehicle speeds between intersections.

Table 6 Crash severity at intersections and on roads

Crash Severity	Pedestrians		Bicyclists		All Active Transportation	
	Intersections	Segments	Intersections	Segments	Intersections	Segments
Fatal	33%	67%	100%	0%	37%	63%
Injury	48%	52%	43%	57%	46%	54%
Property	60%	40%	-	-	60%	40%
All Crashes	48%	52%	44%	56%	47%	53%

[17] Data provided by NDOT. Data excludes December 2023 due to limited availability

Top Crash Corridors

Crash history helps highlight specific corridors which account for the majority of the crashes in the neighborhood. Out of a total of 45 corridors, the following 15 accounted for a total of **187 injury crashes (69 percent of the total)** and **15 fatal crashes (79 percent of the total)** involving a person walking or biking in the Central Reno/Midtown area (Table 7). ***Kietzke Ln stands out among these top 15 corridors in terms of total fatal crashes with seven fatal pedestrian crashes, which is as many as the other 14 top corridors combined***. Additionally, Virginia St includes a total of 48 injury crashes for people walking and biking, or nearly one-fifth of all injury crashes in the neighborhood during the study period from January 2018 to October 2025.

Table 7 Crash history on corridors with high crash rates

Rank	***Street Name***	**Pedestrian Crashes**		**Bicycle Crashes**		**Total**	**Crashes Per Mile**
		Fatal	*Injury*	*Fatal*	*Injury*		
1	Virginia St	1	32	0	16	49	13.73
2	Kietzke Ln	7	11	0	14	32	8.29
3	Mill St	0	12	0	5	17	9.18
4	Wells Ave	1	14	0	2	17	10.52
5	Moana Ln	0	6	1	4	11	6.37
6	Plumb Ln	0	6	0	5	11	5.85
7	2nd St	3	6	0	1	10	6.29
8	Kirman Ave	1	4	0	4	9	5.29
9	Gentry Wy	0	5	0	3	8	9.98
10	Sierra St	0	5	0	2	7	20.47
11	Vassar St	1	2	0	4	7	4.48
12	E Peckham Ln	0	2	0	4	6	3.06
13	Grove St	0	5	0	1	6	6.23
14	Lakeside Dr	0	5	0	1	6	2.59
15	Center St	0	3	0	3	6	7.49

High Injury Network

The RTC conducted substantial analysis of the regional roadway network to identify roads and intersections with the greatest safety needs as part of the Truckee Meadows Vision Zero Action Plan. As a part of this plan, the RTC developed a High-Injury Network (HIN) for the region, which identifies those places which have the highest crash rates, level of frequency, and crash severity across the county.

Central Reno/Midtown contains 21 HIN corridors and 32 HIN intersections. The corridors account for 14.34 miles, or nearly 17 percent of the region's HIN network, and almost 23 percent of the region's HIN intersections. Figure 16 highlights the streets and intersections that comprise the HIN in Central Reno/Midtown. Corridors such as Virginia St, Kietzke Ln, Wells Ave, and Mill St make up some of the more dangerous portions of the area's roadway network.

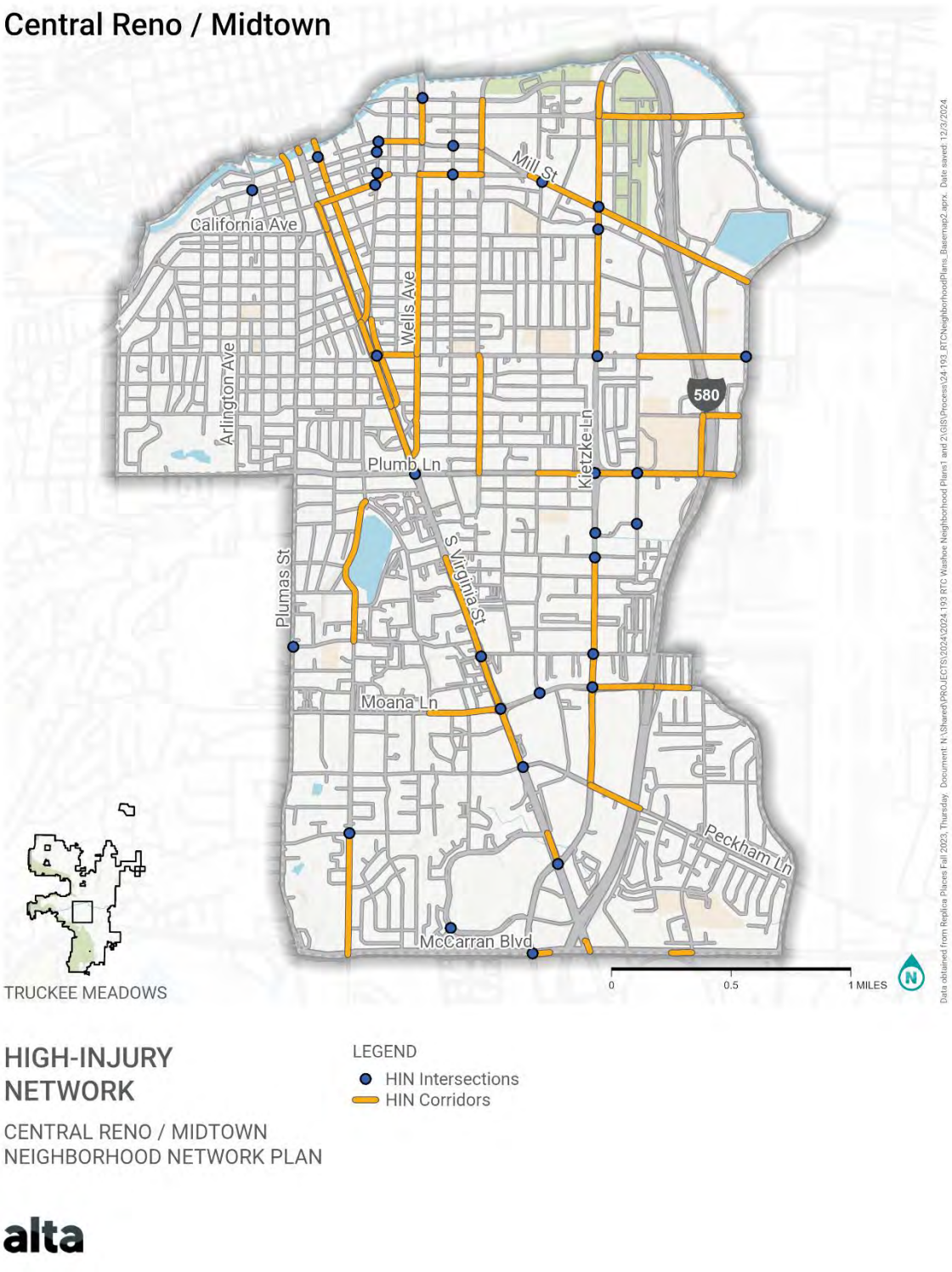


Figure 16 High injury network in Central Reno / Midtown

ATP Interactive Webmap Results

Part of the community engagement effort for the ATP involved providing the public with an interactive web map where they could pinpoint specific locations which were difficult or concerning as a bicyclist or pedestrian (Figure 17). They were also encouraged to mark locations which currently provided good or comfortable facilities. Respondents left a total of 89 comments for the Central Reno/Midtown area. Residents identified 35 bicycle-related issues, 35 pedestrian-related issues, seven network gap issues, and 10 issues related to other mobility deficiencies. Bicycle issues included poor wayfinding, inadequate facilities, poor visibility, and challenging crossings, among others. Pedestrian issues included sidewalk gaps, inadequate and infrequent crossings, and dangerous roadway conditions, among others. Other mobility issues included broader concerns such as confusing intersections and wayfinding, the need for improved transit, and poor roadway design. Several streets were identified as having multiple issues, including Mill St, Plumb Ln, Plumas St, Virginia St, McCarran Blvd, Kietzke Ln, and Wells Ave. In addition to those corridors, two intersections received multiple comments; Virginia St and McCarran Blvd, and Kietzke Ln and Plumb Ln.

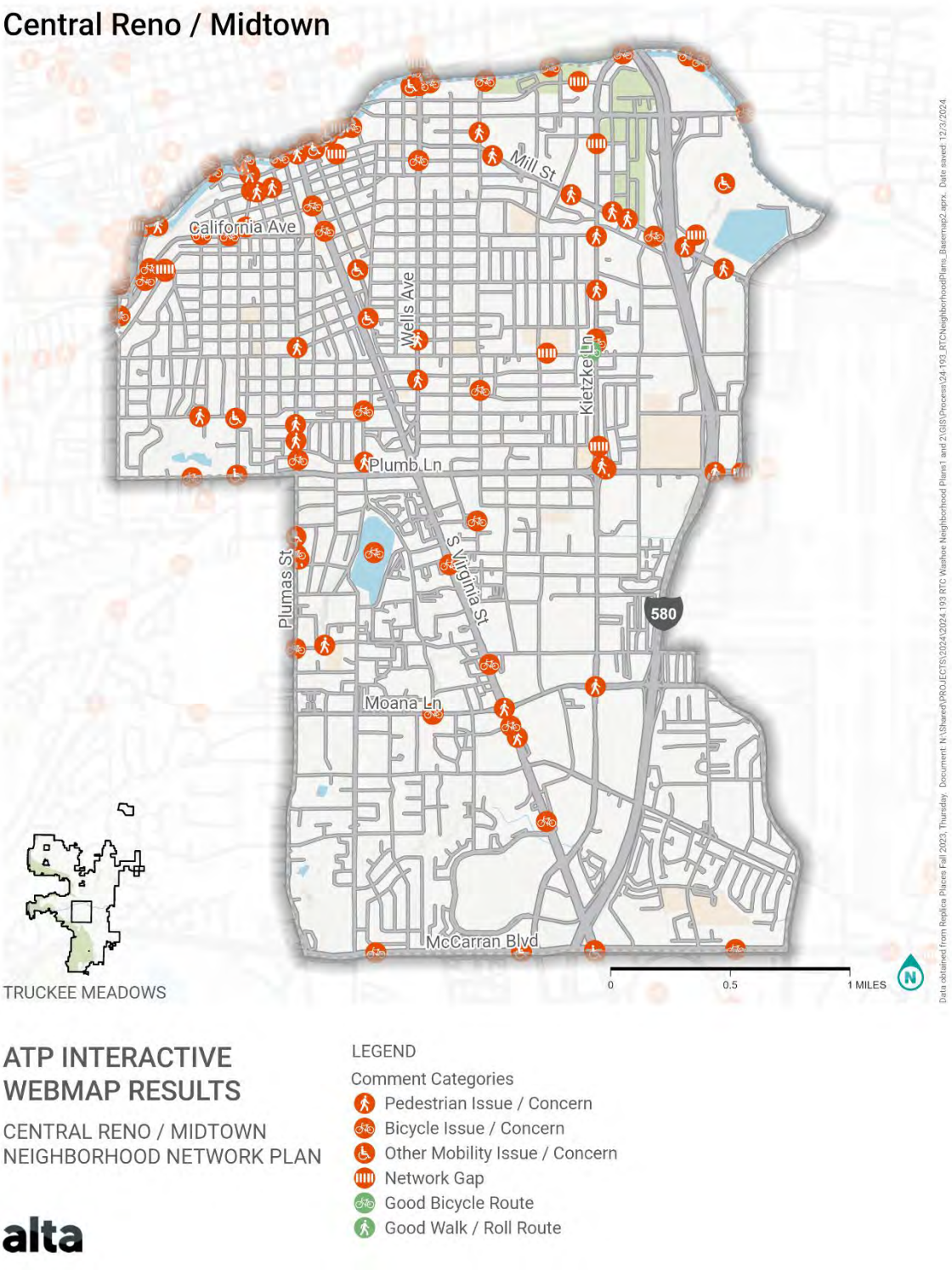


Figure 17 ATP Interactive Webmap comments

Active Trip Demand

Bicycle and Pedestrian Activity

The project team used Replica data to assess the level of walking and biking activity in the area[18]. Based on this data, there are an estimated total of 35,336 daily walking trips (4,628 trips per square mile) and 3,397 daily biking trips (445 trips per square mile) in the Central Reno/Midtown area (Table 8). When looking at the region, there are an estimated 181,779 daily walking trips and 17,035 daily biking trips which comes out to 586 and 55 trips per square mile respectively. This level of activity in the neighborhood represents nearly 20% of walking and biking trips in the region. This highlights the relatively high level and overall density of existing active trips within the Central Reno/Midtown neighborhood, demonstrating a strong demand for active transportation in the community.

Table 8. Estimated Biking and Walking Trips

Mode	Central Reno/Midtown		Reno/Sparks Area
	Total	*% of Total Area*	
Bicycling Trips	3,397	19.9%	17,035
Bicycling Trip Density (per square mile)	445	N/A	55
Walking Trips	35,336	19.4%	181,779
Walking Trip Density (per square mile)	4,628	N/A	586

Active Trip Potential

In addition to understanding where current active transportation trips occur, it is also important to understand which areas have a strong potential for increased active transportation trips. This analysis is accomplished by identifying areas where people take a high number of short vehicle trips. Figure 18 contains data from the RTC travel demand model, highlighting areas with high levels of short vehicle trips. Trips are classified based on their distance, with distance serving as an indicator of the suitability for various mode shifts. Trips under one mile were classified as potential walking trips, trips between one and three miles were classified as potential biking trips, trips between three and six miles were classified as potential e-bike trips, and trips over six miles were considered not suitable for active modes.

[18] Replica Data provides trip estimates based on activity-based travel demand modeling. This data provides a high-level estimate of trips by various modes throughout the area but does not represent recorded trip data.

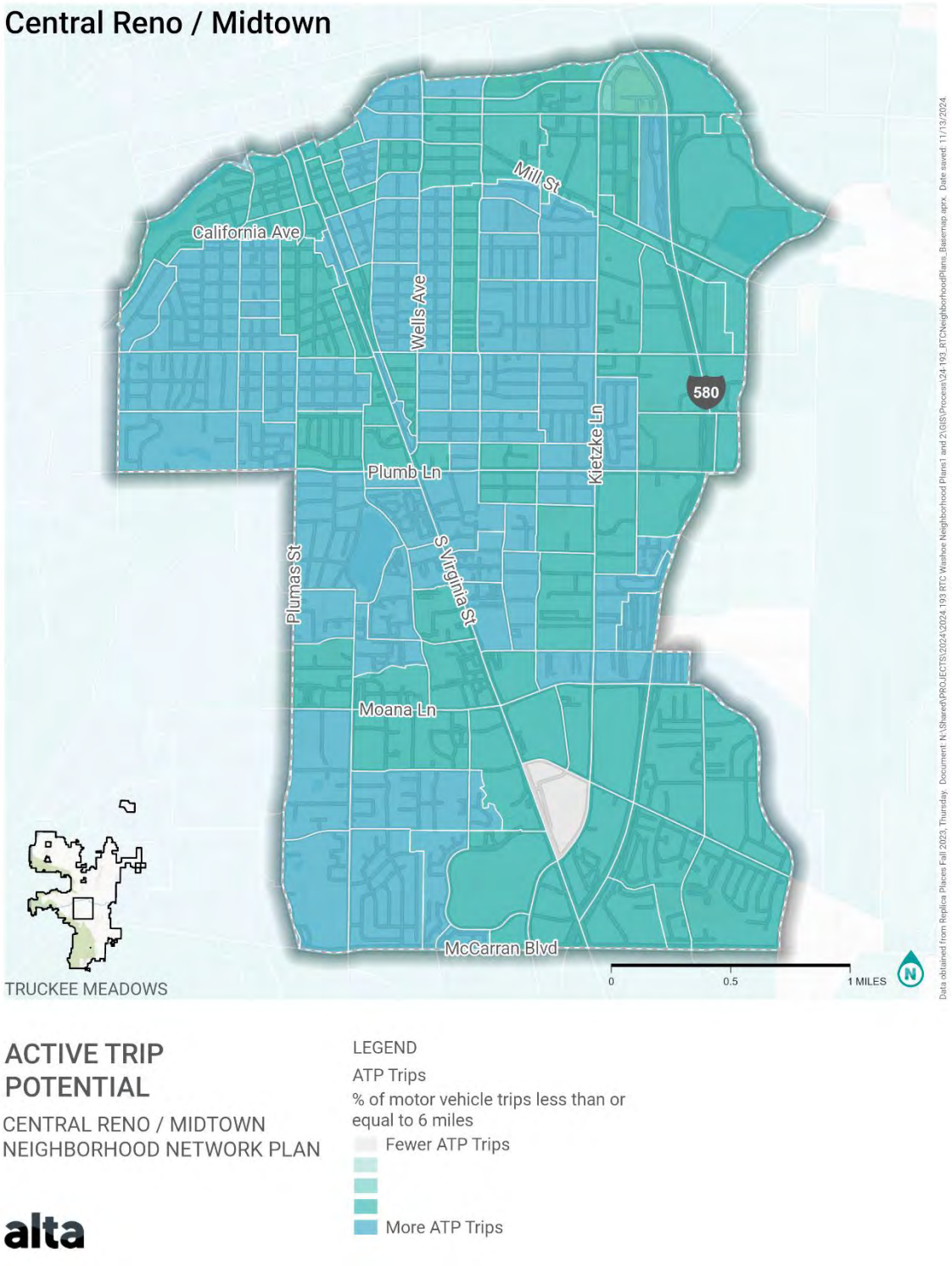


Figure 18 Active trip potential in Central Reno / Midtown

Within the Central Reno/Midtown neighborhood, there are a number of areas that see a high percent of vehicle trips that are less than or equal to six miles, which have the potential to be converted to other modes. South of Moana St, which is an area characterized by ample parks and retail spaces, a majority of the communities' trips fall under six miles, with many seeing nearly half of their trips fall under three miles. Several of the areas bounded by Sharon Wy, Plumas St, Virginia St, and the Truckee River also see high rates of vehicle trips under six miles, with most seeing over half of trips under three miles. Table 9 below shows the estimated total number of trips for the Central Reno/Midtown and Reno/Sparks areas. Central Reno/ Midtown sees ten percent more trips under three miles than the Reno/Sparks area, highlighting the significant potential for increased mode shift in the neighborhood.

Table 9 Percent of daily vehicle trips (Replica Data)

Trip Distance	Central Reno / Midtown		TMSA	
	Estimate	*Percentage*	*Estimate*	*Percentage*
Less than 1 mile	11,453	13.2%	259,087	10.4%
1 to 3 miles	31,224	36.0%	717,325	28.8%
3 to 6 miles	23,721	27.4%	695,067	27.9%
over 6 Miles	20,330	23.4%	820,599	32.9%
Total	86,728	100%	2,492,078	100%

Neighborhood Network Gaps

Active Transportation Gap Analysis

The RTC completed an Active Transportation Gap Analysis as part of the development of the *RTC Washoe Active Transportation Plan.* To identify gaps, the RTC combined the results of several analyses of the Truckee Meadows network, including Bicycle Level of Traffic Stress, Pedestrian Experience, Equity, Active Trip Potential, and the High Injury Network[19]. The analyses were combined by assigning a score to each individual analysis for each road segment (Figure 19). Segments could earn a score between zero and 40, with zero representing a roadway with no gaps and 40 representing a roadway with significant gaps.

The roadway network in Central Reno/Midtown earned an average overall gap analysis score of 23.3, with streets scoring as high as 29.4 and as low as 14.5. Most of the 45 streets earned an average score between 20 and 30. The following 10 streets reported the highest average gap analysis score (Figure 20).

Top Ten Active Transportation Network gaps:

1. Matley Ln (29.4)
2. Kietzke Ln (28.91)
3. Center Street (27.8)
4. S Virginia St (27.78)
5. Moana Ln (27.06)
6. Villanova Dr (27)
7. Vassar St (26.92)
8. Plumb Ln (26.74)
9. Smithridge Dr (26.67)
10. Wells Ave (26.09)

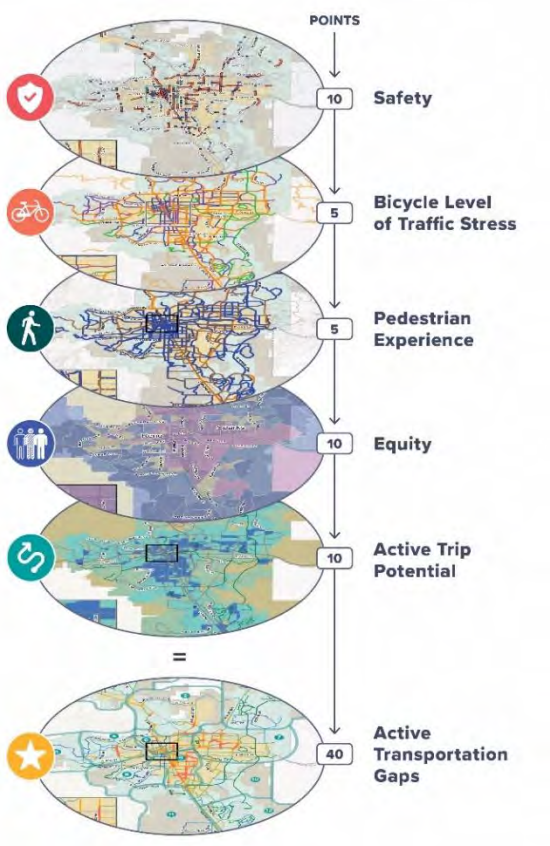


Figure 19. Active Transportation Gap Variables

The highest rated sections of these roadways, shown in red, represent to greatest barriers to active transportation travel in the neighborhood. While the gap analysis identified many of the same corridors that residents did during the ATP Interactive Webmap survey, there were two additional streets that were identified as presenting major challenges for pedestrians and bicyclists. Mill St received eight comments with respondents indicating issues related to a lack of crosswalks, sidewalk gaps, inadequate bicycle infrastructure, and dangerous roadway speeds. Plumas St also received eight comments identifying issues such as sidewalk gaps, inadequate bicycle infrastructure, confusing signage, and a need for additional crossings. It's important to note that Plumas St was also identified by residents as being difficult to cross and travel along while walking and biking but did not fall within the top ten highest active transportation network gaps nor in the regional HIN.

[19] *The term "gap" represents a roadway section that acts as a barrier to active transportation in the region.*



Figure 20 Top 10 highest scoring corridors in Central Reno / Midtown

Neighborhood Profile Summary

The Central Reno/Midtown neighborhood is relatively dense, ethnically diverse, and slightly younger population than the Reno/Sparks area as a whole. When compared to the region, Central Reno/Midtown has some of the highest equity needs in the region with a lower average household income and a higher rate of households with no vehicle access and housing cost burden, especially between Virginia St and Interstate 580. Central Reno/Midtown also contains a wealth of destinations that contribute to its vibrant and dynamic environment. With this wealth of destinations, the neighborhood has a high level of existing biking and walking trips relative to the greater Reno/Sparks area and a high potential for converting short-vehicle trips into active transportation trips. However, with the current active transportation network, residents often struggle to reach these destinations by walking or biking and may be hesitant to shift current short-vehicle trips to an active mode.

Central Reno / Midtown:

38.5%
Hispanic (26.4% region avg.)

35%
More residents housing burdened vs region

23x
Regional housing density

2x
Lack of Vehicle Access

-$22K
Household Income below Region Average

The existing transportation network provides different levels of comfort and connectivity for people biking and walking. The majority of bicycle facilities are bike lanes on arterial level roadways and many major roads lack bicycle accommodations. This results in a bicycle network that is largely uncomfortable within the neighborhood and connecting to nearby neighborhoods, as major arterials such as Kietzke Ln, Plumb Ln, S McCarran Blvd, and S Virginia St can act as barriers which are difficult to travel along and challenging to cross for people biking. Some major roadways like S Virginia St, Moana Ln, Greg St, and Kietzke Ln also provide a less comfortable experience for people walking, as sidewalks generally lack a buffer between high-speed and high-volume vehicle traffic and people walking.

Analysis of crash data also highlights major arterial roadways as safety issues for people walking and biking with fatal and serious injury crashes involving a person walking or biking within the neighborhood being largely concentrated along Kietzke Ln, Virginia St, Mill St, Wells Ave, Moana Ln, and Plumb Ln. Resident comments echoed this analysis, noting several safety concerns while walking or biking, particularly on Mill St, Plumb Ln, Plumas St, Virginia St, McCarran Blvd, Kietzke Ln, and Wells Ave. Additionally, the Virginia St/McCarran Blvd and Kietzke Ln/Plumb Ln intersections were highlighted by residents as particularly concerning.

B

Appendix B: Community Engagement Summary

MEMORANDUM

To: Marquis Williams, Project Manager, RTC Washoe

From: Cole Peiffer, Project Manager, Alta Planning + Design

Date: January 14, 2025

Re: **Neighborhood Network Plan – Phase 1 Community Engagement Summary**

Community Workshop – Boys and Girls Club

Workshop Summary

Date	Time	Attendees
Wednesday, November 13th, 2024	5:00-7:00 p.m.	48

The RTC hosted a community engagement workshop for the Central Reno/Midtown Neighborhood Network Plan (NNP). The event was covered by KOLO 8 News and took place at the Boys and Girls Club Carano Facility (1090 Bresson Ave) from 5:00 p.m. to 7:00 p.m. The workshop provided an opportunity for residents to share their input and concerns related to walking, biking, and accessing transit in the neighborhood. Three staff members from RTC and two consultants engaged with approximately 48 participants (21 adults and 27 children). The following summarizes the event and key takeaways:

Event Description:



Cole Peiffer, from Alta Planning + Design, provided a brief presentation outlining the Neighborhood Network Planning process and goals, which is part of the RTC's broader effort to improve active transportation options across the Reno/Sparks area. The Central Reno/Midtown area is the first focus of this effort, with other neighborhoods to follow.

After the presentation, participants were invited to engage in the following activities:



- **Interactive Map Exercise**: Attendees used large, detailed maps of the neighborhood to identify areas of concern related to walking, biking, and transit access. They noted locations of concern by providing feedback directly on maps, highlighting missing infrastructure, and other challenges.
- **Feedback Collection**: In addition to the map exercise, participants were encouraged to provide comments through an interactive online map, available via a QR code they could scan on the flyer given out at the event.
- **Language Support**: To ensure effective outreach and communication with Spanish-speaking attendees, Sierra Rodriguez-Torres from Alta Planning + Design served as a translator. She assisted several Latinx families by summarizing key points from the presentation and guiding them in navigating the online map to submit their feedback.

Key Takeaways:

Participants shared valuable feedback regarding their experiences and challenges when walking and biking in the Central Reno/Midtown area. Below are some of the key themes and concerns that emerged from the workshop and map comments:



- **Crossing Major Roads with Children**: Several attendees noted that crossing major roads with children can be difficult and unsafe, particularly where crosswalks or traffic signals are lacking or not well maintained.
- **Need for Improved Lighting**: A few participants highlighted the need for better street lighting, especially in areas with high foot traffic, to enhance safety during evening hours.

- **Kietzke Lane Gap**: There was strong feedback about the gap in walking and biking infrastructure along Kietzke Lane, which creates a barrier for those wishing to travel along this major corridor.



- **Sidewalk Gaps**: Missing sidewalks, particularly on residential streets, were a major concern. Attendees indicated that the lack of continuous pedestrian pathways makes walking in some areas unsafe or impractical.
- **Desire for Better Bike Connectivity**: Participants expressed interest in improving bike connections to key destinations, such as parks, schools, and commercial centers, as well as creating safer routes for bicyclists, especially on busy streets.
- **Traffic Speed and Safety Concerns**: Some residents mentioned concerns about high traffic speeds, particularly in areas near schools or parks, where increased traffic calming measures could improve safety for pedestrians and cyclists.

Next Steps:

The feedback from this workshop will be used to inform the development of the Neighborhood Network Plan for Central Reno/Midtown, focusing on the identification of key safety improvements, infrastructure gaps, and opportunities for enhanced active transportation options. The RTC will continue to gather public input through additional pop-up meetings in December and through the interactive online map, which will remain open for comments through December.

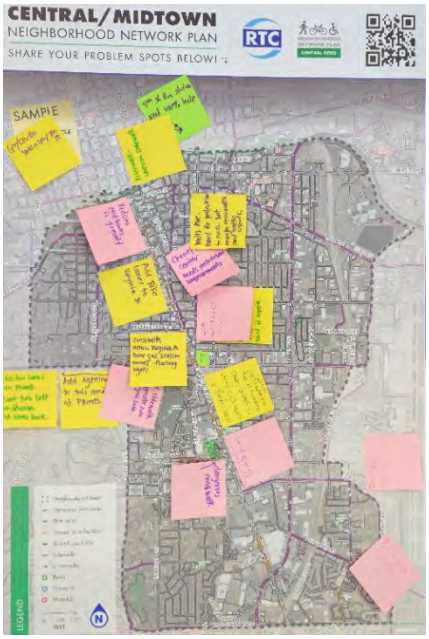
MEMORANDUM

Community Pop-Up 1: Reno Public Market

Pop-Up Summary

Date	Time	Attendees
Thursday, December 5th, 2024	5:00-7:00 p.m.	18

The RTC hosted a pop-up event at the Reno Public Market at 299 East Plumb Lane from 5:00 – 8:30 p.m. The pop-up event coincided with the venue's weekly Trivia Night and was covered by KOLO 8 News. The event featured two tables with flyers, giveaways, and a large map where attendees could leave feedback on where gaps exist for pedestrian and cycling infrastructure. Three staff members from RTC and three consultants engaged with approximately 18 people who shared their thoughts and suggestions for the neighborhood.





Facility Improvements

Lighting: Improved lighting was a key request for safety, especially at night.

Pedestrian Improvements: More crosswalks, visible pedestrian signals, and better infrastructure were suggested for high-traffic areas like Wells Avenue and Virginia Street.

Bike Lanes: Support for adding bike lanes on Virginia Street and in the Riverwalk area, with a focus on safer routes in alleyways.

Sidewalks: Requests for better sidewalk conditions in areas like Riverwalk, Midtown, Cheney/Center, and West Plumb.

Barriers

Lighting & Crosswalks: Insufficient lighting and unsafe crosswalks were major barriers.

Traffic Speeds: High vehicle speeds on streets like Virginia Street and Wells Avenue made walking and biking unsafe.

Alleyways: Disrepair in alleyways, especially near Wells District, limited bike access.

MEMORANDUM

Community Pop-Up 2: Reno-Sparks Convention Center

Pop-Up Summary

Date	Time	Attendees
Saturday, December 7th, 2024	10:00am-1:00p.m.	70

The RTC hosted a pop-up event at the Reno-Sparks Convention Center on December 7, 2024, coinciding with Jurassic Quest and the Magic of Santa Craft Faire. The event featured two tables with flyers, giveaways, and a large map for attendees to leave feedback about pedestrian and cycling infrastructure. Three staff members from RTC and two consultants engaged with approximately 70 people who shared their thoughts and suggestions for the neighborhood.

Facility Improvements



Lighting: Many attendees requested better lighting, especially for safety at night.

Pedestrian Improvements: There were calls for more RRFBs, crosswalks, and pedestrian signals in areas like Yori Park and other high-traffic locations.

Bike Lanes: Requests included improved bike lanes, especially on Arlington and the bike path from Lake St. to Greg St., with concerns about safety due to traffic and homelessness.

Stop Signs: One suggestion was adding stop signs near Yori Park for safer access.

Barriers



Lighting & Safety: Lack of lighting and unsafe paths, particularly along the bike path by the river, were concerns for many attendees.

Traffic: High traffic speeds and congestion, especially near Yori Park and the bike path, were identified as barriers for pedestrians and cyclists.

Homelessness & Disrepair: Concerns about homelessness, garbage, and disrepair on bike paths, especially from Lake St. to Greg St., were highlighted as safety issues.

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MEMORANDUM

Virtual Public Comment Map Summary

In addition to capturing comments on large detail maps during in-person events, comments were also received through a virtual public comment map from mid-November to December 20, 2024. Participants provided a total of 285 comments along with a total of 653 'like' votes for different comments. This section highlights the major takeaways from the map.

Pedestrian Safety & Infrastructure:

1. **Crosswalk Safety**: Several comments emphasize the need for better crosswalk infrastructure, including light-up signs, pedestrian refuges, better visibility, and traffic signals that prioritize pedestrians.
2. **Lighting Issues**: Poor street lighting, particularly in high-traffic areas or near bus stops, is a recurring concern for pedestrian safety.
3. **Sidewalks & Pathways**: There are calls for wider, more accessible sidewalks, particularly for wheelchairs and strollers, and improved connections for pedestrians, especially near hospitals, schools, and transit hubs.
4. **Traffic Calming**: High-speed vehicle traffic is a common issue, with requests for traffic calming measures such as roundabouts, stop signs, and road re-designs to make streets safer for pedestrians.

Cycling Infrastructure:

1. **Lack of Bike Lanes**: Numerous comments highlight areas where bike lanes are either missing, inconsistent, or inadequate, urging for safer, continuous bike lanes, especially on popular routes (e.g., Vassar Street, 4th Street, Market Street).
2. **Bike Lanes Conflict**: Bicyclists are often forced to share lanes with fast-moving vehicles, parked cars, or pedestrians, creating unsafe conditions.
3. **Better Bicycle Amenities**: There are calls for more bike racks, bike-friendly signage, and protected bike lanes, as well as clear bike lane transitions at key intersections.
4. **Integrated Bike Paths**: Many suggest creating or extending connected bike paths, particularly along the Truckee River, and improving access to key destinations such as Midtown, the airport, and shopping areas.

Transit & Multi-modal Connectivity:

1. **Public Transit Accessibility**: Several comments focus on the need for better bike and pedestrian access to public transportation hubs, like bus stops and train stations.
2. **Connectivity Gaps**: There is a desire for better links between neighborhoods, including creating bike and pedestrian pathways that connect key areas and eliminate gaps in the network.
3. **Micromobility Concerns**: Issues around access and infrastructure for micromobility (e.g., scooters, electric bikes) are noted, particularly in areas with no clear paths for these users or confusing intersections.

Urban Design & Traffic Flow:

1. **Road Diets**: Suggestions to reconfigure roads to prioritize pedestrians and cyclists, with wider sidewalks and bike lanes, and fewer lanes for cars in certain areas.
2. **High-Volume Roads**: Several high-speed roads are highlighted as barriers to safe pedestrian and bike travel, with suggestions to slow traffic and redesign streets for mixed use.
3. **Improving Intersections**: Many comments mention problematic intersections, particularly for cyclists and pedestrians, with requests for safer crossings, bike boxes, and clearer signage.

Specific Location Issues:

1. **Key Areas for Improvement**: There are mentions of specific streets and intersections, such as **Plumb Lane**, **Virginia Street**, **Wells Avenue**, and **South Wells Avenue**, which are seen as critical for improvement in terms of safety, connectivity, and multimodal infrastructure.
2. **Traffic Signals & Timing**: Problems with signal timing, particularly for cyclists (e.g., sensors that don't detect bikes), and poor pedestrian signal setups that lead to long waits or unsafe crossing conditions.

Long-term Planning & Infrastructure Expansion:

1. **Bike and Pedestrian Path Expansion**: Comments advocate for completing long-planned bike and pedestrian routes, such as the Truckee River Path, Gateway Park, and the

Peckham Bikeway, as well as creating new paths like the Vassar/Kietzke Bikeway and Manzanita Park Path.

2. **Multimodal Integration**: Several comments propose multimodal solutions, including roundabouts, shared-use paths, and connections to public transportation, aimed at improving overall connectivity for both vehicles and non-motorized users.
3. **Public Space Activation**: Some comments suggest turning underutilized spaces (like old railway areas or parking lots) into more pedestrian-friendly areas or commercial spaces that integrate cycling and walking infrastructure.

Comments that received the most votes include but aren't limited to:

1. **Dangerous Conditions for Bicycles**
    - *"Dangerous area for bikes as cars speed through to get to Liberty and drive in the bike lane like it's a driving lane."* (At the crossing of W Liberty St and S Virginia St.)
        - **11 votes**
    - *"People park in the bike lane here."*

      (On S Virginia St. between Court St. and W 1st St)
        - **12 votes**
    - *"Everyone drives in the bike lane here."*

      (On S Arlington St between W. Liberty St and California Ave)
        - **15 votes**
    - *"Literal death wish if entering Midtown from north of this intersection on a bike. Lovely merge into the car lane, but cars will force you onto the curb because they don't register your existence. Reckless driving all over this intersection because it incentivizes bad driving."* (**Same area as above**)
        - **11 votes**
    - *"Protected bike lanes are needed."* (**Same area as above**)
        - **11 votes**
2. **Pedestrian Safety Concerns**
    - *"Vehicles using the roundabout tend to not stop for pedestrians at this crossing and have had several vehicles hop onto the sidewalk."*

(Roundabout at S Center St and S Virginia St)

- **13 votes**

- *"Crossing Plumas anywhere around here is impossible with the fast speeds and parked cars blocking visibility*." (Near Plumas Park, Walker Ave and Martin St)

- **15 votes**

3. **Traffic and Speed Issues**

- *"Absolute highway madness on this slalom. I take the left edge of the right lane to keep cars from straddling lanes and killing me. Also, taking the right side of the right lane means you are invisible around the corner, and everyone drives about 40mph here."* (Plumas St. near California Ave)

- **13 votes**

- *" This has to be the most dangerous intersection in Midtown. Needs traffic calming, preferably a speed bump, but at least significantly narrower lanes. Just paint a bicycle gutter down Plumas, there's tons of space for it already."*

(Crossing at Plumas St and St. Lawrence St.)

- **14 votes**

Overall, the comments that were received reflect a strong desire for safer, more accessible infrastructure for pedestrians, cyclists, and micromobility users, along with a focus on improving connectivity, reducing traffic speeds, and better integrating multimodal transportation options.

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Appendix C: Walk Audit Findings

Central Reno / Midtown Walking Audit Findings



Legend

- Limited Access to Destination
- Speeding Vehicles
- Parks

Disclaimer:
The findings included here represent the input collected during an in-person cross-discipline planning-level review of select corridors and intersections in Reno, NV. This effort did not include the collection of vehicle speed data or analysis of night-time lighting conditions. Additional analysis may be required when identifying specific improvements.

NEIGHBORHOOD NETWORK PLAN
CENTRAL RENO

RTC alta

Key Takeaways : Greg St

Participants observed and suggested the following:
- Due to speeding vehicles, the crosswalk at 21st Street and Greg Street is diffcult to navigate.
- Enhancing access to the Truckee River Path to create a clearer connection to the path through increased wayfinding and crossing infrastructure to support trail connectivity.

Central Reno / Midtown Walking Audit Findings



Legend

- Sidewalk Obstruction
- Widen Sidewalk
- Lighting Needed
- Limited Access to Destination
- Wayfinding Needed
- Landscaping Needed
- Road Diet
- Parks

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NEIGHBORHOOD NETWORK PLAN
CENTRAL RENO

RTC alta

Key Takeaways : Kietzke Ln / Battle Born Wy

Participants observed and suggested the following:

- There is limited access to the Truckee River Path in this section which could be addressed with enhanced wayfinding and crossing facilities.
- A reduction of vehicle lanes by adding landscaping, widening sidewalks, and addressing sidewalk obstructions.
- Increased lighting under the I-580 bridge is needed.

Central Reno / Midtown Walking Audit Findings



Legend

- Unsafe Biking Conditions
- Change Lane Design
- Landscaping Needed

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NEIGHBORHOOD NETWORK PLAN
CENTRAL RENO

RTC alta

Key Takeaways : Kietzke Ln / McCarra Blvd

Participants observed and suggested the following:

- McCarran Blvd and Kietzke Ln intersection is uncomfortable for people walking or biking.
- Reconfigure right turn lanes to reduce vehicle speeds and increase separation for people walking and biking.
- A landscaped buffer would increase pedestrian and bicycle comfort

Central Reno / Midtown Walking Audit Findings



Legend

- Unsafe Biking Conditions
- Change Parking
- Crosswalk Repainting
- Sidewalk Obstruction
- Widen Sidewalk
- Lighting Needed
- Poor Bus Stop Access / Comfort
- Remove Parking
- Road Diet

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NEIGHBORHOOD NETWORK PLAN
CENTRAL RENO

RTC alta

Key Takeaways : Kietzke Ln / Mill St

Participants observed and suggested the following:

- Removing parking on this arterial to make biking safer and improve transit stop accessibility.
- Left turns for bicyclists at Mill Street are difficult.
- Crossing enhancements could include repainted crosswalks, lighting, and upgrades to a Pedestrian Hybrid Beacon at Roberts St.

Central Reno / Midtown Walking Audit Findings



Legend

- Unsafe Biking Conditions
- Crosswalk Needed
- Landscaping Needed
- High Vehicle Speeds

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NEIGHBORHOOD NETWORK PLAN
CENTRAL RENO

RTC alta

Key Takeaways : Kietzke Ln / Moana Ln

Participants observed and suggested the following:

- Bike lane ends near the Moana Lane intersection leaving bicyclists in an uncomfortable mixing zone.
- Need for a mid-block crossing between Moana Lane and Peckham Lane.
- A landscaped buffer between high speed vehicles and people walking would enhance pedestrian comfort.

Central Reno / Midtown Walking Audit Findings



Legend

- Change Lane Design
- Crosswalk Needed
- Pedestrian Signal Change
- Landscaping Needed
- RRFB Needed
- Remove Porkchop Island
- Vehicles Not Yielding
- Missing Sidewalks
- Schools

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NEIGHBORHOOD NETWORK PLAN
CENTRAL RENO
RTC alta

Key Takeaways : Plumb Ln / Kietzke Ln

Participants observed and suggested the following:

- Kietzke Lane lacks sidewalks and sufficient lighting north of Plumb Lane.
- Address right-turn safety by removing pork-chop islands or adding enhanced crossings with RRFBs in channelized right turns.
- Upgrading the RRFB between Margrave Dr and Apple St to a PHB to enhance pedestrian safety.

Central Reno / Midtown Walking Audit Findings



Legend

- Bike Lane Needed
- Comfortable Walking / Biking Conditions
- Missing Sidewalk
- Sidewalk Obstruction
- Bike Lane Needed
- Parks

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NEIGHBORHOOD NETWORK PLAN
CENTRAL RENO

RTC alta

Key Takeaways : Plumb Ln / Virginia St

Participants observed and suggested the following:

- The landscaped buffer on the south side of Plumb Lane between Virginia Street and Kirman Avenue created a comfortable pedestrian environment.
- The bike lane on Plumb Lane should be extended east between Virginia Street to Kietzke Lane.

Central Reno / Midtown Walking Audit Findings



Legend

- Bike Parking Needed
- Bulb-outs Needed
- Change Lane Design
- Change Parking
- Crosswalk Needed
- Lighting Needed

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NEIGHBORHOOD NETWORK PLAN
CENTRAL RENO

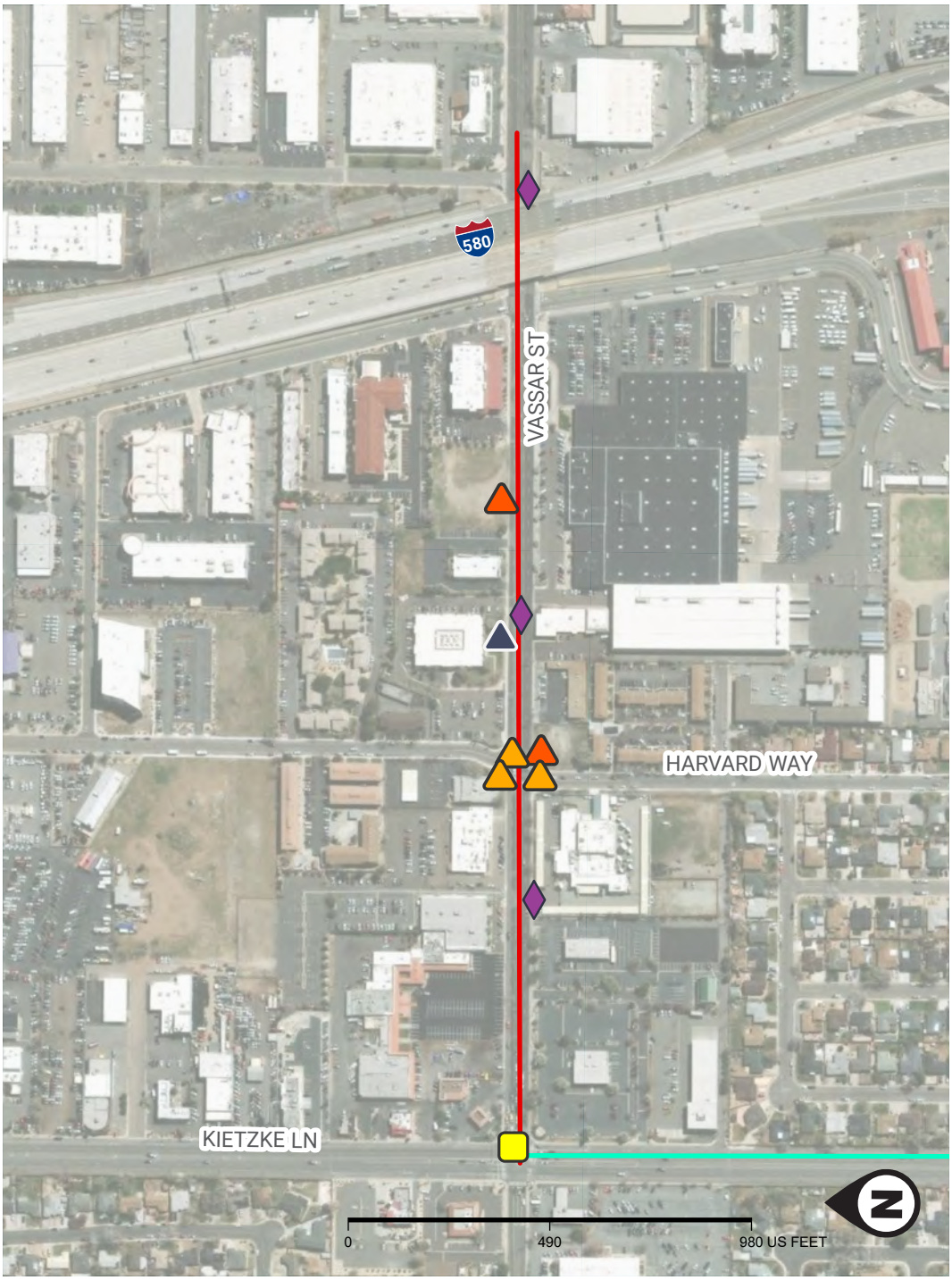
RTC alta

Key Takeaways : Sierra St / Plumas St

Participants observed and suggested the following:

- Consolidating lanes on Sierra St and Plumas St may help address uncomfortable weaving issues between California Ave and Marsh Ave.
- Enhance crossings on Plumas St at Marsh Ave and Saint Lawrence Ave.
- Need for increased bike parking options along California Ave.

Central Reno / Midtown Walking Audit Findings



Legend

- Bike Detection Needed
- Change Lane Design
- Missing Sidewalk
- Pedestrian Signal Change
- Sidewalk Obstruction
- High Speeds
- Missing Sidewalks

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NEIGHBORHOOD NETWORK PLAN
CENTRAL RENO

RTC alta

Key Takeaways : Vassar St

Participants observed and suggested the following:

- Excess roadway capacity increases speeds in this section making the street feel uncomfortable.
- Buffered bike lanes to increase increase the level of comfort.
- This roadway has numerous sidewalk gaps and multiple sidewalk obstructions, which makes walking feel uncomfortable.
- Increased pedestrian crossing times at Harvard Way to support student crossings.

Central Reno / Midtown Walking Audit Findings



Legend

- Unsafe Biking Conditions
- Change Lane Design
- Comfortable Walking / Biking Conditions
- Sidewalk Obstruction
- Landscaping Needed
- Schools
- Parks

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NEIGHBORHOOD NETWORK PLAN
CENTRAL RENO

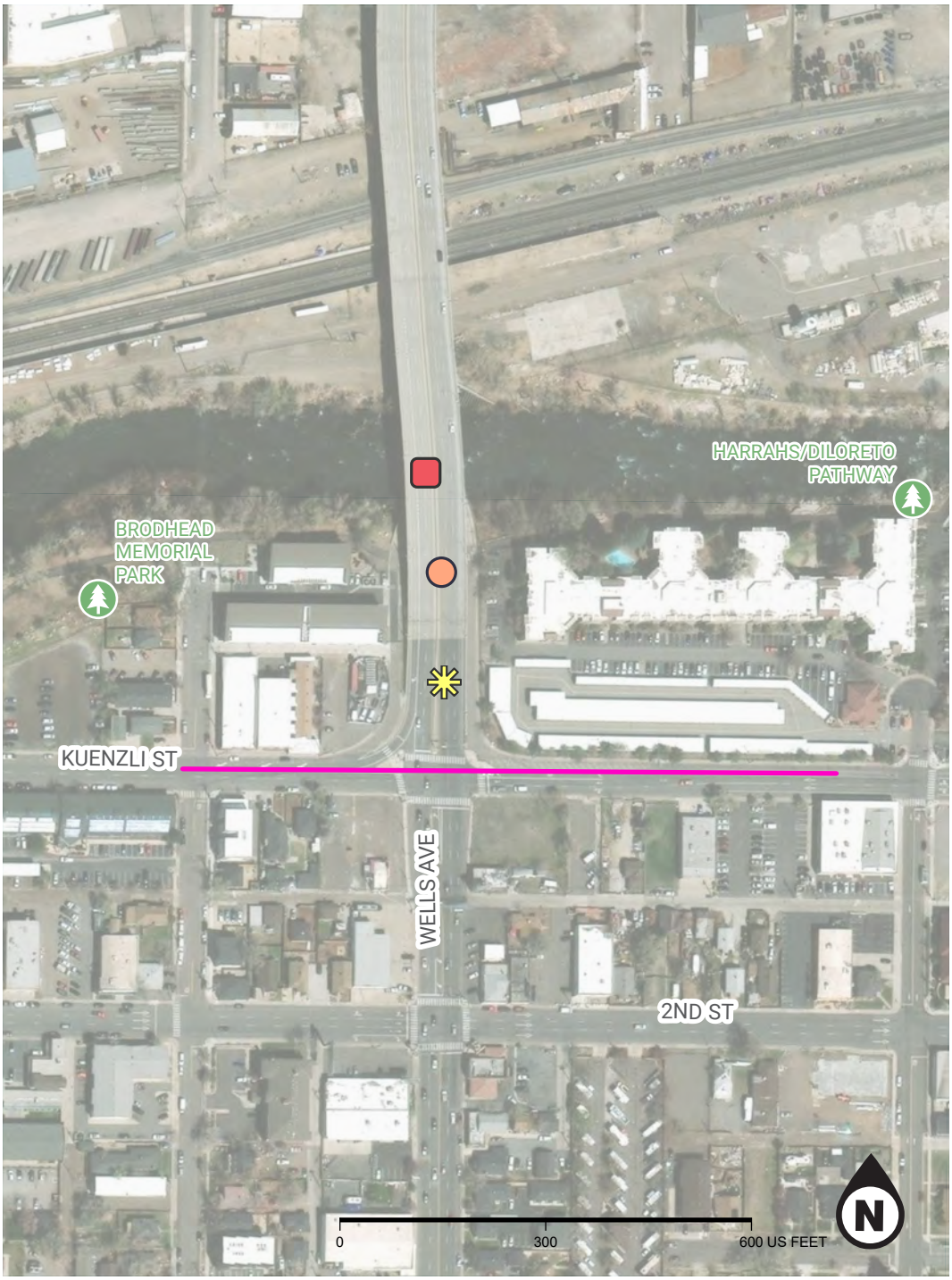
RTC alta

Key Takeaways : Virginia St / Moana Ln

Participants observed and suggested the following:

- Landscaped sidewalk buffer on the south side of Moana Ln creates a comfortable pedestrian environment.
- There are multiple sidewalk obstructions on Moana Ln west of Virginia St
- The westbound bike lane ends at Baker Ln creating uncomfortable condition for people biking.

Central Reno / Midtown Walking Audit Findings



Legend

- Unsafe Biking Conditions
- Lighting Needed
- Limited Access to Destination
- Bike Lane Needed
- Parks

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NEIGHBORHOOD NETWORK PLAN
CENTRAL RENO

RTC alta

Key Takeaways : Wells Ave Bridge

Participants observed and suggested the following:

- Kuenzli Ln bike lanes end at Wells Ave and do not continue to the west.
- Poor existing connectivity to the Truckee River Path may be addressed through enhanced wayfinding, lighting, and removal of access point obstructions such as gating / fences.



Appendix D: Recommendation Scenarios

MEMORANDUM

To: Marquis Williams, Project Manager, RTC Washoe

From: Cole Peiffer, Project Manager, Alta Planning + Design

Date: January 31, 2025

Re: DRAFT Recommendation Scenario Development and Comparison – Central Reno/Midtown

Introduction

This document outlines the process for developing recommendation scenarios for the Central Reno/Midtown neighborhood area for the RTC Washoe Neighborhood Network Plan program. This memo highlights the approach used and facilities considered while developing recommendations, describes each of the three scenarios, and provides a comparison between all three for RTC's consideration and selection of a preferred alternative.

Recommendation Development Approach

Addressing Identified Needs

Alta analyzed multiple datasets from the recent Active Transportation Plan (ATP) in combination with public input to identify the key barriers to active transportation throughout the neighborhood. Based on this finding, the project team focused on addressing identified needs whenever possible through this plan. The project team first focused on addressing the largest barriers on larger roadways; however, many of these roadways were not strong candidates for quick-build projects due to current traffic volumes, significant levels of driveways, and complex operational challenges that go beyond the scope of quick-build projects (e.g., Kietzke Lane). In these instances, the project team identified proximate roadways that would be better candidates for quick-build improvements while still providing network benefits.

Some larger roadways identified as strong candidates for quick-build improvements include roadways that may be reconfigured within the existing roadway space to provide more comfortable connections for people walking and biking while maintaining vehicle connectivity and access.[1] These include roadways such as 2nd Street, Plumas Street, and Vassar Street.

The project team then reviewed the roadway network to create a denser network within the neighborhood by creating "neighborhood byways." These facilities (see more detailed description below) provide a low-stress traffic-calmed connection on residential type streets while maintaining on-street parking. These facilities are intended to provide connections to destinations within the neighborhood such as schools, parks, hospitals, and others.

[1] *It is important to note that quick-build improvements can vary significantly based on the materials used, total time installed, and maintenance needs. More detail on the assumed installation type for each facility is included below in the Facilities section.*

Furthermore, the project team focused on creating scenarios that generally fit within the RTC's estimated budget for quick-build improvements over the next five years. Proposed scenarios may need to be further refined based on budget considerations and available funding streams.

Scenario Themes

Each scenario follows a general theme to differentiate between scenarios and provide variability in the selection process; however, some projects are included in multiple scenarios based on their integral nature within the Central Reno/Midtown network (e.g., Casazza Drive).

Facilities

The facility types included in the recommendation development process are primarily quick-build style improvements that can be implemented relatively quickly with minimal costs as they do not require moving curb lines or traffic signals. Facilities considered during the development of recommendations are categorized below as corridor improvements or intersection/midblock crossing improvements.

Corridor Improvements

Improvements along the corridor help to expand the bicycling network and create more traffic-calmed streets within the neighborhood. The facility types include the following:

1. Neighborhood Byway – Low-speed and low-stress connections that are traffic calmed using speed humps and curb extensions. These traffic-calming measures help maintain low speeds and volumes of vehicles to create a scenario where people biking can comfortably share space with people driving. This improvement assumes the application of traffic calming through speed humps, speed cushions, and curb extensions.



Figure 1. Neighborhood Byway Example

2. Bike Lane – Bike lanes provide dedicated space for bicycle travel adjacent to vehicle traffic, which enables people biking to ride at their preferred speed. This facility is separated from vehicle traffic by a painted lane line or buffer. Quick-build bike lanes look similar to standard bike lanes.



Figure 2. Bike Lane Example

3. Buffered Bike Lane – This enhanced bike lane provides increased separation between people biking and people driving through a striped buffer, which creates a more comfortable environment for people biking. Quick-build buffered bike lanes look similar to standard buffered bike lanes.

4. Protected Bike Lane – The most comfortable on-street facility type for people biking, this facility provides a physical barrier between people walking and people driving with concrete parking stops, planters, parking, or other physical barriers. In a quick-build setting, barrier treatments are not intended to be permanent and may vary significantly based on costs, maintenance needs, and planned installation timing. For this effort, the project team assumed a painted buffer with flex-posts for protection.

5. Change to Two-Way – This recommendation type does not include providing a bicycle facility but instead is focused on the overall transportation network operations. This recommendation focuses on Kirman Avenue in Scenario 1 and considers transitioning Kirman Avenue to two-way operations in conjunction with the improvement on Locust Street.



Figure 3. Buffered Bike Lane Example



Figure 4. Protect Bike Lane Example

Intersection/Midblock Crossing Improvements

Intersections and midblock crossing locations are key areas for improvements to reduce vehicle speeds where people walking and biking interact with people driving. These improvements are focused along or near recommended corridor improvements. The improvements considered at intersections and midblock crossings include the following:

1. Pedestrian Hybrid Beacon (PHB) – This pedestrian-activated flasher improves crossings at unsignalized intersections or midblock crossings on major streets. PHBs include a signal head with two red lenses over a single yellow lens.

2. Rectangular Rapid Flashing Beacon (RRFB) – This pedestrian-activated flasher improves crossings at unsignalized intersections or midblock crossings on single or multi-lane roadways. This includes flashing amber lights which alert drivers to the person crossing. RRFBs are typically installed on roadways up to 35 mph.



Figure 5. Pedestrian Hybrid Beacon (PHB) Example



Figure 6. Rectangular Rapid Flashing Beacon (RRFB)

3. High-Visibility Crosswalks – This crosswalk type includes thick white bars to increase driver awareness to the crossing. This crosswalk design has been shown to increase driver awareness compared to the standard crosswalk design with two parallel white lines on the outside of the crosswalk.

4. Curb Extensions – This improvement reduces the total crossing distance for people walking, reduces speed of turning vehicles and increases pedestrian visibility at the crosswalk.

5. Raised Crosswalks – This improvement brings the crosswalk up to sidewalk level to increase pedestrian visibility and reduce vehicle speeds as they travel over the raised crosswalk. These are typically installed on lower-volume/lower-speed roadways.

6. Leading Pedestrian Interval (LPI) – This provides people walking with a 3- to 7-second head start when crossing at a signalized intersection by showing the walk symbol while people driving have a red light. This helps make pedestrians more visible at intersections and improves pedestrian safety.

7. Bicycle Wayfinding – Signage to indicate distance and direction to key destinations along a bike corridor, or within the network to help bicyclists stay on the most comfortable streets. This improvement was indicated in transition areas where riders may benefit from directional signage.

8. Bicycle Cut-Through – This is a type of modal filtering which modifies the existing median to provide bicyclists with a small opening to enable them to continue straight. This creates a more direct network for people biking with minimal impact to the overall roadway.



Figure 7. High Visibility Crosswalk Example



Figure 8. Quick-Build Curb Extensions Example



Figure 9. Quick-Build Raised Crosswalk Example



Figure 10. Leading Pedestrian Interval Example

9. Bicycle Jug Handle – This improvement provides a turn pocket for people biking, which allows them to stay out of the bike lane while waiting for a gap in traffic to cross the street.

10. Bike Box – An area at the front of a traffic lane at signalized intersections where people biking can wait ahead of vehicles to make left turns more easily. This makes bicyclists more visible, reduces delays for bicyclists, and helps keep vehicles from encroaching into crosswalks.

11. Pedestrian Median Refuge – A dedicated space for pedestrians to wait when crossing multi-lane roadways this dedicated space helps improve safety for people crossing at intersections.



Figure 11. Bike Cut Through Example



Figure 12. Bicycle Jug Handle Example



Figure 14. Pedestrian Median Refuge Island Example

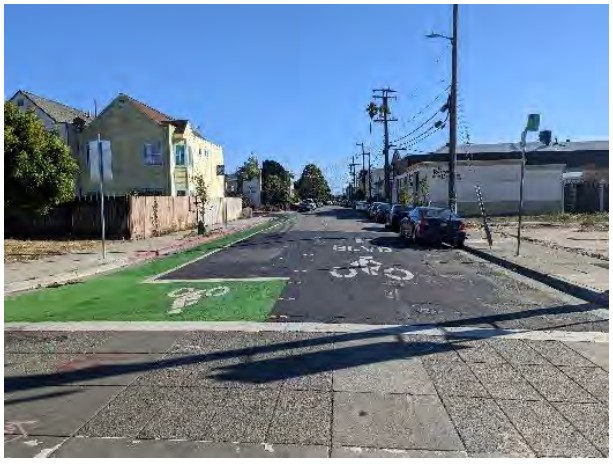


Figure 13. Bike Box Example

Recommendation Scenarios

This section highlights the recommendation scenarios for the Central Reno/Midtown neighborhood. Each scenario description includes an overview of the scenario theme, a project table with a rationale for each project, and a table showing all improvements included in the scenario. Projects are mapped for each scenario following the corresponding description and data.

Scenario 1

Theme: Connecting North–South

Description: Scenario 1 provides increased connectivity across the neighborhood with a focus on north/south connections with regular east–west connections. Public comments and our analysis highlighted the need for increased connectivity throughout the neighborhood, especially connecting north–south between Kietzke Lane and Plumas Street. This scenario focused on increasing connections from the Truckee River Path to McCarran Boulevard and targets improvements within the highest equity need portion of the neighborhood. This scenario includes nearly **13 miles of corridor improvements** with **30 identified improvements** at 23 specific intersections with a total planning level estimate of **$5.66 million** (Table 1).

Table 1. Scenario 1 Recommendations

Scenario 1 Recommendations			
Corridor Improvement Type	**Miles**	**Cost**	
Buffered/Protected Bike Lane	1.7	$	1,059,594
Buffered Bike Lane	1.5	$	396,223
Change to Two-Way	1.1	$	30,000
Neighborhood Byway	8.6	$	1,919,309
Sub-Total	12.9	$	3,405,126
Intersection Improvement Type	**Number**		**Cost**
Curb Extensions	19	$	133,000
Bicycle Jug Handle	1	$	15,000
High-Visibility Crosswalk	4	$	24,000
Rectangular Rapid Flashing Beacon (RRFB)	3	$	135,000
Pedestrian Hybrid Beacon (PHB)	3	$	1,950,000
Sub-Total	30	$	2,257,000
Total		$	5,662,126

Corridor and intersection improvements are shown in Figure 15. It's important to note that intersection improvements have been consolidated on the map legend for simplicity; a full list of the intersection improvements are included in Appendix A.

Recommendation Scenario 1

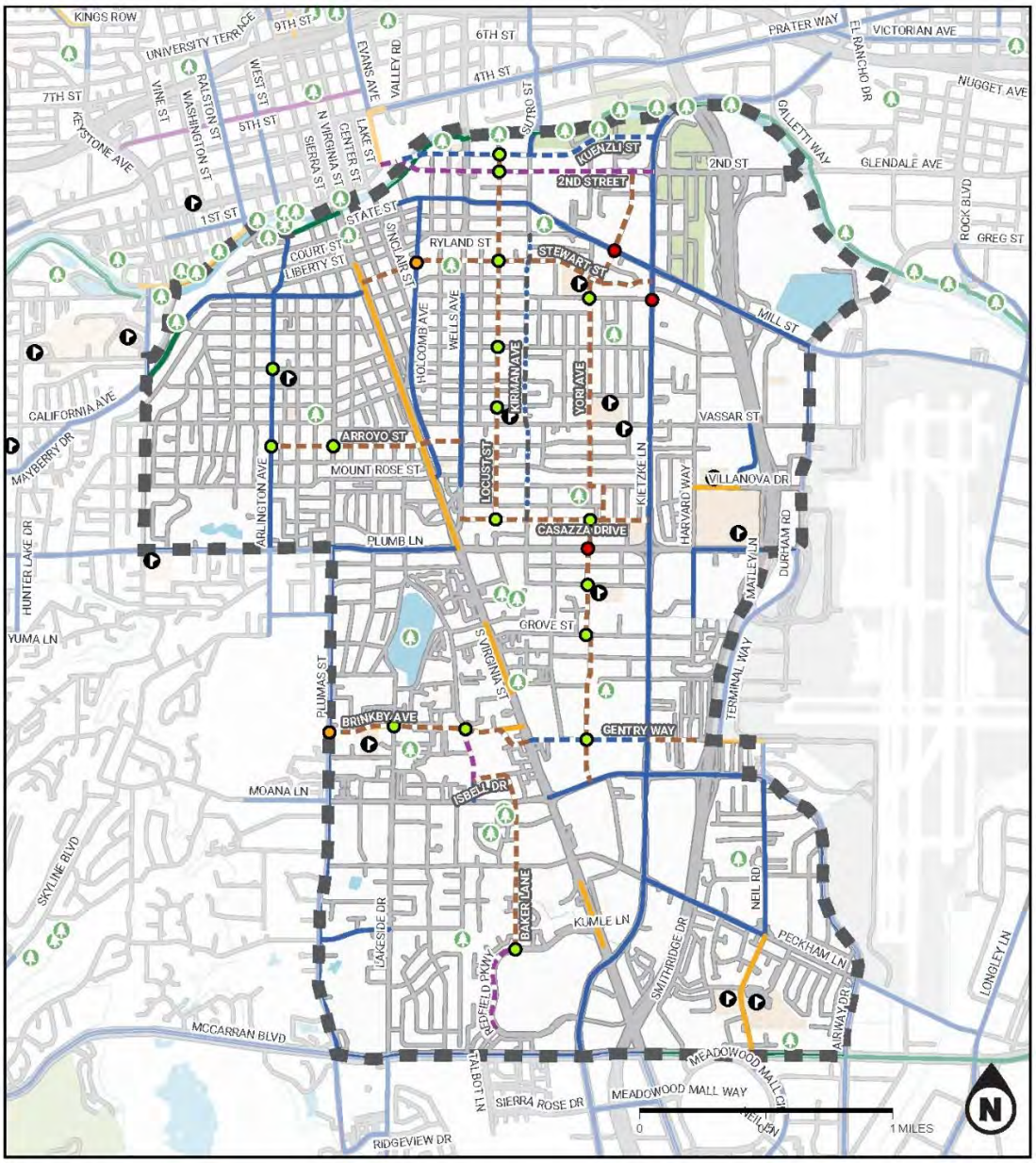


Figure 15. Scenario 1 Recommendations

Project Rationale

This section describes the project location, extent, facility type, rationale, and individual costs for including each identified corridor improvement in Scenario 1 in Table 2.

Table 2. Scenario 1 Project Descriptions and Rationale

Scenario 1					
Name	*Extent*	*Type*	*Miles*	*Rationale*	*Cost*
2nd Street	Lake Street to Kietzke Lane	Protected Bike Lane	1.09	This project reutilizes excess vehicle capacity between Lake Street/Kietzke Lane to create a more comfortable connection. Protection may be intermittent due to driveway considerations. This roadway also creates a key connection with north–south improvements on Locust Street and Yori Avenue.	$ 688,386
Lymberry Street	Brinkby Avenue to Isbell Drive	Protected Bike Lane	0.21	Enhances narrow existing bike lanes for improved comfort Links with Baker Lane for signalized crossing at Moana Lane. This would require removing parking on the east side of the roadway.	$ 134,453
Redfield Parkway	Baker Lane to Talbot Lane	Protected Bike Lane	0.37	Excess vehicle capacity allows for a buffered/protected bike lane and helps finish the north–south connection to McCarran Boulevard on Talbot Lane.	$ 236,754
Gentry Way	Kietzke Lane to Brinkby Avenue	Buffered Bike Lane	0.47	This roadway provides a potential east–west connection by reutilizing existing roadway space. This section of Gentry Way is 35 mph and would not support a shared-lane environment.	$ 123,336
Kuenzli Street	2nd Street to Kietzke Lane	Buffered Bike Lane	1.05	This recommendation works in concert with the 2nd Street improvement providing a westbound facility for bicyclists by reutilizing available roadway space.	$ 272,887
Kirman Avenue	Ryland Street to Casazza Drive	Change to Two-Way	1.13	In conjunction with improvements on Locust Street, this scenario recommends reconfiguring Kirman Avenue between Ryland Street and Casazza Drive to allow for two-way vehicle traffic. This roadway is included on the Primary Emergency Vehicle Route (PEVR).	$ 30,000

Scenario 1					
Name	*Extent*	*Type*	*Miles*	*Rationale*	*Cost*
Arroyo Street	Wells Avenue to Arlington Avenue	Neighborhood Byway	0.75	Reformatting a one-way neighborhood street to provide two-way vehicle traffic as well as traffic calming through speed humps and curb extensions. This roadway is not included on the PEVR and would be an easy candidate for traffic-calming elements.	$168,356
Baker Lane	Redfield Parkway to Isbell Drive	Neighborhood Byway	0.70	Moana Lane was identified as a major barrier for people walking and biking in this area, and Baker Lane provides one of the only signalized crossings between Lakeside Drive and Virginia Street. Baker Lane also provides good north–south connectivity to the Firecreek Crossing mall area and to the southern edge of the neighborhood. This roadway is included on the PEVR.	$ 155,846
Brinkby Ave	Gentry Way to Plumas Street	Neighborhood Byway	0.82	This roadway already has speed humps for a short section near Anderson Elementary and is not included in the PEVR. By extending the area where speed humps are present, it is possible to maintain highly utilized on-street parking while reducing vehicle speeds and creating a more comfortable bicycling connection.	$ 184,029
Casazza Drive	Wells Avenue to Kietzke Lane	Neighborhood Byway	0.75	This east–west route is critical for allowing bicyclists to continue traveling north–south past the Plumb Lane area. Casazza Drive creates an easy east–west connection linking the recommendations on Yori Avenue and Locust Street as well as the existing bike lanes on Wells Avenue. This roadway is included on the PEVR.	$ 167,205
Gentry Way	Kietzke Lane to Eastern Terminus	Neighborhood Byway	0.19	This section connects with residential areas in a low-speed and low-volume context.	$ 42,910
Isbell Drive	Baker Lane to Lymberry Street	Neighborhood Byway	0.13	This roadway connects Lymberry Street to Baker Lane, which is a critical crossing point across Moana Lane.	$ 29,636
Locust Street	Casazza Drive to Kuenzli Street	Neighborhood Byway	1.44	This one-way neighborhood roadway can be reconfigured to allow for two-way vehicle traffic along with traffic-calming elements such as speed humps. This scenario considers also changing	$ 322,666

Scenario 1					
Name	*Extent*	*Type*	*Miles*	*Rationale*	*Cost*
				operations on Kirman Avenue from one-way to two-way.	
Stewart Street	Kietzke Lane to Virginia Street	Neighborhood Byway	1.19	Stewart Street creates an easy east–west connection from Kietzke Lane to Virginia Street and will connect with the Biggest Little Bike Network (BLBN) once complete at Sinclair Street. Stewart Street is not included on the PEVR and would be a strong candidate for traffic calming.	$ 265,464
Yori Avenue/ Gould Street	Kuenzli Street to Casazza Drive (via Chaska Place and Grand Canyon Drive)	Neighborhood Byway	2.61	Yori Avenue would provide a key north–south connection through the neighborhood linking with multiple east–west connections including Gentry Way, Casazza Drive, Stewart Street, and 2nd Street. This improvement would also include two PHBs at Mill Street and Plumb Lane. This roadway is included on the PEVR.	$ 583,196

Scenario 2

Theme: Building Off the Biggest Little Bike Network

Description: Scenario 2 focuses on expanding out from the Biggest Little Bike Network (BLBN) by connecting to Virginia Street and Sinclair Street on Liberty Street and Thoma Street. Once connecting with the BLBN, all recommendations in this scenario connect to each other to create a cohesive network. This scenario also provides an east–west connection across the neighborhood along Vassar Street/Caliente Street/Monroe Street. This scenario includes approximately **11.3 miles of corridor improvements** and **24 identified improvements** at 15 specific intersections for a total planning level estimate cost of **$4.22 million** (Table 3).

Table 3. Scenario 2 Recommendations

Scenario 2		
Corridor Improvement Type	**Miles**	**Cost**
Neighborhood Byway	9.4	$ 2,107,956
Protected Bike Lane	1.9	$ 1,175,651
Sub-Total	11.3	$ 3,283,607
Intersection Improvement Type	**Number**	**Cost**
Curb Extensions	12	$ 84,000
High-Visibility Crosswalk	2	$ 12,000
Pedestrian Refuge Island	1	$ 50,000
Raised Crosswalk	1	$ 23,024
Bike Jug Handle	1	$ 15,000
Bike Cut-Through	1	$ 10,000
Bike Box	1	$ 2,000
Bicycle Wayfinding	1	$ 2,000
Leading Pedestrian Interval (LPI)	1	$ 5,500
Rectangular Rapid Flashing Beacon (RRFB)	2	$ 90,000
Pedestrian Hybrid Beacon (PHB)	1	$ 650,000
Sub-Total	24	$ 943,524
Total		$ 4,227,132

Corridor and intersection improvements are shown in Figure. It's important to note that intersection improvements have been consolidated on the map legend for simplicity; a full list of the intersection improvements are included in Appendix A.

Recommendation Scenario 2

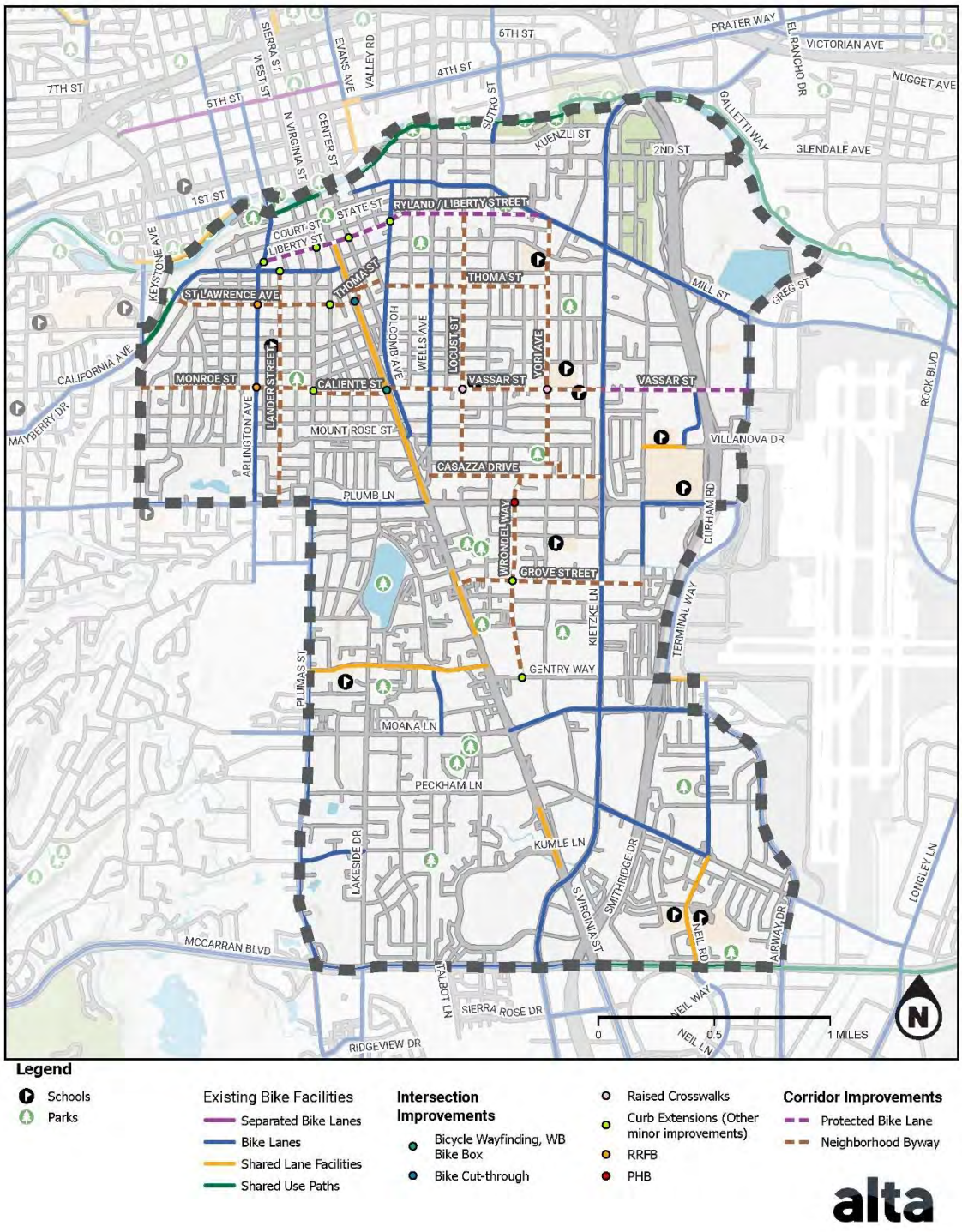


Figure 2. Scenario 2 Recommendations

Project Rationale

This section describes the project location, extent, facility type, rationale, and individual costs for including each identified corridor improvement in Scenario 2 in Table 4.

Table 4. Scenario 2 Project Descriptions and Rationale

Scenario 2					
Name	**Extent**	**Type**	**Miles**	**Rationale**	**Cost**
Ryland Street/ Liberty Street	Arlington Avenue to Mill Street	Protected Bike Lane	1.23	This 4- to 5-lane roadway has an average daily traffic volume (ADT) of 7,100 as of 2023 per the Nevada Department of Transportation (NDOT) and would be a strong candidate for a protected bike lane. This would create a viable way to continue east from the California Avenue bike lanes (connecting on Arlington Avenue). This would be a strong east–west connection in the south of downtown Reno and complement to 5th Street in the BLBN. This project would also connect with the BLBN on Virginia Street and Lake Street/Sinclair Street.	$ 778,108
Vassar Street	Cordone Ave to Terminal Way	Protected Bike Lane	0.63	The current roadway speeds on this section of Vassar Street were noted by walk audit participants and the public as being perceived as high. The wide roadway with relatively low volumes (5,400 ADT 2024 - NDOT) could be reconfigured to accommodate traffic volumes while reducing speeds and enhancing safety with protected bike lanes. This would extend the reach of the network east past Kietzke Lane, a key barrier in the neighborhood.	$397,543
Caliente Street	Plumas Street to Virginia Street	Neighborhood Byway	0.32	This roadway links Vassar Street and Monroe Street to create an east–west connection across the neighborhood. This non-PEVR roadway would be reconfigured to provide two-way traffic along with traffic-calming elements (alternative would be contra-flow bike lane configuration). Connections at Virginia Street and Plumas Street will require wayfinding and improvements to facilitate turning.	$ 72,306
Casazza Drive	Wells Avenue to Kietzke Lane	Neighborhood Byway	0.75	This east–west route is critical for allowing bicyclists to continue traveling north–south past the Plumb Lane area. Casazza Drive creates an easy east–west connection linking the recommendations on Yori Way and Locust Street, as well as the existing bike lanes on Wells Avenue. This roadway is included on the PEVR.	$ 167,205

Scenario 2					
Name	**Extent**	**Type**	**Miles**	**Rationale**	**Cost**
Grove Street	Virginia Street to Harvard Way	Neighborhood Byway	0.80	This relatively low-volume street (3,400 ADT 2023) provides a good east–west connection with a 25-mph speed limit. The addition of traffic calming, such as speed cushions and curb extensions, could maintain lower vehicle speeds while accommodating emergency vehicles and creating a more comfortable bicycle connection. This roadway is on the PEVR	$ 179,643
Lander Street	California Avenue to Plumb Lane	Neighborhood Byway	1.00	This north–south connection through the neighborhood already has modal filtering through the Our Lady of the Snows parking lot during the day and provides a low-volume and slow speed connection through the west side of the neighborhood. This would also connect with the east–west routes on Monroe Street and Saint Lawrence Avenue.	$ 224,279
Locust Street	Casazza Drive to Ryland Street	Neighborhood Byway	1.13	This one-way neighborhood roadway can be reconfigured to allow for two-way vehicle traffic along with traffic-calming elements such as speed humps of speed cushions to accommodate emergency vehicles. This scenario considers maintaining one-way operations on Kirman Avenue. This roadway is included on the PEVR.	$ 252,731
Monroe Street	Plumas Street to Sharon Way	Neighborhood Byway	0.74	This low-volume roadway (540 ADT 2023) is not included on the PEVR and would provide connection east–west to Caliente Street and further east to Vassar Street. The connection to Caliente Street will require short bike lanes on Plumas Street with bike jug handles (turn pockets) for bicycles turning left across Plumas Street.	$ 165,697
Saint Lawrence Avenue	Virginia Street to Keystone Ave (via Newlands Circle)	Neighborhood Byway	0.76	This connection would connect with the future Keystone Bridge project and extend east to Virginia Street providing enhanced crossings on Arlington Avenue, Forest Street, and Virginia Street. This would connect with Thoma Street for further east–west connection as well as the bicycle facilities on Virginia Street for north–south. This roadway is not included on the PEVR.	$ 170,173

Scenario 2					
Name	**Extent**	**Type**	**Miles**	**Rationale**	**Cost**
Thoma Street	Holcomb Avenue to Yori Avenue	Neighborhood Byway	0.79	This segment of Thoma Street extends from Sinclair Street, the southern edge of the BLBN, to Yori Way. This creates an east–west connection approximately between Ryland Street/Liberty Street and Vassar Street. An RRFB enhanced crosswalk at Holcomb Avenue would improve the crossing safety and network continuity. This road is not on the PEVR.	$ 176,367
Thoma Street	Virginia Street to Sinclair Street	Neighborhood Byway	0.07	This short section would allow eastbound bicyclists to cut through at the Saint Lawrence Avenue/Virginia Street intersection and travel with traffic through the Sticks parking lot to reach Thoma Street and continue traveling east to connect with the BLBN on Sinclair Street.	$ 14,786
Thoma Street/ Virginia Street	Center Street to Saint Lawrence Avenue	Neighborhood Byway	0.08	This short section would allow westbound bicyclists to travel along Thoma Street and take a left onto Virginia Street and then a right onto Saint Lawrence Avenue.	$ 18,111
Vassar Street	Cordone Avenue to Virginia Street	Neighborhood Byway	0.94	This section of Vassar Street directly fronts two public schools and connects Virginia Street to Kietzke Lane for a direct east–west connection. With a 25-mph speed limit and on-street parking, this roadway would benefit from speed humps to accommodate emergency vehicles while reducing vehicle speeds. Additionally, this would include curb extensions at Locust Street and Yori Avenue.	$ 209,300
Wrondel Way	Casazza Drive to Gentry Way	Neighborhood Byway	0.88	This north–south connection provides an additional option to cross Plumb Lane with a pedestrian-activated beacon and is not included on the PEVR. This would include upgrading the current RRFB at Wrondel Way/Plumb Lane to a PHB.	$ 196,612
Yori Avenue	Mill Street to Casazza Drive (via Chaska Place and Grand Canyon Drive)	Neighborhood Byway	1.17	This byway connects from Casazza Drive north to the RRFB at Mill Street via Chaska Place and Grand Canyon Boulevard. This would front two schools that include school zones on Yori Avenue. Yori Avenue from Grand Canyon Boulevard to Mill Street is included on the PEVR.	$ 260,748

Scenario 3

Theme: Connecting to Schools and Parks

Description: This scenario targets schools and parks as the key destinations for increased access and connectivity. Based on this focus, the recommended improvements are located throughout the neighborhood and provide more focused enhancements to the existing network while making targeted improvements to create a denser and more comfortable network. This scenario includes a total of **12.7 miles of corridor improvements** as well as **36 identified improvements** at 28 specific intersections for an estimated cost of **$5.97 million** (Table 5).

Table 5. Scenario 3 Recommendations

Scenario 3			
Corridor Improvement Type	**Miles**	**Cost**	
Bike Lanes	0.1	$	24,583
Buffered/Protected Bike Lane	1.6	$	1,013,374
Buffered Bike Lane	0.5	$	123,336
Neighborhood Byway	8.6	$	1,930,989
Protected Bike Lane	0.6	$	397,543
Protected Bikeway	1.2	$	783,471
Sub-Total	12.7	$	4,273,296
Intersection Improvement Type	**Number**	**Cost**	
Curb Extensions	24	$	168,000
High-Visibility Crosswalk	2	$	12,000
Raised Crosswalk	1	$	23,034
Leading Pedestrian Interval (LPI)	3	$	16,500
Pedestrian Refuge Island	1	$	50,000
Rectangular Rapid Flashing Beacon (RRFB)	3	$	135,000
Pedestrian Hybrid Beacon (PHB)	2	$	1,300,000
Sub-total	36	$	1,704,534
Total		$	5,977,831

Corridor and intersection improvements are shown in Figure 316. It's important to note that intersection improvements have been consolidated on the map legend for simplicity; a full list of the intersection improvements are included in Appendix A.

Recommendation Scenario 3

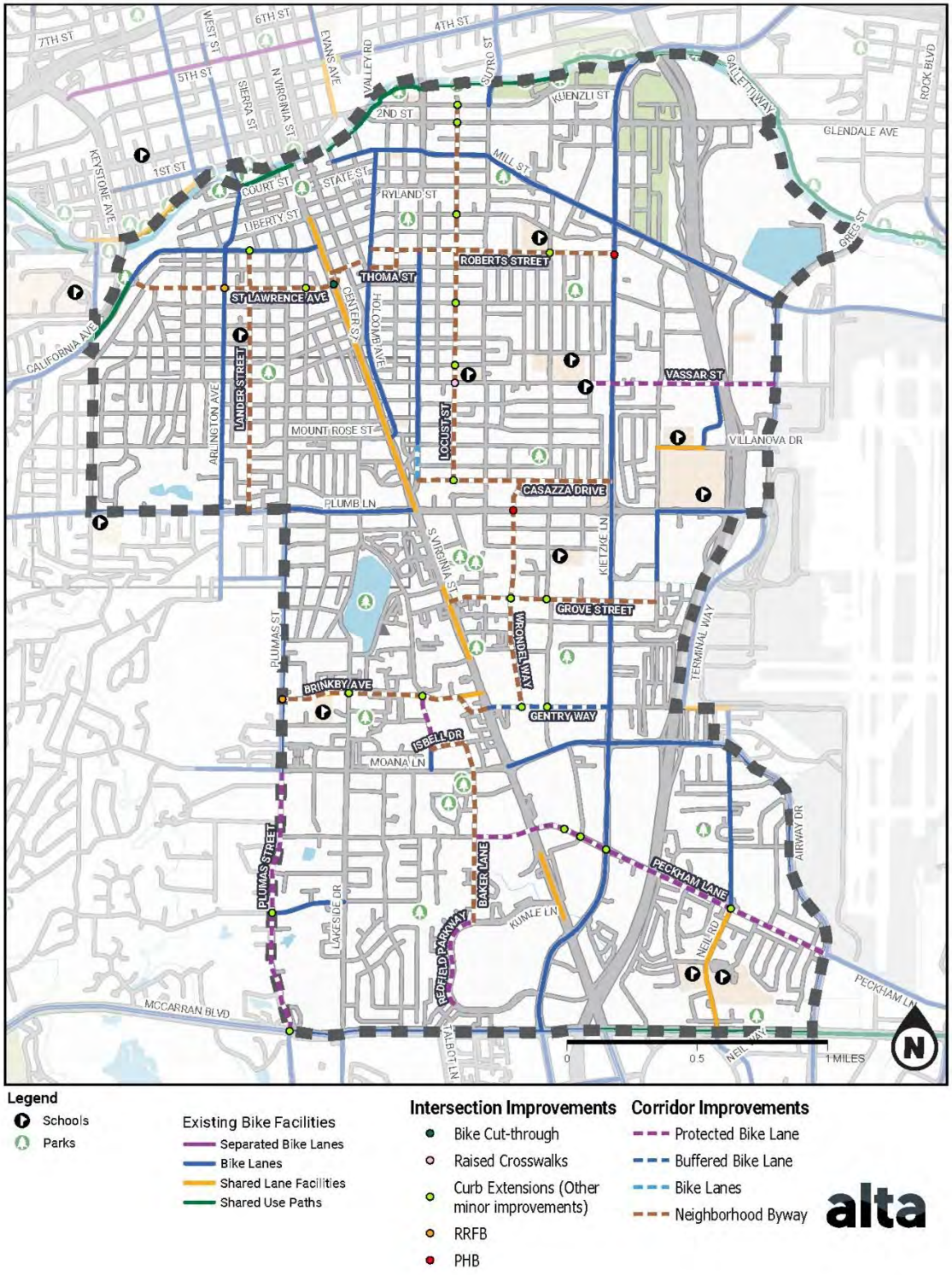


Figure 316. Scenario 3 Recommendations

Project Rationale

This section describes the project location, extent, facility type, rationale, and individual costs for including each identified corridor improvement in Scenario 3 in Table 6.

Table 6. Scenario 3 Project Descriptions and Rationale

Scenario 3					
Name	**Extent**	**Type**	**Miles**	**Rationale**	**Cost**
Wells Avenue	Casazza Drive to Regency Way	Bike Lanes	0.13	This would restripe Wells Avenue to continue bike lanes between Casazza Drive and Regency Way helping to close a small gap in the network and connect with improvements on Casazza Drive.	$ 24,583
Lymberry Street	Brinkby Avenue to Isbell Drive	Protected Bike Lane	0.21	Enhances narrow existing bike lanes for improved comfort. Links with Baker Lane for signalized crossing at Moana Lane. This would require removing parking on the east side of the roadway.	$ 134,453
Peckham Lane	Baker Lane to Airway Drive	Protected Bike Lane	1.24	This project would reutilize roadway space to close two gaps in the bicycle network on Peckham Lane with a protected bike lane. This would include curb extensions between Kietzke Lane and the convention center driveway. This would close a gap in the southeast portion of the neighborhood and also help people cross Kietzke Lane, which is a major barrier in the neighborhood.	$ 783,471
Plumas Street	Moana Lane to McCarran Boulevard	Protected Bike Lane	1.01	Plumas Street between Moana Lane and McCarran Boulevard presents a strong opportunity to repurpose underutilized parking to create a protected bike lane in the southwest corner of the neighborhood. This connection could showcase a high-quality facility type although would not connect to another low-stress bicycle facility.	$ 642,167
Redfield Parkway	Baker Lane to Talbot Lane	Protected Bike Lane	0.37	Excess vehicle capacity allows for a buffered/protected bike lane and helps finish the north–south connection to McCarran Boulevard on Talbot Lane.	$ 236,754

Scenario 3					
Name	**Extent**	**Type**	**Miles**	**Rationale**	**Cost**
Vassar Street	Cordone Avenue to Terminal Way	Protected Bike Lane	0.63	The current roadway speeds on this section of Vassar Street were noted by walk audit participants and the public as being perceived as high. The wide roadway with relatively low volumes (5,400 ADT 2024 – NDOT) could be reconfigured to accommodate traffic volumes while reducing speeds and enhancing safety with protected bike lanes.	$ 397,543
Gentry Way	Kietzke Lane to Brinkby Avenue	Buffered Bike Lane	0.47	This roadway provides a potential east–west connection by reutilizing existing roadway space. The section between Virginia Street and Kietzke Lane is 35 mph and would not support a shared-lane environment. This section is not included on the PEVR.	$ 123,336
Baker Lane	Redfield Parkway to Isbell Drive	Neighborhood Byway	0.70	Moana Lane was identified as a major barrier for people walking and biking in this area, and Baker Lane provides one of the only signalized crossings between Lakeside Drive and Virginia Street. Baker Lane also provides good north–south connectivity to the Firecreek Crossing mall area and to the southern edge of the neighborhood. This roadway is included on the PEVR.	$ 155,846
Brinkby Avenue	Gentry Way to Plumas Street	Neighborhood Byway	0.82	This roadway already has speed humps for a short section near Anderson Elementary and is not included in the PEVR. By extending the area where speed humps are present, it is possible to maintain highly utilized on-street parking while reducing vehicle speeds and creating a more comfortable bicycling connection.	$ 184,029
Casazza Drive	Wells Avenue to Kietzke Lane	Neighborhood Byway	0.75	This east–west route is critical for allowing bicyclists to continue traveling north–south past the Plumb Lane area. Casazza Drive creates an easy east–west connection linking the recommendations on Yori Way and Locust Street as well as the existing bike lanes on Wells Avenue. This roadway is included on the PEVR.	$ 167,205

Scenario 3					
Name	**Extent**	**Type**	**Miles**	**Rationale**	**Cost**
Grove Street	Virginia Street to Harvard Way	Neighborhood Byway	0.80	This relatively low-volume street (3,400 AADT 2023) provides a good east–west connection with a 25-mph speed limit. The addition of traffic calming, such as speed cushions and curb extensions, could maintain lower vehicle speeds while accommodating emergency vehicles and creating a more comfortable bicycle connection. This roadway is on the PEVR.	$ 179,643
Isbell Drive	Baker Lane to Lymberry Street	Neighborhood Byway	0.13	This roadway connects Lymberry Street to Baker Lane, which is a critical crossing point across Moana Lane.	$ 29,636
Lander Street	California Avenue to Plumb Lane	Neighborhood Byway	1.00	This north–south connection through the neighborhood already has modal filtering through the Our Lady of the Snows parking lot during the day and provides a low-volume and slow speed connection through the west side of the neighborhood. This would also connect with the east–west routes on Monroe Street and Saint Lawrence Avenue.	$ 224,279
Locust Street	Casazza Drive to Kuenzli Street	Neighborhood Byway	1.44	This one-way neighborhood roadway can be reconfigured to allow for two-way vehicle traffic along with traffic-calming elements such as speed humps. This scenario does not consider changing operations on Kirman Avenue from one-way to two-way.	$ 322,666
Roberts Street	Holcomb Avenue to Kietzke Lane	Neighborhood Byway	0.94	This east–west connection is not on the PEVR and connects with Kietzke Lane at an existing RRFB. This project would create a neighborhood byway between Kietzke Lane and Holcomb Avenue while also upgrading the RRFB to a PHB. To connect to the BLBN, there are short sections recommended on Wheeler Street and Thoma Street.	$ 209,281

Scenario 3					
Name	**Extent**	**Type**	**Miles**	**Rationale**	**Cost**
Saint Lawrence Avenue	Virginia Street to Keystone Avenue (via Newlands Circle)	Neighborhood Byway	0.76	This section would connect with the future Keystone Bridge project and extend east to Virginia Street, providing enhanced crossings on Arlington Avenue, Forest Street, and Virginia Street. This would connect with Thoma Street for further east–west connection as well as the bicycle facilities on Virginia Street for north–south. This roadway is not included on the PEVR.	$ 170,173
Thoma Street	Sinclair Street to Wheeler Street	Neighborhood Byway	0.09	This short section would allow bicyclists to cross Holcomb Avenue at Thoma Street/Sinclair Street and connect with Wheeler Street to connect with Roberts Street.	$ 21,101
Thoma Street	Center Street to Sinclair Street	Neighborhood Byway	0.10	This short section would connect with the BLBN on Sinclair Street for eastbound and westbound bicyclists.	$ 22,426
Thoma Street	Virginia Street to Center Street	Neighborhood Byway	0.07	This short section would allow eastbound bicyclists to cut through at the Saint Lawrence Avenue/Virginia Street intersection and travel with traffic through the Sticks parking lot to reach Thoma Street and continue traveling east to connect with the BLBN on Sinclair Street.	$ 14,786
Thoma Street/ Virginia Street	Center Street to Saint Lawrence Avenue	Neighborhood Byway	0.08	This short section would allow westbound bicyclists to travel along Thoma Street and take a left onto Virginia Street and then a right onto Saint Lawrence Avenue.	$ 18,111
Wheeler Street	Thoma Street to Roberts Street	Neighborhood Byway	0.07	This short section is not included on the PEVR and would facilitate the connection between Roberts Street and the BLBN for a continued east–west connection. This short section would also require focused wayfinding to show bicyclists the right way to connect between Sinclair Street and Roberts Street.	$ 15,193
Wrondel Way	Casazza Drive to Gentry Way	Neighborhood Byway	0.88	This north–south connection provides an additional option to cross Plumb Lane with a pedestrian-activated beacon and is not included on the PEVR. This would include upgrading the current RRFB at Wrondel Way/Plumb Lane to a PHB.	$ 196,612

Scenario Comparison

To compare scenarios, the project team analyzed three key metrics for each one. These are intended to help in decision-making and selection of a preferred alternative. These metrics include:

- Metric #1: ATP Goals – This metric ranks how well each of the scenarios furthers each of the four goals from the ATP based on a review of the scenarios, overlap with known safety issues and high-injury network, understanding of maintenance requirements and issues, and an assessment of how many trips each may generate based on increased Community Access (Metric #2).
- Metric #2: Community Access – This metric analyzes the potential increase in access and resulting induced trips to three key community destinations (schools, parks, and hospitals). This assessment used the Washoe ATP Accessibility Testing Toolkit provided to RTC Washoe as part of the ATP process. The analysis process and results are presented in the Community Access section.
- Metric #3: Implementation Considerations – The ease of implementation and coordination requirements with partner agencies are key considerations when identifying projects for quick-build implementation. This metric considers potential issues with implementing each scenario based on coordination around the PEVR network, evaluation and coordination around capacity reductions, and the planning level cost estimate.

ATP Goals

The project team reviewed the scenarios and compared them against each of the four ATP goals. See Table 7 for the results of this comparison. The review process for each goal is explained below:

- Safety – The project team reviewed the extent to which recommended projects overlap and address issues on RTC high-injury network corridors and intersections as well as roadways identified as leading barriers in the Regional Active Transportation Gap Analysis.
- Mode Share and Community – The team ran the Washoe Accessibility Testing tool to assess the degree to which the scenarios would induce new active trips to key community destinations including parks, schools, and hospitals. This helps to gauge benefits to mode share and the potential level of additional community benefits (e.g., health benefits from increased active trips). Findings from this analysis are further detailed in the Community Access section.
- Maintenance – This metric represents the potential level of effort to maintain the recommended projects compared to each other. This is based on the overall mix of recommended facility types and the potential widths of protected bike lanes. Protected bike lanes typically include a higher level of ongoing maintenance to sweep the bike lane and replace missing delineators/barrier treatments. Wider protected bike lanes allow for a wider variety of sweeping equipment, which reduces maintenance costs. Neighborhood byways typically have a lower overall level of maintenance effort outside of maintaining intersection treatments such as painted curb extensions with delineators.

Table 7. Scenario Comparison Metric #1 - ATP Goals

Metric		Scenario		
		1 Connecting North South	2 Building Off the BLBN	3 Connecting to Schools and Parks
ATP Goals	*Safety*	Medium	Medium	**High**
	Mode Share and Community	**Medium/High**	Medium	**High**
	Maintenance	**High**	Medium	Low

Community Access

Alta conducted an analysis using the Washoe Accessibility Testing toolbox that was developed by Alta and provided to the RTC during the ATP process in 2024. This tool helps to gauge the varying levels of access gain to different destination types based on bicycle network enhancements. This is represented by potential trips that may shift from vehicle to bicycle based on new low-stress connections in the bicycle network. The aggregate access gain to each destination type is shown for each scenario in Table 8 with overall analysis results shown graphically in Figure 417 through Figure. Additional maps highlighting results for each destination type (schools, parks, hospitals) included in Appendix B.

It is important to note that the estimated trips in Table 8 are intended to inform the planning process but are not intended to be refined or exact estimations of future bicycling trips.

Table 8. Estimated New Bicycle Trips to Community Destinations by Scenario

Total Estimated New Bicycle Trips To:	Scenario		
	1 – Connecting North South	2 – Building Off the BLBN	3 – Connecting to Schools and Parks
Hospitals	1,561	633	1,361
Schools	838	730	2,062
Parks	6,732	3,969	11,935
Overall	9,131	5,332	15,358

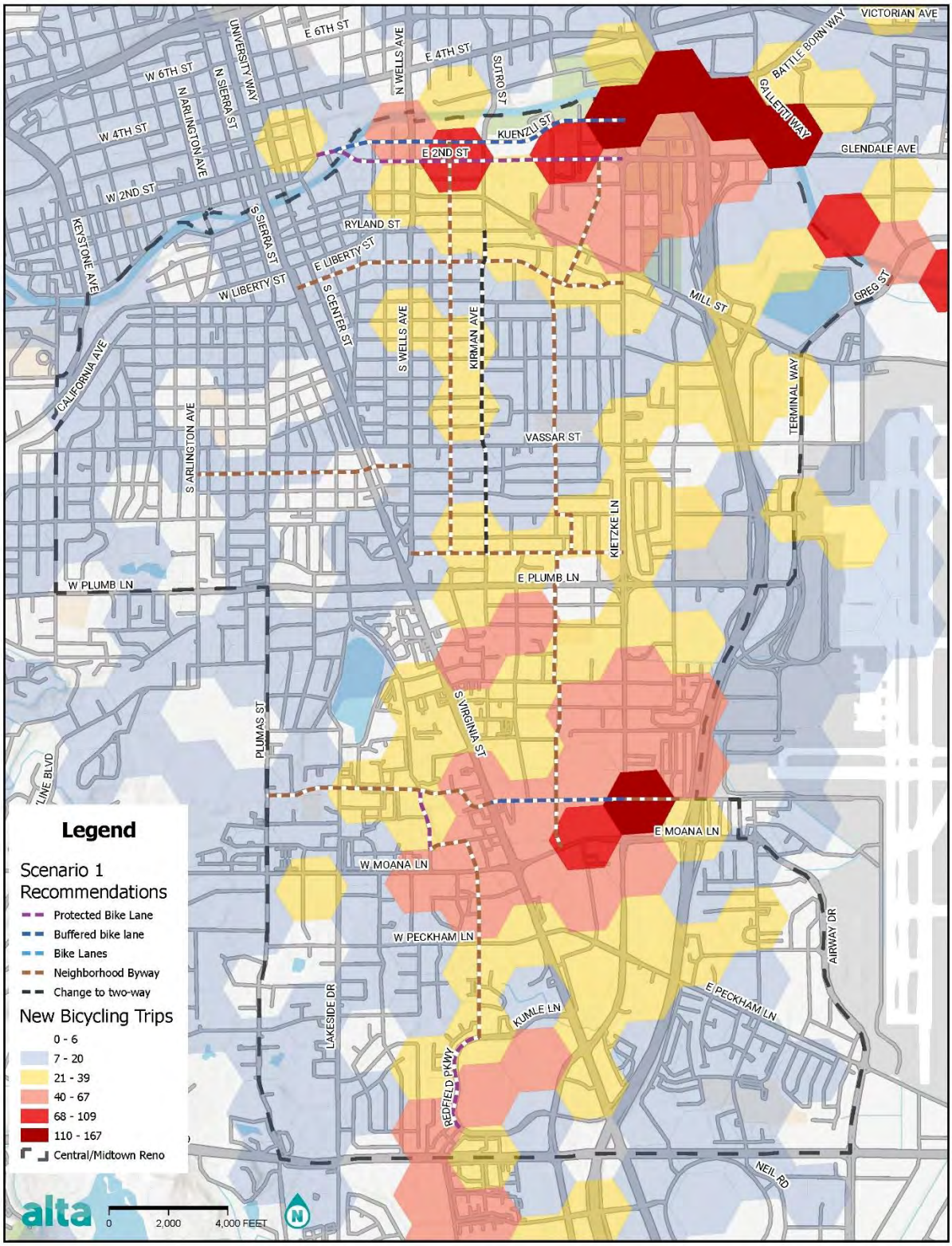


Figure 417. Scenario 1 – Overall Access Gains

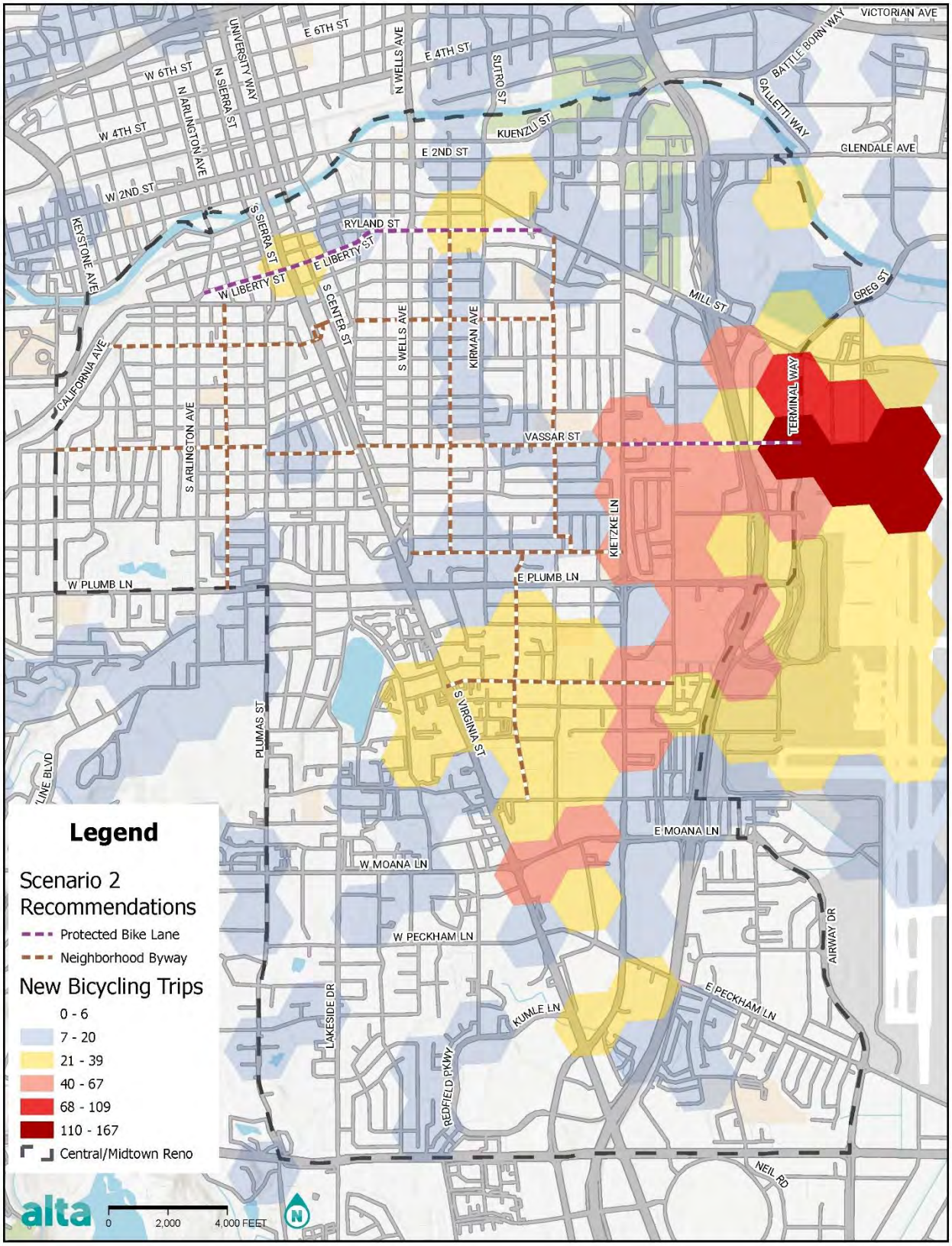


Figure 5. Scenario 2 – Overall Access Gains

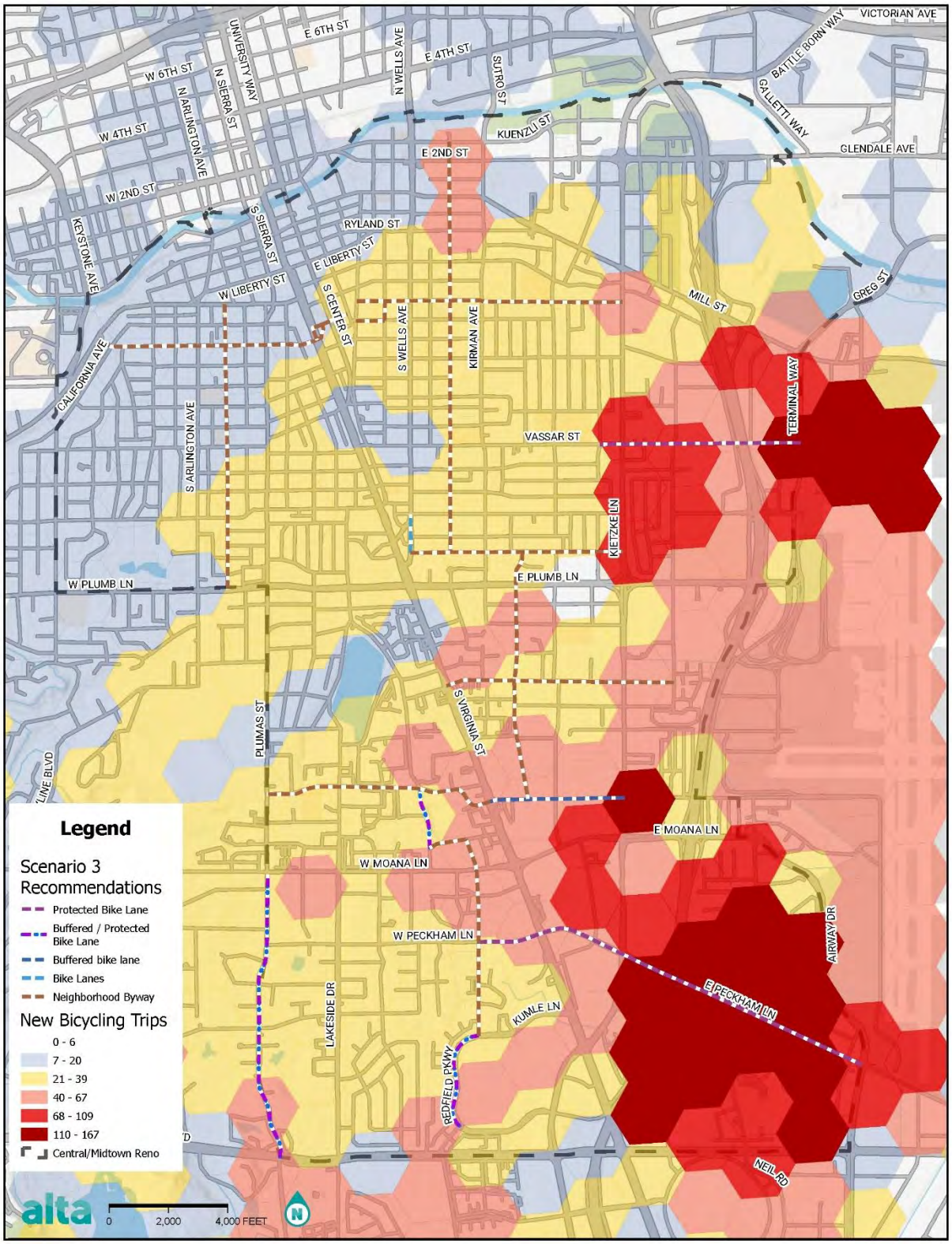


Figure 6. Scenario 3 – Overall Access Gains

Implementation Considerations

Implementation of recommended projects may be impacted by greater levels of coordination, analysis, design, or outreach that may result from projects that are seen as overly cumbersome to the general public or agency partners. This may include projects that result in noticeable traffic operational impacts, parking reductions in high demand areas or impact to City of Reno Fire and Police response times.

Primary Emergency Vehicle Route Network (PEVR) Considerations

The PEVR determines where vertical traffic-calming elements are permitted within the City of Reno. Roadways identified as neighborhood byways in the scenarios include some PEVR roadways. To implement these projects, it will be critical to have strong understanding of the appetites for experimentation from City of Reno staff with new traffic-calming elements such as speed cushions or to modification of the PEVR on select routes. Table 9 highlights the total percentage of recommendations that are located on the PEVR. This highlights that Scenario 1 has the largest percentage of PEVR roadways with a total of 60%, while Scenarios 2 and 3 have the same level at 41%.

Operational/Parking Considerations

Roadways identified in the scenarios represent generally strong candidates for capacity reductions or reutilization of roadway space. However, due to the more impactful nature of roadway reconfigurations it is important to factor in additional effort for engagement and outreach in addition to additional analysis to refine the conceptual design for some identified projects. Table 9 highlights the total percentage of projects in each scenario which requires capacity reduction or elimination of parking. These factors typically result in a higher level of outreach and engagement efforts compared to projects which do not adjust roadway or parking capacity.

Planning Level Cost Estimate

The scenario recommendations are intended to be scalable to fit within the available RTC budget with the understanding that planning level cost estimates, which are generated on per mile estimates, can be further refined during the final scenario selection process. The aggregate cost estimate for each scenario is shown in Table 9 for consideration. For a more detailed breakdown of planning level cost estimates, please see Appendix C.

Table 9. Implementation Considerations

Percentage of Roadways That:	Scenario		
	1 Connecting North South	2 Building Off the BLBN	3 Connecting to Schools and Parks
Are on the PEVR	60%	41%	41%
Require Capacity/Parking Reduction	27%	12%	18%
Total Planning Level Cost Estimate:	$ 5,662,126	$ 4,227,132	$ 5,977,831

Overall Scenario Comparison Matrix

Table 10 combines the results of the three comparison metrics into a simple table to support scenario selection and refinement. For simplicity, each scenario is given a ranking from 'Low' to 'Very High' based on how well it satisfies the metric. For the Implementation Considerations metric, each scenario is compared against each other for the portion of PEVR roadways and percentage of roadways which require capacity or parking reduction.

Table 10. Overall Scenario Comparison Matrix

Metric		Scenario		
		1 Connecting North South	**2 Building Off the BLBN**	**3 Connecting to Schools and Parks**
ATP Goals	Safety	Medium	Medium	**High**
	Mode Share and Community	**Medium/High**	Medium	**High**
	Maintenance	**High**	Medium	Low
Community Access	**Total Access Gains To:**			
	Hospitals	Medium	Medium	**High**
	Schools	**High**	Medium	**Very High**
	Parks	**High**	Low	**Medium/High**
Implementation Considerations	**Percentage of Roadways That:**			
	Are on the PEVR	**High**	Medium	Medium
	Require Capacity Reduction	Low/Medium	Low	Medium
	Total Planning Level Cost Estimate:	$5,662,126	$4,227,132	$5,977,831

Appendix A – Intersection Improvements

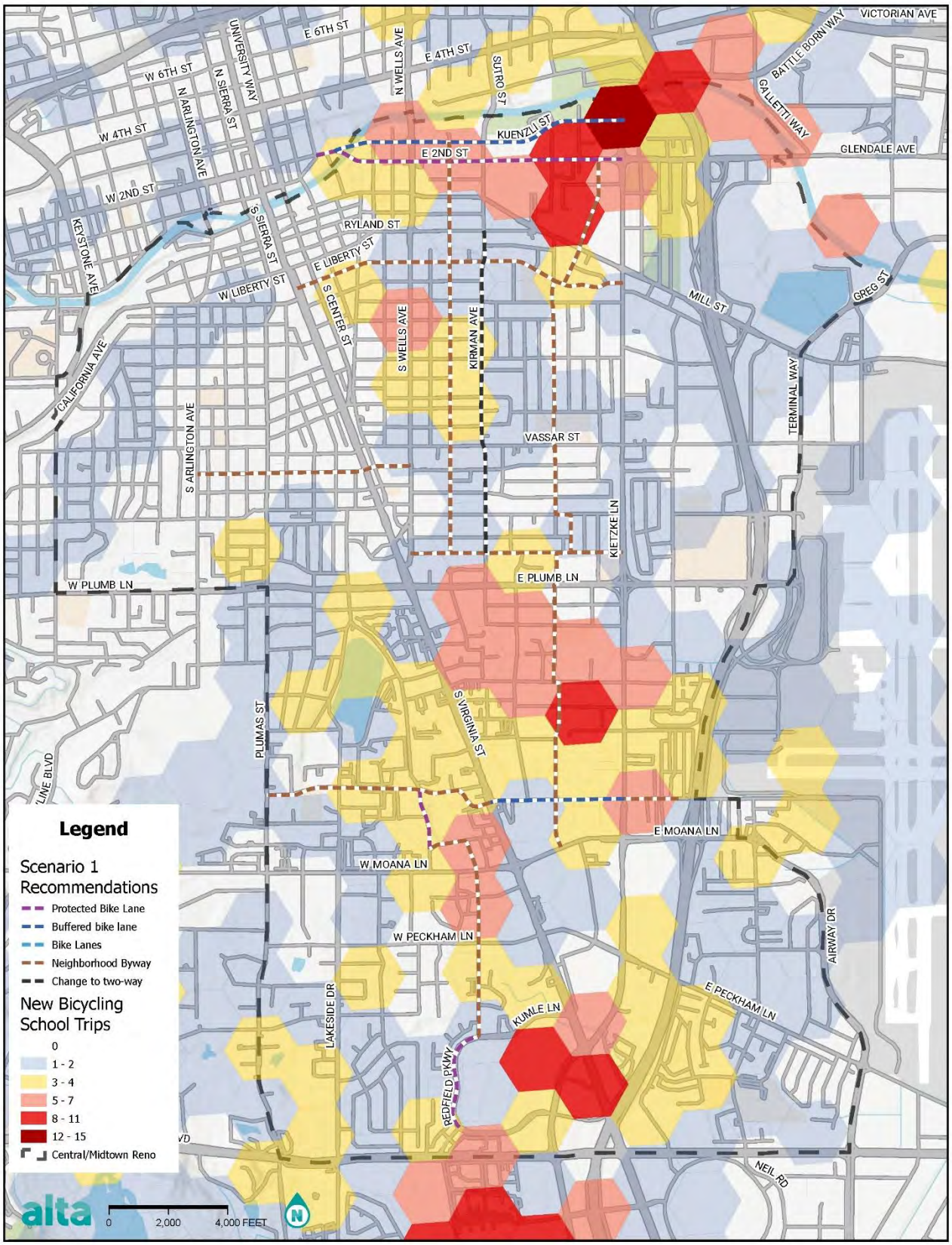
Scenario 1 Intersection Improvements			
Main Road	**Intersecting Street**	**Improvement(s)**	**Planning Level Cost Estimates**
Arlington Ave	W Taylor St	Curb Extensions	$ 10,000
Arroyo St	Arlington Ave	Curb Extensions, High-Visibility Crosswalk	$ 16,000
Arroyo St	Plumas St	Curb Extensions, High-Visibility Crosswalk	$ 22,000
Brinkby Way	Lakeside Dr	Curb Extensions	$ 10,000
Brinkby Way	Plumas St	Curb Extensions, High-Visibility Crosswalk, RRFB	$ 81,000
Casazza Dr	Locust St	Curb Extensions	$ 10,000
Casazza Dr	Yori Way	Curb Extensions	$ 10,000
Grove St	Yori Way	Curb Extensions	$ 10,000
Grove St	Yori Way	Curb Extensions	$ 10,000
Kietzke Lane	Roberts Lane	PHB	$ 650,000
Kirman Ave	E Taylor St	Curb Extensions	$ 10,000
Kirman Ave	Wonder St / Balzar Cir	Curb Extensions	$ 10,000
Locust St	2nd St	Curb Extensions	$ 10,000
Locust St	E Taylor St	Curb Extensions	$ 1,000
Locust St	Kuenzli St	Curb Extensions	$ 10,000
Locust St	Ryland St	RRFB	$ 50,000
Locust St	Stewart St	Curb Extensions	$ 10,000
Locust St	Wonder St	Curb Extensions	$ 10,000
Lymberry St	Brinkby Way	Curb Extensions	$ 10,000
Mill St	Yori Way	PHB	$ 650,000
Plumas St	St Lawrence Ave	Curb Extensions	$ 10,000
Plumas St	W Taylor St	Curb Extensions	$ 10,000
Redfield Pkwy	Baker Ln	Curb Extensions, Bike Jug handle	$ 25,000
Stewart St	Holcomb Ave	Curb Extensions, High-Visibility Crosswalk, RRFB	$ 61,000
Yori Way	Apple St	Curb Extensions	$ 10,000
Yori Way	Bresson Ave	Curb Extensions	$ 10,000
Yori Way	Plumb Lane	PHB, Curb Extensions	$ 660,000
Yori Way	Roberts St	Curb Extensions	$ 10,000

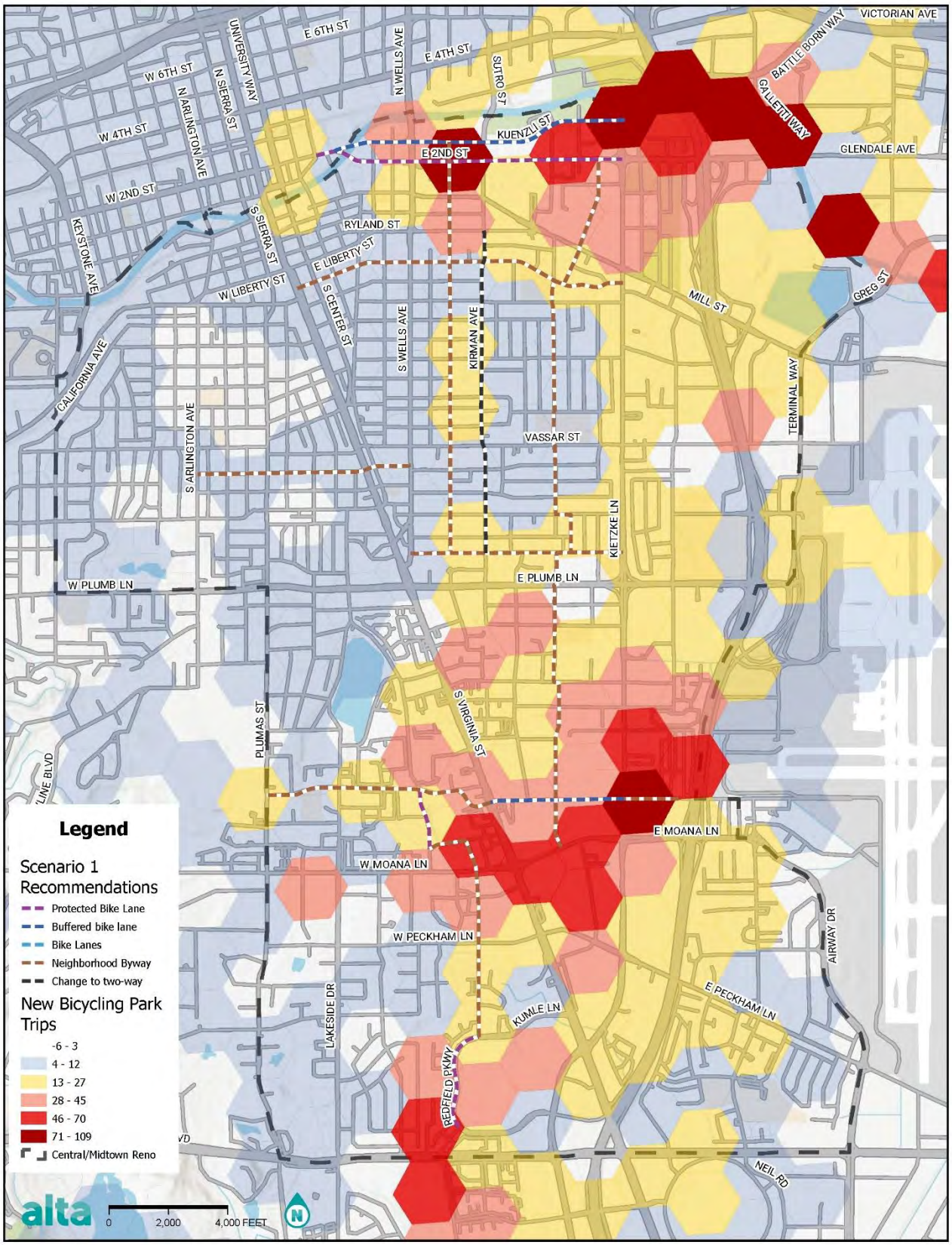
Scenario 2 Intersection Improvements			
Main Road	**Intersecting Street**	**Improvement(s)**	**Planning Level Cost Estimates**
Arlington Ave	Monroe St	Curb Extensions, RRFB	$ 55,000
Arlington Ave	St Lawrence Ave	Curb Extensions, High-Visibility Crosswalk, RRFB	$ 61,000
Lander St	California Ave	Curb Extensions, Relocate Crosswalk to westside, pedestrian refuge island	$ 22,000
Liberty St	Arlington Ave	Curb Extensions	$ 10,000
Liberty St	Center St	Curb Extensions	$ 10,000
Liberty St	Holcomb Ave	Curb Extensions, LPI	$ 15,500
Liberty St	Sierra St	Curb Extensions	$ 10,000
Plumas St	Caliente St	Curb Extensions, Short Bike Lane, Bike Jug Handles, Remove Parking	$ 25,000
Plumb Ln	Wrondel Way	PHB, Curb Extensions	$ 660,000
St Lawrence Ave	Foster Drive	Curb Extensions	$ 10,000
Vassar St	Locust St	Raised Crosswalks	$ 50,000
Virginia St	St Lawrence Ave	Bike Cut-Through	$ 20,000
Virginia St	Vassar St	Bicycle Wayfinding, WB Bike Box	$ 15,000
Wrondel Way	Gentry Way	Curb Extensions	$ 10,000
Wrondel Way	Grove St	Curb Extensions	$ 10,000
Yori Way	Vassar St	Raised Crosswalks	$ 50,000

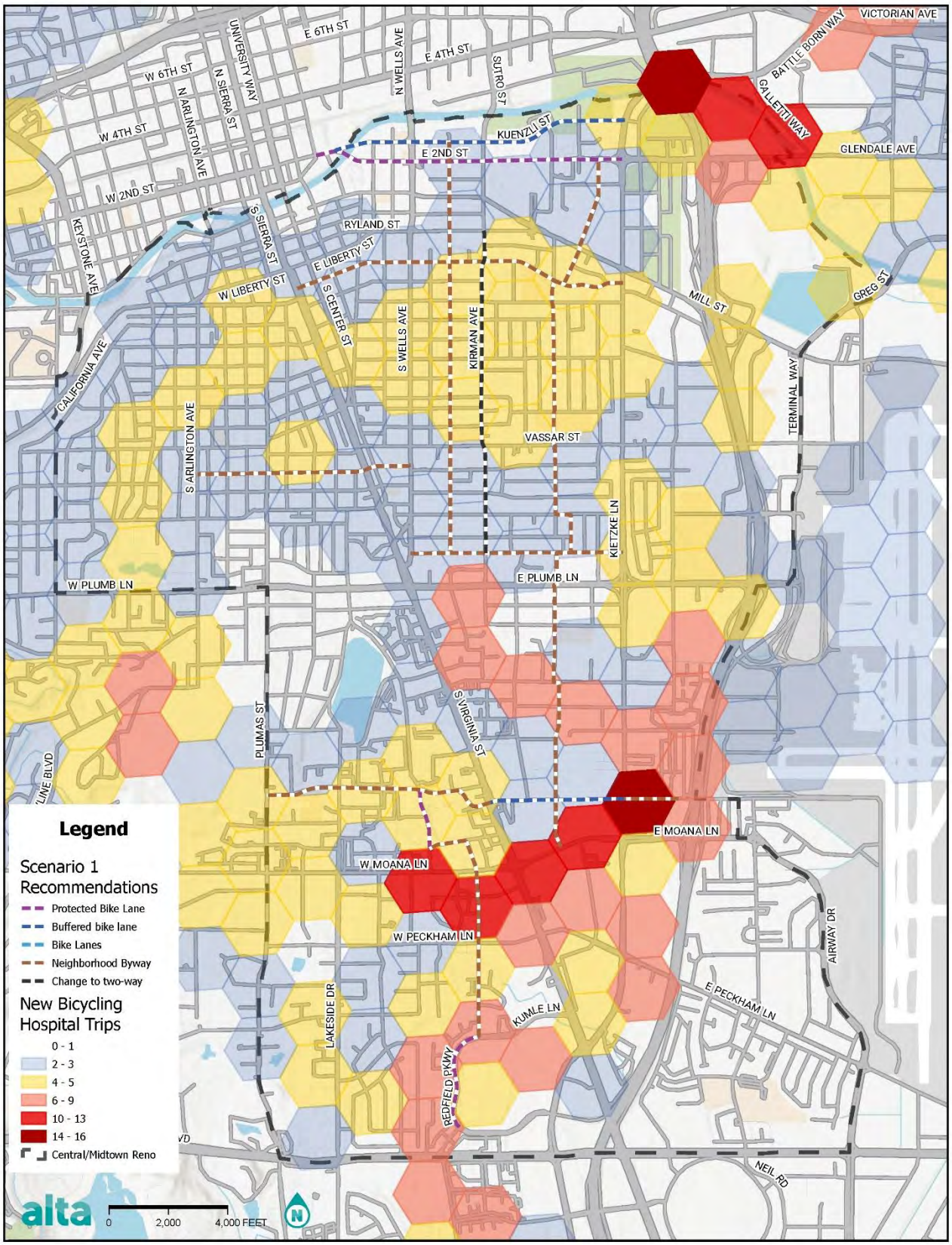
Scenario 3 Intersection Improvements			
Main Road	**Intersecting Street**	**Improvement(s)**	**Planning Level Cost Estimates**
Arlington Ave	St Lawrence Ave	Curb Extensions, High-Visibility Crosswalk, RRFB	$ 55,000
Brinkby Way	Lakeside Dr	Curb Extensions	$ 10,000
Brinkby Way	Plumas St	Curb Extensions, High-Visibility Crosswalk, RRFB	$ 61,000
Casazza Dr	Locust St	Curb Extensions	$ 10,000
Grove St	Yori Way	Curb Extensions	$ 10,000
Grove St	Yori Way	Curb Extensions	$ 10,000
Kietzke Lane	E Taylor St	PHB	$ 650,000
Kietzke lane	Margrave Dr	PHB	$ 650,000
Kietzke Lane	Roberts Lane	PHB	$ 650,000
Kietzke Ln	Peckham Ln	Curb Extensions, LPI	$ 15,500
Kirman Ave	E Taylor St	Curb Extensions	$ 10,000
Kirman Ave	Wonder St / Balzar Cir	Curb Extensions	$ 10,000
Lander St	California Ave	Curb Extensions, Relocate Crosswalk to westside, pedestrian refuge island	$ 22,000
Locust St	2nd St	Curb Extensions	$ 10,000
Locust St	E Taylor St	Curb Extensions	$ 10,000
Locust St	Kuenzli St	Curb Extensions	$ 10,000
Locust St	Ryland St	RRFB	$ 50,000
Locust St	Stewart St	Curb Extensions	$ 10,000
Locust St	Wonder St	Curb Extensions	$ 10,000
Lymberry St	Brinkby Way	Curb Extensions	$ 10,000
Peckham Ln	Atlantis / Convention Center Driveways	Curb Extensions	$ 10,000
Peckham Ln	Colesiuem Way	Curb Extensions, LPI	$ 15,500
Peckham Ln	Neil Rd	Curb Extensions, LPI	$ 15,500
Plumas St	Manzanita Ave	Curb Extensions	$ 30,000
Plumas St	McCarran Blvd	Curb Extensions	$ 30,000
Plumas St	St Lawrence Ave	Curb Extensions	$ 30,000
Plumb Ln	Wrondel Way	PHB, Curb Extensions	$ 660,000
St Lawrence Ave	Foster Drive	Curb Extensions	$ 10,000
Vassar St	Locust St	Raised Crosswalks	$ 50,000
Virginia St	St Lawrence Ave	Bike Cut-through	$ 20,000

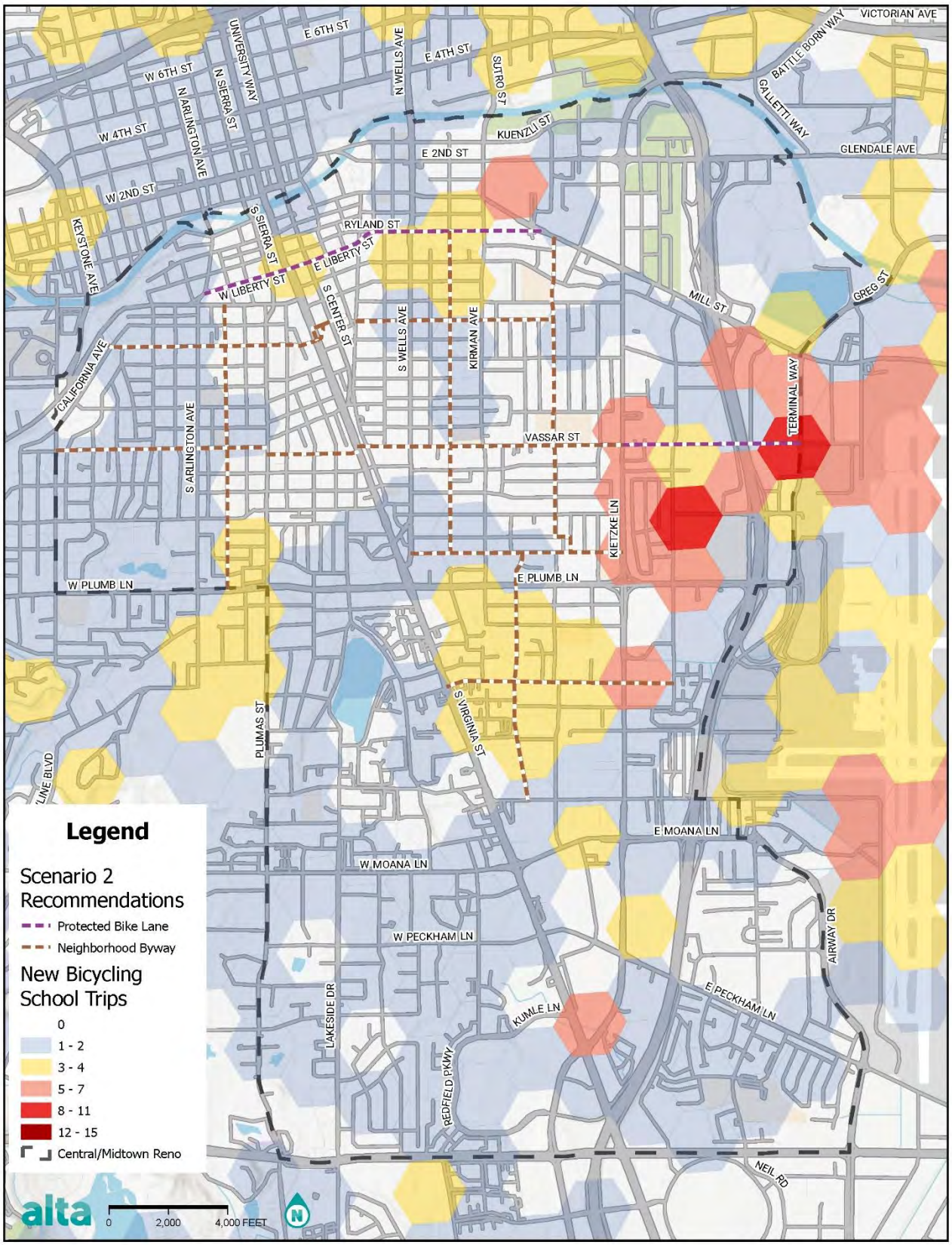
Scenario 3 Intersection Improvements			
Main Road	**Intersecting Street**	**Improvement(s)**	**Planning Level Cost Estimates**
Wrondel Way	Gentry Way	Curb Extensions	$ 10,000
Wrondel Way	Grove St	Curb Extensions	$ 10,000
Yori Way	Bresson Ave	Curb Extensions	$ 10,000
Yori Way	Roberts St	Curb Extensions	$ 10,000
Yori Way	Vassar St	Raised Crosswalks	$ 50,000

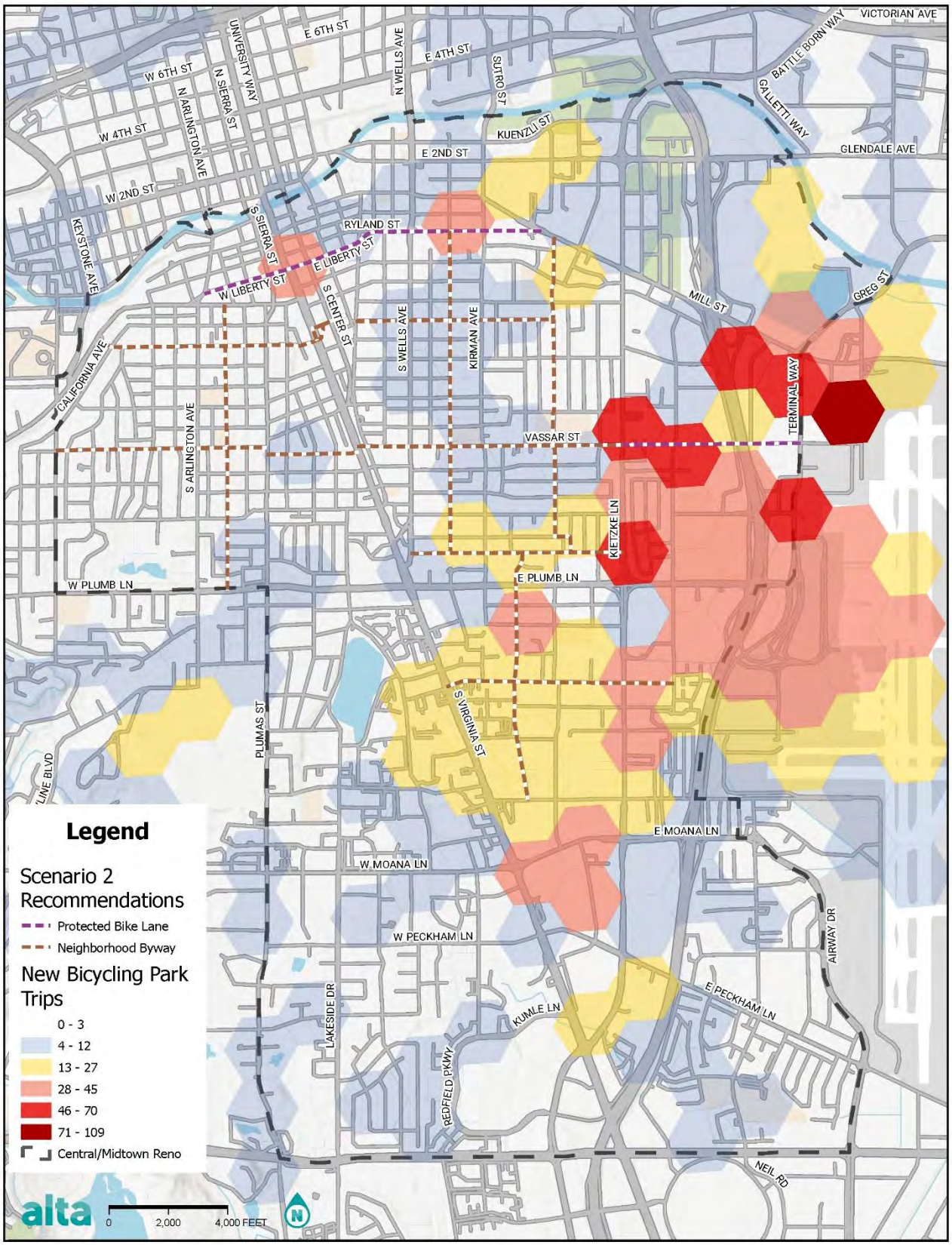
Appendix B – Destination Type Access Gains by Scenario

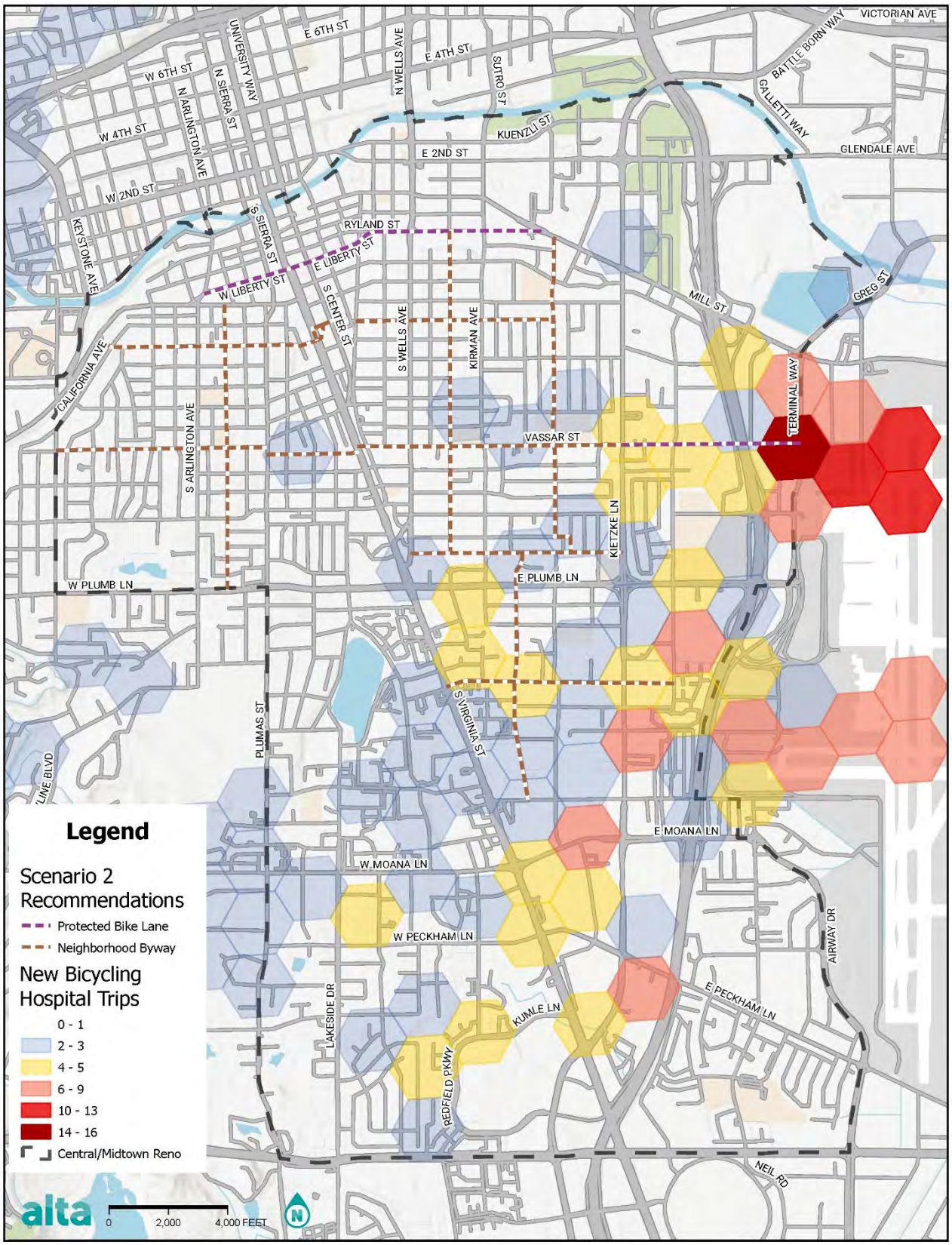

Legend
Scenario 1 Recommendations
Protected Bike Lane
Buffered bike lane
Bike Lanes
Neighborhood Byway
Change to two-way
New Bicycling School Trips
0
1 - 2
3 - 4
5 - 7
8 - 11
12 - 15
Central/Midtown Reno
0
2,000
4,000 FEET
E 6TH ST
W 6TH ST
UNIVERSITY WAY
N WELLS AVE
E 4TH ST
SUTRO ST
VICTORIAN AVE
BATTLE BORN WAY
GALLETTI WAY
GLENDALE AVE
W 4TH ST
N ARLINGTON AVE
N SIERRA ST
KUENZLI ST
E 2ND ST
W 2ND ST
KEYSTONE AVE
S SIERRA ST
RYLAND ST
E LIBERTY ST
W LIBERTY ST
S CENTER ST
S WELLS AVE
KIRMAN AVE
MILL ST
GREG ST
CALIFORNIA AVE
S ARLINGTON AVE
TERMINAL WAY
VASSAR ST
KIETZKE LN
W PLUMB LN
E PLUMB LN
PLUMAS ST
S VIRGINIA ST
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AIRWAY DR
E PECKHAM LN
LAKESIDE DR
KUMLE LN
REDFIELD PKWY
NEIL RD

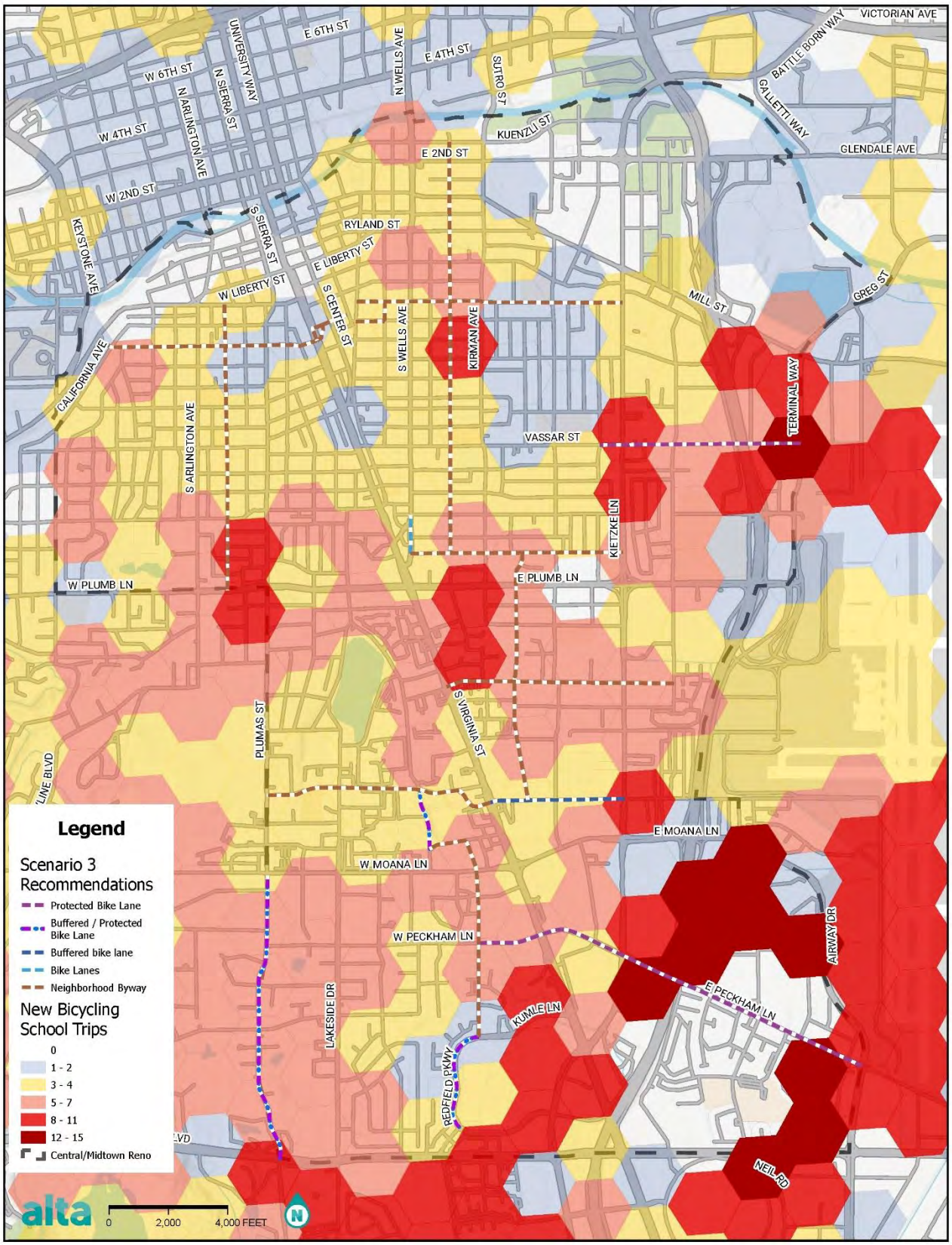

Legend
Scenario 1 Recommendations
Protected Bike Lane
Buffered bike lane
Bike Lanes
Neighborhood Byway
Change to two-way
New Bicycling Park Trips
-6 - 3
4 - 12
13 - 27
28 - 45
46 - 70
71 - 109
Central/Midtown Reno
alta
0
2,000
4,000 FEET
E 6TH ST
W 6TH ST
UNIVERSITY WAY
N SIERRA ST
N WELLS AVE
E 4TH ST
SUTRO ST
BATTLE BORN WAY
VICTORIAN AVE
GALLETTI WAY
GLENDALE AVE
W 4TH ST
N ARLINGTON AVE
KUENZLI ST
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W 2ND ST
KEYSTONE AVE
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RYLAND ST
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S CENTER ST
S WELLS AVE
KIRMAN AVE
MILL ST
GREG ST
CALIFORNIA AVE
S ARLINGTON AVE
TERMINAL WAY
VASSAR ST
KIETZKE LN
W PLUMB LN
E PLUMB LN
PLUMAS ST
S VIRGINIA ST
E MOANA LN
W MOANA LN
W PECKHAM LN
AIRWAY DR
LAKESIDE DR
E PECKHAM LN
KUMLE LN
REDFIELD PKWY
NEIL RD

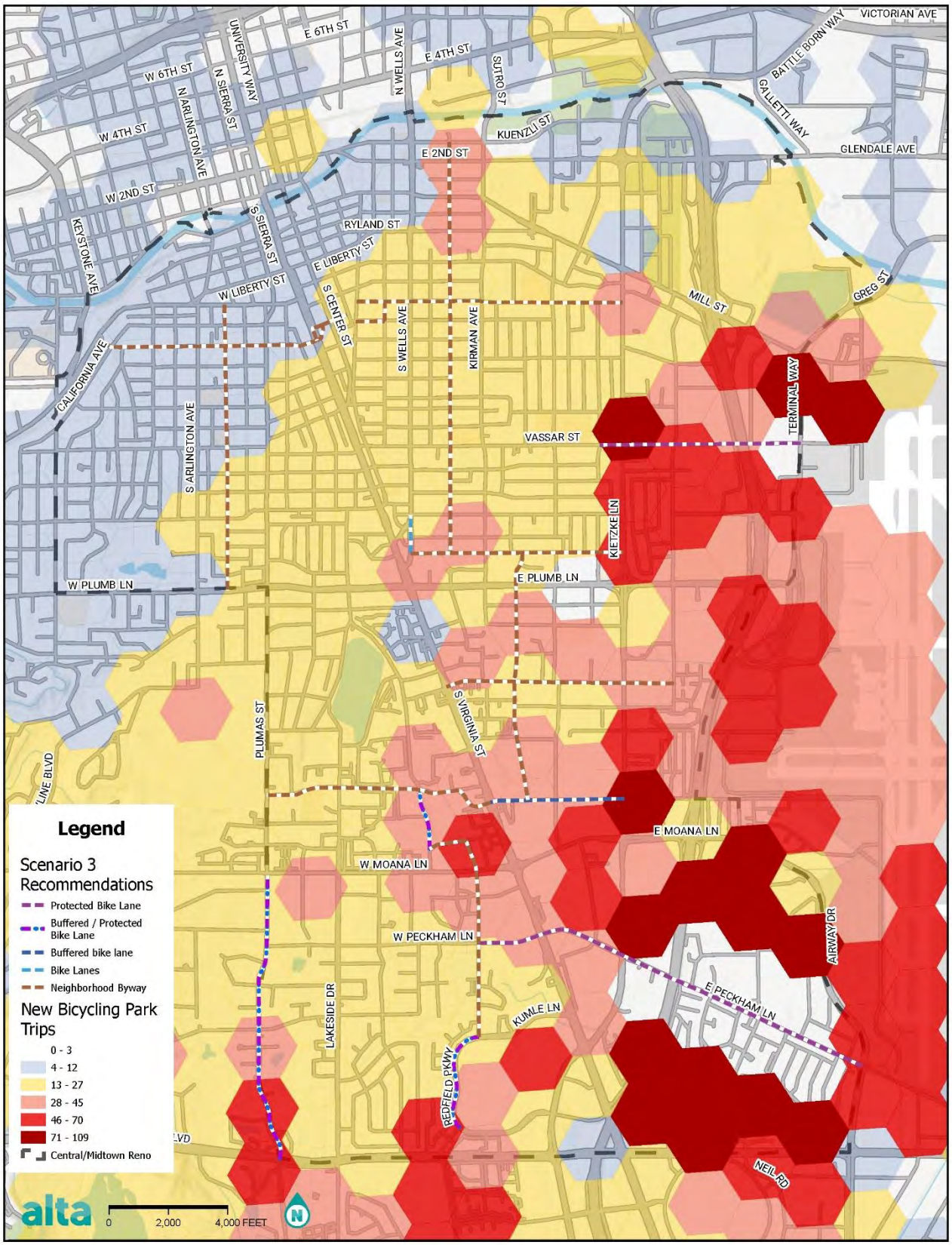

Legend
Scenario 1 Recommendations
Protected Bike Lane
Buffered bike lane
Bike Lanes
Neighborhood Byway
Change to two-way
New Bicycling Hospital Trips
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2 - 3
4 - 5
6 - 9
10 - 13
14 - 16
Central/Midtown Reno
alta
0
2,000
4,000 FEET
E 6TH ST
W 6TH ST
UNIVERSITY WAY
N WELLS AVE
E 4TH ST
SUTRO ST
VICTORIAN AVE
BATTLE BORN WAY
GALLETTI WAY
GLENDALE AVE
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N ARLINGTON AVE
N SIERRA ST
KUENZLI ST
E 2ND ST
W 2ND ST
KEYSTONE AVE
S SIERRA ST
RYLAND ST
E LIBERTY ST
W LIBERTY ST
S CENTER ST
S WELLS AVE
KIRMAN AVE
MILL ST
GREG ST
CALIFORNIA AVE
S ARLINGTON AVE
TERMINAL WAY
VASSAR ST
KIETZKE LN
W PLUMB LN
E PLUMB LN
PLUMAS ST
S VIRGINIA ST
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E PECKHAM LN
LAKESIDE DR
KUMLE LN
REDFIELD PKWY
NEIL RD

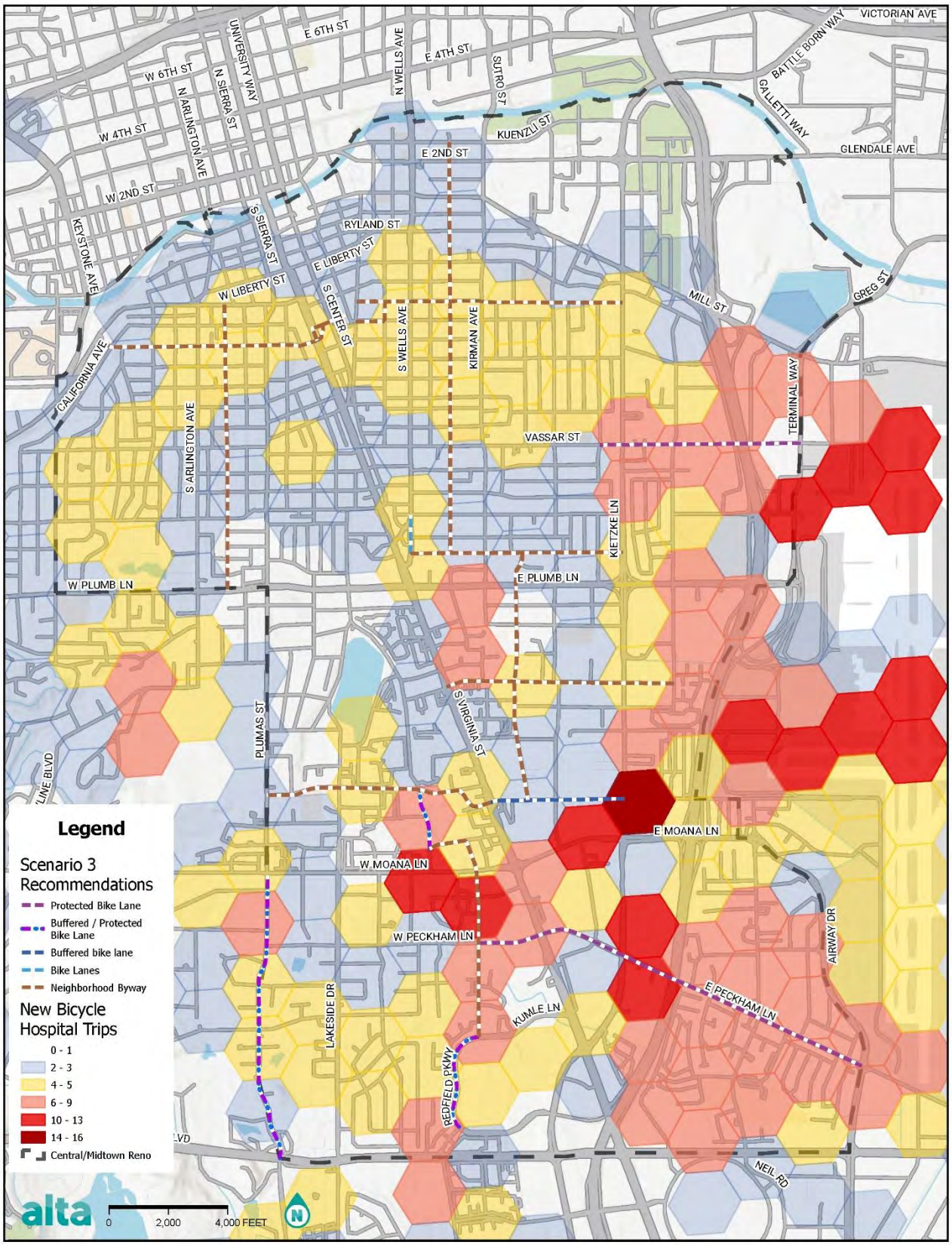

Legend
Scenario 2 Recommendations
Protected Bike Lane
Neighborhood Byway
New Bicycling School Trips
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1 - 2
3 - 4
5 - 7
8 - 11
12 - 15
Central/Midtown Reno
0
2,000
4,000 FEET
E 6TH ST
W 6TH ST
W 4TH ST
W 2ND ST
E 4TH ST
E 2ND ST
UNIVERSITY WAY
N SIERRA ST
N ARLINGTON AVE
N WELLS AVE
SUTRO ST
KUENZLI ST
VICTORIAN AVE
BATTLE BORN WAY
GALLETTI WAY
GLENDALE AVE
KEYSTONE AVE
S SIERRA ST
RYLAND ST
E LIBERTY ST
W LIBERTY ST
S CENTER ST
S WELLS AVE
KIRMAN AVE
MILL ST
GREG ST
CALIFORNIA AVE
S ARLINGTON AVE
TERMINAL WAY
VASSAR ST
KIETZKE LN
W PLUMB LN
E PLUMB LN
PLUMAS ST
S VIRGINIA ST
E MOANA LN
W MOANA LN
W PECKHAM LN
E PECKHAM LN
AIRWAY DR
LAKESIDE DR
KUMLE LN
REDFIELD PKWY
NEIL RD


Legend
Scenario 2 Recommendations
Protected Bike Lane
Neighborhood Byway
New Bicycling Park Trips
0 - 3
4 - 12
13 - 27
28 - 45
46 - 70
71 - 109
Central/Midtown Reno
alta
0
2,000
4,000 FEET
N
E 6TH ST
W 6TH ST
W 4TH ST
W 2ND ST
E 4TH ST
E 2ND ST
UNIVERSITY WAY
N ARLINGTON AVE
N SIERRA ST
N WELLS AVE
SUTRO ST
KUENZLI ST
BATTLE BORN WAY
VICTORIAN AVE
GALLETTI WAY
GLENDALE AVE
KEYSTONE AVE
S SIERRA ST
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W MOANA LN
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E PECKHAM LN
AIRWAY DR
LAKESIDE DR
KUMLE LN
REDFIELD PKWY
NEIL RD


Legend
Scenario 2 Recommendations
Protected Bike Lane
Neighborhood Byway
New Bicycling Hospital Trips
0 - 1
2 - 3
4 - 5
6 - 9
10 - 13
14 - 16
Central/Midtown Reno
alta
0
2,000
4,000 FEET
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W 6TH ST
UNIVERSITY WAY
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E 4TH ST
SUTRO ST
VICTORIAN AVE
BATTLE BORN WAY
GALLETTI WAY
W 4TH ST
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GLENDALE AVE
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KEYSTONE AVE
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RYLAND ST
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W LIBERTY ST
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KIRMAN AVE
MILL ST
GREG ST
CALIFORNIA AVE
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TERMINAL WAY
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W PLUMB LN
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S VIRGINIA ST
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W MOANA LN
W PECKHAM LN
AIRWAY DR
E PECKHAM LN
LAKESIDE DR
KUMLE LN
REDFIELD PKWY
NEIL RD


Legend
Scenario 3 Recommendations
Protected Bike Lane
Buffered / Protected Bike Lane
Buffered bike lane
Bike Lanes
Neighborhood Byway
New Bicycling School Trips
0
1 - 2
3 - 4
5 - 7
8 - 11
12 - 15
Central/Midtown Reno
alta
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2,000
4,000 FEET
N
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W 6TH ST
UNIVERSITY WAY
N WELLS AVE
E 4TH ST
SUTRO ST
VICTORIAN AVE
BATTLE BORN WAY
GALLETTI WAY
GLENDALE AVE
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N SIERRA ST
KUENZLI ST
E 2ND ST
W 2ND ST
KEYSTONE AVE
S SIERRA ST
RYLAND ST
E LIBERTY ST
W LIBERTY ST
S CENTER ST
S WELLS AVE
KIRMAN AVE
MILL ST
GREG ST
CALIFORNIA AVE
S ARLINGTON AVE
TERMINAL WAY
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W PECKHAM LN
AIRWAY DR
E PECKHAM LN
LAKESIDE DR
KUMLE LN
REDFIELD PKWY
NEIL RD


Legend
Scenario 3 Recommendations
Protected Bike Lane
Buffered / Protected Bike Lane
Buffered bike lane
Bike Lanes
Neighborhood Byway
New Bicycling Park Trips
0 - 3
4 - 12
13 - 27
28 - 45
46 - 70
71 - 109
Central/Midtown Reno
alta
0
2,000
4,000 FEET
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UNIVERSITY WAY
N WELLS AVE
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SUTRO ST
VICTORIAN AVE
BATTLE BORN WAY
GALLETTI WAY
GLENDALE AVE
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N ARLINGTON AVE
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AIRWAY DR
E PECKHAM LN
LAKESIDE DR
KUMLE LN
REDFIELD PKWY
NEIL RD


Legend
Scenario 3 Recommendations
Protected Bike Lane
Buffered / Protected Bike Lane
Buffered bike lane
Bike Lanes
Neighborhood Byway
New Bicycle Hospital Trips
0 - 1
2 - 3
4 - 5
6 - 9
10 - 13
14 - 16
Central/Midtown Reno
alta
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2,000
4,000 FEET
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UNIVERSITY WAY
N WELLS AVE
E 4TH ST
SUTRO ST
VICTORIAN AVE
BATTLE BORN WAY
GALLETTI WAY
GLENDALE AVE
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KEYSTONE AVE
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RYLAND ST
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MILL ST
GREG ST
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TERMINAL WAY
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S VIRGINIA ST
E MOANA LN
W MOANA LN
W PECKHAM LN
AIRWAY DR
E PECKHAM LN
LAKESIDE DR
KUMLE LN
REDFIELD PKWY
NEIL RD

Appendix C – Cost Estimate Unit/Per Mile Costs

Corridor Improvement	Cost Per Mile
Bike Lane	$ 183,600
Buffered Bike Lane	$ 261,000
Protected Bike Lane	$ 633,600
Bicycle Boulevard	$ 52,800
Bicycle Boulevard with Intersection Traffic Calming (Curb Extensions and 2 new crosswalks every 1/4 mile)	$ 223,664

Intersection Improvement	Cost Per Installation
Pedestrian Hybrid Beacon (PHB)	$ 650,000
Median Refuge Island	$ 50,000
RRFBs	$ 45,375
Raised Crosswalk	$ 23,024
Midblock Crossing	$ 19,577
Bike Jug Handle	$ 15,000
Curb Extensions	$ 10,000
High-Visibility Crosswalk	$ 6,000
Leading Pedestrian Interval	$ 5,500
Leading Pedestrian Interval	$ 5,500
Bike Box	$ 2,000
Bicycle Wayfinding	$ 2,000



Appendix E: Project Cutsheets

HARVARD WAY

PROJECT DESCRIPTION

This project focuses on creating a north/south connection in the eastern portion of the neighborhood to support students walking and biking to school and enhance connectivity from Grove Street to Mill Street. The project originated from the Central Reno / Midtown Neighborhood Network Plan and aims to help enhance connectivity in conjunction with upcoming development in the area.

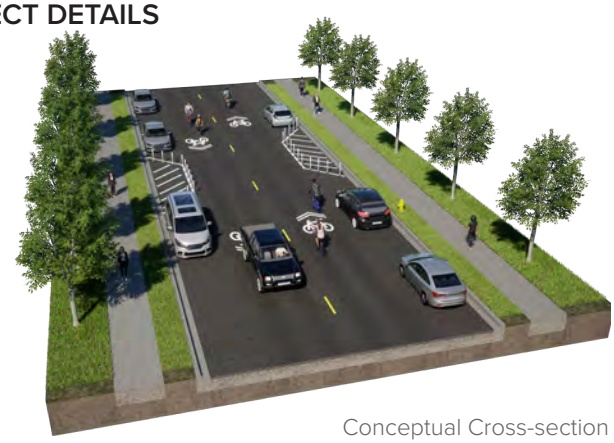
This project would build off of the existing bike lanes between Plumb Lane and Grove Street with the addition of safety and traffic calming elements north of Plumb Lane including curb extensions, leading pedestrian intervals and high visibility crosswalks. This treatment will help maintain low vehicle speeds and volumes and help create a more comfortable north / south connection.



Harvard Way

Roberts St to Grove St	Neighborhood Byway
Traffic Circle Bike Boxes	Curb Extensions Daylighting
PLANNING LEVEL COST ESTIMATE	
$320,468	

PROJECT DETAILS

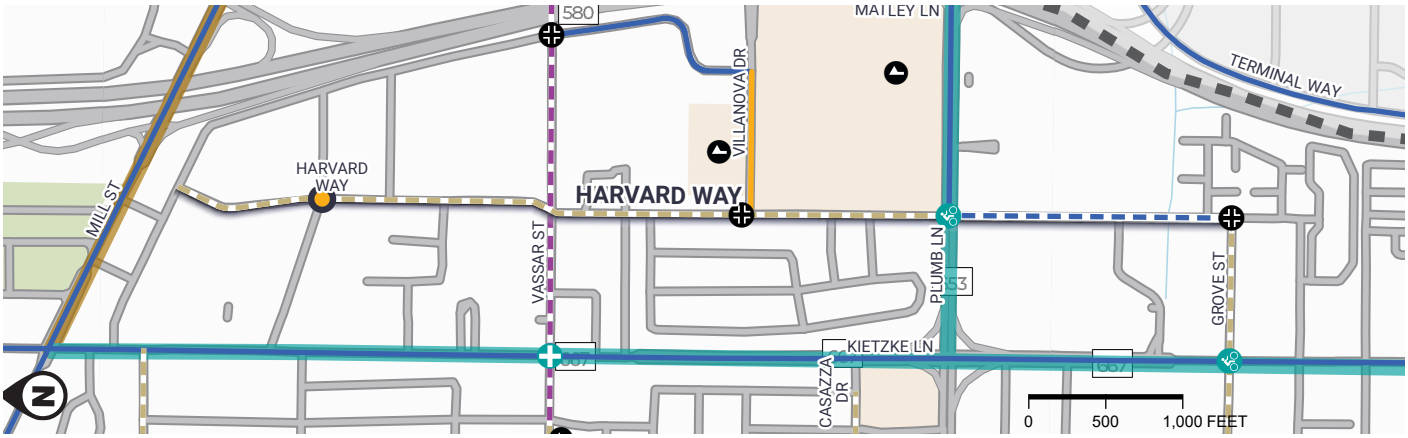


Conceptual Cross-section

Design Considerations

The proposed cross-section to the left represents the typical configuration for a neighborhood byway. Traffic calming elements along the route are intended to include curb extensions with neckdowns / chokers between intersections where parking utilization was observed to be relatively low. This project also includes potential modifications to signal timings which may need to be coordinated with additional analysis and improvements on major cross-streets such as Vassar Street.

PROJECT MAP



LEGEND

- Central/Midtown Reno
- school
- park

Existing Bike Facility

- bike lane
- shared use path
- shared lane

RTP Funded Project Type

- capacity
- multimodal

Central Reno Recommendations

- bike lane
- protected bike lane
- neighborhood byway

Intersection Concept Type

- curb extensions w/ minor enhancements
- protected intersection
- two-staged turn box / cut through / bike boxes
- traffic circle

2ND, KUENZLI & KIRMAN ST

PROJECT DESCRIPTION

This project would establish an east/west connection on the northern edge of the Central Reno / Midtown neighborhood and connecting to the Biggest Little Bike Network project at Evans Avenue. This project originated from the Central Reno / Midtown Neighborhood Network Plan and would provide a westbound protected bike lane on Kuenzli St and an eastbound protected bike lane on 2nd St with east/west travel continuing on Kuenzli St between Sutro St and Kietzke Lane with protected bike lanes.

Intersection improvements such as two-staged turn boxes at Sutro St/Kirman Ave will be crucial to assist bicyclists to safely continue east/west along this route. Additionally, a temporary bike lane on Kirman Avenue between Kuenzli St and 2nd St would help maintain protection and connectivity along the route but requires additional analysis to consider feasibility.



2nd, Kuenzli & Kirman Street

Lake St to Sutro St Lake St to Kietzke Ln	Protected Bike Lane One-Way Protect Bike Lane
Daylighting Protected Intersections	Curb Extensions Wayfinding Two-Staged Turn Box
	PLANNING LEVEL COST ESTIMATE
	$ 1,242,891

PROJECT DETAILS

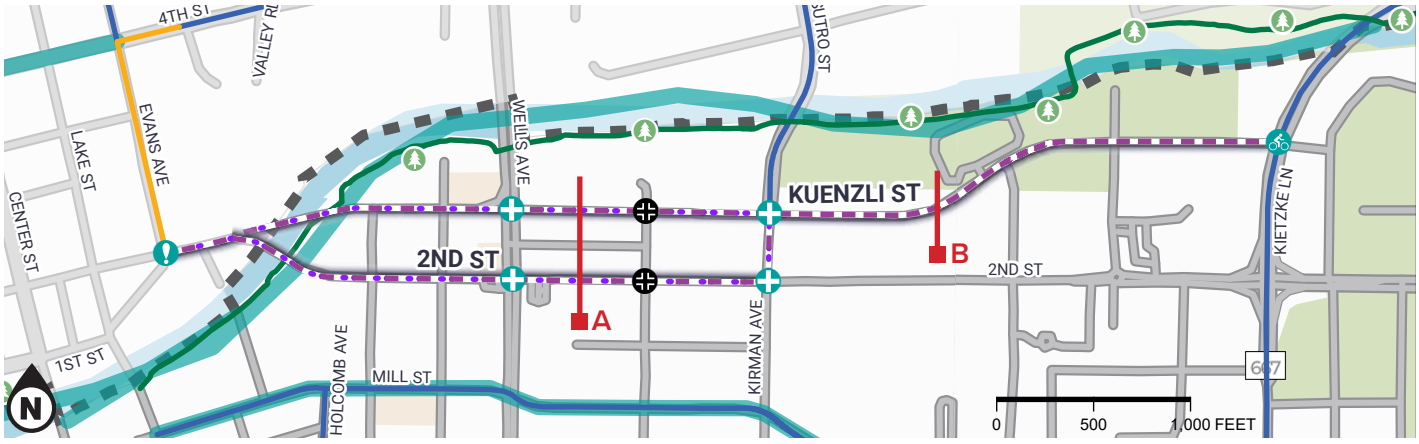


Cross-section A



Cross-section B

PROJECT MAP



LEGEND

- Central/Midtown Reno
- school
- park

Existing Bike Facility

- bike lane
- shared use path
- shared lane

RTP Funded Project Type

- capacity
- multimodal

Central Reno Recommendations

- one-way protected bike lane
- protected bike lane

Intersection Concept Type

- curb extensions w/ minor enhancements
- protected intersection
- two-staged turn box / cut through / bike boxes
- wayfinding

YORI WAY

PROJECT DESCRIPTION

This project would turn Yori Way into a Neighborhood Byway by adding curb extensions and chokers to help maintain low vehicle speeds and a comfortable shared street environment. With this project, Yori Way will provide a long north/south connection through the majority of the Central Reno / Midtown neighborhood with activated crossings of multiple major roadways.

The project originated from the Central Reno / Midtown Neighborhood Network Plan and will connect with the planned quick-build improvements on Roberts St, Vassar St, Casazza Dr, and Grove St. Additionally, this project will help provide direct connections to multiple neighborhood schools including Booth Elementary, Loder Elementary and Vaughn Middle School.



Yori Way

Mill St to Moana Ln	Neighborhood Byway
High Visibility Crosswalks Daylighting	Curb Extensions
PLANNING LEVEL COST ESTIMATE	
$696,778	

PROJECT DETAILS

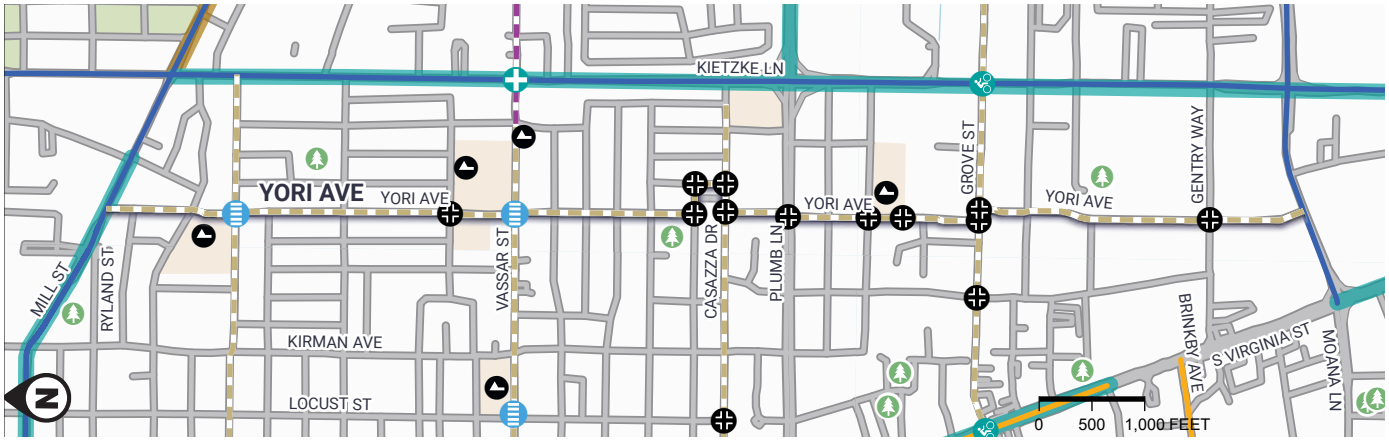


Conceptual Cross-section

Design Considerations

This project will compliment the recent traffic calming improvements on Yori Way at Roberts Street which include quick-build style curb extensions. This project will add curb extensions to reduce crossing distances and reduce turning vehicle speeds. Additionally, crossings at major roadways (ex. Plumb Lane) may be upgraded to overhead Rectangular Rapid Flashing Beacons (RRFBs) or Pedestrian Hybrid Beacons (PHBs) based on engineering judgment.

PROJECT MAP



LEGEND

- Central/Midtown Reno
- school
- park

Existing Bike Facility

- bike lane
- shared use path
- shared lane

RTP Funded Project Type

- capacity
- multimodal

Central Reno Recommendations

- bike lane
- protected bike lane
- neighbor-hood byway
- two-way cycle track

Intersection Concept Type

- curb extensions w/ minor enhancements
- protected intersection
- two-staged turn box / cut through / bike boxes
- high visbility crosswalk

GROVE STREET

PROJECT DESCRIPTION

Grove Street provides a key east/west connection through the heart of the Central Reno / Midtown neighborhood and across two major roadways: Kietzke Lane and Virginia Street. This project will create a Neighborhood Byway on Grove Street by adding curb extensions, chokers, and shared lane symbols.

This treatment will help reduce overall crossing distances for pedestrians and help maintain low vehicle speeds along the corridor and through intersections. The project originated from the Central Reno / Midtown Neighborhood Network Plan and will connect with planned quick-build improvements on Yori Way and the existing bicycle lanes on Harvard Way and provide connectivity to the Virginia Lake recreation area.



Grove Street

Lymberry St to Harvard Way	Neighborhood Byway
Curb Extensions Daylighting	Bike Boxes Bike Jug Handle
PLANNING LEVEL COST ESTIMATE	
$332,933	

PROJECT DETAILS

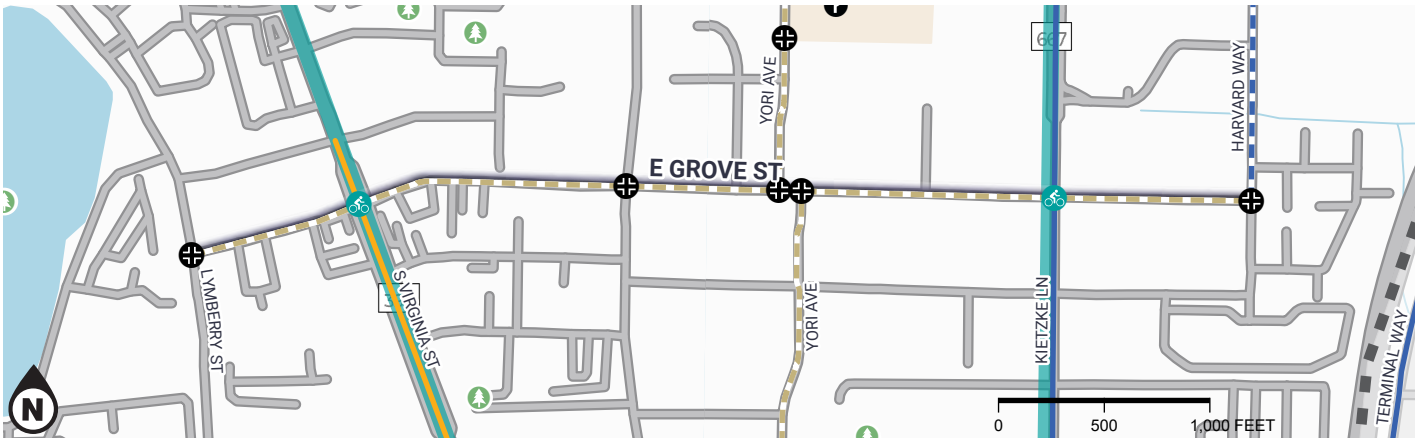


Conceptual Cross-section

Design Considerations

The addition of bicycle detection at the existing signalized intersections of Kietzke Lane and Virginia Street may be considered in order to enhance the use of this route for people biking. Additionally, the Neighborhood Byway design will help maintain parking along the corridor but there may be areas near driveways and intersections where parking space is reallocated to increase visibility and enhance safety.

PROJECT MAP



LEGEND

- Central/Midtown Reno
- school
- park

Existing Bike Facility
- bike lane
- shared use path
- shared lane

RTP Funded Project Type
- capacity
- multimodal

Central Reno Recommendations
- bike lane
- neighborhood byway

Intersection Concept Type
- curb extensions w/ minor enhancements
- two-staged turn box / cut through / bike boxes

CASAZZA DRIVE

PROJECT DESCRIPTION

Casazza Drive provides an alternative east/ west connection to Plumb Lane in the middle of the Central Reno / Midtown neighborhood. Improvements on Casazza Drive will help to enhance connectivity with local shopping destinations and will serve as an integral piece of the active transportation network by linking the planned quick-build improvements on Yori Way and the existing bike lanes on Wells Avenue.

The project originated from the Central Reno / Midtown Neighborhood Network Plan and will help to enhance safety along this corridor and support low vehicle speeds in addition to adding traffic calming elements like curb extensions and intersection daylighting.



Casazza Drive

Wells Ave to Kietzke Ln	Neighborhood Byway
Curb Extensions	Daylighting
PLANNING LEVEL COST ESTIMATE	
$222,851	

PROJECT DETAILS



Conceptual Cross-section

Design Considerations

The Neighborhood Byway design will help maintain parking along the corridor but there may be areas near driveways and intersections where parking space is reallocated to increase visibility and enhance safety. Additional connectivity may be achieved by striping in bike lanes on Wells Avenue from Casazza Drive to Grand Canyon Blvd with shared lane markings through the roundabout.

PROJECT MAP



LEGEND

- Central/Midtown Reno
- school
- park

Existing Bike Facility

- bike lane
- shared use path
- shared lane

RTP Funded Project Type

- capacity
- multimodal

Central Reno Recommendations

- bike lane
- neighborhood byway

Intersection Concept Type

- curb extensions w/ minor enhancements
- two-staged turn box / cut through / bike boxes

CALIENTE & MONROE STREET

PROJECT DESCRIPTION

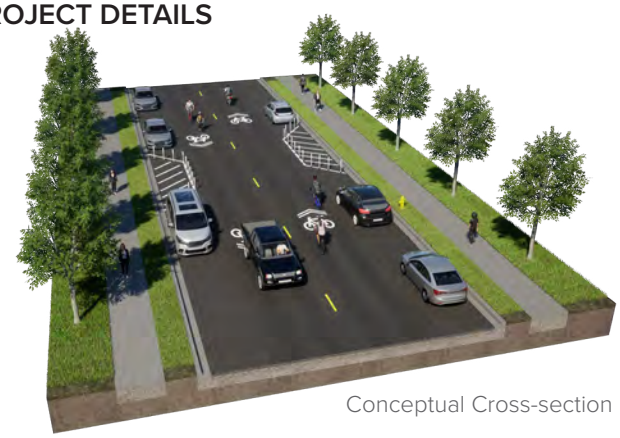
This connection helps to create a continuous east/west link across the neighborhood by acting as an extension of the improvements on Vassar Street. This route connects to the proposed improvements on Forest Street and would also connect with the existing bike lanes on Arlington Avenue. Mount Rose Street may be considered as alternative to this corridor.



Caliente & Monroe Street

Virginia St to Plumas St Plumas St to Marsh Ave	Neighborhood Byway
High Visibility Crosswalks Curb Extensions	Bike Boxes Bike Jug Handles
PLANNING LEVEL COST ESTIMATE	
$313,992	

PROJECT DETAILS

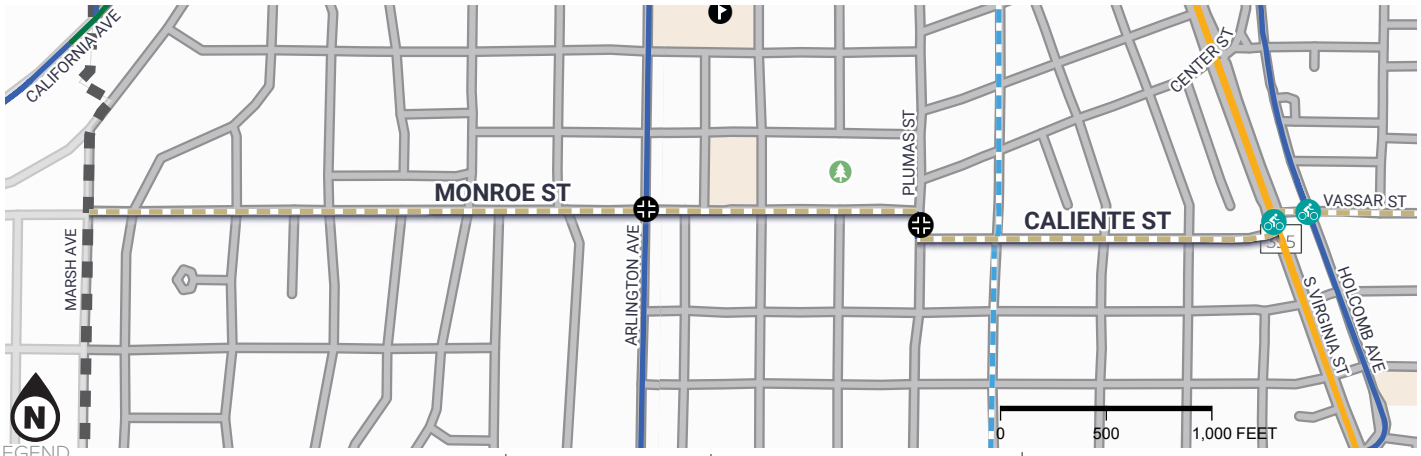


Conceptual Cross-section

Design Considerations

It is important to note that a Neighborhood Byway treatment on Caliente Street would require reconfiguring Caliente Street to work with bi-directional vehicle traffic or to create a contra-flow bike lane. Allowing bi-directional traffic is preferred and would require reconfiguration of the existing bulb-outs at the Virginia Street intersection. Additionally, in order to enhance the transition from Caliente Street to Monroe Street, a short bike lane with a bicycle jug handle is recommended. This would provide dedicated space for a bicyclist to turn while remaining outside of vehicle traffic.

PROJECT MAP



LEGEND

- Central/Midtown Reno
- school
- park

Existing Bike Facility
- bike lane
- shared use path
- shared lane

RTP Funded Project Type
- capacity
- multimodal

Central Reno Recommendations
- bike lane
- neighborhood byway

Intersection Concept Type
- curb extensions w/ minor enhancements
- two-staged turn box / cut through / bike boxes

VASSAR STREET

PROJECT DESCRIPTION

Vassar Street provides a helpful east/west connection through the Central Reno / Midtown neighborhood while connecting with multiple schools, the US Post Office, and popular commercial destinations along Virginia Street. This project will implement two configurations on either side of Kietzke Lane. West of Kietzke Lane, this project will create a Neighborhood Byway with curb extensions to support a slow-speed environment. East of Kietzke Lane, this project will reconfigure the existing roadway space to provide a protected bike lane in either direction while maintaining one vehicle lane in each direction and a two-way center turn lane.

The project originated from the Central Reno / Midtown Neighborhood Network Plan and will provide connections to the planned quick-build improvements on Yori Way and Harvard Way while also linking with the existing bike lanes on Holcomb Avenue, Wells Avenue, and Kietzke Lane.



Vassar Street

Terminal Way to S Virginia St	Protected Bike Lane Neighborhood Byway
Protected Intersections Curb Extensions	Daylighting Bike Boxes
PLANNING LEVEL COST ESTIMATE	
$948,302	

PROJECT DETAILS



Cross-section A



Cross-section B

PROJECT MAP



LEGEND

- Central/Midtown Reno
- school
- park

Existing Bike Facility

- bike lane
- shared use path
- shared lane

RTP Funded Project Type

- capacity
- multimodal

Central Reno Recommendations

- protected bike lane
- neighborhood byway

Intersection Concept Type

- curb extensions w/ minor enhancements
- protected intersection
- two-staged turn box / cut through / bike boxes
- high visibility crosswalk

TAYLOR & CHENEY STREET

PROJECT DESCRIPTION

This connection uses two short street segments on Taylor Street and Cheney Street to create a connection across Virginia Street between Holcomb Avenue and the planned quick-build improvements on Forest Street.

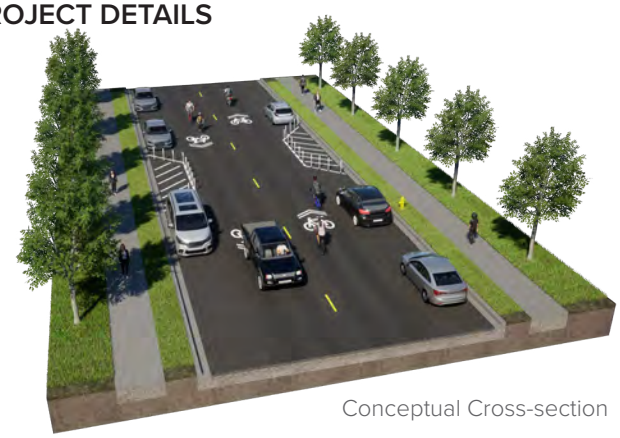
The project originated from the Central Reno / Midtown Neighborhood Network Plan and will include utilizing a cut through in the existing median to allow bicyclists only to turn left from Taylor Street and Cheney Street onto Virginia Street. This route will connect with the existing high visibility crosswalk across Holcomb Avenue and an existing high visibility crosswalk at Plumas Street.



Taylor & Cheney Street

Holcomb Ave to Plumas St	Neighborhood Byway
Daylighting Bike Cut-throughs	Curb Extensions
	PLANNING LEVEL COST ESTIMATE
	$141,310

PROJECT DETAILS

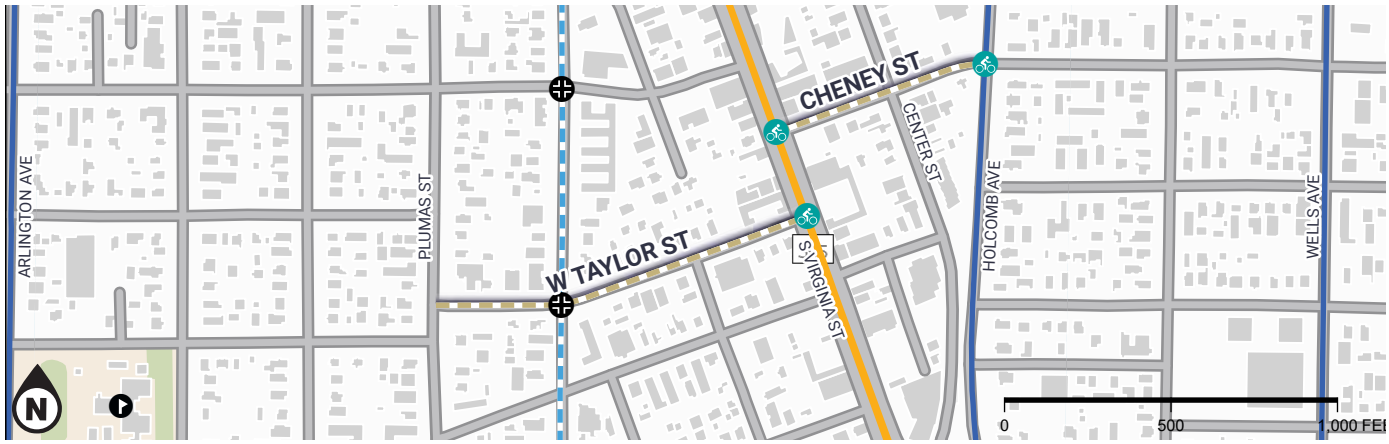


Conceptual Cross-section

Design Considerations

This route crosses Virginia Street in an area with a high level of pedestrian activity and would benefit from the addition of enhanced crosswalks at Virginia Street and Center Street. Additionally, the Neighborhood Byway design will help maintain on-street parking between Virginia Street and Kietzke Lane but there may be areas near driveways and intersections where parking space is reallocated to increase visibility and enhance safety.

PROJECT MAP



LEGEND

- Central/Midtown Reno
- school

Existing Bike Facility
- bike lane
- shared use path
- shared lane

RTP Funded Project Type
- capacity
- multimodal

Central Reno Recommendations
- two-way cycle track
- neighborhood byway

Intersection Concept Type
- curb extensions w/ minor enhancements
- two-staged turn box / cut through / bike boxes

MORAN & ROBERTS STREET

PROJECT DESCRIPTION

This project will create neighborhood byways on sections of Roberts Street and Moran Street to support east/west travel between Kietzke Lane and Virginia Street. Roberts Street and Moran Street are low-speed and low-volume roadways through the neighborhood which can provide connectivity enhancements between the Wells Avenue District, residential areas, and the Midtown commercial area.

Individuals traveling east/west will transition from Roberts Street to Moran Street at Wilson Street for a one block section which will include wayfinding signage and pavement markings. The project originated from the Central Reno / Midtown Neighborhood Network Plan and will also enhance the existing crossing on Wells Avenue by reducing the crossing distance with curb extensions.



Moran & Roberts Street

S Virginia St to Wilson St (Moran St)	Neighborhood Byway
High Visibility Crosswalks Wayfinding	Median Pedestrian Refuge
PLANNING LEVEL COST ESTIMATE	
$399,678	

PROJECT DETAILS

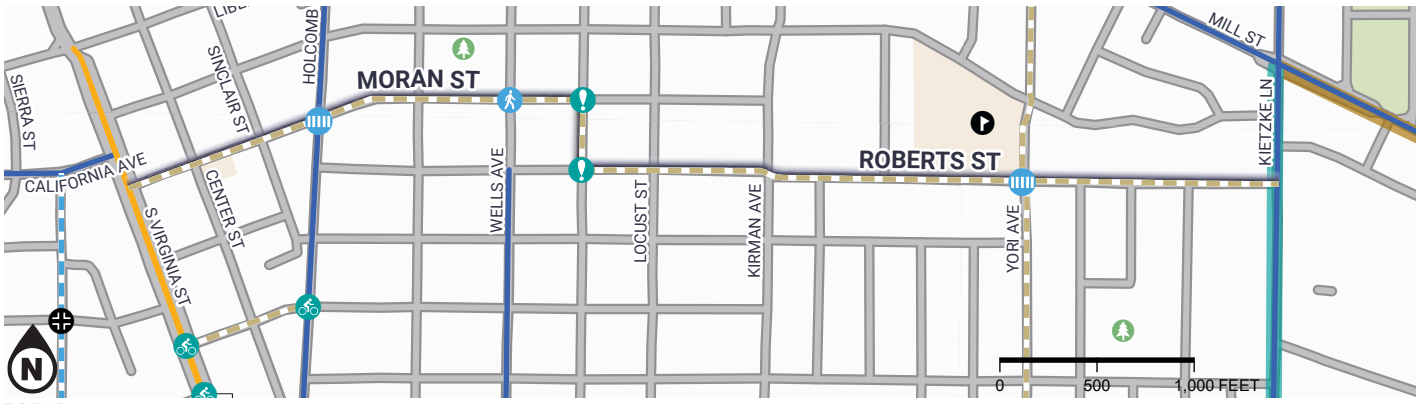


Conceptual Cross-section

Design Considerations

Wayfinding at the intersection of Moran Street / Virginia Street can help bicyclists continue west with the existing bike lanes on California Avenue. Eastbound movements of cyclists coming from California Avenue crossing Virginia Street will be considered in design, and will benefit from the addition of wayfinding signage. The Holcomb Avenue intersection presents a strong opportunity to add a marked crossing with curb extensions that is nearly equidistant between the existing crossings at Cheney Street and Ryland Street/Liberty Street. The Neighborhood Byway design will help maintain parking along the corridor but there may be areas near driveways and intersections where parking space is reallocated to increase visibility and enhance safety.

PROJECT MAP



LEGEND

- Central/Midtown Reno
- school
- park

Existing Bike Facility
- bike lane
- shared use path
- shared lane

RTP Funded Project Type
- capacity
- multimodal

Central Reno Recommendations
- two-way cycle track
- neighborhood byway

Intersection Concept Type
- curb extensions w/ minor enhancements
- high visibility crosswalk
- wayfinding
- two-staged turn box / cut through / bike boxes
- median pedestrian refuge

FOREST STREET

PROJECT DESCRIPTION

This north/south connection will link with the planned quick-build improvements on Caliente Street and the existing bike lanes on California Avenue. This route would provide a key uninterrupted link for bicyclists traveling north/southwest of Virginia Street and provide a proximate alternative to the shared lane facility on Virginia Street.

The project originated from the Central Reno / Midtown Neighborhood Network Plan and will help connect residential neighborhoods with the larger active transportation network and help provide crossing enhancements for pedestrians within this residential area.



Forest Street

California Ave to Mount Rose St	Neighborhood Byway
Traffic Circle Curb Extensions	High Visibility Crosswalks
PLANNING LEVEL COST ESTIMATE	
$377,113	

PROJECT DETAILS

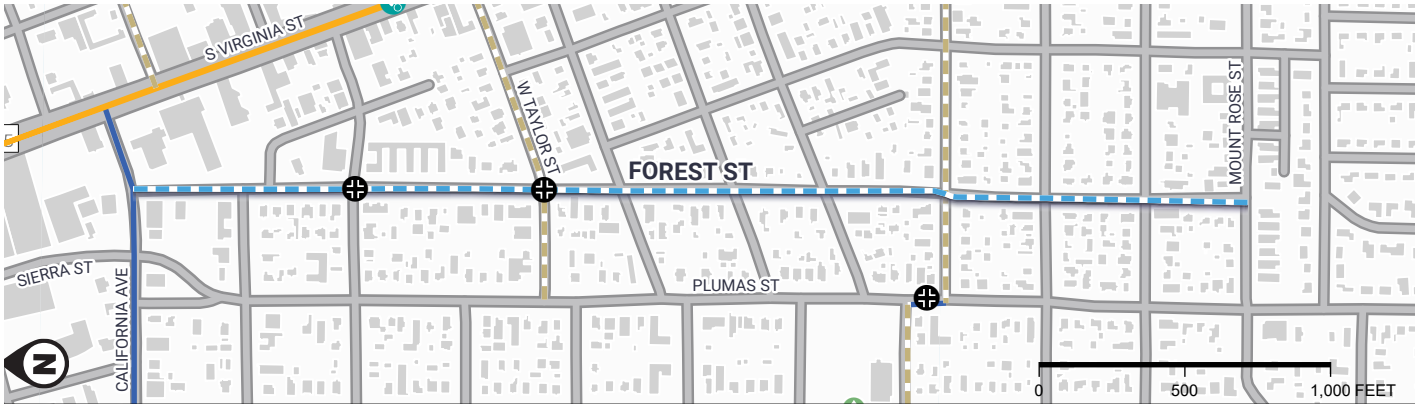


Conceptual Cross-section

Design Considerations

This project would consolidate roadway space to provide a two-way cycle track with a wide buffer in conjunction with a southbound vehicle lane and one lane of parking. The proposed configuration could accommodate physical separation in key areas if delineators or other vertical elements are placed on the far side of the buffer space (as shown in the cross-section).

PROJECT MAP



LEGEND

- Central/Midtown Reno
- school
- park

Existing Bike Facility

- bike lane
- shared use path
- shared lane

RTP Funded Project Type

- capacity
- multimodal

Central Reno Recommendations

- two-way cycle track
- neighborhood byway

Intersection Concept Type

- curb extensions w/ minor enhancements

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 5.3.**

To: Regional Transportation Commission

From: Graham Dollarhide, Planning Manager

SUBJECT: Draft FFY2025-2029 RTIP

RECOMMENDED ACTION

Receive a presentation on the draft Federal Fiscal Years (FFY) 2025-2029 Regional Transportation Improvement Program (RTIP). (Informational Only)

BACKGROUND AND DISCUSSION

The FFY 2025-2029 Regional Transportation Improvement Program (RTIP) provides documentation of regional transportation improvements and programs with identified funding sources over a five-year period. Projects in the RTIP were developed through the 2050 Regional Transportation Plan, 2025 Update (RTP) process.

This RTIP will continue many of the projects that are currently underway as well as standing programs contained in the previous document, including purchase of RIDE and ACCESS replacement vehicles; transit and paratransit operations; and the Safe Routes to School, trip reduction, traffic management, and pavement preservation programs. New projects included in the FFY 2025-2029 RTIP are those prioritized through the RTP process. The FFY 2025-2029 RTIP also updates current projects, reflecting necessary changes to project phasing, scope, cost, funding sources, and/or timing. Highlights of the changes are provided below with full details provided in the attached project listing. An air quality analysis is not required as part of this RTIP, as conformity was determined as part of the RTP process and there are no conformity-related changes to projects involving the addition of capacity.

NEW PROJECTS

- Bus Stop Improvements Program – maintain and improve systemwide bus stop locations with upgraded facilities and amenities.
- Active Transportation Program – created in response to recommendation in the Active Transportation Plan to fund annual active transportation projects identified in series of Neighborhood Network Plans.
- Highland Ranch Parkway Capacity – widen Highland Ranch Parkway to two lanes in each direction between Sun Valley Boulevard and Pyramid Way.

- University Area Transportation Project – created to implement recommended improvements to the area around the University of Nevada, Reno.
- Vista Boulevard Widening – widen Vista Boulevard to six lanes between I-80 and Prater Way.
- O'Brien's Pass Safety Project – safety improvements and shared use path along Golden Valley Road/W. 7th Avenue between Spearhead Way and Sun Valley Boulevard.
- Moya Boulevard Capacity Project – widen Moya Boulevard between Red Rock Road and Echo Avenue.
- North Hills Road Capacity Project – widen North Hills Boulevard between Golden Valley Road to Buck Drive.
- Lear Boulevard Connection – complete connection on Lear Boulevard between Military Road and Lemmon Drive.
- Mira Loma Drive Capacity – widen Mira Loma Drive between McCarran Boulevard and Veterans Parkway.
- Pyramid Hwy/US 395 Connector Phase 2 – widen Disc Drive between Pyramid Way and Vista Boulevard.
- South Virginia Street Multimodal and ADA North – improve bicycle and ADA facilities on S. Virginia Street between Meadowood Mall Circle and Moana Lane.
- Keystone Avenue Multimodal Improvements – improve bicycle and pedestrian facilities on Keystone Avenue between First Street and I-80.
- Peckham Lane Multimodal – improve/add sidewalks and bike lanes on Peckham Lane between Lakeside Drive and Airway Drive.
- 4th Street Bike Lanes (Sparks) – add bike lanes on 4th Street between Victorian Avenue and Queen Way.
- Previously approved Transportation Alternatives (TA) Set-Aside projects.

"COMPLETED" AND REMOVED PROJECTS

- Bicycle, Pedestrian, and ADA Improvements (Replaced by Active Transportation Program)
- South Virginia Street & I-580 Exit 29 Capacity & Safety Project (Completed)
- Steamboat Parkway and Damonte Ranch Parkway Capacity Project (Completed)
- Moana Lane Multimodal and ADA Improvements (Removed)

PROJECTS WITH SIGNIFICANT CHANGES

- McCarran Boulevard Safety and Operations – update to scope and budget and timeline to reflect current project details.
- North Valleys North Virginia Street Widening – update to budget and timeline to reflect current project details.

The draft RTIP is currently available to the public for review and comment at rtcwashoe.com. The public comment period complies with requirements outlined in the Public Participation Plan. A public hearing and RTIP approval is scheduled for August 15, 2025, at the RTC Board meeting.

FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

8/18/2023 - Approved a resolution adopting the FFY 2023-2027 RTIP.

NV20110301 - RTC RIDE and ACCESS - PM

Preventive Maintenance - Mechanical

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$59,375,000
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Maintenance
Air Quality	* Exempt
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	FTA 5307 LRG URB CAPITAL	$30,000,000	$3,500,000	$3,500,000	$3,500,000	$3,500,000	$3,500,000	-	$47,500,000
Other	LOCAL FUND	$4,000,000	-	-	-	-	-	-	$4,000,000
Other	LOCAL SALES TAX - RTCWA	$3,500,000	$875,000	$875,000	$875,000	$875,000	$875,000	-	$7,875,000
Total Other		$37,500,000	$4,375,000	$4,375,000	$4,375,000	$4,375,000	$4,375,000	-	$59,375,000
Total Prior Costs		$37,500,000	-	-	-	-	-	-	$37,500,000
Total Pro-grammed		$37,500,000	$4,375,000	$4,375,000	$4,375,000	$4,375,000	$4,375,000	-	$59,375,000

NV20110303 - RIDE Capital - Shelters

Transit Enhancements/Shelters

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$4,600,025
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Capital & Rehab
Air Quality	Exempt, Mass Transit - Reconstruction or renovation of transit structures.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	FTA 5307 LRG URB CAPITAL	$2,612,820	$200,000	$200,000	$200,000	$200,000	$200,000	-	$3,612,820
Other	FTA 5307 LRG URB OPERATING	$67,200	-	-	-	-	-	-	$67,200
Other	LOCAL FUND	$470,005	-	-	-	-	-	-	$470,005
Other	LOCAL SALES TAX - RTCWA	$200,000	$50,000	$50,000	$50,000	$50,000	$50,000	-	$450,000
Total Other		$3,350,025	$250,000	$250,000	$250,000	$250,000	$250,000	-	$4,600,025
Total Prior Costs		$3,350,025	-	-	-	-	-	-	$3,350,025
Total Programmed		$3,350,025	$250,000	$250,000	$250,000	$250,000	$250,000	-	$4,600,025

NV20110304 - RIDE Capital - Support Vehicles/Equipment

Purchase Support Vehicles/Equipment (RTC Administration) - Annual Program

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$880,000
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Capital & Rehab
Air Quality	Exempt, Mass Transit - Purchase of support vehicles.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	FTA 5307 LRG URB CAPITAL	$204,000	$60,000	$60,000	$60,000	$60,000	$60,000	-	$504,000
Other	FTA 5339 BUS/FAC LRG URB CAPITAL	$200,000	-	-	-	-	-	-	$200,000
Other	LOCAL FUND	$74,000	-	-	-	-	-	-	$74,000
Other	LOCAL SALES TAX - RTCWA	$27,000	$15,000	$15,000	$15,000	$15,000	$15,000	-	$102,000
Total Other		$505,000	$75,000	$75,000	$75,000	$75,000	$75,000	-	$880,000
Total Prior Costs		$505,000	-	-	-	-	-	-	$505,000
Total Programmed		$505,000	$75,000	$75,000	$75,000	$75,000	$75,000	-	$880,000

NV20110305 - RIDE Capital - Equipment

Purchase Shop Equipment/Other Equipment - Annual Program

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$3,995,000
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Capital & Rehab
Air Quality	Exempt, Mass Transit - Purchase of office, shop and operating equipment for existing facilities.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	FTA 5307 LRG URB CAPITAL	$1,856,000	$200,000	$200,000	$200,000	$200,000	$200,000	-	$2,856,000
Other	FTA 5307 LRG URB OPERATING	$250,000	$50,000	-	-	-	-	-	$300,000
Other	LOCAL FUND	$276,500	-	-	-	-	-	-	$276,500
Other	LOCAL SALES TAX - RTCWA	$250,000	$62,500	$62,500	$62,500	$62,500	$62,500	-	$562,500
Total Other		$2,632,500	$312,500	$262,500	$262,500	$262,500	$262,500	-	$3,995,000
Total Prior Costs		$2,632,500	-	-	-	-	-	-	$2,632,500
Total Programmed		$2,632,500	$312,500	$262,500	$262,500	$262,500	$262,500	-	$3,995,000

NV20110307 - RIDE Capital - Communication/Computer Equipment

Purchase Vehicle/Communication/Computer Equipment - Annual Program

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$5,113,500
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Capital & Rehab
Air Quality	Exempt, Mass Transit - Purchase of office, shop and operating equipment for existing facilities.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	FTA 5307 LRG URB CAPITAL	$2,340,800	$350,000	$350,000	$350,000	$350,000	$350,000	-	$4,090,800
Other	LOCAL FUND	$235,200	-	-	-	-	-	-	$235,200
Other	LOCAL SALES TAX - RTCWA	$350,000	$87,500	$87,500	$87,500	$87,500	$87,500	-	$787,500
Total Other		$2,926,000	$437,500	$437,500	$437,500	$437,500	$437,500	-	$5,113,500
Total Prior Costs		$2,926,000	-	-	-	-	-	-	$2,926,000
Total Programmed		$2,926,000	$437,500	$437,500	$437,500	$437,500	$437,500	-	$5,113,500

NV20110309 - RIDE Capital - Bldg. Renovations

Building Renovations and Upgrades - Annual Program

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$11,860,559
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Capital & Rehab
Air Quality	Exempt, Mass Transit - Reconstruction or renovation of transit structures.
TCM	No
Construction Start	2016
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Construction	FTA 5307 LRG URB CAPITAL	$5,874,500	-	-	-	-	-	-	$5,874,500
Construction	FTA 5337 GOOD REPAIR	$75,000	-	-	-	-	-	-	$75,000
Construction	FTA 5339 BUS/FAC LRG URB CAPITAL	$1,445,000	-	-	-	-	-	-	$1,445,000
Construction	LOCAL FUND	$1,503,625	-	-	-	-	-	-	$1,503,625
Construction	LOCAL SALES TAX - RTCWA	$418,684	-	-	-	-	-	-	$418,684
Construction	STBG >200K (WA)	$1,400,000	-	-	-	-	-	-	$1,400,000
Total Construction		$10,716,809	-	-	-	-	-	-	$10,716,809
Other	FTA 5307 LRG URB CAPITAL	-	$90,000	$90,000	$90,000	$90,000	$90,000	-	$450,000

Other	FTA 5337 GOOD RE-PAIR	-	$75,000	$75,000	$75,000	$75,000	$75,000	-	$375,000
Other	LOCAL SALES TAX - RTCWA	-	$63,750	$63,750	$63,750	$63,750	$63,750	-	$318,750
Total Other		-	$228,750	$228,750	$228,750	$228,750	$228,750	-	$1,143,750
Total Prior Costs		$10,716,809	-	-	-	-	-	-	$10,716,809
Total Programmed		$10,716,809	$228,750	$228,750	$228,750	$228,750	$228,750	-	$11,860,559

NV20110311 - ACCESS Operations - ADA

ADA-related operating expenses

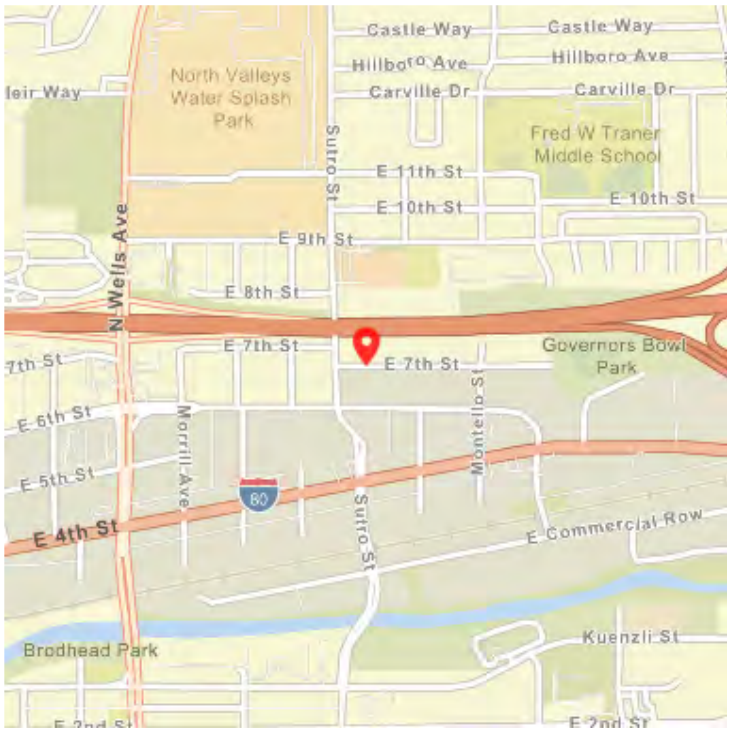
MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$11,825,600
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Other
Air Quality	Exempt, Mass Transit - Transit operating assistance.
TCM	Yes
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	FTA 5307 LRG URB OPERATING	$5,960,400	$700,000	$700,000	$700,000	$700,000	$700,000	-	$9,460,400
Other	LOCAL FUND	$790,200	-	-	-	-	-	-	$790,200
Other	LOCAL SALES TAX - RTCWA	$700,000	$175,000	$175,000	$175,000	$175,000	$175,000	-	$1,575,000
Total Other		$7,450,600	$875,000	$875,000	$875,000	$875,000	$875,000	-	$11,825,600
Total Prior Costs		$7,450,600	-	-	-	-	-	-	$7,450,600
Total Pro-grammed		$7,450,600	$875,000	$875,000	$875,000	$875,000	$875,000	-	$11,825,600

NV20110312 - ACCESS Capital - Sutro

Facilities (Operations & Maintenance)/Equipment - ACCESS Buildings at Sutro Street

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$1,150,000
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Capital & Rehab
Air Quality	Exempt, Mass Transit - Re-construction or renovation of transit structures.
TCM	No
Construction Start	-
From	600 Sutro Street
To	-



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	* FTA 5307	$280,000	-	-	-	-	-	-	$280,000
Other	FTA 5307 LRG URB CAPITAL	$320,000	$64,000	$64,000	$64,000	$64,000	$64,000	-	$640,000
Other	LOCAL FUND	$86,000	-	-	-	-	-	-	$86,000
Other	LOCAL SALES TAX - RTCWA	$64,000	$16,000	$16,000	$16,000	$16,000	$16,000	-	$144,000
Total Other		$750,000	$80,000	$80,000	$80,000	$80,000	$80,000	-	$1,150,000
Total Prior Costs		$750,000	-	-	-	-	-	-	$750,000
Total Pro-grammed		$750,000	$80,000	$80,000	$80,000	$80,000	$80,000	-	$1,150,000

WA20110215 - Traffic Management Program - Annual Traffic Signal, ITS Operations, & Intersection Improvements

Ongoing cycle of retiming of 1/3 of the regional traffic signals - approximately 150 per year, traffic engineering spot/intersection improvements, Intelligent Transportation Systems (ITS) operations.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$92,500,000
Lead Agency	RTC Washoe
Contact	Alex Wolfson
NDOT District	District 2
County	Washoe
Project Type	ITS
Air Quality	Exempt, Other - Traffic signal synchronization projects.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	CMAQ - WA	$950,000	-	-	-	-	-	-	$950,000
Other	LOCAL FUEL TAX - RTCWA	$40,000,000	$10,000,000	$10,000,000	$10,000,000	$10,000,000	$10,000,000	-	$90,000,000
Other	LOCAL FUND	$1,550,000	-	-	-	-	-	-	$1,550,000
Total Other		$42,500,000	$10,000,000	$10,000,000	$10,000,000	$10,000,000	$10,000,000	-	$92,500,000
Total Prior Costs		$42,500,000	-	-	-	-	-	-	$42,500,000
Total Programmed		$42,500,000	$10,000,000	$10,000,000	$10,000,000	$10,000,000	$10,000,000	-	$92,500,000

WA2012101 - Trip Reduction Program

Administrative Activities and Vanpool Program

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$24,026,316
Lead Agency	RTC Washoe
Contact	Scott Miklos
NDOT District	District 2
County	Washoe
Project Type	TDM
Air Quality	Exempt, Air Quality - Ride-sharing and van-pooling program.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	CMAQ - WA	$3,610,000	-	-	-	$2,280,000	$2,280,000	-	$8,170,000
Other	FTA 5307 LRG URB OPERATING	$2,280,000	$2,280,000	$2,280,000	$2,280,000	-	-	-	$9,120,000
Other	LOCAL FUND	$361,316	-	-	-	-	-	-	$361,316
Other	LOCAL SALES TAX - RTCWA	$240,000	$120,000	$120,000	$120,000	$120,000	$120,000	-	$840,000
Other	STBG >200K (WA)	$5,535,000	-	-	-	-	-	-	$5,535,000
Total Other		$12,026,316	$2,400,000	$2,400,000	$2,400,000	$2,400,000	$2,400,000	-	$24,026,316
Total Prior Costs		$12,026,316	-	-	-	-	-	-	$12,026,316
Total Programmed		$12,026,316	$2,400,000	$2,400,000	$2,400,000	$2,400,000	$2,400,000	-	$24,026,316

WA2012128 - Reno Freeway Service Patrol FFY25-29

Provide cost-free assistance to motorists and first responders for a variety of roadway incidents.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$10,757,116
Lead Agency	Nevada DOT
Contact	Sonja Jacinto-Acosta
NDOT District	District 2
County	Washoe
Project Type	Program Funding Buckets
Air Quality	* Exempt
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	HSIP	-	$3,912,480	-	-	-	-	-	$3,912,480
Other	NHPP	$6,306,780	-	-	-	-	-	-	$6,306,780
Other	STATE MATCH - NV	$331,936	$205,920	-	-	-	-	-	$537,856
Total Other		$6,638,716	$4,118,400	-	-	-	-	-	$10,757,116
Total Prior Costs		$6,638,716	-	-	-	-	-	-	$6,638,716
Total Programmed		$6,638,716	$4,118,400	-	-	-	-	-	$10,757,116

WA20130078 - RIDE Replacement Vehicles

Purchase RIDE replacement vehicles. Ongoing vehicle replacement schedule. FHWA funds to be transferred to FTA.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$71,304,621
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Capital & Rehab
Air Quality	Exempt, Mass Transit - Purchase new buses and rail cars to replace existing vehicles or minor expansions of fleet.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	CMAQ - WA	$32,226,135	-	-	$4,500,000	-	$4,500,000	-	$41,226,135
Other	FTA 5307 LRG URB CAPITAL	$1,360,000	-	-	-	-	-	-	$1,360,000
Other	FTA 5309 SMALL STARTS	$4,080,000	-	-	-	-	-	-	$4,080,000
Other	FTA 5339 BUS/FAC LRG URB CAPITAL	$1,568,000	$4,500,000	$4,500,000	-	$4,500,000	-	-	$15,068,000
Other	LOCAL FUND	$3,133,113	-	-	-	-	-	-	$3,133,113
Other	LOCAL SALES TAX - RTCWA	$835,663	$236,842	$236,842	$236,842	$236,842	$236,842	-	$2,019,873
Other	STBG >200K (WA)	$4,417,500	-	-	-	-	-	-	$4,417,500
Total Other		$47,620,411	$4,736,842	$4,736,842	$4,736,842	$4,736,842	$4,736,842	-	$71,304,621
Total Prior Costs		$47,620,411	-	-	-	-	-	-	$47,620,411

Total Programmed	$47,620,411	$4,736,842	$4,736,842	$4,736,842	$4,736,842	$4,736,842	- $71,304,621

WA20140044 - Safe Routes to School

County wide safe routes to school program

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$2,430,520
Lead Agency	RTC Washoe
Contact	Jennifer Iveson
NDOT District	District 2
County	Washoe
Project Type	Other
Air Quality	Exempt, Other - Transportation enhancement activities.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	LOCAL FUND	$88,950	$12,800	$13,184	$6,592	-	-	-	$121,526
Other	STBG >200K (WA)	$1,690,050	$243,200	-	-	-	-	-	$1,933,250
Other	TAP >200K STBG (WA)	-	-	$250,496	$125,248	-	-	-	$375,744
Total Other		$1,779,000	$256,000	$263,680	$131,840	-	-	-	$2,430,520
Total Prior Costs		$1,779,000	-	-	-	-	-	-	$1,779,000
Total Programmed		$1,779,000	$256,000	$263,680	$131,840	-	-	-	$2,430,520

WA20140046 - ACCESS Replacement Vehicles

Purchase ACCESS Replacement Vehicles - Ongoing Vehicle Replacement Schedule

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$14,057,578
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Capital & Rehab
Air Quality	Exempt, Mass Transit - Purchase new buses and rail cars to replace existing vehicles or minor expansions of fleet.
TCM	Yes
Construction Start	-
From	-
To	-

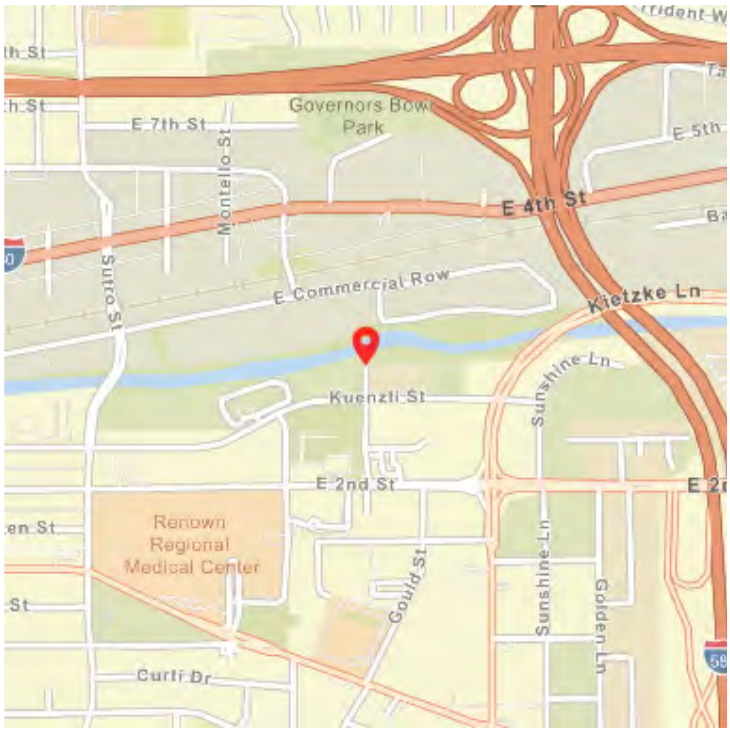
Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	* FTA 5339 BUS FAC	$480,800	-	-	-	-	-	-	$480,800
Other	CMAQ - WA	$3,050,000	$2,100,000	-	$2,100,000	-	-	-	$7,250,000
Other	FTA 5307 LRG URB CAPITAL	$1,200,000	-	-	-	-	-	-	$1,200,000
Other	FTA 5339 BUS/FAC LRG URB CAPITAL	$937,894	-	-	-	-	-	-	$937,894
Other	LOCAL FUND	$637,306	-	-	-	-	-	-	$637,306
Other	LOCAL SALES TAX - RTCWA	$335,526	$110,526	-	$110,526	-	-	-	$556,578
Other	STBG >200K (WA)	$2,995,000	-	-	-	-	-	-	$2,995,000
Total Other		$9,636,526	$2,210,526	-	$2,210,526	-	-	-	$14,057,578
Total Prior Costs		$9,636,526	-	-	-	-	-	-	$9,636,526
		$9,636,526	$2,210,526	-	$2,210,526	-	-	-	$14,057,578

Total Programmed	

WA20150003 - Truckee River Shared Use Path

Construct Pathway

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$777,455
Lead Agency	RTC Washoe
Contact	Jeff Wilbrecht
NDOT District	District 2
County	Washoe
Project Type	Active Transportation (Bike/Ped)
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	Yes
Construction Start	2024
From	John Champion Memorial Park
To	East side of the US 395/IR580 overpass



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUND	$10,638	-	-	-	-	-	-	$10,638
Preliminary Engineering	TAP >200K STBG (WA)	$202,116	-	-	-	-	-	-	$202,116
Total Preliminary Engineering		$212,754	-	-	-	-	-	-	$212,754
Right of Way	LOCAL FUND	$564,700	-	-	-	-	-	-	$564,700
Total Right of Way		$564,700	-	-	-	-	-	-	$564,700
Construction	STATE MATCH - NV	$1	-	-	-	-	-	-	$1
Total Construction		$1	-	-	-	-	-	-	$1
Total Prior Costs		$777,455	-	-	-	-	-	-	$777,455
Total Programmed		$777,455	-	-	-	-	-	-	$777,455

WA20150006 - ACCESS Capital - Facilities

Annual Facilities (Operations and Maintenance) Program

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$762,500
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Maintenance
Air Quality	* Exempt
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	FTA 5339 BUS/FAC LRG URB CAPITAL	$360,000	$50,000	$50,000	$50,000	$50,000	$50,000	-	$610,000
Other	LOCAL FUND	$40,000	-	-	-	-	-	-	$40,000
Other	LOCAL SALES TAX - RTCWA	$50,000	$12,500	$12,500	$12,500	$12,500	$12,500	-	$112,500
Total Other		$450,000	$62,500	$62,500	$62,500	$62,500	$62,500	-	$762,500
Total Prior Costs		$450,000	-	-	-	-	-	-	$450,000
Total Pro-grammed		$450,000	$62,500	$62,500	$62,500	$62,500	$62,500	-	$762,500

WA20150011 - Pavement Preservation Program

Annual Pavement Preservation Program - Roadway Reconstruction and Preventive Maintenance

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$219,100,000
Lead Agency	RTC Washoe
Contact	Scott Gibson
NDOT District	District 2
County	Washoe
Project Type	Preservation
Air Quality	Exempt, Safety - Pavement resurfacing and/or rehabilitation.
TCM	No
Construction Start	2018
From	-
To	-



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Construction	LOCAL FUEL TAX - RTCWA	$90,000,000	$22,500,000	$22,500,000	$22,500,000	$22,500,000	$22,500,000	-	$202,500,000
Construction	LOCAL FUND	$16,600,000	-	-	-	-	-	-	$16,600,000
Total Construction		$106,600,000	$22,500,000	$22,500,000	$22,500,000	$22,500,000	$22,500,000	-	$219,100,000
Total Prior Costs		$106,600,000	-	-	-	-	-	-	$106,600,000
Total Programmed		$106,600,000	$22,500,000	$22,500,000	$22,500,000	$22,500,000	$22,500,000	-	$219,100,000

WA20150060 - Virginia Street, Bus RAPID Transit Extension

Bus RAPID transit extension from the RTC 4th STREET STATION in downtown Reno to the University of Nevada, Reno; improves safety, traffic/bus operations, constructs 3 RAPID stations, adds bus-only lane segment, widens/constructs sidewalks and corrects ADA sidewalk deficiencies in the corridor from Plumb Lane to Liberty Street (within the total project corridor of Plumb Lane to 15th Street). FHWA funding will to be transferred to FTA. A request to enter project development under the FTA Small Starts Program has been submitted and accepted. Funding programmed in the "other" phase is for the acquisition of transit capital such as buses, bus shelters, etc.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$114,877,667
Lead Agency	RTC Washoe
Contact	Kimberly Diegle
NDOT District	District 2
County	Washoe
Project Type	Transit - Capital & Rehab
Air Quality	Exempt, Mass Transit - Construction of small passenger shelters and information kiosks.
TCM	No
Construction Start	2020
From	Plumb Lane
To	15th Street



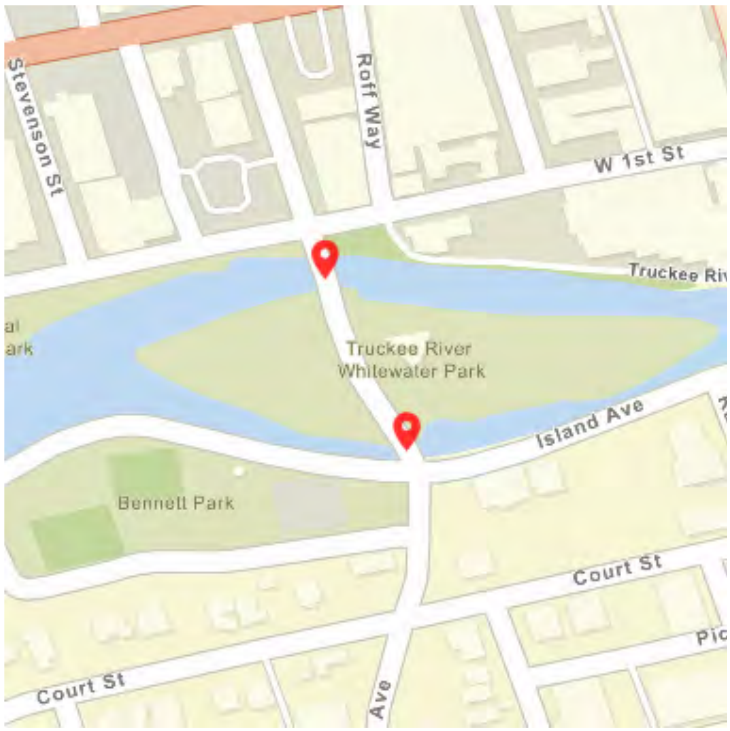
Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	FTA 5307 LRG URB OPERATING	$5,042,142	-	-	-	-	-	-	$5,042,142
Preliminary Engineering	LOCAL FUND	$5,500,000	-	-	-	-	-	-	$5,500,000
Total Preliminary Engineering		$10,542,142	-	-	-	-	-	-	$10,542,142
Right of Way	CMAQ TRANSFER TO FTA	$3,420,094	-	-	-	-	-	-	$3,420,094
Right of Way	FTA 5309 SMALL STARTS	$9,115,742	-	-	-	-	-	-	$9,115,742
Right of Way	LOCAL FUND	$4,945,309	-	-	-	-	-	-	$4,945,309
Right of Way		$3,189,484	-	-	-	-	-	-	$3,189,484

	STBG >200K (WA)								
Total Right of Way		$20,670,629	-	-	-	-	-	-	$20,670,629
Construction	CMAQ TRANSFER TO FTA	$279,906	-	-	-	-	-	-	$279,906
Construction	FTA 5309 SMALL STARTS	$30,126,621	-	-	-	-	-	-	$30,126,621
Construction	LOCAL FUND	$31,473,603	-	-	-	-	-	-	$31,473,603
Construction	STBG >200K (WA)	$177,315	-	-	-	-	-	-	$177,315
Total Construction		$62,057,445	-	-	-	-	-	-	$62,057,445
Other	CMAQ TRANSFER TO FTA	$2,000,000	-	-	-	-	-	-	$2,000,000
Other	FTA 5309 SMALL STARTS	$1,145,500	-	-	-	-	-	-	$1,145,500
Other	LOCAL FUND	$18,461,951	-	-	-	-	-	-	$18,461,951
Total Other		$21,607,451	-	-	-	-	-	-	$21,607,451
Total Prior Costs		$114,877,667	-	-	-	-	-	-	$114,877,667
Total Programmed		$114,877,667	-	-	-	-	-	-	$114,877,667

WA20170122 - Arlington Avenue Bridges Replacement

Replace the Arlington Avenue Bridges at the Truckee River

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$34,600,944
Lead Agency	RTC Washoe
Contact	Bryan Byrne
NDOT District	District 2
County	Washoe
Project Type	Bridge/Structures
Air Quality	Exempt, Safety - Non capacity widening or bridge reconstruction.
TCM	No
Construction Start	2024
From	-
To	-



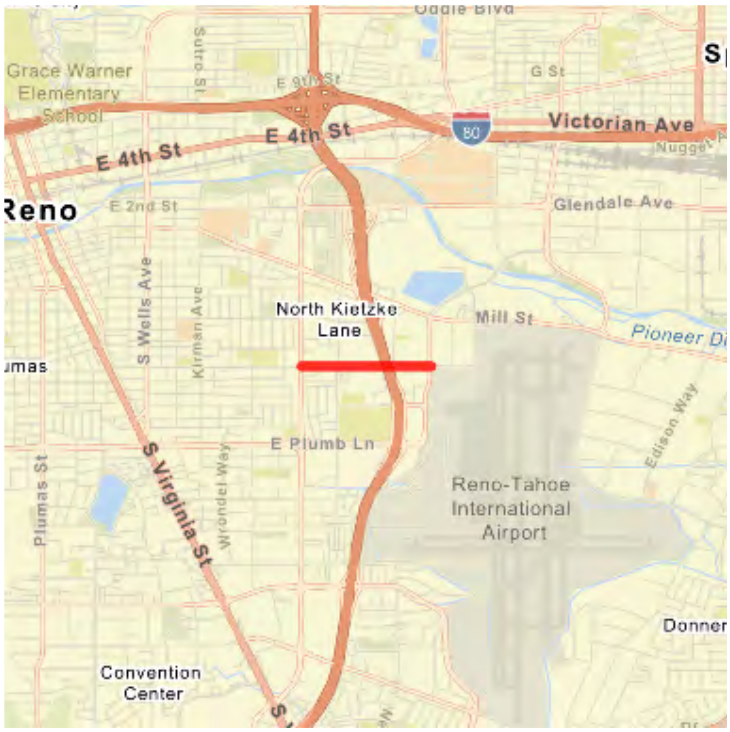
Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	HIGHWAY INFRA COVID WA	$3,300,944	-	-	-	-	-	-	$3,300,944
Total Preliminary Engineering		$3,300,944	-	-	-	-	-	-	$3,300,944
Construction	CONGRESSIONALLY DIRECTED SPENDING	$2,000,000	-	-	-	-	-	-	$2,000,000
Construction	LOCAL FUEL TAX - RTCWA	$16,400,000	-	-	-	-	-	-	$16,400,000
Construction	RAISE GRANT	$7,000,000	-	-	-	-	-	-	$7,000,000
Construction	STBG >200K (WA)	$5,900,000	-	-	-	-	-	-	$5,900,000
Total Construction		$31,300,000	-	-	-	-	-	-	$31,300,000
Total Prior Costs		$34,600,944	-	-	-	-	-	-	$34,600,944
		$34,600,944	-	-	-	-	-	-	$34,600,944

Total Programmed	

WA20170126 - Vassar Street Multimodal Improvements

Bicycle and sidewalk improvements.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$4,500,000
Lead Agency	RTC Washoe
Contact	Scott Gibson
NDOT District	District 2
County	Washoe
Project Type	Active Transportation (Bike/Ped)
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	Yes
Construction Start	2029
From	Kietzke Lane
To	Terminal Way

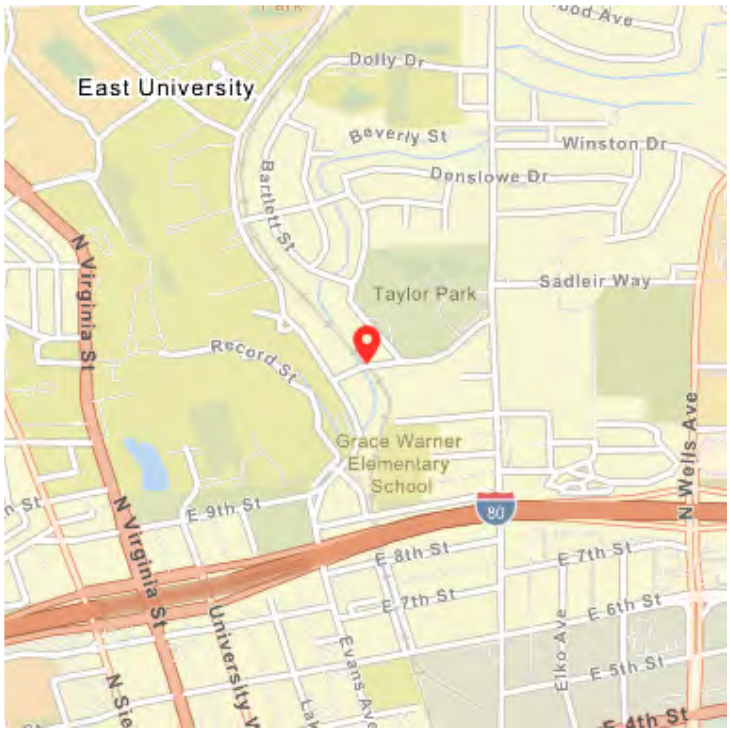


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	CARBON REDUCTION PROGRAM > 200K (WA)	-	-	-	-	$641,250	-	-	$641,250
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	-	-	-	$33,750	-	-	$33,750
Total Preliminary Engineering		-	-	-	-	$675,000	-	-	$675,000
Construction	CARBON REDUCTION PROGRAM > 200K (WA)	-	-	-	-	-	$3,633,750	-	$3,633,750
Construction	LOCAL FUEL TAX - RTCWA	-	-	-	-	-	$191,250	-	$191,250
Total Construction		-	-	-	-	-	$3,825,000	-	$3,825,000
Total Programmed		-	-	-	-	$675,000	$3,825,000	-	$4,500,000

WA20170130 - Highland Avenue Railroad Crossing

CROSSING SURFACE IMPROVEMENTS AND ADJUSTMENT TO CROSSING SIGNAL ARMS TO IMPROVE PEDESTRIAN ACTIVITIES

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$1,048,950
Lead Agency	Nevada DOT
Contact	Kim Goodwin
NDOT District	District 2
County	Washoe
Project Type	Railroad
Air Quality	Exempt, Safety - Rail-road/highway crossing.
TCM	No
Construction Start	2026
From	Highland Avenue
To	-

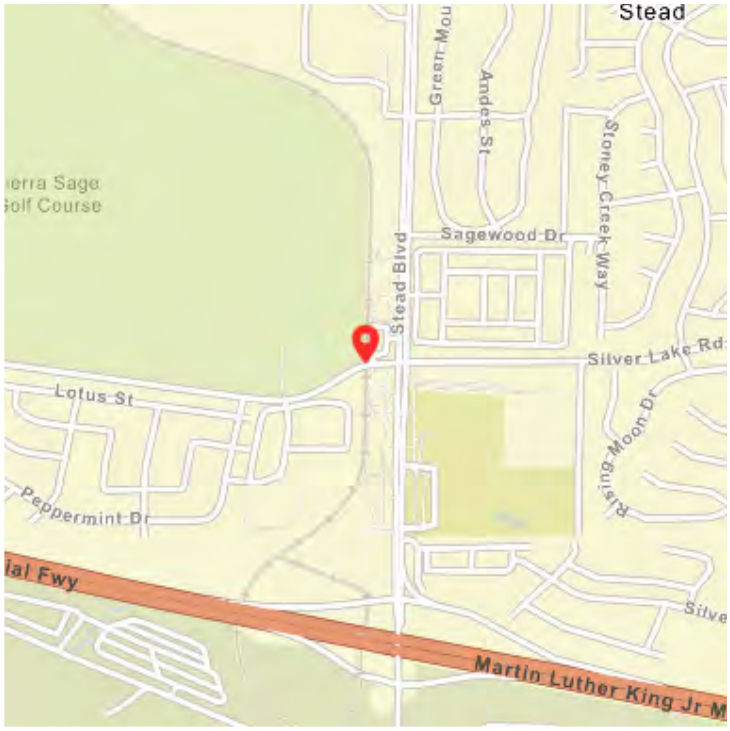


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUND	$14,450	-	-	-	-	-	-	$14,450
Preliminary Engineering	RAIL	$14,450	-	-	-	-	-	-	$14,450
Preliminary Engineering	STATE MATCH - NV	$50	-	-	-	-	-	-	$50
Total Preliminary Engineering		$28,950	-	-	-	-	-	-	$28,950
Construction	LOCAL FUND	-	-	$102,000	-	-	-	-	$102,000
Construction	RAIL	-	-	$918,000	-	-	-	-	$918,000
Total Construction		-	-	$1,020,000	-	-	-	-	$1,020,000
Total Prior Costs		$28,950	-	-	-	-	-	-	$28,950
Total Programmed		$28,950	-	$1,020,000	-	-	-	-	$1,048,950

WA20170132 - Silver Lake Drive Railroad Crossing

INSTALL CROSSING SIGNAL AND CROSSING SURFACE IMPROVEMENTS INCLUDING VEHICLE ASSEMBLY GATES, ADDITION OF PEDESTRIAN GATES, RAILROAD CABINET REPLACEMENT, RAILROAD TRAFFIC PREEMPTION AND OTHER IMPROVEMENTS.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$1,583,220
Lead Agency	Nevada DOT
Contact	Kim Goodwin
NDOT District	District 2
County	Washoe
Project Type	Railroad
Air Quality	Exempt, Safety - Railroad/hwy crossing warning devices.
TCM	No
Construction Start	2026
From	Silver Lake Drive
To	-



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUND	$1,500	-	-	-	-	-	-	$1,500
Preliminary Engineering	RAIL	$15,300	-	-	-	-	-	-	$15,300
Preliminary Engineering	STATE MATCH - NV	$200	-	-	-	-	-	-	$200
Total Preliminary Engineering		$17,000	-	-	-	-	-	-	$17,000
Construction	LOCAL FUND	-	-	$259,000	-	-	-	-	$259,000
Construction	RAIL	-	-	$1,240,500	-	-	-	-	$1,240,500
Construction	STATE HIGHWAY FUND	-	-	$66,220	-	-	-	-	$66,220
Construction	STATE MATCH - NV	-	-	$500	-	-	-	-	$500
		-	-	$1,566,220	-	-	-	-	$1,566,220

Total Construction								
Total Prior Costs	$17,000	-	-	-	-	-	-	$17,000
Total Programmed	$17,000	-	$1,566,220	-	-	-	-	$1,583,220

WA20180047 - Reno Bike Project - Major Taylor Program

Cycling physical education and safety program

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$389,054
Lead Agency	RTC Washoe
Contact	Noah Silverman
NDOT District	District 2
County	Washoe
Project Type	Active Transportation (Bike/Ped)
Air Quality	Exempt, Other - Non construction related activities.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	LOCAL FUND	$10,770	-	$8,682	-	-	-	-	$19,452
Other	TAP >200K STBG (WA)	-	-	$164,964	-	-	-	-	$164,964
Other	TAP FLEX STBG	$204,638	-	-	-	-	-	-	$204,638
Total Other		$215,408	-	$173,646	-	-	-	-	$389,054
Total Prior Costs		$215,408	-	-	-	-	-	-	$215,408
Total Programmed		$215,408	-	$173,646	-	-	-	-	$389,054

WA20180057 - US 395, North Valleys, Golden Valley to Stead, Phase 2

On US 395 from Golden Valley Rd. to Lemmon Dr., construct an additional travel lane, aux lane, and rehabilitate existing lanes NB & SB. From Lemmon Dr. to Stead Blvd., construct an additional travel lane and rehabilitate existing lanes NB & SB.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$193,048,669
Lead Agency	Nevada DOT
Contact	Nanette Maxwell
NDOT District	District 2
County	Washoe
Project Type	Preservation
Air Quality	Non-Exempt
TCM	No
Construction Start	2025
From	Golden Valley, Golden Valley Rd Inter
To	Stead, Stead Blvd Inter

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	STATE HIGHWAY FUND	$400,000	$10,573,669	-	-	-	-	-	$10,973,669
Total Preliminary Engineering		$400,000	$10,573,669	-	-	-	-	-	$10,973,669
Right of Way	STATE HIGHWAY FUND	$15,000	$60,000	-	-	-	-	-	$75,000
Total Right of Way		$15,000	$60,000	-	-	-	-	-	$75,000
Construction	BRIDGE FORMULA PROGRAM	-	$4,679,848	-	-	-	-	-	$4,679,848
Construction	INFRA GRANT	-	$88,917,130	-	-	-	-	-	$88,917,130
Construction	NHPP	-	$75,990,622	-	-	-	-	-	$75,990,622
Construction	STATE HIGHWAY FUND	-	$8,166,544	-	-	-	-	-	$8,166,544
		-	$4,245,856	-	-	-	-	-	$4,245,856

Construc-tion	STATE MATCH - NV							
Total Con-struction		-	$182,000,000	-	-	-	-	- $182,000,000
Total Prior Costs		$415,000	-	-	-	-	-	- $415,000
Total Pro-grammed		$415,000	$192,633,669	-	-	-	-	- $193,048,669

WA20180059 - West 4th Street Downtown Reno Improvements

Construct enhanced sidewalks, bus/bike lanes, lighting, and intersection improvements.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$8,500,000
Lead Agency	RTC Washoe
Contact	Scott Gibson
NDOT District	District 2
County	Washoe
Project Type	Active Transportation (Bike/Ped)
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	No
Construction Start	2025
From	Vine St
To	Evans Ave

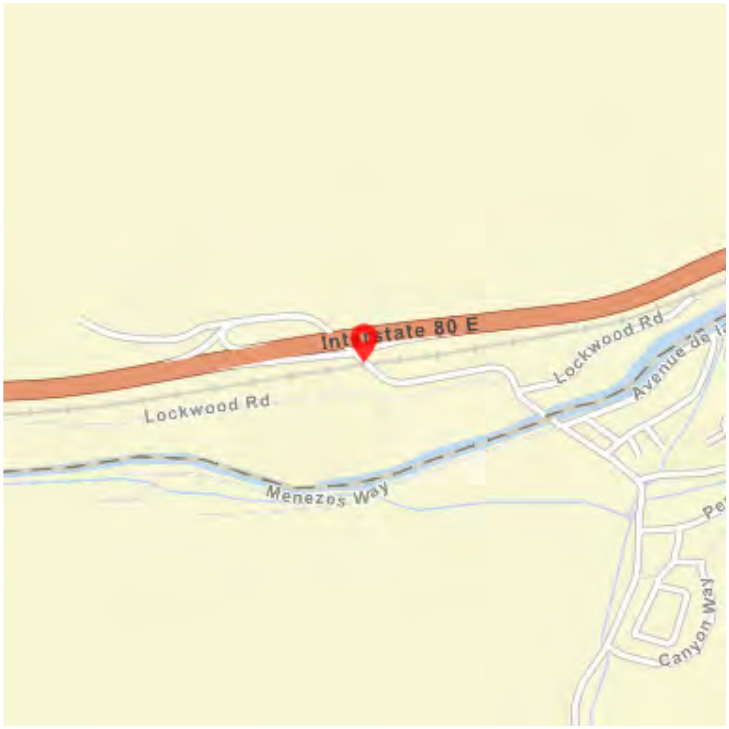


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	$1,000,000	-	-	-	-	-	-	$1,000,000
Total Preliminary Engineering		$1,000,000	-	-	-	-	-	-	$1,000,000
Construction	LOCAL FUEL TAX - RTCWA	-	$7,500,000	-	-	-	-	-	$7,500,000
Total Construction		-	$7,500,000	-	-	-	-	-	$7,500,000
Total Prior Costs		$1,000,000	-	-	-	-	-	-	$1,000,000
Total Programmed		$1,000,000	$7,500,000	-	-	-	-	-	$8,500,000

WA20180100 - G-751 Bridge Replacement

Replace structure and rebuild roadway approaches

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$0
Lead Agency	Nevada DOT
Contact	David Chase
NDOT District	District 2
County	Washoe
Project Type	Bridge/Structures
Air Quality	Exempt, Safety - Non capacity widening or bridge reconstruction.
TCM	No
Construction Start	-
From	-
To	-



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Total Programmed		-	-	-	-	-	-	-	-

WA20190002 - U-Pass (Ed-Pass) Start-up Program

Seed money to establish a Universal Access Transit Pass (U-Pass) program with the University of Nevada, Reno (UNR) and Truckee Meadows Community College (TMCC) to provide unlimited access to RTC RIDE transit routes.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$2,789,473
Lead Agency	RTC Washoe
Contact	Scott Miklos
NDOT District	District 2
County	Washoe
Project Type	Transit - Other
Air Quality	Exempt, Mass Transit - Transit operating assistance.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	CMAQ - WA	$900,000	$350,000	$350,000	$350,000	$350,000	$350,000	-	$2,650,000
Other	LOCAL SALES TAX - RTCWA	$47,368	$18,421	$18,421	$18,421	$18,421	$18,421	-	$139,473
Total Other		$947,368	$368,421	$368,421	$368,421	$368,421	$368,421	-	$2,789,473
Total Prior Costs		$947,368	-	-	-	-	-	-	$947,368
Total Programmed		$947,368	$368,421	$368,421	$368,421	$368,421	$368,421	-	$2,789,473

WA20190027 - Meadowood Mall Transfer Station Relocation

Reloctate the RTC RIDE Meadowood Mall Transfer Station within the Meadowood Mall property and implement potential FTA joint development with affordable housing and possible retail.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$6,720,000
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Other
Air Quality	Exempt, Mass Transit - Reconstruction or renovation of transit structures.
TCM	No
Construction Start	2024
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	FTA 5339 BUS/FAC LRG URB CAPITAL	$500,000	-	-	-	-	-	-	$500,000
Preliminary Engineering	LOCAL SALES TAX - RTCWA	$125,000	-	-	-	-	-	-	$125,000
Total Preliminary Engineering		$625,000	-	-	-	-	-	-	$625,000
Right of Way	LOCAL SALES TAX - RTCWA	$95,000	-	-	-	-	-	-	$95,000
Total Right of Way		$95,000	-	-	-	-	-	-	$95,000
Construction	FTA 5339 BUS/FAC LRG URB CAPITAL	$4,800,000	-	-	-	-	-	-	$4,800,000
Construction	LOCAL SALES TAX - RTCWA	$1,200,000	-	-	-	-	-	-	$1,200,000

Total Construction	$6,000,000	-	-	-	-	-	-	$6,000,000
Total Prior Costs	$6,720,000	-	-	-	-	-	-	$6,720,000
Total Programmed	$6,720,000	-	-	-	-	-	-	$6,720,000

WA20190035 - Traffic Calming Improvements

Purchase speed radar signs and Rectangular Rapid Flashing Beacons (RRFBs).

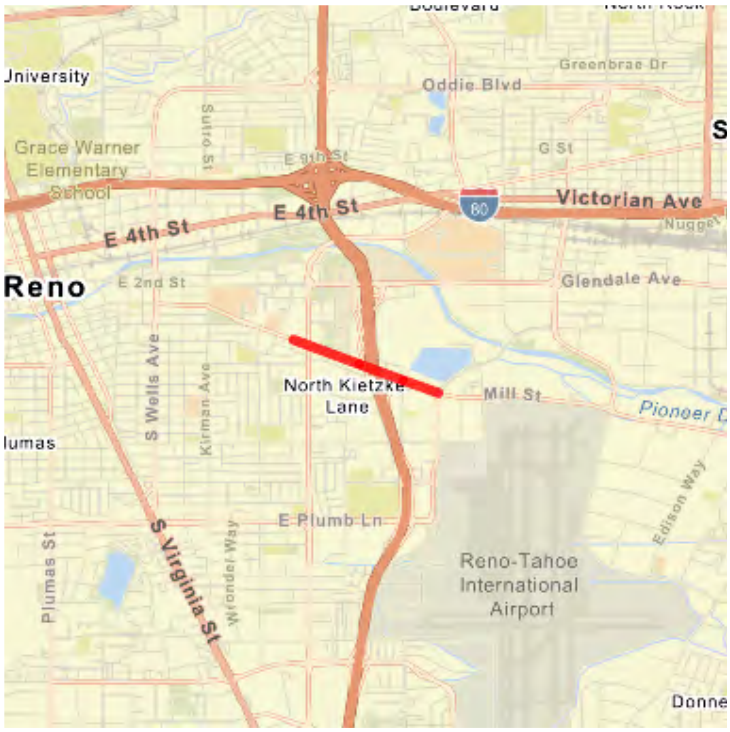
MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$35,790
Lead Agency	Washoe County
Contact	Mitch Fink
NDOT District	District 2
County	Washoe
Project Type	Signals & Lighting
Air Quality	Exempt, Safety - Non signalization traffic control and operating.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUND	$350	-	-	-	-	-	-	$350
Preliminary Engineering	TAP >200K STBG (WA)	$6,650	-	-	-	-	-	-	$6,650
Total Preliminary Engineering		$7,000	-	-	-	-	-	-	$7,000
Other	LOCAL FUND	$1,440	-	-	-	-	-	-	$1,440
Other	TAP >200K STBG (WA)	$27,350	-	-	-	-	-	-	$27,350
Total Other		$28,790	-	-	-	-	-	-	$28,790
Total Prior Costs		$35,790	-	-	-	-	-	-	$35,790
Total Programmed		$35,790	-	-	-	-	-	-	$35,790

WA20190038 - Mill Street Capacity & Safety Project

Multimodal, operational, safety, and capacity improvements.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$35,500,000
Lead Agency	RTC Washoe
Contact	Kimberly Diegle
NDOT District	District 2
County	Washoe
Project Type	Capacity
Air Quality	Non-Exempt
TCM	No
Construction Start	2025
From	500 ft W of Kietzke Ln
To	Terminal Way

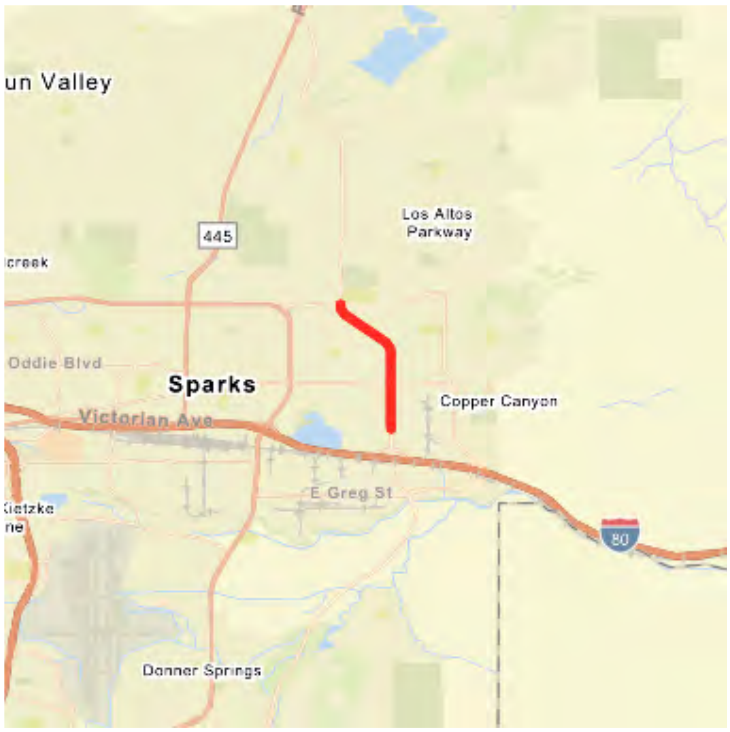


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	$5,000,000	-	-	-	-	-	-	$5,000,000
Total Preliminary Engineering		$5,000,000	-	-	-	-	-	-	$5,000,000
Right of Way	LOCAL FUEL TAX - RTCWA	$15,000,000	-	-	-	-	-	-	$15,000,000
Total Right of Way		$15,000,000	-	-	-	-	-	-	$15,000,000
Construction	LOCAL FUEL TAX - RTCWA	-	$15,500,000	-	-	-	-	-	$15,500,000
Total Construction		-	$15,500,000	-	-	-	-	-	$15,500,000
Total Prior Costs		$20,000,000	-	-	-	-	-	-	$20,000,000
Total Programmed		$20,000,000	$15,500,000	-	-	-	-	-	$35,500,000

WA20190041 - Sparks Boulevard Corridor - Phase 2

Widen roadway from 4 to 6 lanes and construct multimodal improvements.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$75,000,000
Lead Agency	RTC Washoe
Contact	Garrett Rodgers
NDOT District	District 2
County	Washoe
Project Type	Capacity
Air Quality	Non-Exempt
TCM	No
Construction Start	2025
From	Lincoln Way
To	Baring Boulevard



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	$6,000,000	-	-	-	-	-	-	$6,000,000
Total Preliminary Engineering		$6,000,000	-	-	-	-	-	-	$6,000,000
Right of Way	LOCAL FUEL TAX - RTCWA	$3,000,000	-	-	-	-	-	-	$3,000,000
Total Right of Way		$3,000,000	-	-	-	-	-	-	$3,000,000
Construction	LOCAL FUEL TAX - RTCWA	-	$3,300,000	-	-	-	-	-	$3,300,000
Construction	STBG >200K (WA)	-	$53,600,000	-	-	-	-	-	$53,600,000
Construction	STBG FLEX	-	$9,100,000	-	-	-	-	-	$9,100,000
Total Construction		-	$66,000,000	-	-	-	-	-	$66,000,000
Total Prior Costs		$9,000,000	-	-	-	-	-	-	$9,000,000
		$9,000,000	$66,000,000	-	-	-	-	-	$75,000,000

Total Programmed	

WA20190042 - Sun Valley Blvd. Corridor Improvements

Multimodal and drainage improvements along the Sun Valley Boulevard corridor.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$88,150,000
Lead Agency	RTC Washoe
Contact	Jessica Dover
NDOT District	District 2
County	Washoe
Project Type	Active Transportation (Bike/Ped)
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	No
Construction Start	2027
From	Scottsdale Road
To	7th Avenue



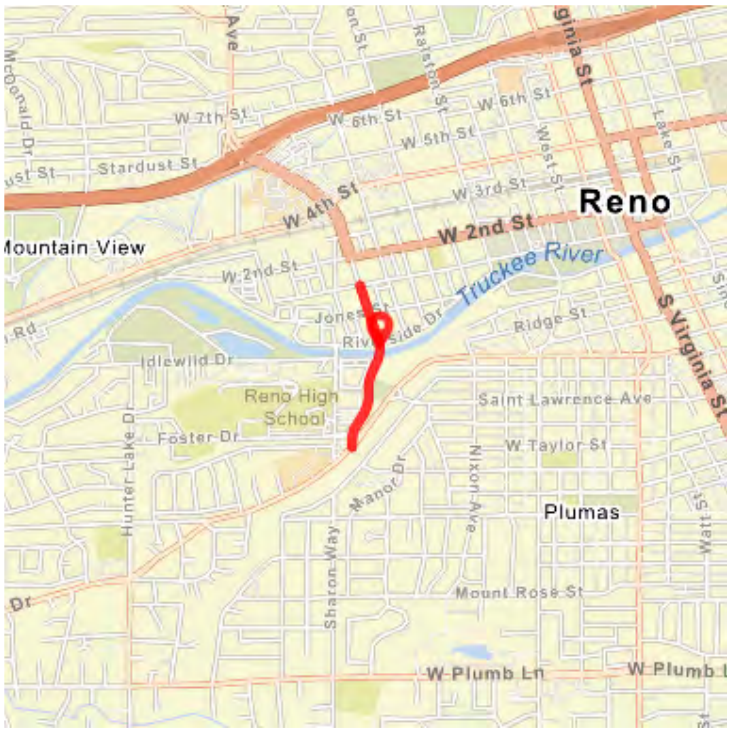
Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	$2,000,000	$4,000,000	-	-	-	-	-	$6,000,000
Total Preliminary Engineering		$2,000,000	$4,000,000	-	-	-	-	-	$6,000,000
Right of Way	LOCAL FUEL TAX - RTCWA	-	-	$1,000,000	-	-	-	-	$1,000,000
Total Right of Way		-	-	$1,000,000	-	-	-	-	$1,000,000
Construction	ANTICIPATED DISCRETIONARY GRANT	-	-	-	$62,000,000	-	-	-	$62,000,000
Construction	CONGRESSIONALLY DIRECTED SPENDING	-	-	-	$2,500,000	-	-	-	$2,500,000
Construction	LOCAL FUEL TAX - RTCWA	-	-	-	$16,650,000	-	-	-	$16,650,000
		-	-	-	$81,150,000	-	-	-	$81,150,000

Total Construction								
Total Prior Costs	$2,000,000	-	-	-	-	-	-	$2,000,000
Total Programmed	$2,000,000	$4,000,000	$1,000,000	$81,150,000	-	-	-	$88,150,000

WA20190044 - Keystone Avenue Improvements - Package 1

Multimodal improvements and Truckee River bridge replacement.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$5,000,000
Lead Agency	RTC Washoe
Contact	Sara Going
NDOT District	District 2
County	Washoe
Project Type	Bridge/Structures
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	No
Construction Start	-
From	California Avenue
To	1st Street



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	BRIDGE FORMULA PGM OFF-SYS	$5,000,000	-	-	-	-	-	-	$5,000,000
Total Preliminary Engineering		$5,000,000	-	-	-	-	-	-	$5,000,000
Total Prior Costs		$5,000,000	-	-	-	-	-	-	$5,000,000
Total Programmed		$5,000,000	-	-	-	-	-	-	$5,000,000

WA20190047 - I80 East - Washoe

PRECONSTRUCTION, DESIGN AND CONSTRUCTION - WIDEN TO THREE LANES EACH DIRECTION

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$524,280,000
Lead Agency	Nevada DOT
Contact	Christopher Kuhn
NDOT District	District 2
County	Washoe
Project Type	Capacity
Air Quality	Non-Exempt
TCM	Yes
Construction Start	2027
From	Vista Blvd
To	USA Parkway



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	INFRA GRANT	-	$25,000,000	-	-	-	-	-	$25,000,000
Preliminary Engineering	STATE MATCH - NV	-	$4,250,000	-	-	-	-	-	$4,250,000
Total Preliminary Engineering		-	$29,250,000	-	-	-	-	-	$29,250,000
Construction	INFRA GRANT	-	-	-	$91,000,000	$159,520,000	-	-	$250,520,000
Construction	NHPP	-	-	-	$33,750,000	$70,320,000	-	-	$104,070,000
Construction	STATE MATCH - NV	-	-	-	$34,000,000	$71,750,000	-	-	$105,750,000
Construction	STBG FLEX	-	-	-	$11,250,000	$23,440,000	-	-	$34,690,000
Total Construction		-	-	-	$170,000,000	$325,030,000	-	-	$495,030,000
Total Programmed		-	$29,250,000	-	$170,000,000	$325,030,000	-	-	$524,280,000

WA20200013 - I-80 West, Reno - Bridge Replacements CON

Replace structures, I-770, I-774 E/W, I-775 E/W, H-767 E/W

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$102,225,500
Lead Agency	Nevada DOT
Contact	Ryan Hornback
NDOT District	District 2
County	Washoe
Project Type	Bridge/Structures
Air Quality	Exempt, Safety - Non capacity widening or bridge reconstruction.
TCM	No
Construction Start	2025
From	-
To	-



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	STATE HIGHWAY FUND	$6,655,000	-	-	-	-	-	-	$6,655,000
Total Preliminary Engineering		$6,655,000	-	-	-	-	-	-	$6,655,000
Right of Way	STATE HIGHWAY FUND	$550,000	-	-	-	-	-	-	$550,000
Total Right of Way		$550,000	-	-	-	-	-	-	$550,000
Construction	BRIDGE FORMULA PGM OFF-SYS	-	$4,206,319	-	-	-	-	-	$4,206,319
Construction	BRIDGE FORMULA PROGRAM	-	$60,578,196	-	-	-	-	-	$60,578,196
Construction	HSIP	-	$665,973	-	-	-	-	-	$665,973
		-	$5,101,591	-	-	-	-	-	$5,101,591

Construction	HWY INFRA BRIDGE REPLACEMENT							
Construction	LOCAL FUND	-	$37,000	-	-	-	-	- $37,000
Construction	NHPP	-	$14,663,697	-	-	-	-	- $14,663,697
Construction	STATE MATCH - NV	-	$5,462,108	-	-	-	-	- $5,462,108
Construction	STBG BRIDGE	-	$2,907,000	-	-	-	-	- $2,907,000
Construction	STBG FLEX	-	$1,398,616	-	-	-	-	- $1,398,616
Total Construction		-	$95,020,500	-	-	-	-	- $95,020,500
Total Prior Costs		$7,205,000	-	-	-	-	-	- $7,205,000
Total Programmed		$7,205,000	$95,020,500	-	-	-	-	- $102,225,500

WA20200023 - FlexRIDE Service

New FlexRIDE (microtransit) service in the South Meadows, Spanish Springs and the Verdi/Somersett areas.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$6,505,264
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Operating
Air Quality	Exempt, Mass Transit - Transit operating assistance.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	CMAQ - WA	$3,090,000	$2,090,000	-	-	-	-	-	$5,180,000
Other	CMAQ TRANSFER TO FTA	$1,000,000	-	-	-	-	-	-	$1,000,000
Other	LOCAL SALES TAX - RTCWA	$215,264	$110,000	-	-	-	-	-	$325,264
Total Other		$4,305,264	$2,200,000	-	-	-	-	-	$6,505,264
Total Prior Costs		$4,305,264	-	-	-	-	-	-	$4,305,264
Total Programmed		$4,305,264	$2,200,000	-	-	-	-	-	$6,505,264

WA20200025 - Virginia Street Bus RAPID Transit Extension Operation

Bus RAPID transit extension from the RTC 4th STREET STATION in downtown Reno to the University of Nevada, Reno; improves safety, traffic/bus operations, constructs 3 RAPID stations, adds bus only lane segment.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$8,105,264
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Operating
Air Quality	Exempt, Mass Transit - Transit operating assistance.
TCM	No
Construction Start	-
From	Plumb Lane
To	15th Street



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	CMAQ - WA	$2,750,000	$850,000	$850,000	$850,000	$1,200,000	$1,200,000	-	$7,700,000
Other	LOCAL SALES TAX - RTCWA	$144,737	$44,737	$44,737	$44,737	$63,158	$63,158	-	$405,264
Total Other		$2,894,737	$894,737	$894,737	$894,737	$1,263,158	$1,263,158	-	$8,105,264
Total Prior Costs		$2,894,737	-	-	-	-	-	-	$2,894,737
Total Pro-grammed		$2,894,737	$894,737	$894,737	$894,737	$1,263,158	$1,263,158	-	$8,105,264

WA20200070 - Lemmon Drive Traffic Improvements and Resiliency Project

Project will improve traffic operations and add resiliency through stormwater and other improvements.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$56,210,526
Lead Agency	RTC Washoe
Contact	Bryan Byrne
NDOT District	District 2
County	Washoe
Project Type	Road Improvement
Air Quality	Non-Exempt
TCM	No
Construction Start	2026
From	Fleetwood Drive
To	Ramsey Way



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	CONGRESSIONALLY DIRECTED SPENDING	$4,000,000	-	-	-	-	-	-	$4,000,000
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	$210,526	-	-	-	-	-	-	$210,526
Total Preliminary Engineering		$4,210,526	-	-	-	-	-	-	$4,210,526
Right of Way	LOCAL FUEL TAX - RTCWA	-	$2,000,000	-	-	-	-	-	$2,000,000
Total Right of Way		-	$2,000,000	-	-	-	-	-	$2,000,000
Construction	LOCAL FUEL TAX - RTCWA	-	-	$25,000,000	-	-	-	-	$25,000,000
Construction	RAISE GRANT	-	-	$25,000,000	-	-	-	-	$25,000,000
Total Construction		-	-	$50,000,000	-	-	-	-	$50,000,000
		$4,210,526	-	-	-	-	-	-	$4,210,526

Total Prior Costs								
Total Programmed	$4,210,526	$2,000,000	$50,000,000	-	-	-	-	$56,210,526

WA20210003 - Geiger Grade Realignment

Construct new roadway alignment on Geiger Grade from Virginia Street to Toll Road

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$84,000,000
Lead Agency	RTC Washoe
Contact	Kimberly Diegle
NDOT District	District 2
County	Washoe
Project Type	Major/New Construction
Air Quality	Non-Exempt
TCM	No
Construction Start	2028
From	Virginia Street
To	Toll Road



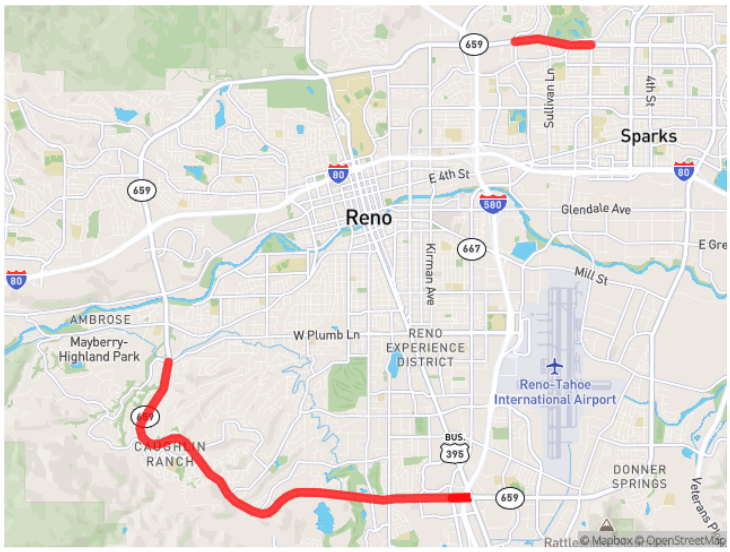
Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	$12,000,000	-	-	-	-	-	-	$12,000,000
Total Preliminary Engineering		$12,000,000	-	-	-	-	-	-	$12,000,000
Right of Way	LOCAL FUEL TAX - RTCWA	-	-	$12,000,000	-	-	-	-	$12,000,000
Total Right of Way		-	-	$12,000,000	-	-	-	-	$12,000,000
Construction	ANTICIPATED DISCRETIONARY GRANT	-	-	-	-	$48,000,000	-	-	$48,000,000
Construction	LOCAL FUEL TAX - RTCWA	-	-	-	-	$12,000,000	-	-	$12,000,000
Total Construction		-	-	-	-	$60,000,000	-	-	$60,000,000
Total Prior Costs		$12,000,000	-	-	-	-	-	-	$12,000,000
		$12,000,000	-	$12,000,000	-	$60,000,000	-	-	$84,000,000

Total Programmed

WA20210004 - McCarran Blvd Safety and Operations

Intersection and operations improvements from Plumb Lane to South Virginia Street and from El Rancho Drive to Rock Boulevard.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$14,000,000
Lead Agency	RTC Washoe
Contact	Jessica Dover
NDOT District	District 2
County	Washoe
Project Type	Interchange/Intersection
Air Quality	Exempt, All Projects - Intersection channelization projects.
TCM	No
Construction Start	2027
From	El Rancho Drive, Plumb Lane
To	Rock Boulevard, South Virginia Street



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	$3,000,000	-	-	-	-	-	$3,000,000
Total Preliminary Engineering		-	$3,000,000	-	-	-	-	-	$3,000,000
Right of Way	LOCAL FUEL TAX - RTCWA	-	-	$1,000,000	-	-	-	-	$1,000,000
Total Right of Way		-	-	$1,000,000	-	-	-	-	$1,000,000
Construction	LOCAL FUEL TAX - RTCWA	-	-	-	$10,000,000	-	-	-	$10,000,000
Total Construction		-	-	-	$10,000,000	-	-	-	$10,000,000
Total Programmed		-	$3,000,000	$1,000,000	$10,000,000	-	-	-	$14,000,000

WA20210005 - North Valleys North Virginia Street Widening

Panther Drive to Stead Blvd

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$89,000,000
Lead Agency	RTC Washoe
Contact	Garrett Rodgers
NDOT District	District 2
County	Washoe
Project Type	Capacity
Air Quality	Non-Exempt
TCM	No
Construction Start	2027
From	Panther Drive
To	Stead Blvd



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	$5,000,000	-	-	-	-	-	-	$5,000,000
Total Preliminary Engineering		$5,000,000	-	-	-	-	-	-	$5,000,000
Right of Way	LOCAL FUEL TAX - RTCWA	-	-	$2,000,000	-	-	-	-	$2,000,000
Total Right of Way		-	-	$2,000,000	-	-	-	-	$2,000,000
Construction	LOCAL FUEL TAX - RTCWA	-	-	-	$82,000,000	-	-	-	$82,000,000
Total Construction		-	-	-	$82,000,000	-	-	-	$82,000,000
Total Prior Costs		$5,000,000	-	-	-	-	-	-	$5,000,000
Total Programmed		$5,000,000	-	$2,000,000	$82,000,000	-	-	-	$89,000,000

WA20210006 - Pembroke Drive Safety Project

Widen roadway with two-way left turn lane from McCarran Blvd to Veterans Pkwy; includes associated safety improvements.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$15,500,000
Lead Agency	RTC Washoe
Contact	Ashley Hurlbut
NDOT District	District 2
County	Washoe
Project Type	Capacity
Air Quality	Non-Exempt
TCM	No
Construction Start	2026
From	McCarran Blvd
To	Veterans Pkwy

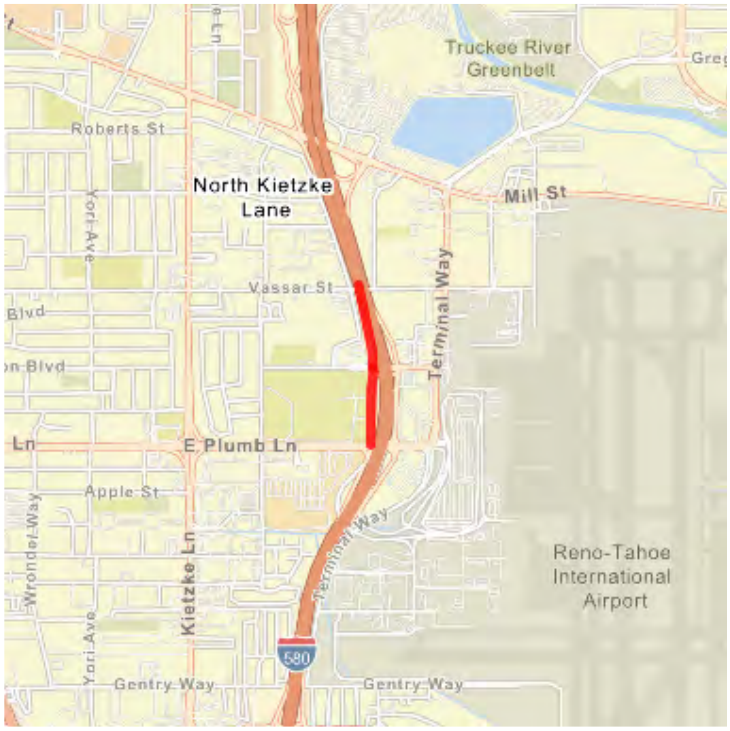


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	$2,000,000	-	-	-	-	-	-	$2,000,000
Total Preliminary Engineering		$2,000,000	-	-	-	-	-	-	$2,000,000
Right of Way	LOCAL FUEL TAX - RTCWA	-	-	$1,000,000	-	-	-	-	$1,000,000
Total Right of Way		-	-	$1,000,000	-	-	-	-	$1,000,000
Construction	LOCAL FUEL TAX - RTCWA	-	-	$12,500,000	-	-	-	-	$12,500,000
Total Construction		-	-	$12,500,000	-	-	-	-	$12,500,000
Total Prior Costs		$2,000,000	-	-	-	-	-	-	$2,000,000
Total Programmed		$2,000,000	-	$13,500,000	-	-	-	-	$15,500,000

WA20210008 - FRWA51, Enhanced Safety Improvements

INSTALL NEW SIGNAGE, ADJUST CONCRETE BARRIER RAIL AND NEW STRIPING FOR ENHANCED SAFETY IMPROVEMENTS ,FROM VILLANOVA DR, I 580 EXIT 65A, TO PLUMB LANE; MP WA 0.00 TO MP WA 0.246

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$1,455,000
Lead Agency	Nevada DOT
Contact	Christopher Deal
NDOT District	District 2
County	Washoe
Project Type	Safety
Air Quality	Exempt, Safety - Safety Improvement Program.
TCM	No
Construction Start	2025
From	Villanova Drive
To	Plumb Lane



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Right of Way	STATE HIGHWAY FUND	$5,000	-	-	-	-	-	-	$5,000
Total Right of Way		$5,000	-	-	-	-	-	-	$5,000
Construction	HSIP	-	$1,372,750	-	-	-	-	-	$1,372,750
Construction	LOCAL FUND	-	$5,000	-	-	-	-	-	$5,000
Construction	STATE MATCH - NV	-	$72,250	-	-	-	-	-	$72,250
Total Construction		-	$1,450,000	-	-	-	-	-	$1,450,000
Total Prior Costs		$5,000	-	-	-	-	-	-	$5,000
Total Programmed		$5,000	$1,450,000	-	-	-	-	-	$1,455,000

WA20210012 - Sixth Street 4 All

Construct bicycle facilities and safety improvements from Virginia Street to 4th Street

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$24,472,045
Lead Agency	RTC Washoe
Contact	Alex Wolfson
NDOT District	District 2
County	Washoe
Project Type	Active Transportation (Bike/Ped)
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	No
Construction Start	2027
From	Virginia Street
To	4th Street



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	$650,000	-	-	-	-	-	$650,000
Preliminary Engineering	SAFE STREETS AND ROADS FOR ALL GRANT	-	$2,600,000	-	-	-	-	-	$2,600,000
Total Preliminary Engineering		-	$3,250,000	-	-	-	-	-	$3,250,000
Right of Way	LOCAL FUEL TAX - RTCWA	-	-	$100,000	-	-	-	-	$100,000
Right of Way	SAFE STREETS AND ROADS FOR ALL GRANT	-	-	$400,000	-	-	-	-	$400,000
Total Right of Way		-	-	$500,000	-	-	-	-	$500,000
Construction	LOCAL FUEL TAX - RTCWA	-	-	-	$14,758,933	-	-	-	$14,758,933
		-	-	-	$5,963,112	-	-	-	$5,963,112

Construc-tion	SAFE STREETS AND ROADS FOR ALL GRANT								
Total Con-struction		-	-	-	$20,722,045	-	-	-	$20,722,045
Total Pro-grammed		-	$3,250,000	$500,000	$20,722,045	-	-	-	$24,472,045

WA20210014 - Virginia Line BRT Improvements Project

Improve Virginia Line BRT operations and construct multimodal and ADA improvements from Liberty Street to Meadowood Mall Circle

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$18,050,000
Lead Agency	RTC Washoe
Contact	Kimberly Diegle
NDOT District	District 2
County	Washoe
Project Type	Active Transportation (Bike/Ped)
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	No
Construction Start	2025
From	Liberty Street
To	Meadowood Mall Circle



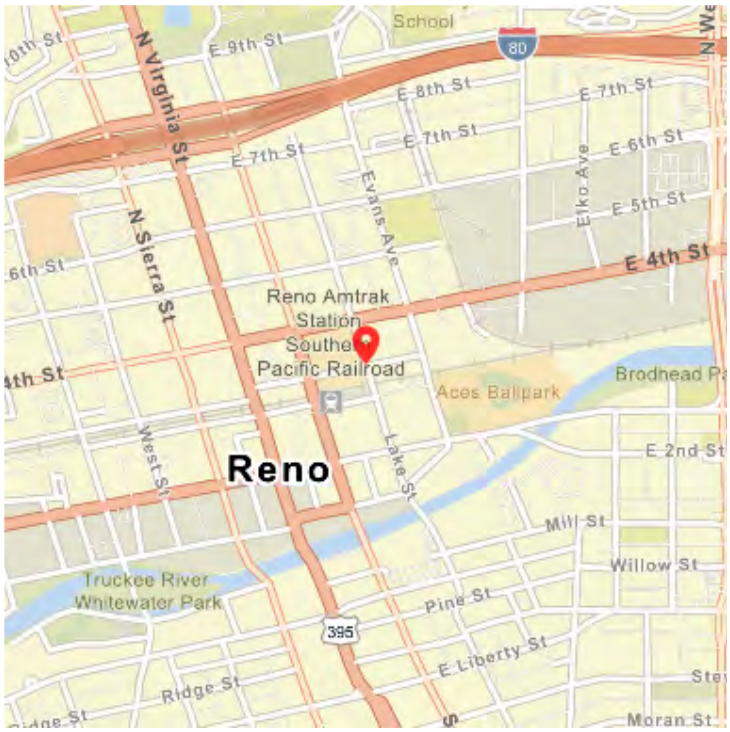
Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	FTA 5309 SMALL STARTS	$1,295,000	-	-	-	-	-	-	$1,295,000
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	$1,295,000	-	-	-	-	-	-	$1,295,000
Total Preliminary Engineering		$2,590,000	-	-	-	-	-	-	$2,590,000
Right of Way	LOCAL FUEL TAX - RTCWA	-	$1,000,000	-	-	-	-	-	$1,000,000
Total Right of Way		-	$1,000,000	-	-	-	-	-	$1,000,000
Construction	FTA 5309 SMALL STARTS	-	$5,060,000	-	-	-	-	-	$5,060,000
Construction	LOCAL FUEL TAX - RTCWA	-	$9,400,000	-	-	-	-	-	$9,400,000
Total Construction		-	$14,460,000	-	-	-	-	-	$14,460,000
		$2,590,000	-	-	-	-	-	-	$2,590,000

Total Prior Costs								
Total Programmed	$2,590,000	$15,460,000	-	-	-	-	-	$18,050,000

WA20210015 - RTC 4TH STREET STATION Expansion

Expand footprint and structure of RTC 4TH STREET STATION

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$7,025,000
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Capital & Rehab
Air Quality	Exempt, Mass Transit - Re-construction or renovation of transit structures.
TCM	No
Construction Start	2024
From	-
To	-



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Construc-tion	FTA 5307 LRG URB CAPITAL	$5,619,999	-	-	-	-	-	-	$5,619,999
Construc-tion	LOCAL SALES TAX - RTCWA	$1,405,001	-	-	-	-	-	-	$1,405,001
Total Con-struction		$7,025,000	-	-	-	-	-	-	$7,025,000
Total Prior Costs		$7,025,000	-	-	-	-	-	-	$7,025,000
Total Pro-grammed		$7,025,000	-	-	-	-	-	-	$7,025,000

WA20210016 - RTC Park and Ride Program

On-going program to establish strategic park and ride lots throughout the region.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$1,312,500
Lead Agency	RTC Washoe
Contact	Scott Miklos
NDOT District	District 2
County	Washoe
Project Type	TDM
Air Quality	Exempt, Air Quality - Ride-sharing and van-pooling program.
TCM	No
Construction Start	2022
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Construction	FTA 5339 BUS/FAC LRG URB CAPITAL	$350,000	$140,000	$140,000	$140,000	$140,000	$140,000	-	$1,050,000
Construction	LOCAL SALES TAX - RTCWA	$25,000	$35,000	$35,000	$35,000	$35,000	$35,000	-	$200,000
Construction	RTC SALES TAX	$62,500	-	-	-	-	-	-	$62,500
Total Construction		$437,500	$175,000	$175,000	$175,000	$175,000	$175,000	-	$1,312,500
Total Prior Costs		$437,500	-	-	-	-	-	-	$437,500
Total Programmed		$437,500	$175,000	$175,000	$175,000	$175,000	$175,000	-	$1,312,500

WA20210017 - FlexRIDE Replacement Vehicles

Vehicle replacement program for the RTC FlexRIDE (microtransit) service.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$6,920,000
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Capital & Rehab
Air Quality	Exempt, Mass Transit - Purchase new buses and rail cars to replace existing vehicles or minor expansions of fleet.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	FTA 5307 LRG URB CAPITAL	$494,000	-	$468,528	$2,720,000	-	-	-	$3,682,528
Other	FTA 5310 ELDERLY/DISABLED LRG URB CAPITAL	-	-	$2,251,472	-	-	-	-	$2,251,472
Other	LOCAL SALES TAX - RTCWA	$26,000	-	$480,000	$480,000	-	-	-	$986,000
Total Other		$520,000	-	$3,200,000	$3,200,000	-	-	-	$6,920,000
Total Prior Costs		$520,000	-	-	-	-	-	-	$520,000
Total Programmed		$520,000	-	$3,200,000	$3,200,000	-	-	-	$6,920,000

WA20210021 - Pyramid Way Operations Improvements

Add southbound lane from Ingenuity Avenue to Egyptian Drive.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$14,500,000
Lead Agency	RTC Washoe
Contact	Jessica Dover
NDOT District	District 2
County	Washoe
Project Type	Capacity
Air Quality	Non-Exempt
TCM	No
Construction Start	2026
From	Ingenuity Avenue
To	Egyptian Drive

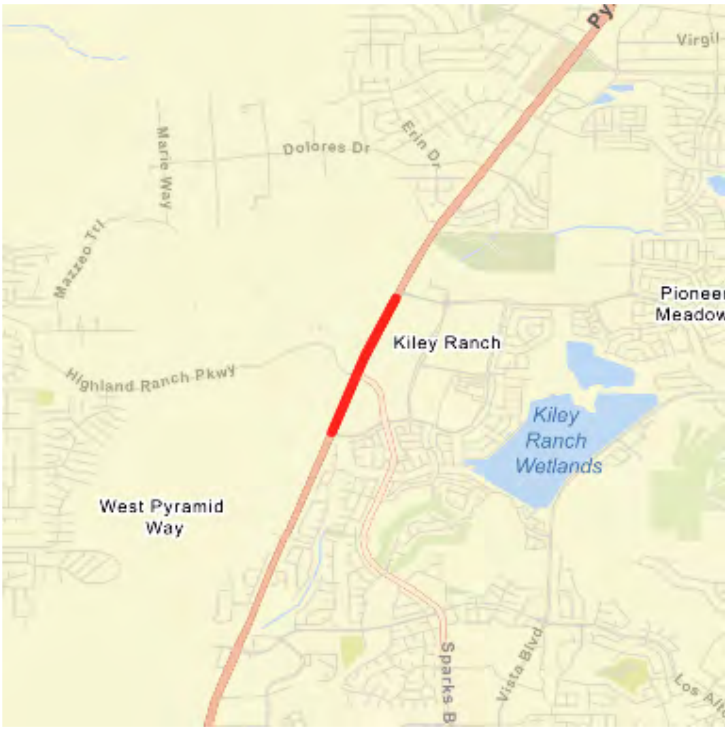


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	$1,200,000	-	-	-	-	-	-	$1,200,000
Total Preliminary Engineering		$1,200,000	-	-	-	-	-	-	$1,200,000
Right of Way	LOCAL FUEL TAX - RTCWA	-	$300,000	-	-	-	-	-	$300,000
Total Right of Way		-	$300,000	-	-	-	-	-	$300,000
Construction	LOCAL FUEL TAX - RTCWA	-	-	$13,000,000	-	-	-	-	$13,000,000
Total Construction		-	-	$13,000,000	-	-	-	-	$13,000,000
Total Prior Costs		$1,200,000	-	-	-	-	-	-	$1,200,000
Total Programmed		$1,200,000	$300,000	$13,000,000	-	-	-	-	$14,500,000

WA20220011 - Pyramid Hwy/Sparks Blvd Interchange and Connector Improvements - Feasibility and Preliminary Design

Preliminary design for improvements to the Pyramid Way and Sparks Blvd/Highland Ranch intersection, including converting existing intersection to a new grade-separated interchange. Preliminary design of the Pyramid/US 395 Connector (new road) between Pyramid Way and US 395.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$5,000,000
Lead Agency	RTC Washoe
Contact	Austin McCoy
NDOT District	District 2
County	Washoe
Project Type	Interchange/Intersection
Air Quality	Exempt, All Projects - Interchange reconfiguration projects.
TCM	No
Construction Start	-
From	Kiley Pkwy
To	Wingfield Hills Rd



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	$500,000	-	-	-	-	-	-	$500,000
Preliminary Engineering	STBG >200K (WA)	$4,500,000	-	-	-	-	-	-	$4,500,000
Total Preliminary Engineering		$5,000,000	-	-	-	-	-	-	$5,000,000
Total Prior Costs		$5,000,000	-	-	-	-	-	-	$5,000,000
Total Programmed		$5,000,000	-	-	-	-	-	-	$5,000,000

WA20220017 - US 395 North Valleys- Preservation

Mill and overlay with hydraulic, ITS, and ramp improvements

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$27,725,000
Lead Agency	Nevada DOT
Contact	Victor Peters
NDOT District	District 2
County	Washoe
Project Type	Preservation
Air Quality	Exempt, Safety - Pavement resurfacing and/or rehabilitation.
TCM	No
Construction Start	2028
From	WA MP 34.1
To	WA MP 38.3



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	STATE HIGHWAY FUND	$225,000	-	-	-	-	-	-	$225,000
Total Preliminary Engineering		$225,000	-	-	-	-	-	-	$225,000
Construction	NHPP	-	-	-	-	$21,683,750	-	-	$21,683,750
Construction	STATE MATCH - NV	-	-	-	-	$1,375,000	-	-	$1,375,000
Construction	STBG FLEX	-	-	-	-	$4,441,250	-	-	$4,441,250
Total Construction		-	-	-	-	$27,500,000	-	-	$27,500,000
Total Prior Costs		$225,000	-	-	-	-	-	-	$225,000
Total Programmed		$225,000	-	-	-	$27,500,000	-	-	$27,725,000

WA20220019 - I 580 Bowers to Mount Rose Highway- Preservation

Mill and fill w/ OG, profile grind concrete sections

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$30,300,000
Lead Agency	Nevada DOT
Contact	Shawn Paterson
NDOT District	District 2
County	Washoe
Project Type	Preservation
Air Quality	Exempt, Safety - Pavement resurfacing and/or rehabilitation.
TCM	No
Construction Start	2026
From	WA MP 5.4
To	WA MP 14.95

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	STATE HIGHWAY FUND	$300,000	-	-	-	-	-	-	$300,000
Total Preliminary Engineering		$300,000	-	-	-	-	-	-	$300,000
Construction	NHPP	-	-	$28,500,000	-	-	-	-	$28,500,000
Construction	STATE MATCH - NV	-	-	$1,500,000	-	-	-	-	$1,500,000
Total Construction		-	-	$30,000,000	-	-	-	-	$30,000,000
Total Prior Costs		$300,000	-	-	-	-	-	-	$300,000
Total Programmed		$300,000	-	$30,000,000	-	-	-	-	$30,300,000

WA20220020 - SR 659 North McCarran Blvd 3R, from N Virginia St to Northtowne Ln.

Mill and overlay with SLI, ADA, L&A, and pedestrian safety improvements.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$9,700,154
Lead Agency	Nevada DOT
Contact	Fred Shakal
NDOT District	District 2
County	Washoe
Project Type	Preservation
Air Quality	Exempt, Safety - Pavement resurfacing and/or rehabilitation.
TCM	No
Construction Start	2026
From	N Virginia
To	Northtown Ln



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Right of Way	STATE HIGHWAY FUND	$130,000	-	-	-	-	-	-	$130,000
Total Right of Way		$130,000	-	-	-	-	-	-	$130,000
Construction	STATE HIGHWAY FUND	-	-	$9,570,154	-	-	-	-	$9,570,154
Total Construction		-	-	$9,570,154	-	-	-	-	$9,570,154
Total Prior Costs		$130,000	-	-	-	-	-	-	$130,000
Total Programmed		$130,000	-	$9,570,154	-	-	-	-	$9,700,154

WA20220021 - SR 445 Spanish Springs, Golden View Drive to Egyptian Drive- Preservation

2.75" cold mill, 2" dense grade with 0.75" open grade

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$11,430,000
Lead Agency	Nevada DOT
Contact	Brian Deal
NDOT District	District 2
County	Washoe
Project Type	Preservation
Air Quality	Exempt, Safety - Pavement resurfacing and/or rehabilitation.
TCM	No
Construction Start	2028
From	WA MP 4.5
To	WA MP 9.0



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	STATE HIGHWAY FUND	$230,000	-	-	-	-	-	-	$230,000
Total Preliminary Engineering		$230,000	-	-	-	-	-	-	$230,000
Construction	NHPP	-	-	-	-	$10,640,000	-	-	$10,640,000
Construction	STATE MATCH - NV	-	-	-	-	$560,000	-	-	$560,000
Total Construction		-	-	-	-	$11,200,000	-	-	$11,200,000
Total Prior Costs		$230,000	-	-	-	-	-	-	$230,000
Total Programmed		$230,000	-	-	-	$11,200,000	-	-	$11,430,000

WA20220025 - Sierra St Bridge Replacement

Design, ROW, and construction for the Sierra St Bridge Replacement project.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$33,600,000
Lead Agency	RTC Washoe
Contact	Bryan Byrne
NDOT District	District 2
County	Washoe
Project Type	Bridge/Structures
Air Quality	Exempt, Safety - Non capacity widening or bridge reconstruction.
TCM	No
Construction Start	2026
From	-
To	-

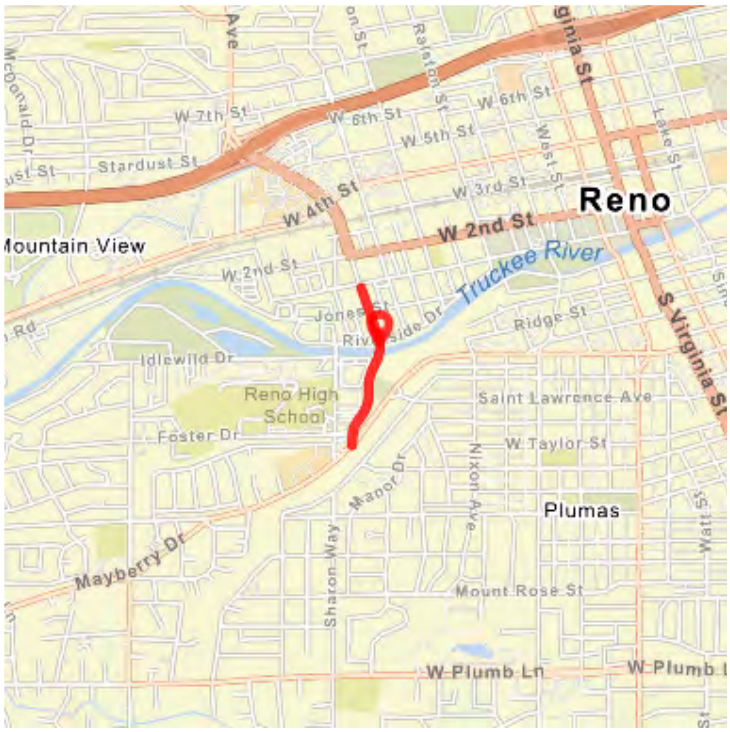
Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	BRIDGE FORMULA PGM OFF-SYS	$3,500,000	-	-	-	-	-	-	$3,500,000
Total Preliminary Engineering		$3,500,000	-	-	-	-	-	-	$3,500,000
Right of Way	LOCAL FUEL TAX - RTCWA	-	-	$100,000	-	-	-	-	$100,000
Total Right of Way		-	-	$100,000	-	-	-	-	$100,000
Construction	BRIDGE FORMULA PGM OFF-SYS	-	-	$12,500,000	-	-	-	-	$12,500,000
Construction	BRIDGE FORMULA PROGRAM	-	-	$6,100,000	-	-	-	-	$6,100,000
Construction	LOCAL FUEL TAX - RTCWA	-	-	$6,700,000	-	-	-	-	$6,700,000
Construction	STBG BRIDGE	-	-	$4,700,000	-	-	-	-	$4,700,000
		-	-	$30,000,000	-	-	-	-	$30,000,000

Total Construction							
Total Prior Costs	$3,500,000	-	-	-	-	-	$3,500,000
Total Programmed	$3,500,000	-	$30,100,000	-	-	-	$33,600,000

WA20220026 - Keystone Avenue Improvements - Package 2

Multimodal improvements and Truckee River bridge replacement.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$30,000,000
Lead Agency	RTC Washoe
Contact	Sara Going
NDOT District	District 2
County	Washoe
Project Type	Bridge/Structures
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	No
Construction Start	2027
From	California Avenue
To	1st Street



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Construction	LOCAL FUEL TAX - RTCWA	-	-	-	$30,000,000	-	-	-	$30,000,000
Total Construction		-	-	-	$30,000,000	-	-	-	$30,000,000
Total Programmed		-	-	-	$30,000,000	-	-	-	$30,000,000

WA20220027 - Mt. Rose Corridor Study Recommendations Phase 1 Improvements

Construct roundabouts at Bordeaux Dr and Callahan Rd. Add raised median and a shared use path.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$26,000,000
Lead Agency	RTC Washoe
Contact	Amanda Callegari
NDOT District	District 2
County	Washoe
Project Type	Major/New Construction
Air Quality	Exempt, Safety - Pavement resurfacing and/or rehabilitation.
TCM	No
Construction Start	2028
From	Bordeaux Dr
To	Thomas Creek Rd

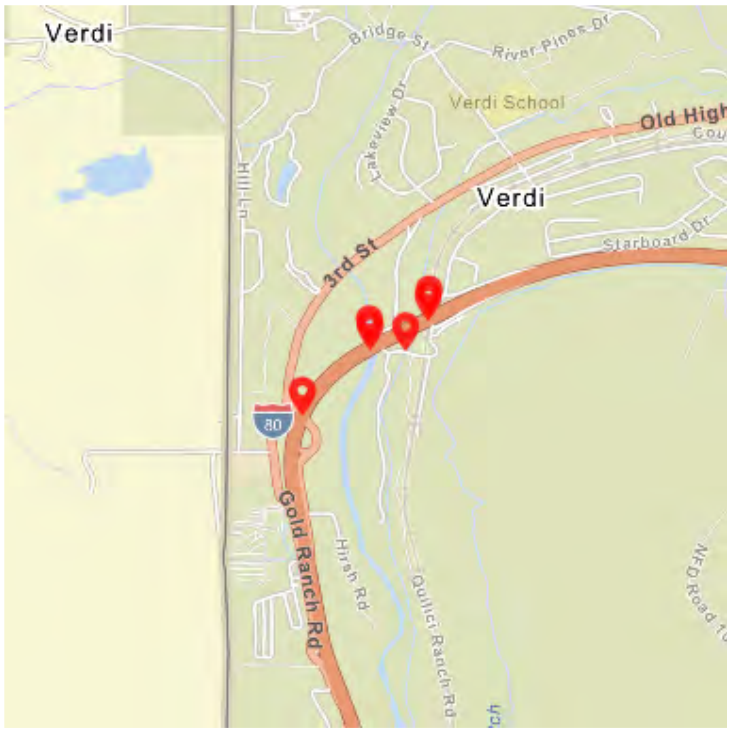


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	-	$3,000,000	-	-	-	-	$3,000,000
Total Preliminary Engineering		-	-	$3,000,000	-	-	-	-	$3,000,000
Construction	LOCAL FUEL TAX - RTCWA	-	-	-	-	$10,000,000	-	-	$10,000,000
Construction	STATE HIGHWAY FUND	-	-	-	-	$13,000,000	-	-	$13,000,000
Total Construction		-	-	-	-	$23,000,000	-	-	$23,000,000
Total Programmed		-	-	$3,000,000	-	$23,000,000	-	-	$26,000,000

WA20220028 - I-80, Verdi - Bridge Replacements Phase 1

Replace Structures, G-772 E/W, I-773 E/W, B-764 E/W, G-765 E/W

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$103,518,610
Lead Agency	Nevada DOT
Contact	Christopher Kuhn
NDOT District	District 2
County	Washoe
Project Type	Bridge/Structures
Air Quality	Exempt, Safety - Non capacity widening or bridge reconstruction.
TCM	No
Construction Start	2031
From	-
To	-



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	BRIDGE FORMULA PROGRAM	-	-	-	-	-	-	$10,008,250	$10,008,250
Preliminary Engineering	STATE HIGHWAY FUND	$5,750,000	-	-	-	-	-	-	$5,750,000
Preliminary Engineering	STATE MATCH - NV	-	-	-	-	-	-	$526,750	$526,750
Total Preliminary Engineering		$5,750,000	-	-	-	-	-	$10,535,000	$16,285,000
Right of Way	BRIDGE FORMULA PROGRAM	-	-	-	-	-	-	$522,500	$522,500
Right of Way	STATE HIGHWAY FUND	$550,000	-	-	-	-	-	-	$550,000
Right of Way	STATE MATCH - NV	-	-	-	-	-	-	$27,500	$27,500
Total Right of Way		$550,000	-	-	-	-	-	$550,000	$1,100,000

Construction	BRIDGE FORMULA PROGRAM	-	-	-	-	-	-	$81,826,929	$81,826,929
Construction	STATE MATCH - NV	-	-	-	-	-	-	$4,306,681	$4,306,681
Total Construction		-	-	-	-	-	-	$86,133,610	$86,133,610
Total Prior Costs		$6,300,000	-	-	-	-	-	-	$6,300,000
Total Future Costs		-	-	-	-	-	-	$97,218,610	$97,218,610
Total Programmed		$6,300,000	-	-	-	-	-	$97,218,610	$103,518,610

WA20220035 - West 4th St Improvements - West McCarran Blvd to Vine St

Construct enhanced sidewalks, bus/bike lanes, and intersection improvements.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$27,435,000
Lead Agency	RTC Washoe
Contact	Doug Maloy
NDOT District	District 2
County	Washoe
Project Type	Active Transportation (Bike/Ped)
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	No
Construction Start	2025
From	W. McCarran Blvd
To	Vine St



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	$3,500,000	-	-	-	-	-	-	$3,500,000
Total Preliminary Engineering		$3,500,000	-	-	-	-	-	-	$3,500,000
Construction	HSIP	-	$13,828,000	-	-	-	-	-	$13,828,000
Construction	LOCAL FUEL TAX - RTCWA	-	$10,107,000	-	-	-	-	-	$10,107,000
Total Construction		-	$23,935,000	-	-	-	-	-	$23,935,000
Total Prior Costs		$3,500,000	-	-	-	-	-	-	$3,500,000
Total Programmed		$3,500,000	$23,935,000	-	-	-	-	-	$27,435,000

WA20230002 - Pyramid Hwy/Sparks Blvd Interchange and Connector Improvements - Construction

Improvements to the Pyramid Way and Sparks Blvd/Highland Ranch intersection, including converting existing intersection to a new grade-separated interchange. Right-of-way and construction phases of project.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$122,000,000
Lead Agency	RTC Washoe
Contact	Austin McCoy
NDOT District	District 2
County	Washoe
Project Type	Interchange/Intersection
Air Quality	Exempt, All Projects - Interchange reconfiguration projects.
TCM	No
Construction Start	2031
From	Kiley Pkwy
To	Wingfield Hills Rd



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Right of Way	LOCAL FUEL TAX - RTCWA	-	-	-	-	-	-	$2,000,000	$2,000,000
Total Right of Way		-	-	-	-	-	-	$2,000,000	$2,000,000
Construction	ANTICIPATED DISCRETIONARY GRANT	-	-	-	-	-	-	$120,000,000	$120,000,000
Total Construction		-	-	-	-	-	-	$120,000,000	$120,000,000
Total Future Costs		-	-	-	-	-	-	$122,000,000	$122,000,000
Total Programmed		-	-	-	-	-	-	$122,000,000	$122,000,000

WA20230003 - Hydrogen Fuel Cell Buses

Purchase of hydrogen fuel cell electric buses to replace aging diesel buses; purchase through award of discretionary funds (5339(c) Low or No Vehicle Emission Program).

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$8,270,452
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Capital & Rehab
Air Quality	Exempt, Mass Transit - Purchase new buses and rail cars to replace existing vehicles or minor expansions of fleet.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	FTA 5339 BUS/FAC LRG URB CAPITAL	$7,029,884	-	-	-	-	-	-	$7,029,884
Other	LOCAL FUEL TAX - RTCWA	$1,240,568	-	-	-	-	-	-	$1,240,568
Total Other		$8,270,452	-	-	-	-	-	-	$8,270,452
Total Prior Costs		$8,270,452	-	-	-	-	-	-	$8,270,452
Total Programmed		$8,270,452	-	-	-	-	-	-	$8,270,452

WA20230004 - Hydrogen Fuel Cell Bus Support Equipment/Facilities

Purchase of hydrogen fuel tank and station upgrades; purchase through award of discretionary funds (5339(c) Low or No Vehicle Emission Program).

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$1,270,136
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Capital & Rehab
Air Quality	Exempt, Mass Transit - Purchase new buses and rail cars to replace existing vehicles or minor expansions of fleet.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	FTA 5339 BUS/FAC LRG URB CAPITAL	$1,143,122	-	-	-	-	-	-	$1,143,122
Other	LOCAL FUEL TAX - RTCWA	$127,014	-	-	-	-	-	-	$127,014
Total Other		$1,270,136	-	-	-	-	-	-	$1,270,136
Total Prior Costs		$1,270,136	-	-	-	-	-	-	$1,270,136
Total Programmed		$1,270,136	-	-	-	-	-	-	$1,270,136

WA20230005 - Hydrogen Fuel Cell Other Capital Items

Project management and training for hydrogen fuel cell bus and station acquisition/construction; funding through award of discretionary funds (5339(c) Low or No Vehicle Emission Program).

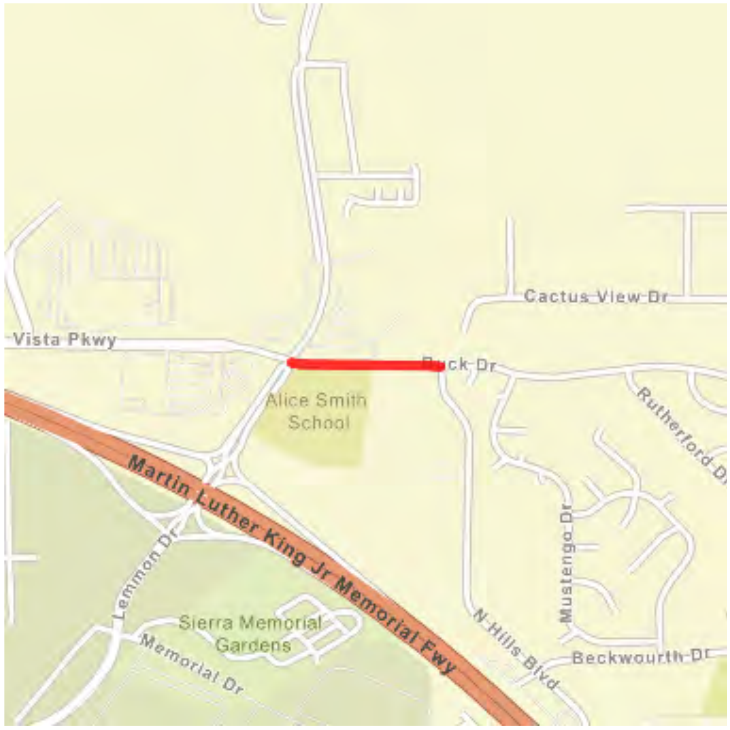
MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$764,500
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Capital & Rehab
Air Quality	Exempt, Mass Transit - Const of new bus or rail storage/maint facilities excluded in 23 CFR part 771.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	FTA 5339 BUS/FAC LRG URB CAPITAL	$611,600	-	-	-	-	-	-	$611,600
Other	LOCAL FUEL TAX - RTCWA	$152,900	-	-	-	-	-	-	$152,900
Total Other		$764,500	-	-	-	-	-	-	$764,500
Total Prior Costs		$764,500	-	-	-	-	-	-	$764,500
Total Programmed		$764,500	-	-	-	-	-	-	$764,500

WA20230006 - Buck Drive Circulation Project

Widening of Buck Drive between Lemmon Drive and North Hills Boulevard

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$4,000,000
Lead Agency	RTC Washoe
Contact	Bryan Byrne
NDOT District	District 2
County	Washoe
Project Type	Capacity
Air Quality	Non-Exempt
TCM	No
Construction Start	2026
From	Lemmon Dr
To	North Hills Blvd



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	$511,164	-	-	-	-	-	-	$511,164
Total Preliminary Engineering		$511,164	-	-	-	-	-	-	$511,164
Right of Way	LOCAL FUEL TAX - RTCWA	-	$488,836	-	-	-	-	-	$488,836
Total Right of Way		-	$488,836	-	-	-	-	-	$488,836
Construction	LOCAL FUEL TAX - RTCWA	-	-	$3,000,000	-	-	-	-	$3,000,000
Total Construction		-	-	$3,000,000	-	-	-	-	$3,000,000
Total Prior Costs		$511,164	-	-	-	-	-	-	$511,164
Total Programmed		$511,164	$488,836	$3,000,000	-	-	-	-	$4,000,000

WA20230007 - Military Road Capacity & Safety Project

Roadway widening, safety, and multimodal improvements.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$38,858,400
Lead Agency	RTC Washoe
Contact	Austin McCoy
NDOT District	District 2
County	Washoe
Project Type	Capacity
Air Quality	Non-Exempt
TCM	No
Construction Start	2026
From	Lemmon Dr
To	Echo Ave

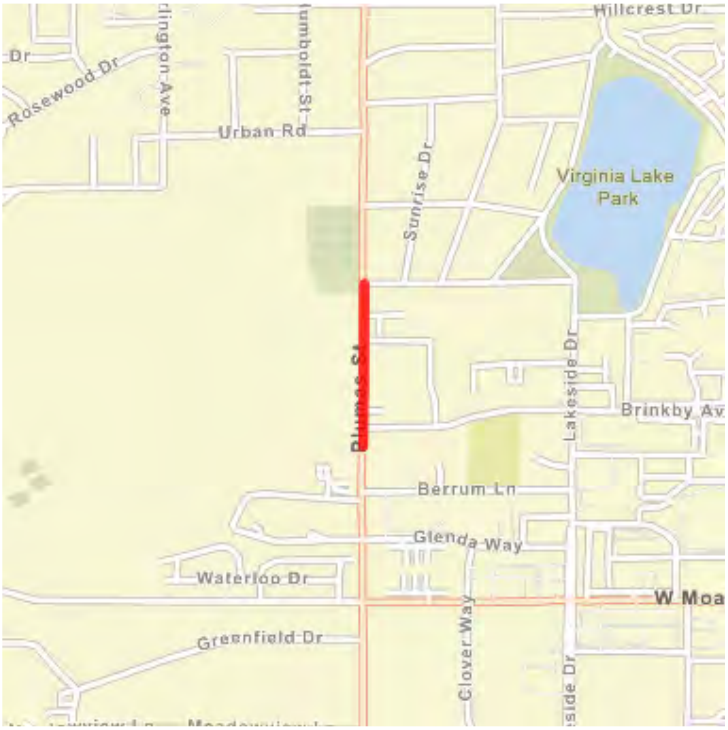


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	$5,000,000	-	-	-	-	-	-	$5,000,000
Total Preliminary Engineering		$5,000,000	-	-	-	-	-	-	$5,000,000
Right of Way	LOCAL FUEL TAX - RTCWA	-	$3,000,000	-	-	-	-	-	$3,000,000
Total Right of Way		-	$3,000,000	-	-	-	-	-	$3,000,000
Construction	LOCAL FUEL TAX - RTCWA	-	-	$30,858,400	-	-	-	-	$30,858,400
Total Construction		-	-	$30,858,400	-	-	-	-	$30,858,400
Total Prior Costs		$5,000,000	-	-	-	-	-	-	$5,000,000
Total Programmed		$5,000,000	$3,000,000	$30,858,400	-	-	-	-	$38,858,400

WA20230008 - Plumas Street Sidewalk - Phase 2

Install sidewalk, curb and gutter on the west side of Plumas Street from Mountain View Drive to Brinkby Ave. This will improve safety, encourage non-motorized travel, improve access to transit, and reduce emissions and energy use by encouraging non-motorized travel.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$402,155
Lead Agency	City of Reno
Contact	Kurt Dietrich
NDOT District	District 2
County	Washoe
Project Type	Road Improvement
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	No
Construction Start	2024
From	Mountain View Dr
To	Brinkby Ave



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Construction	LOCAL FUND	$20,108	-	-	-	-	-	-	$20,108
Construction	TAP >200K STBG (WA)	$382,047	-	-	-	-	-	-	$382,047
Total Construction		$402,155	-	-	-	-	-	-	$402,155
Total Prior Costs		$402,155	-	-	-	-	-	-	$402,155
Total Programmed		$402,155	-	-	-	-	-	-	$402,155

WA20230009 - Pedestrian Ramp Project - Phase 1

This project will update several pedestrian ramps within various school zoning areas that are currently non-ADA compliant. These ramps provide access to a safe place to walk and a safe place to navigate intersections.

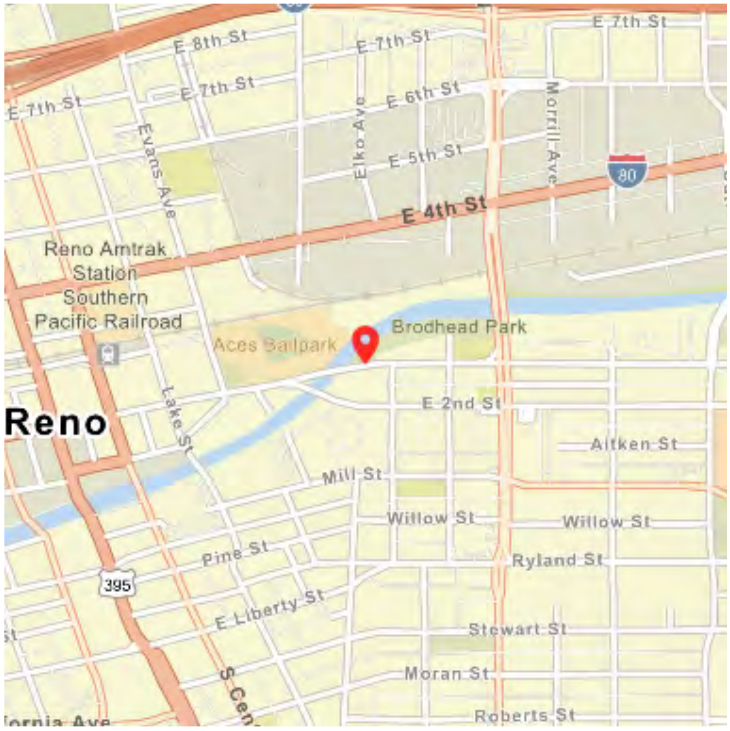
MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$390,000
Lead Agency	City of Sparks
Contact	Amber Sosa
NDOT District	District 2
County	Washoe
Project Type	ADA
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	No
Construction Start	2024
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Construction	LOCAL FUND	$19,500	-	-	-	-	-	-	$19,500
Construction	TAP >200K STBG (WA)	$370,500	-	-	-	-	-	-	$370,500
Total Construction		$390,000	-	-	-	-	-	-	$390,000
Total Prior Costs		$390,000	-	-	-	-	-	-	$390,000
Total Programmed		$390,000	-	-	-	-	-	-	$390,000

WA20230010 - Brodhead Park Restoration Project

The Brodhead Park Restoration Project is a collaborative effort by the City of Reno and One Truckee River (OTR). The goal is to complete a riverbank restoration and vegetation management project at Brodhead Memorial Park along the Tahoe-Pyramid Trail. The project will address critical environmental issues facing the Truckee River including impaired water quality, erosion, aquatic wildlife habitat needs, and vegetation loss. The project is also engaging with the local neighborhood to create an invested stakeholder base to participate in the planning, implementation, and creation of a local neighborhood support system to provide ongoing care of the riverbank restoration.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$723,635
Lead Agency	City of Reno
Contact	Iris Jehle-Peppard
NDOT District	District 2
County	Washoe
Project Type	Landscape & Aesthetics
Air Quality	Exempt, Other - Plantings, landscaping, etc.
TCM	No
Construction Start	2026
From	-
To	-



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUND	-	$4,839	-	-	-	-	-	$4,839
Preliminary Engineering	TAP >200K STBG (WA)	-	$91,930	-	-	-	-	-	$91,930
Total Preliminary Engineering		-	$96,769	-	-	-	-	-	$96,769
Construction	LOCAL FUND	-	-	$31,343	-	-	-	-	$31,343
Construction	TAP >200K STBG (WA)	-	-	$595,523	-	-	-	-	$595,523
Total Construction		-	-	$626,866	-	-	-	-	$626,866
Total Programmed		-	$96,769	$626,866	-	-	-	-	$723,635

WA20230016 - Butch Cassidy Extension

New two-lane roadway connection including multimodal path. Extension of west end of Butch Cassidy to Thomas Creek/Mt. Rose Highway intersection.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$11,700,000
Lead Agency	RTC Washoe
Contact	Kimberly Diegle
NDOT District	District 2
County	Washoe
Project Type	Major/New Construction
Air Quality	Non-Exempt
TCM	No
Construction Start	2026
From	Tuscan Sun Ct
To	Thomas Creek Rd

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	$2,200,000	-	-	-	-	-	$2,200,000
Total Preliminary Engineering		-	$2,200,000	-	-	-	-	-	$2,200,000
Right of Way	LOCAL FUEL TAX - RTCWA	-	$1,500,000	-	-	-	-	-	$1,500,000
Total Right of Way		-	$1,500,000	-	-	-	-	-	$1,500,000
Construction	LOCAL FUEL TAX - RTCWA	-	-	$8,000,000	-	-	-	-	$8,000,000
Total Construction		-	-	$8,000,000	-	-	-	-	$8,000,000
Total Programmed		-	$3,700,000	$8,000,000	-	-	-	-	$11,700,000

WA20230017 - FlexRIDE/ACCESS expansion vehicles

vehicle fleet expansion program for FlexRIDE (microtransit) and ACCESS services.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$4,715,002
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Capital & Rehab
Air Quality	Exempt, Mass Transit - Purchase new buses and rail cars to replace existing vehicles or minor expansions of fleet.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	FTA 5307 LRG URB CAPITAL	-	$952,000	$952,000	$952,000	-	-	-	$2,856,000
Other	FTA 5310 ELDERLY/DISABLED LRG URB CAPITAL	$1,151,752	-	-	-	-	-	-	$1,151,752
Other	LOCAL SALES TAX - RTCWA	$203,250	$168,000	$168,000	$168,000	-	-	-	$707,250
Total Other		$1,355,002	$1,120,000	$1,120,000	$1,120,000	-	-	-	$4,715,002
Total Prior Costs		$1,355,002	-	-	-	-	-	-	$1,355,002
Total Programmed		$1,355,002	$1,120,000	$1,120,000	$1,120,000	-	-	-	$4,715,002

WA20230018 - School Zone Safety Infrastructure

City of Reno, in coordination with Washoe County School District, Safe Routes to School Program, will purchase school zone speed beacon systems that will act as traffic calming devices in various school zones.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$82,000
Lead Agency	City of Reno
Contact	Kurt Dietrich
NDOT District	District 2
County	Washoe
Project Type	Safety
Air Quality	Exempt, Safety - Safety Improvement Program.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	LOCAL FUND	$4,100	-	-	-	-	-	-	$4,100
Other	TAP >200K STBG (WA)	$77,900	-	-	-	-	-	-	$77,900
Total Other		$82,000	-	-	-	-	-	-	$82,000
Total Prior Costs		$82,000	-	-	-	-	-	-	$82,000
Total Programmed		$82,000	-	-	-	-	-	-	$82,000

WA20240001 - South Meadows Connector - Alignment Study

Alignment study

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$2,700,000
Lead Agency	Nevada DOT
Contact	Christopher Kuhn
NDOT District	District 2
County	Washoe
Project Type	Studies
Air Quality	Exempt, Other - Engineering studies.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	STATE HIGHWAY FUND	-	$2,700,000	-	-	-	-	-	$2,700,000
Total Preliminary Engineering		-	$2,700,000	-	-	-	-	-	$2,700,000
Total Programmed		-	$2,700,000	-	-	-	-	-	$2,700,000

WA20240002 - SR 667, KIETZKE LN, RENO, 600FT N OF GENTRY WAY.

PEDESTRIAN, LIGHTING, AND ADA IMPROVEMENTS. VUNERABLE ROAD USER SAFETY PROJECT.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$2,100,000
Lead Agency	Nevada DOT
Contact	Shawn Paterson
NDOT District	District 2
County	Washoe
Project Type	Safety
Air Quality	-
TCM	-
Construction Start	2025
From	600FT N OF GENTRY LN
To	N OF KIETZKE MANOR

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	SECTION 164 PENALTIES HSIP FAST	$600,000	-	-	-	-	-	-	$600,000
Total Preliminary Engineering		$600,000	-	-	-	-	-	-	$600,000
Construction	HSIP	-	$1,425,000	-	-	-	-	-	$1,425,000
Construction	STATE MATCH - NV	-	$75,000	-	-	-	-	-	$75,000
Total Construction		-	$1,500,000	-	-	-	-	-	$1,500,000
Total Prior Costs		$600,000	-	-	-	-	-	-	$600,000
Total Programmed		$600,000	$1,500,000	-	-	-	-	-	$2,100,000

WA20240007 - SR667, Kietzke Lane, from South Virginia Street to Plumb Lane; SR653, Plumb Lane, from Kietzke Lane to Terminal Way

Pavement preservation project

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$11,180,100
Lead Agency	Nevada DOT
Contact	Brian Deal
NDOT District	District 2
County	Washoe
Project Type	Preservation
Air Quality	Exempt, Safety - Pavement resurfacing and/or rehabilitation.
TCM	No
Construction Start	2029
From	KIETZKE LANE, SOUTH VIRGINA
To	PLUMB LANE, TERMINAL WAY



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Construction	NHPP	-	-	-	-	-	$7,965,821	-	$7,965,821
Construction	STATE MATCH - NV	-	-	-	-	-	$559,005	-	$559,005
Construction	STBG FLEX	-	-	-	-	-	$2,655,274	-	$2,655,274
Total Construction		-	-	-	-	-	$11,180,100	-	$11,180,100
Total Programmed		-	-	-	-	-	$11,180,100	-	$11,180,100

WA20250003 - Multilayer Overlay on Various Structures Throughout Washoe County

Multilayer Overlay on Various Structures Throughout Washoe County

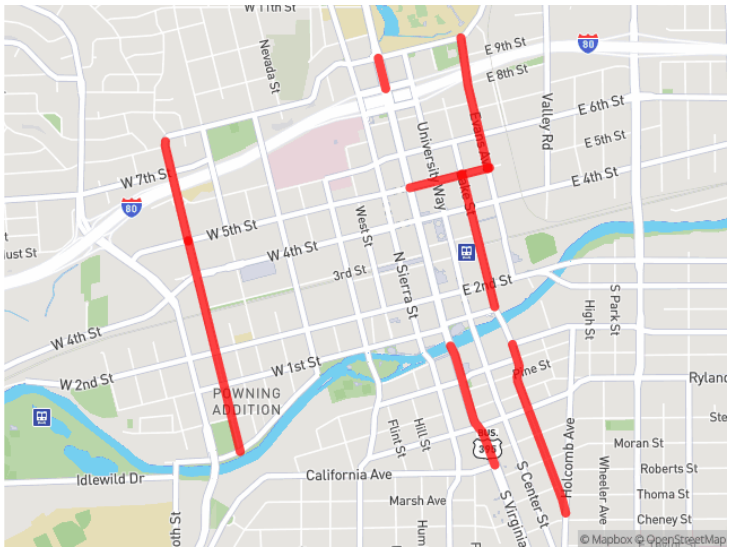
MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$5,000,000
Lead Agency	Nevada DOT
Contact	Allisa Root
NDOT District	District 2
County	Washoe
Project Type	Bridge/Structures
Air Quality	Exempt, Safety - Pavement resurfacing and/or rehabilitation.
TCM	No
Construction Start	2025
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Construction	BRIDGE FORMULA PROGRAM	-	$4,750,000	-	-	-	-	-	$4,750,000
Construction	STATE MATCH - NV	-	$250,000	-	-	-	-	-	$250,000
Total Construction		-	$5,000,000	-	-	-	-	-	$5,000,000
Total Programmed		-	$5,000,000	-	-	-	-	-	$5,000,000

WA20250004 - Biggest Little Bike Network

Construct bicycle facilities and safety improvements throughout network in downtown Reno. Corridors include: Vine Street from Riverside Drive to University Terrace; Fifth Street from Keystone Avenue to Evans Avenue; Virginia Street from California Avenue to Ninth Street; and Evans Avenue/Lake Street/Sinclair Street from E Ninth Street to Holcomb Avenue (from E Ninth Street to E Fifth Street via Evans Avenue; from E Fifth Street to Holcomb Avenue via Lake Street, which becomes Sinclair Street at Mill Street), with the connection between Evans Avenue and Lake Street made on E Fifth Street.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$25,150,000
Lead Agency	RTC Washoe
Contact	Sara Going
NDOT District	District 2
County	Washoe
Project Type	Active Transportation (Bike/Ped)
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	No
Construction Start	2026
From	California Avenue, E Ninth Street, Keystone Avenue, Riverside Drive
To	Evans Avenue, Holcomb Avenue, Ninth Street, University Terrace



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	$2,500,000	-	-	-	-	-	$2,500,000
Total Preliminary Engineering		-	$2,500,000	-	-	-	-	-	$2,500,000
Right of Way	LOCAL FUEL TAX - RTCWA	-	$500,000	-	-	-	-	-	$500,000
Total Right of Way		-	$500,000	-	-	-	-	-	$500,000
Construction	CMAQ - WA	-	-	$21,042,500	-	-	-	-	$21,042,500
Construction	LOCAL FUEL TAX - RTCWA	-	-	$1,107,500	-	-	-	-	$1,107,500
		-	-	$22,150,000	-	-	-	-	$22,150,000

Total Construction							
Total Programmed	-	$3,000,000	$22,150,000	-	-	-	- $25,150,000

WA20250005 - RENO TOWING AND RECOVERY INCENTIVE PROGRAM FY25-29

NDOT will select a Service Provider via the RFP process to manage the Towing and Recovery Incentive Program (TRIP), which reduces incident clearance times and improves traffic safety.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$1,400,000
Lead Agency	Nevada DOT
Contact	Juan Hernandez
NDOT District	District 2
County	Washoe
Project Type	Program Funding Buckets
Air Quality	Exempt, Safety - Hazard elimination program.
TCM	No
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	NHPP	-	$1,330,000	-	-	-	-	-	$1,330,000
Other	STATE MATCH - NV	-	$70,000	-	-	-	-	-	$70,000
Total Other		-	$1,400,000	-	-	-	-	-	$1,400,000
Total Programmed		-	$1,400,000	-	-	-	-	-	$1,400,000

WA20250007 - US 395A, South Virginia Street, Safety Improvements

US 395A, So. Virginia St., -from SR 431 Mt. Rose Highway to E. Patriot Blvd MP WA 16.267 to MP WA 20.080 - Safety Improvements

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$685,714
Lead Agency	Nevada DOT
Contact	Allisa Root
NDOT District	District 2
County	Washoe
Project Type	Safety
Air Quality	Exempt, Safety - Safety Improvement Program.
TCM	No
Construction Start	2025
From	MNT ROSE HWY
To	PATRIOT BLVD

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Construction	HSIP	-	$685,714	-	-	-	-	-	$685,714
Total Construction		-	$685,714	-	-	-	-	-	$685,714
Total Programmed		-	$685,714	-	-	-	-	-	$685,714

WA20250009 - SR 648, 2nd Street, Safety Repairs to Pedestrian Bridge

SR 648, 2nd Street, MP WA 0.132 to MP WA 0.155 - Safety Repairs to Pedestrian Bridge P-1356 at Golden Lane

MPO	RTC Washoe
TIP	26-00
Local ID	PRJ-2822
Total Cost	$1,680,000
Lead Agency	Nevada DOT
Contact	Allisa Root
NDOT District	District 2
County	Washoe
Project Type	Bridge/Structures
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	No
Construction Start	2026
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Construction	BRIDGE FORMULA PGM OFF-SYS	-	-	$1,596,000	-	-	-	-	$1,596,000
Construction	STATE MATCH - NV	-	-	$84,000	-	-	-	-	$84,000
Total Construction		-	-	$1,680,000	-	-	-	-	$1,680,000
Total Programmed		-	-	$1,680,000	-	-	-	-	$1,680,000

WA20250010 - Bus Stop Improvements Program

Program to maintain and improve systemwide bus stop locations with upgraded facilities and amenities

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$2,000,000
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Capital & Rehab
Air Quality	Exempt, Mass Transit - Construction of small passenger shelters and information kiosks.
TCM	-
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	LOCAL SALES TAX - RTCWA	-	-	-	$2,000,000	-	-	-	$2,000,000
Total Other		-	-	-	$2,000,000	-	-	-	$2,000,000
Total Programmed		-	-	-	$2,000,000	-	-	-	$2,000,000

WA20250011 - Active Transportation Program

Dedicated annual funding for Active Transportation Program

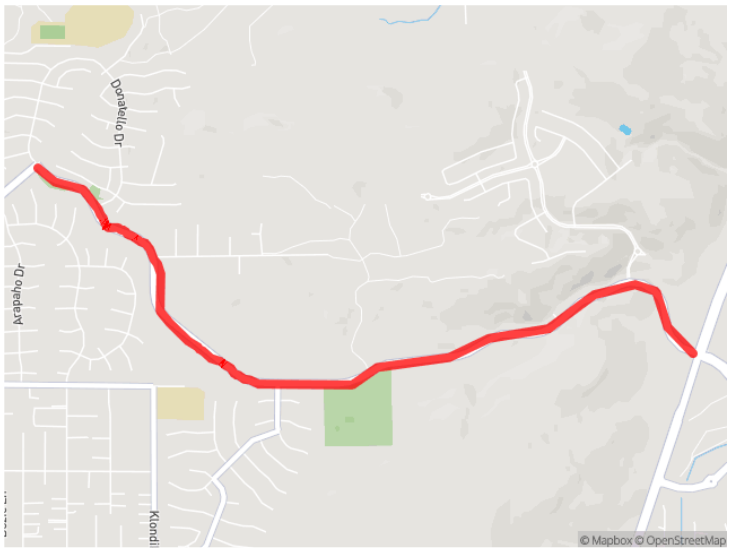
MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$20,000,000
Lead Agency	RTC Washoe
Contact	Marquis Williams
NDOT District	District 2
County	Washoe
Project Type	Active Transportation (Bike/Ped)
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	-
Construction Start	-
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	LOCAL FUEL TAX - RTCWA	-	-	$5,000,000	$5,000,000	$5,000,000	$5,000,000	-	$20,000,000
Total Other		-	-	$5,000,000	$5,000,000	$5,000,000	$5,000,000	-	$20,000,000
Total Programmed		-	-	$5,000,000	$5,000,000	$5,000,000	$5,000,000	-	$20,000,000

WA20250012 - Highland Ranch Parkway Capacity

Widen Highland Ranch Parkway from two to four lanes

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$62,000,000
Lead Agency	RTC Washoe
Contact	Austin McCoy
NDOT District	District 2
County	Washoe
Project Type	Capacity
Air Quality	-
TCM	-
Construction Start	2028
From	Sun Valley Blvd
To	Pyramid Wy

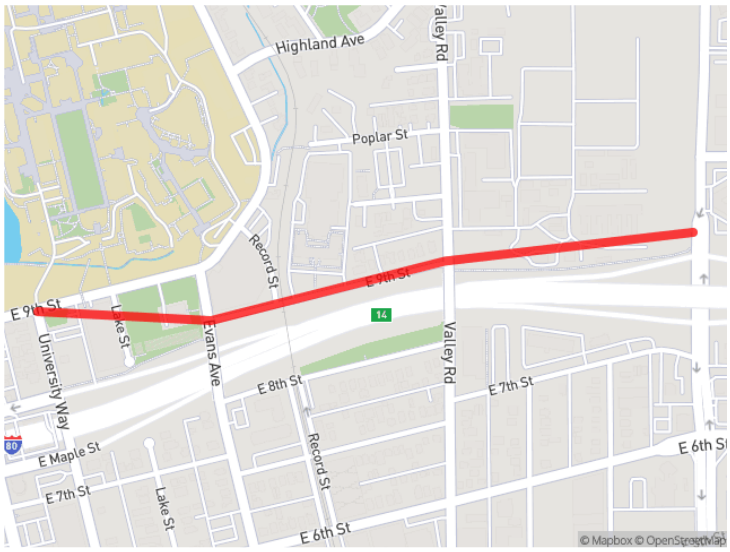


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	-	$6,000,000	-	-	-	-	$6,000,000
Total Preliminary Engineering		-	-	$6,000,000	-	-	-	-	$6,000,000
Right of Way	LOCAL FUEL TAX - RTCWA	-	-	-	$1,000,000	-	-	-	$1,000,000
Total Right of Way		-	-	-	$1,000,000	-	-	-	$1,000,000
Construction	LOCAL FUEL TAX - RTCWA	-	-	-	-	$55,000,000	-	-	$55,000,000
Total Construction		-	-	-	-	$55,000,000	-	-	$55,000,000
Total Programmed		-	-	$6,000,000	$1,000,000	$55,000,000	-	-	$62,000,000

WA20250013 - University Area Transportation Project

Road realignment from Lake St. to Evans Ave. and 9th St extension from Valley Rd. to Wells Ave.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$6,400,000
Lead Agency	RTC Washoe
Contact	Kimberly Diegle
NDOT District	District 2
County	Washoe
Project Type	Major/New Construction
Air Quality	-
TCM	-
Construction Start	2027
From	University Wy
To	Wells Ave

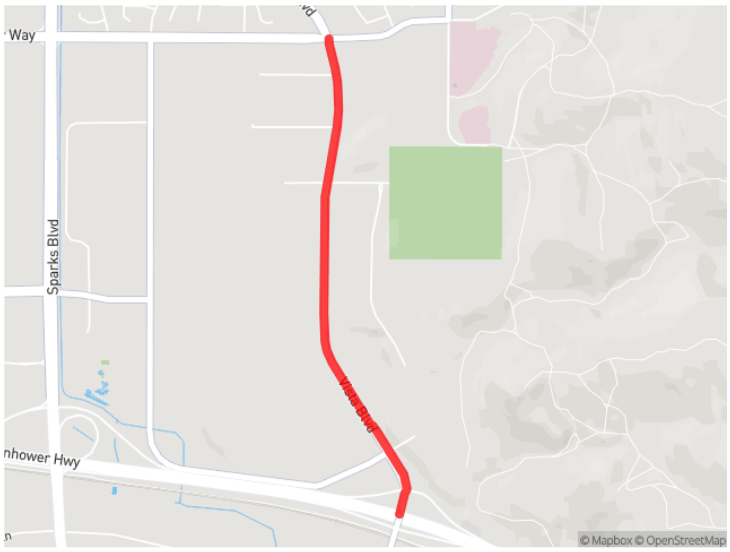


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	$1,000,000	-	-	-	-	-	$1,000,000
Total Preliminary Engineering		-	$1,000,000	-	-	-	-	-	$1,000,000
Right of Way	LOCAL FUEL TAX - RTCWA	-	-	$1,000,000	-	-	-	-	$1,000,000
Total Right of Way		-	-	$1,000,000	-	-	-	-	$1,000,000
Construction	LOCAL FUEL TAX - RTCWA	-	-	-	$4,400,000	-	-	-	$4,400,000
Total Construction		-	-	-	$4,400,000	-	-	-	$4,400,000
Total Programmed		-	$1,000,000	$1,000,000	$4,400,000	-	-	-	$6,400,000

WA20250014 - Vista Boulevard Widening

Widen Vista Boulevard from 4 to 6 lanes from I-80 to Prater Way

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$22,000,000
Lead Agency	RTC Washoe
Contact	Dale Keller
NDOT District	District 2
County	Washoe
Project Type	Capacity
Air Quality	Non-Exempt
TCM	-
Construction Start	2030
From	I-80
To	Prater Way

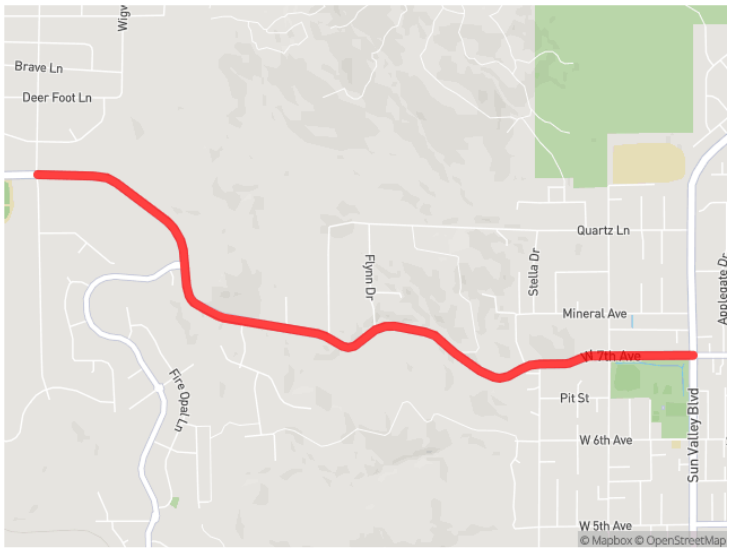


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	-	-	$2,000,000	-	-	-	$2,000,000
Total Preliminary Engineering		-	-	-	$2,000,000	-	-	-	$2,000,000
Construction	LOCAL FUEL TAX - RTCWA	-	-	-	-	-	-	$20,000,000	$20,000,000
Total Construction		-	-	-	-	-	-	$20,000,000	$20,000,000
Total Future Costs		-	-	-	-	-	-	$20,000,000	$20,000,000
Total Programmed		-	-	-	$2,000,000	-	-	$20,000,000	$22,000,000

WA20250015 - O'Brien's Pass Safety Project

Safety improvements and shared use path along Golden Valley Road/W 7th Avenue

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$5,500,000
Lead Agency	RTC Washoe
Contact	Dale Keller
NDOT District	District 2
County	Washoe
Project Type	Safety
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	-
Construction Start	-
From	Spearhead Way
To	Sun Valley Boulevard

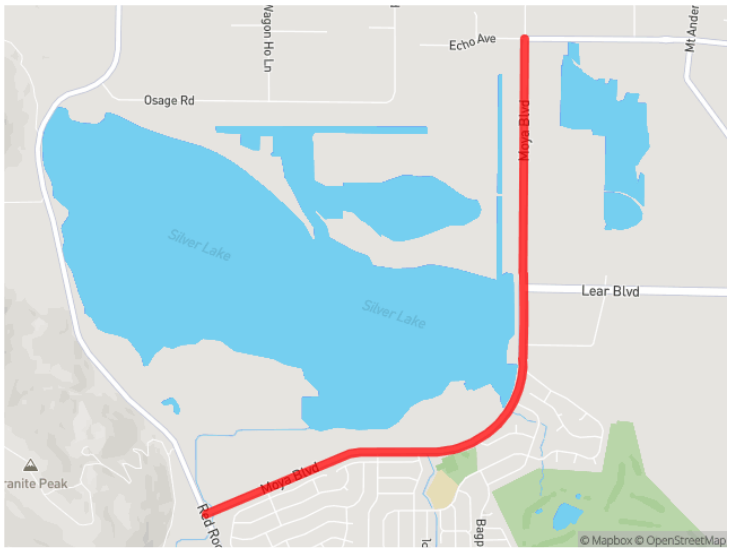


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	-	-	-	$1,500,000	-	-	$1,500,000
Total Preliminary Engineering		-	-	-	-	$1,500,000	-	-	$1,500,000
Right of Way	LOCAL FUEL TAX - RTCWA	-	-	-	-	-	$4,000,000	-	$4,000,000
Total Right of Way		-	-	-	-	-	$4,000,000	-	$4,000,000
Total Programmed		-	-	-	-	$1,500,000	$4,000,000	-	$5,500,000

WA20250016 - Moya Boulevard Capacity Project

Widen Moya Boulevard from Red Rock Road to Echo Avenue

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$23,500,000
Lead Agency	RTC Washoe
Contact	Ashley Hurlbut
NDOT District	District 2
County	Washoe
Project Type	Capacity
Air Quality	Non-Exempt
TCM	-
Construction Start	2028
From	Red Rock Road
To	Echo Avenue

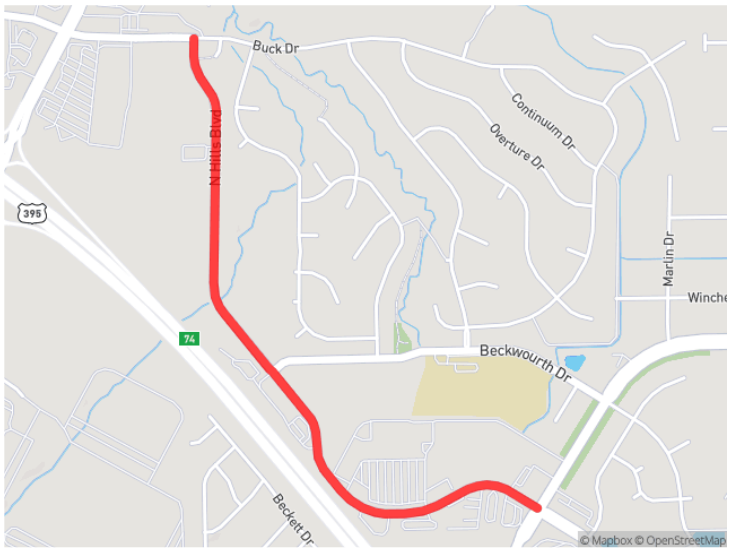


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	$2,500,000	-	-	-	-	-	$2,500,000
Total Preliminary Engineering		-	$2,500,000	-	-	-	-	-	$2,500,000
Right of Way	LOCAL FUEL TAX - RTCWA	-	-	$1,000,000	-	-	-	-	$1,000,000
Total Right of Way		-	-	$1,000,000	-	-	-	-	$1,000,000
Construction	LOCAL FUEL TAX - RTCWA	-	-	-	-	$20,000,000	-	-	$20,000,000
Total Construction		-	-	-	-	$20,000,000	-	-	$20,000,000
Total Programmed		-	$2,500,000	$1,000,000	-	$20,000,000	-	-	$23,500,000

WA20250017 - North Hills Road Capacity Project

Widen North Hills Boulevard from Golden Valley Road to Buck Drive

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$31,000,000
Lead Agency	RTC Washoe
Contact	Dale Keller
NDOT District	District 2
County	Washoe
Project Type	Capacity
Air Quality	Non-Exempt
TCM	-
Construction Start	2030
From	Golden Valley Road
To	Buck Drive

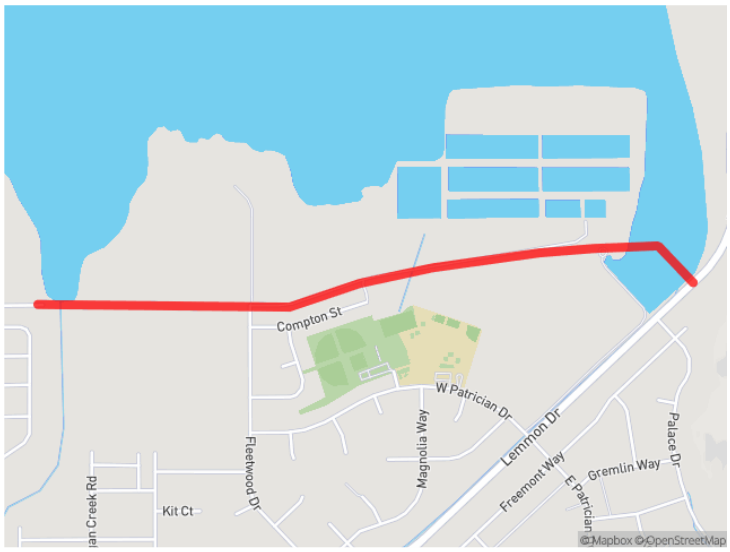


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	-	-	-	$3,000,000	-	-	$3,000,000
Total Preliminary Engineering		-	-	-	-	$3,000,000	-	-	$3,000,000
Right of Way	LOCAL FUEL TAX - RTCWA	-	-	-	-	-	$4,000,000	-	$4,000,000
Total Right of Way		-	-	-	-	-	$4,000,000	-	$4,000,000
Construction	LOCAL FUEL TAX - RTCWA	-	-	-	-	-	-	$24,000,000	$24,000,000
Total Construction		-	-	-	-	-	-	$24,000,000	$24,000,000
Total Future Costs		-	-	-	-	-	-	$24,000,000	$24,000,000
Total Programmed		-	-	-	-	$3,000,000	$4,000,000	$24,000,000	$31,000,000

WA20250018 - Lear Boulevard Connection

Complete connection on Lear Boulevard between Military Road and Lemmon Drive

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$44,000,000
Lead Agency	RTC Washoe
Contact	Dale Keller
NDOT District	District 2
County	Washoe
Project Type	Major/New Construction
Air Quality	Non-Exempt
TCM	-
Construction Start	2031
From	Military Road
To	Lemmon Drive

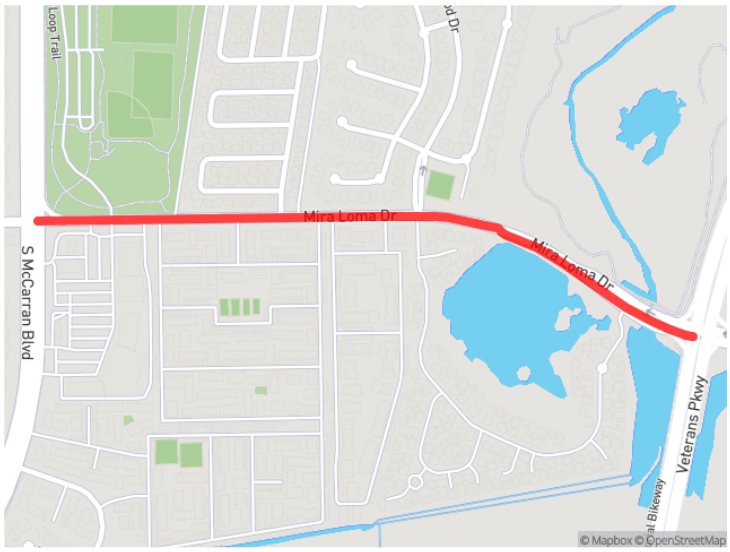


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	-	-	-	-	$3,000,000	-	$3,000,000
Total Preliminary Engineering		-	-	-	-	-	$3,000,000	-	$3,000,000
Right of Way	LOCAL FUEL TAX - RTCWA	-	-	-	-	-	-	$1,000,000	$1,000,000
Total Right of Way		-	-	-	-	-	-	$1,000,000	$1,000,000
Construction	LOCAL FUEL TAX - RTCWA	-	-	-	-	-	-	$40,000,000	$40,000,000
Total Construction		-	-	-	-	-	-	$40,000,000	$40,000,000
Total Future Costs		-	-	-	-	-	-	$41,000,000	$41,000,000
Total Programmed		-	-	-	-	-	$3,000,000	$41,000,000	$44,000,000

WA20250019 - Mira Loma Drive Capacity

Widen Mira Loma Drive between McCarran Boulevard and Veterans Parkway

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$1,500,000
Lead Agency	RTC Washoe
Contact	Dale Keller
NDOT District	District 2
County	Washoe
Project Type	Capacity
Air Quality	Non-Exempt
TCM	-
Construction Start	-
From	McCarran Boulevard
To	Veterans Parkway

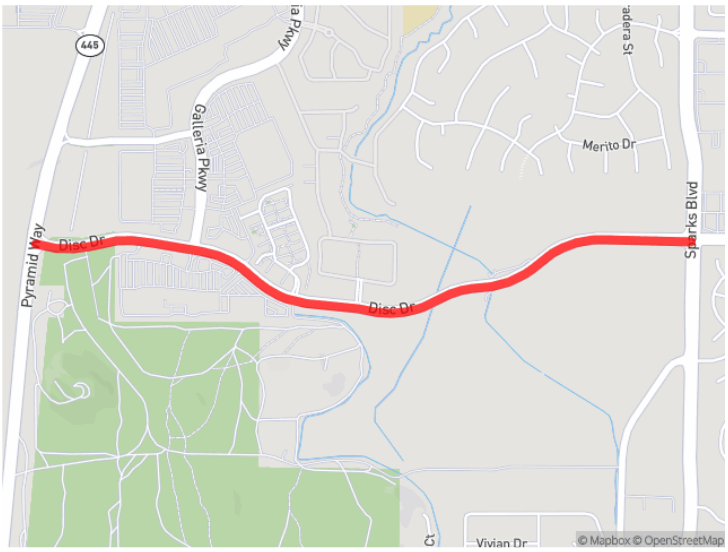


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	-	-	-	-	$1,500,000	-	$1,500,000
Total Preliminary Engineering		-	-	-	-	-	$1,500,000	-	$1,500,000
Total Programmed		-	-	-	-	-	$1,500,000	-	$1,500,000

WA20250020 - Pyramid Hwy/US 395 Connector Phase 2

Widen Disc Drive from Pyramid Highway to Vista Boulevard

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$2,500,000
Lead Agency	RTC Washoe
Contact	Dale Keller
NDOT District	District 2
County	Washoe
Project Type	Capacity
Air Quality	Non-Exempt
TCM	-
Construction Start	-
From	Pyramid Highway
To	Vista Boulevard

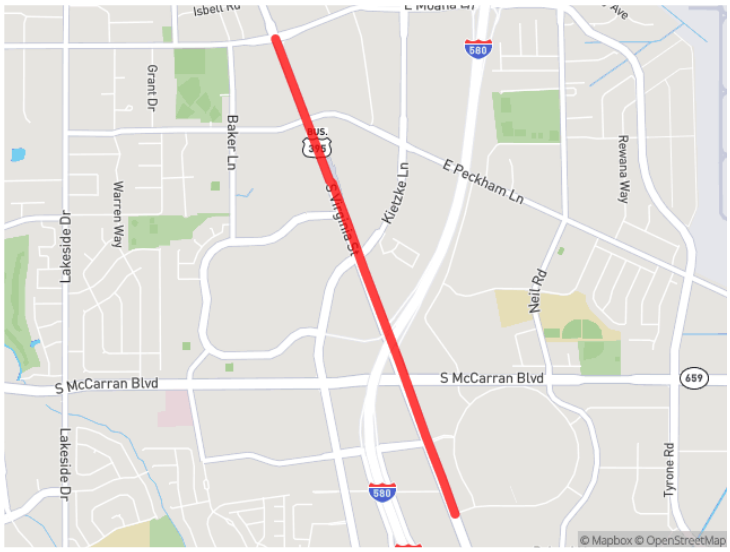


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	-	-	-	-	$2,500,000	-	$2,500,000
Total Preliminary Engineering		-	-	-	-	-	$2,500,000	-	$2,500,000
Total Programmed		-	-	-	-	-	$2,500,000	-	$2,500,000

WA20250021 - South Virginia Street Multimodal and ADA North

Improve bicycle and ADA facilities on South Virginia Street from Meadowood Mall Circle to Moana Lane

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$1,500,000
Lead Agency	RTC Washoe
Contact	Dale Keller
NDOT District	District 2
County	Washoe
Project Type	Active Transportation (Bike/Ped)
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	-
Construction Start	-
From	Meadowood Mall Circle
To	Moana Lane

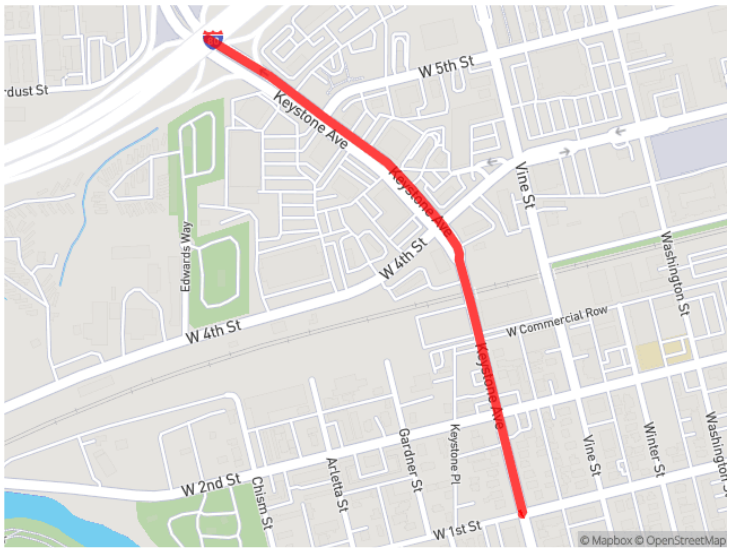


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	-	-	-	-	$1,500,000	-	$1,500,000
Total Preliminary Engineering		-	-	-	-	-	$1,500,000	-	$1,500,000
Total Programmed		-	-	-	-	-	$1,500,000	-	$1,500,000

WA20250022 - Keystone Avenue Multimodal Improvements

Improve bicycle and pedestrian facilities on Keystone Avenue from First Street to I-80

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$1,500,000
Lead Agency	RTC Washoe
Contact	Dale Keller
NDOT District	District 2
County	Washoe
Project Type	Active Transportation (Bike/Ped)
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	-
Construction Start	-
From	First Street
To	I-80

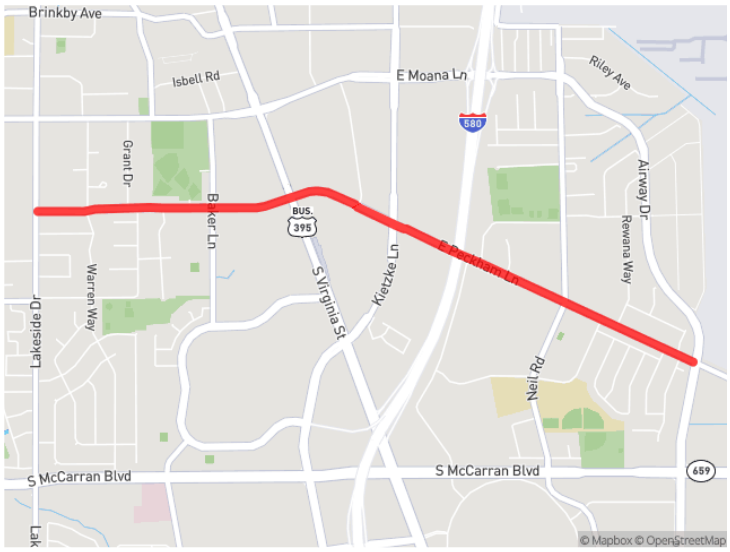


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	-	-	-	-	$1,500,000	-	$1,500,000
Total Preliminary Engineering		-	-	-	-	-	$1,500,000	-	$1,500,000
Total Programmed		-	-	-	-	-	$1,500,000	-	$1,500,000

WA20250023 - Peckham Lane Multimodal

Improved/added sidewalks and bike lanes on Peckham Lane from Lakeside Drive to Airway Drive

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$1,500,000
Lead Agency	RTC Washoe
Contact	Dale Keller
NDOT District	District 2
County	Washoe
Project Type	Active Transportation (Bike/Ped)
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	-
Construction Start	-
From	Lakeside Drive
To	Airway Drive

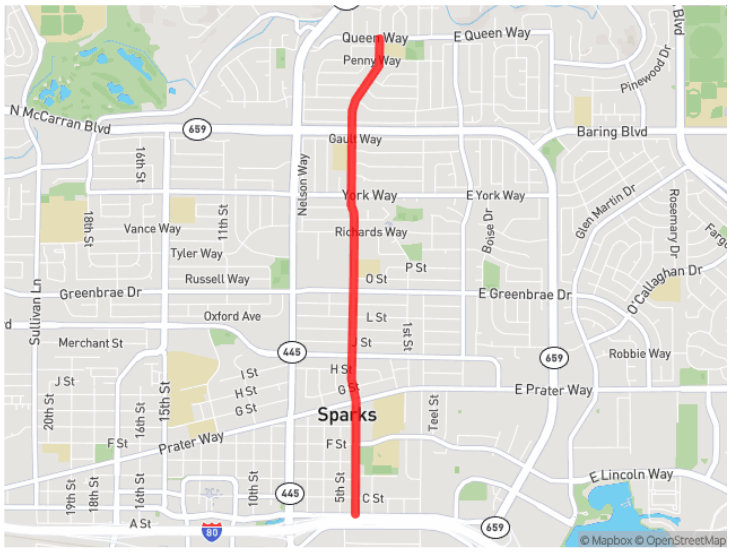


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	-	-	-	-	$1,500,000	-	$1,500,000
Total Preliminary Engineering		-	-	-	-	-	$1,500,000	-	$1,500,000
Total Programmed		-	-	-	-	-	$1,500,000	-	$1,500,000

WA20250024 - 4th Street Bike Lanes (Sparks)

Addition of bike lanes on 4th Street in Sparks from Victorian Avenue to Queen Way

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$1,500,000
Lead Agency	RTC Washoe
Contact	Dale Keller
NDOT District	District 2
County	Washoe
Project Type	Active Transportation (Bike/Ped)
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	-
Construction Start	-
From	Victorian Avenue
To	Queen Way

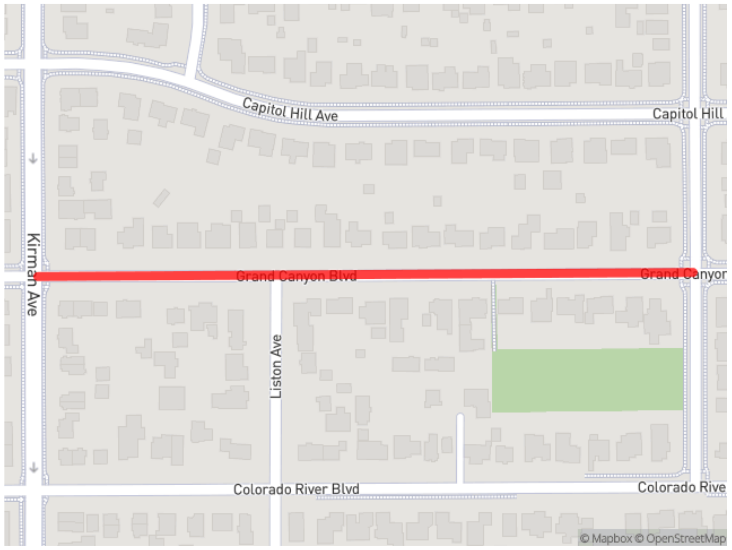


Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	-	-	-	-	$1,500,000	-	$1,500,000
Total Preliminary Engineering		-	-	-	-	-	$1,500,000	-	$1,500,000
Total Programmed		-	-	-	-	-	$1,500,000	-	$1,500,000

WA20250025 - Grand Canyon Area Sidewalk Connectivity

This project will be located in Reno, NV, along Grand Canyon Boulevard between Yori Avenue and Kirman Avenue. It involves the construction of new sidewalks to close critical gaps in the existing pedestrian network, creating more continuous and accessible routes.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$251,580
Lead Agency	City of Reno
Contact	Kurt Dietrich
NDOT District	District 2
County	Washoe
Project Type	Active Transportation (Bike/Ped)
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	-
Construction Start	2027
From	Yori Avenue
To	Kirman Avenue



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUND	-	-	$1,048	-	-	-	-	$1,048
Preliminary Engineering	TAP >200K STBG (WA)	-	-	$19,917	-	-	-	-	$19,917
Total Preliminary Engineering		-	-	$20,965	-	-	-	-	$20,965
Construction	LOCAL FUND	-	-	-	$11,531	-	-	-	$11,531
Construction	TAP >200K STBG (WA)	-	-	-	$219,084	-	-	-	$219,084
Total Construction		-	-	-	$230,615	-	-	-	$230,615
Total Programmed		-	-	$20,965	$230,615	-	-	-	$251,580

WA20250026 - Pedestrian Ramp Project - Phase 2

This proposed project is intended to be a continuation from the 2023 RTC TA Set-Aside Program that improves pedestrian ramp infrastructure near several public schools in the City of Sparks to provide a safer, connected, and reliable alternative mode of transportation that not just serves students, but to include all other users as well. In this new phase, additional elementary school locations have been selected, each with multiple nearby non-ADA complaint pedestrian ramps, with a total of 32 ramps estimated to be updated.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$331,500
Lead Agency	City of Sparks
Contact	Amber Sosa
NDOT District	District 2
County	Washoe
Project Type	Active Transportation (Bike/Ped)
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	-
Construction Start	2027
From	-
To	-

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUND	-	-	$3,825	-	-	-	-	$3,825
Preliminary Engineering	TAP >200K STBG (WA)	-	-	$72,675	-	-	-	-	$72,675
Total Preliminary Engineering		-	-	$76,500	-	-	-	-	$76,500
Construction	LOCAL FUND	-	-	-	$12,750	-	-	-	$12,750
Construction	TAP >200K STBG (WA)	-	-	-	$242,250	-	-	-	$242,250
Total Construction		-	-	-	$255,000	-	-	-	$255,000
Total Programmed		-	-	$76,500	$255,000	-	-	-	$331,500

XS20220010 - SR 430 N. Virginia St. Multimodal Project

Construction of Multimodal Trail on N. Virginia St. from N. McCarran Blvd to "Old" Virginia St. Intersection including Improvements to Existing Lighting and Bus Stops. Rehabilitation of the Existing Pavement and Striping by Removal and Replacement.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$21,074,309
Lead Agency	Nevada DOT
Contact	Nanette Maxwell
NDOT District	District 2
County	Washoe
Project Type	Active Transportation (Bike/Ped)
Air Quality	Exempt, Air Quality - Bicycle and pedestrian facilities.
TCM	No
Construction Start	2026
From	N. Virginia Street
To	N. Virginia Street

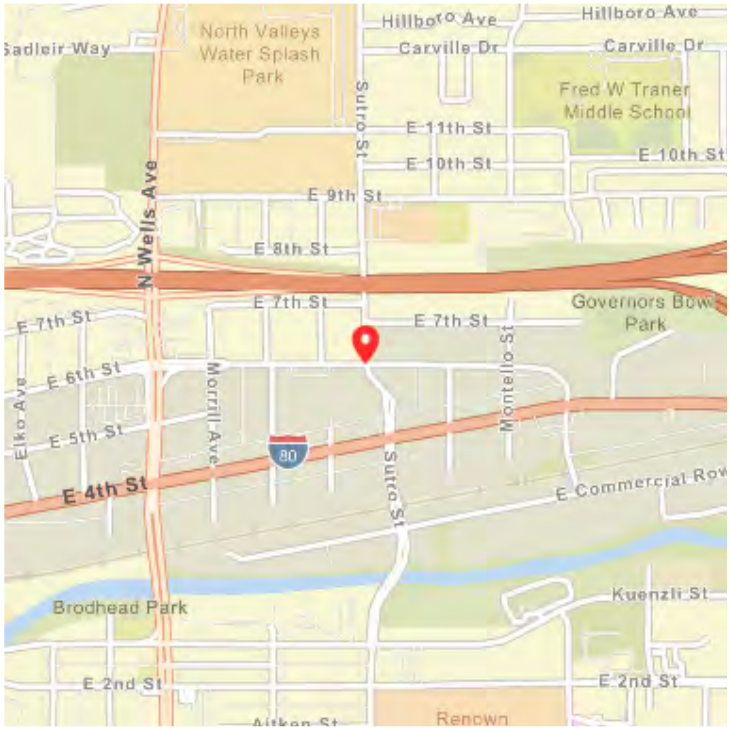
Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	LOCAL FUEL TAX - RTCWA	-	$967,160	-	-	-	-	-	$967,160
Total Preliminary Engineering		-	$967,160	-	-	-	-	-	$967,160
Right of Way	LOCAL FUND	-	$107,149	-	-	-	-	-	$107,149
Total Right of Way		-	$107,149	-	-	-	-	-	$107,149
Construction	HSIP	-	-	$3,497,605	-	-	-	-	$3,497,605
Construction	LOCAL FUEL TAX - RTCWA	-	-	$1,108,005	-	-	-	-	$1,108,005
Construction	NHPP	-	-	$8,822,065	-	-	-	-	$8,822,065
Construction	STATE MATCH - NV	-	-	$255,995	-	-	-	-	$255,995
Construction	STBG >200K (WA)	-	-	$6,316,330	-	-	-	-	$6,316,330
		-	-	$20,000,000	-	-	-	-	$20,000,000

Total Construction							
Total Programmed	-	$1,074,309	$20,000,000	-	-	-	- $21,074,309

XS20220031 - Villanova Maintenance Facility Replacement - Phase 1

The maintenance and operations facility located on Villanova Drive will be relocated. ACCESS fleet operations facility and storage yard on Sutro will be expanded and redesigned to accommodate the combined RIDE and ACCESS fleets along with other improvements such as solar, electric bus chargers, workforce training site, expanded parking and maintenance bays, etc. Phase 1 will involve PE only.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$7,000,000
Lead Agency	RTC Washoe
Contact	Jim Gee
NDOT District	District 2
County	Washoe
Project Type	Transit - Capital & Rehab
Air Quality	Exempt, Mass Transit - Re-construction or renovation of transit structures.
TCM	No
Construction Start	-
From	600 Sutro Street
To	-



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	CONGRES-SIONALLY DIRECTED SPENDING	$3,000,000	-	-	-	-	-	-	$3,000,000
Preliminary Engineering	FTA 5307 LRG URB CAPITAL	$2,600,000	-	-	-	-	-	-	$2,600,000
Preliminary Engineering	LOCAL SALES TAX - RTCWA	$1,400,000	-	-	-	-	-	-	$1,400,000
Total Pre-liminary En-gineering		$7,000,000	-	-	-	-	-	-	$7,000,000
Total Prior Costs		$7,000,000	-	-	-	-	-	-	$7,000,000
Total Pro-grammed		$7,000,000	-	-	-	-	-	-	$7,000,000

XS20220034 - SR 439 USA Parkway- Preservation

Mill and fill W/OG, hydraulic improvements, safety improvements, and lighting.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$33,300,000
Lead Agency	Nevada DOT
Contact	Shawn Paterson
NDOT District	District 2
County	Storey, Washoe
Project Type	Preservation
Air Quality	Exempt, Safety - Pavement resurfacing and/or rehabilitation.
TCM	No
Construction Start	2029
From	N OF LY/ST COUNTY LINE, ST/WA COUNTY LINE
To	I 80, WA COUNTY LINE

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Preliminary Engineering	STATE HIGHWAY FUND	$300,000	-	-	-	-	-	-	$300,000
Total Preliminary Engineering		$300,000	-	-	-	-	-	-	$300,000
Construction	NHPP	-	-	-	-	-	$23,512,500	-	$23,512,500
Construction	STATE MATCH - NV	-	-	-	-	-	$1,650,000	-	$1,650,000
Construction	STBG FLEX	-	-	-	-	-	$7,837,500	-	$7,837,500
Total Construction		-	-	-	-	-	$33,000,000	-	$33,000,000
Total Prior Costs		$300,000	-	-	-	-	-	-	$300,000
Total Programmed		$300,000	-	-	-	-	$33,000,000	-	$33,300,000

XS20220035 - I-80, Fernley, Painted Rock Interchange to East Fernley Grade Separation

2" cold mill, 2" dense grade with 0.75" open grade and various patching locations

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$25,005,000
Lead Agency	Nevada DOT
Contact	Brian Deal
NDOT District	District 2
County	Lyon, Washoe
Project Type	Preservation
Air Quality	Exempt, Safety - Pavement resurfacing and/or rehabilitation.
TCM	No
Construction Start	2030
From	WA MP 41.5
To	LY MP 5.8



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Right of Way	STATE HIGHWAY FUND	$5,000	-	-	-	-	-	-	$5,000
Total Right of Way		$5,000	-	-	-	-	-	-	$5,000
Construction	NHPP	-	-	-	-	-	-	$14,250,000	$14,250,000
Construction	STATE HIGHWAY FUND	-	-	-	-	-	-	$2,500,000	$2,500,000
Construction	STATE MATCH - NV	-	-	-	-	-	-	$1,125,000	$1,125,000
Construction	STBG FLEX	-	-	-	-	-	-	$7,125,000	$7,125,000
Total Construction		-	-	-	-	-	-	$25,000,000	$25,000,000
Total Prior Costs		$5,000	-	-	-	-	-	-	$5,000
Total Future Costs		-	-	-	-	-	-	$25,000,000	$25,000,000

Total Programmed	$5,000	-	-	-	-	-	$25,000,000	$25,005,000

XS20240015 - Tahoe Pyramid Trail East Feasibility Study (TAP)

A feasibility study will be completed to identify an alternative transportation and infrastructure route to complete the last segments of the Tahoe Pyramid Trail, connecting Sparks to TRIC, Wadsworth and Fernley.

MPO	RTC Washoe
TIP	26-00
Local ID	-
Total Cost	$351,000
Lead Agency	Nevada DOT
Contact	Rebecca Kapuler
NDOT District	District 2
County	Lyon, Washoe
Project Type	Studies
Air Quality	Exempt, Other - Engineering studies.
TCM	No
Construction Start	-
From	VISTA BLVD
To	FERNLEY



Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
Other	LOCAL FUND	-	$19,000	-	-	-	-	-	$19,000
Other	TAP FLEX STBG	-	$332,000	-	-	-	-	-	$332,000
Total Other		-	$351,000	-	-	-	-	-	$351,000
Total Programmed		-	$351,000	-	-	-	-	-	$351,000

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 5.4.**

To: Regional Transportation Commission

From: Jeff Wilbrecht, Engineering Manager

SUBJECT: 8th Edition Regional Road Impact Fee General Administrative Manual and Capital Improvement Plan

RECOMMENDED ACTION

Authorize staff to present the 8th Edition Regional Road Impact Fee (RRIF) General Administrative Manual (GAM) and the RRIF Capital Improvement Plan (CIP) to the planning commissions acting as the capital improvements advisory committee and governing body of each participating local government for adoption. (For Possible Action)

BACKGROUND AND DISCUSSION

In accordance with the provisions of the Interlocal Cooperative Agreement entered into by the RTC, Washoe County, the City of Reno and the City of Sparks, the RTC is responsible for initiating periodic reviews of the RRIF program. The review process was initiated by the approval of the long-range 2050 Regional Transportation Plan Update (the "2050 RTP-Update"). The RRIF Program uses RTC's transportation planning efforts, as reflected in the 2050 RTP-Update, to define the list of capital improvements necessitated by and attributable to the new development in each service area. The list of projects for each service area is identified in Exhibit C of the RRIF Capital Improvement Plan (CIP).

The review process is undertaken by the RTC in conjunction with the RRIF Technical Advisory Committee (RRIF TAC), which includes local government technical experts, development representatives from the private sector, members of the local planning commissions, and the RTC. Final recommendations of this update were supported by this committee were made on June 26, 2025.

Presented within the proposed changes to the RRIF General Administrative Manual (GAM) and RRIF CIP include, but are not limited to, the following:

1. Revisions to the Administrative Organization and Responsibilities section, key changes include:
   a. Updated language regarding RTC's role in administering the RRIF program
   b. Integration of the RRIF Technical Advisory Committee (TAC) purpose and objectives into the GAM (previously maintained as a separate document)

c. Updated language regarding the role of the Capital Improvement Advisory Committee
d. Clarified responsibilities of Local Participating Governments
e. Inclusion of references to relevant Nevada Revised Statutes (NRS) to ensure consistency with statutory requirements

2. Updates and minor modifications to the Land Use Definitions within the GAM:
   a. Land uses have been reorganized to better align with the current land development code and RRIF fee schedule
   b. Naming conventions have been standardized for consistency between the GAM and the RRIF fee schedule
   c. Review of Specific Land Use Classifications including Logistic Centers, Data Centers (within the Warehousing category), and Recreational Facilities
   d. Residential Land Use – provided clarification of the definition and treatment of Accessory Dwelling Units (ADUs)

3. RRIF CIP includes modifications to align with current planning documents:
   a. The definition of the RRIF Network has been refined to better align with the terminology used in the recently updated Regional Transportation Plan (RTP)
   b. Service area boundaries have been updated to include areas of Washoe County located east of Interstate 80 and the Warm Springs region in the north
   c. The supporting details that support calculation of the fee structure, developed through the CIP update process, have been updated

4. Updated Fee Schedule following the transportation planning performed as part of the 2050 RTP-Update.

Following this action, staff will present the 8th Edition RRIF GAM and CIP to the planning commission and elected bodies of the participating governments for adoption.

FISCAL IMPACT

There is no budgetary impact associated with this agenda item. Adoption of the RRIF GAM and RRIF CIP by the local jurisdictions will establish the new impact fee rates to the be charged to new development building permit applications. The selection of roadway capacity improvement projects to be designed and constructed with collected impact fees will continue to be included in the appropriate interlocal cooperative agreement (ICA) and fiscal year budgets submitted to the RTC Board for approval.

PREVIOUS BOARD ACTION

9/17/2021 - Authorized staff to present the 7th Edition Regional Road Impact Fee (RRIF) General Administrative Manual (GAM) and the RRIF Capital Improvement Plan (CIP) to the planning commission acting as the capital improvements advisory committee and governing body of each participating local government for adoption.

REGIONAL ROAD IMPACT FEE PROGRAM

GENERAL ADMINISTRATIVE MANUAL

8TH EDITION

TABLE OF CONTENTS

Page

LIST OF EXHIBITS iii

DEFINITIONS 1

I. PURPOSE AND INTENT 6

II. ADMINISTRATIVE ORGANIZATION AND RESPONSIBILITY 6

III. IMPOSITION OF RRIF FEES 8

IV. DETERMINATION OF RRIF FEE BASED ON FEE SCHEDULE 13

V. ADMINISTRATIVE DETERMINATION OF RRIF FEES 22

VI. INDEPENDENT FEE CALCULATION STUDY 24

VII. STUDIES TO ESTABLISH NEW/REDEFINED LAND USE CATEGORIES 29

VIII. REFUNDS 30

IX. EXEMPTIONS 33

X. RRIF WAIVERS REQUESTED AFTER THE 5TH EDITION RRIF GAM/CIP (3/2/2015) UPDATE 36

XI. UNEXPIRED CREDITS APPROVED PRIOR TO THE 5th EDITION RRIF GAM/CIP (3/2/2015) UPDATE 43

XII. APPEALS 44

XIII. USE OF FUNDS 46

XIV. AMENDMENTS TO THE RRIF CAPITAL IMPROVEMENTS PLAN 48

XV. BIENNIAL REVIEW 49

XVI. ADOPTION 50

LIST OF EXHIBITS

EXHIBIT A – EXPANDED LIST OF LAND USES

EXHIBIT B – RRIF SERVICE AREAS

EXHIBIT C – CCFEA CREDIT BENEFIT DISTRICTS

EXHIBIT D – RRIF EXEMPTION LIST

EXHIBIT E – TRAFFIC REPORT GUIDELINES

EXHIBIT F – MIXED USE AND CHANGE OF USE WORKSHEETS

EXHIBIT G – EXAMPLE RRIF WAIVER CALCULATION

DEFINITIONS

Accessory Use: Accessory land uses are uses which are supplemental to, and on a floor area basis that are less than 25% of, the primary land use. The fee for the accessory use is based on the primary land use.

Appeal Committee: A committee of three subject matter experts composed of one representative of each of the Participating Local Governments. The Local RRIF Administrator of each Participating Local Government shall select its representative.

Auxiliary Use: Auxiliary land uses are uses which are secondary to the primary land use and are typically not measured in the same units as are used for fee assessment. For example, the unit of assessment for a golf course is per hole. A separate fee is not calculated for the golf course storage and maintenance buildings since they are an auxiliary use.

Building Gross Floor Area (GFA): The gross floor area of a building is the sum (in square feet) of the area of each floor level, including cellars, basements, mezzanines, penthouses, corridors, lobbies, store and offices that are within the principal outside faces of exterior walls, not including architectural setbacks or projections. Included are all areas that have floor surfaces with clear standing head room (6 feet, 6 inches minimum) regardless of their use. Unroofed areas and unenclosed roof-over spaces, except those contained within the principal outside faces of exterior walls, should be excluded. Parking garages within the building should not be included within the GFA of the entire building.

Capital Contribution Front-Ending Agreement (CCFEA): An agreement, entered into prior to the adoption of the 5th Edition RRIF GAM/CIP (3/2/2015), related to the third-party construction of improvements or dedication of rights-of-way.

Capital Improvements Advisory Committee: The committee required by NRS 278B.150 to oversee the creation of and advise the local government regarding Land Use Assumptions and the RRIF Capital Improvements Plan. The Planning Commissions of each Participating Local Government act collectively as the Capital Improvement Advisory Committee.

CCFEA Credit Benefit District: The benefit districts, within which CCFEA Credits were issued pursuant to a valid unexpired CCFEA, and within which CCFEA Credits may be used and transferred, as provided by the provisions in this Manual and the terms of applicable CCFEAs. The Northwest (NW), Northeast (NE), and South (S) CCFEA Credit Benefit Districts are shown in Exhibit C of this Manual.

CCFEA Credits: A substitute method of payment for assessed road impact fees used prior to the 5th Edition RRIF GAM/CIP (3/2/2015), which were denominated in terms of VMT. CCFEA Credits were issued pursuant to Capital Contribution Front-Ending Agreements (CCFEAs). The term “CCFEA Credit,” as used in this Manual, refers only to credits issued prior to the 5th Edition RRIF GAM/CIP and pursuant to a valid, unexpired CCFEA.

Certificate of Occupancy: A document issued by a building department certifying a building's compliance with applicable building codes, etc., and indicating it to be in a condition suitable for occupancy.

Developer of Record: The owner of the Development of Record for which RRIF Fees are paid, or to which an Offset Agreement is subject; or authorized agent. The Developer of Record includes any successors or assigns to an Offset Agreement.

Development of Record: The property on which a development is proposed and for which impact fees are assessed and imposed by a Participating Local Government.

Dwelling Unit: One or more rooms in a residential building or residential portion of a building which are arranged, designed, used, or intended for occupancy by an individual or a group of individuals, acting as a single housekeeping unit, and which include permanent provisions for living, sleeping, eating, cooking, and sanitary facilities reserved for the occupants thereof.

Feepayer: Any person who seeks to develop land located within one of the Service Areas by applying to one of the Participating Local Governments for the issuance of a building permit in order to make an improvement to land which will generate or attract additional traffic, and as such, is required to pay RRIF Fees in the manner and amount set forth in this Manual.

Interim RRIF Waivers: Interim RRIF Waivers may be issued during phases of construction or dedication of land that provide reasonable assurance that over-crediting shall not occur. Conditions for issuance of Interim RRIF Waivers shall be identified in the Offset Agreement.

Land Use Assumptions: As defined by NRS 278B, projections of changes in land uses, densities, intensities and population for a specified Service Area over a period of at least 10 years, and in accordance with the master plan of the Participating Local Government.

Local RRIF Administrator: An individual appointed by the City or County Manager within the jurisdiction of the Participating Local Government to perform the activities specified in this Manual.

Mixed Use Development: Development that includes both residential and non-residential land uses.

Mixed Use Structure: A particular structure that includes accessory uses associated with the primary land uses. For example, in addition to the actual production of goods, manufacturing facilities may also have office, warehouse, research, and other associated functions.

Notice of RRIF Waiver: A notice issued by the RTC RRIF Administrator to the affected Participating Local Government indicating that the terms of an executed Offset Agreement have been met and authorizing RRIF Waivers for the Development of Record.

Offered Improvement: A contribution, payment, construction, or land dedication offered by the Developer of Record as an Offset-Eligible Improvement.

Offset Agreement: An agreement entered into by the Developer of Record, the RTC, and a Participating Local Government for Offset-Eligible Improvements. The Offset Agreement must set forth the terms and conditions related to the RRIF Waivers for the Offset-Eligible Improvements.

Offset-Eligible Costs: The approved costs of Offset-Eligible Improvements as indicated in the Notice of RRIF Waiver.

Offset-Eligible Improvements: The capital improvements and right-of-way dedications needed for a RRIF Capital Improvement, and appurtenances, traffic signals and other incidentals necessary for such facilities, including:

(a) land, property rights, and easements including the costs of acquisition or condemnation;
(b) professional services associated with actual construction;
(c) new road construction, including new travel lanes (except that the first two travel lanes are not eligible), new turn lanes, and new bridges;
(d) relocation of utilities to accommodate new road construction; and
(e) in association with new road alignments, necessary drainage facilities, street lighting, traffic signalization, curbing, sidewalks, medians and shoulders, and bicycle and pedestrian facilities.

Original CCFEA Credits: CCFEA Credits against assessed road impact fees awarded to a developer by the RTC, as opposed to Transferred CCFEA Credits.

Participating Local Governments: The City of Reno, the City of Sparks, and Washoe County.

Percent New Trips: The percentage of trips to a land use that are Primary Trips.

Primary Trips: Trips to a land use for which that land use is the primary destination, as opposed to trips that stop at a land use on the way to another land use (pass-by trips), or trips that take a short diversion from the route to the primary destination (diverted-link trips).

Regional Transportation Commission (RTC): The regional transportation commission created pursuant to NRS 277A that coordinates joint efforts of the Participating Local Governments to administer the RRIF Program pursuant to the RRIF Interlocal Cooperative Agreement.

RRIF Automation Program: The program accessible through the RTC website for the administration, tracking and transferring of RRIF Waivers and CCFEA Credits.

RRIF Capital Improvements: The capacity adding “street projects” and “facility expansions” listed in the RRIF Capital Improvements Plan that are necessitated by and attributable to new development in each Service Area. Site-Related Improvements are not RRIF Capital Improvements.

RRIF Capital Improvements Plan: The plan required by NRS 278B.170 which is updated and adopted in connection with this Manual.

RRIF Fees: The regional road impact fees assessed by Participating Local Governments to fund RRIF Capital Improvements within the designated Service Area.

RRIF Interlocal Cooperative Agreement: An agreement among the Participating Local Governments and the RTC for the implementation of the RRIF Program.

RRIF Network: The existing or planned arterial or collector streets and roads that meet the criteria specified in the RRIF Capital Improvements Plan.

RRIF Ordinance: The ordinance prepared by the RTC and adopted, in substantially the same form, by the Participating Local Governments to implement the RRIF Program.

RRIF Program: The regional road impact fee program established by the Participating Local Governments and the RTC pursuant to NRS 278B, the RRIF Interlocal Cooperative Agreement, and the RRIF Ordinance.

RRIF TAC: The RRIF Technical Advisory Committee established and managed by the RTC RRIF Administrator pursuant to this Manual.

RRIF Waiver: A waiver of the payment of RRIF Fees in exchange for dedication of Offset-Eligible Improvements. RRIF Waivers will be denominated in dollars and land use based on the fee schedule in effect as of the date of approval of the Offset Agreement.

RTC Board: The Board of the Regional Transportation Commission.

RTC RRIF Administrator: The individual named by the RTC Executive Director to direct the administration of the RRIF Program.

Service Area: As defined by NRS 278B, the areas within the boundaries of local government which are served directly and benefited by the RRIF Capital Improvements in the RRIF Capital Improvements Plan. The Service Areas are shown in Exhibit B of this Manual.

Shell Permit: A building permit to construct the “shell” of a building. Remodeling permits would be issued later to finish construction of the interior of the structure.

Site-Related Improvements: Capital improvements and right-of-way dedications for direct access improvements to the Development of Record, including, but not limited to, (1) site driveways and streets, turn lanes into those driveways and streets, and/or traffic control measures for those driveways and/or non-regional roadways; and (2) frontage streets. Site-Related Improvements are not RRIF Capital Improvements, and are not included in the RRIF Capital Improvements Plan.

Transferred CCFEA Credits: Unused CCFEA Credits which have been transferred by an original Developer of Record to a party other than the RTC. Upon transfer, Original CCFEA Credits become Transferred CCFEA Credits and are subject to usage as identified in this Manual and the associated CCFEA Agreement.

Trip Generation Rate: The average number of trip ends generated during the afternoon peak hour of adjacent street traffic during a weekday per unit of measurement of the land use (e.g., dwelling unit, 1,000 square feet).

Trip Length: The average length in miles on the RRIF Network for all trips ending within the designated Service Area.

Trust Fund: An interest-bearing holding account for RRIF Fee collections.

Vehicle-Mile of Travel (VMT): A unit of travel demand consisting of a motor vehicle traveling for one mile.

REGIONAL ROAD IMPACT FEES
GENERAL ADMINISTRATIVE MANUAL

I. PURPOSE AND INTENT

This Manual guides the RTC and the Participating Local Governments in the administration of the RRIF Program.

II. ADMINISTRATIVE ORGANIZATION AND RESPONSIBILITY

A. Regional Transportation Commission

The RRIF Interlocal Cooperative Agreement assigns the RTC the task of administering the RRIF Program and coordinating the joint efforts of the Participating Local Governments that are needed to administer the RRIF Program.

1. The RTC Planning Department, as the designated Metropolitan Planning Organization (MPO) for the urbanized area of Reno, Sparks, and Washoe County, shall conduct the regional transportation planning efforts necessary to provide the data and analysis used to develop the RRIF Capital Improvement Plan.

2. The RTC shall administer the RRIF Program pursuant to this Manual. The Executive Director of the RTC shall appoint the RTC RRIF Administrator who shall be responsible for the administration of the RRIF Program.

3. As needed, and as provided in this Manual, the RTC RRIF Administrator shall be responsible for the duties and responsibilities specified in this Manual.

4. Each year, the RTC RRIF Administrator shall calculate the amount of the automatic increase to the RRIF Fees that occurs every twelve months pursuant to the indexing provisions of the RRIF Ordinance and as authorized by NRS 278B.255. The RTC RRIF Administrator will make administrative revisions to the RRIF Fee schedule as reflected in the RRIF Capital Improvement Plan.

5. No less than every two years, the RTC RRIF Administrator shall initiate a review of the RRIF Capital Improvement Plan and the RRIF Ordinance, to determine whether any modifications need to be made to the RRIF Program. The RTC RRIF Administrator shall:

    a. Review the Service Areas' Land Use Assumptions and prepare and recommend changes to the Capital Improvement Advisory Committee and the Participating Local Jurisdictions.

b. Study and analyze street and highway needs in the Service Areas and prepare and recommend changes to the RRIF Capital Improvements Plan (with written comments) to the Capital Improvement Advisory Committee and the Participating Local Jurisdictions.

c. Prepare reports for the Capital Improvement Advisory Committee concerning the progress of the RTC in carrying out the RRIF Capital Improvement Plan.

d. Prepare and recommend changes to the RRIF Ordinance to the Capital Improvement Advisory Committee and the Participating Local Jurisdictions.

e. Prepare and recommend changes to this Manual to the Participating Local Jurisdictions.

6. The RTC Board shall approve the RRIF Capital Improvement Plan, this Manual, the RRIF Interlocal Cooperative Agreement, and any updates or amendments thereto.

7. The RTC shall receive the RRIF Fees from the Participating Local Governments and deposit them into RTC's Trust Fund

8. The RTC shall expend RRIF Fees on those RRIF Capital Improvements included in the RRIF Capital Improvements Plan, as selected and approved by the RTC Board.

6. The RTC shall honor written agreements entered into by the Participating Local Governments prior to December 15, 1995, which granted credits under predecessor road fee systems.

B. RRIF TAC

The RRIF TAC is an advisory committee that will review and recommend any modifications, additions, or updates to be made to the RRIF Capital Improvement Plan and this Manual during the biennial review process required by this Manual, the RRIF Interlocal Cooperative Agreement, and NRS 278B. The RRIF TAC shall also provide recommendations on the RRIF Program and processes at other times as requested by the RTC RRIF Administrator. The RRIF TAC shall provide recommendations to the RTC RRIF Administrator.

1. The RTC RRIF Administrator shall chair the RRIF TAC.

2. The RTC RRIF Administrator shall establish and manage the RRIF TAC which shall consist of the following members or their designated representatives:

a. The RTC RRIF Administrator (1)

b. The Community Development Directors from the Participating Local Governments (3)

c. The Public Works Directors from the Participating Local Governments (3)

d. A member from the Planning Commission of each of the Participating Local Governments (3)

e. An RTC staff member appointed by the Executive Director of the RTC (1)

f. Four members from the private sector development community as appointed by the RTC RRIF Administrator (4)

g. Any other members appointed by the RTC RRIF Administrator

3. The RTC RRIF Administrator shall provide reasonable public notice of (i) the time, place and location of meetings; and (ii) an agenda of the topics scheduled to be considered. The meetings shall be open to the public, but the RRIF TAC is not a "public body" for purposes of the Nevada Open Meeting Law.

4. RRIF TAC shall only meet if more than half of its active members are in attendance.

C. Capital Improvement Advisory Committee

1. The Planning Commissions of each Participating Local Government act collectively as the Capital Improvement Advisory Committee required by NRS 278B.150.

2. Individually and collectively, the Planning Commissions of each Participating Local Government shall:

a. Review the Service Area's Land Use Assumptions prepared by the RTC and determine whether they are in conformance with the master plan of the Participating Local Government. NRS 278B.150(3)(a).

b. Review the RRIF Capital Improvement Plan (with written comments) as prepared by the RTC. NRS 278B.150(3)(b).

c. Review and accept the RTC's reports concerning the progress of the RTC in carrying out the RRIF Capital Improvement Plan. NRS 278B.150(3)(c).

d. Report to the governing body of the Participating Local Government regarding any perceived inequities in the

implementation of the RRIF Capital Improvement Plan or the imposition of the RRIF Fee. NRS 278B.150(3)(d).

e. Advise and make recommendation to the Participating Local Government of the need to update or revise the Service Area's Land Use Assumptions, the RRIF Capital Improvement Plan, and the RRIF Ordinance. NRS 278B.150(3)(e).

C. Participating Local Governments

The RRIF Interlocal Cooperative Agreement assigns the following responsibilities to the Participating Local Governments:

1. To designate their Planning Commission to serve as part of the Capital Improvement Advisory Committee, and to ensure the Planning Commissions of each Participating Local Government act collectively as the Capital Improvement Advisory Committee. NRS 278B.150(2).

2. To approve the Service Areas' Land Use Assumptions prepared by the RTC and recommended by the Capital Improvement Advisory Committee, with any modifications jointly agreed to by the other Participating Local Governments. NRS 278B.180; NRS 278B.190.

3. To adopt the RRIF Capital Improvements Plan and amendments thereto as prepared by the RTC and recommended by the Capital Improvement Advisory Committee, with any modifications jointly agreed to by the other Participating Local Governments. NRS 278B.210.

4. To adopt the RRIF Ordinance and amendments thereto as prepared by the RTC and recommended by the Capital Improvement Advisory Committee, with any modifications jointly agreed to by the other Participating Local Governments. NRS 278B.160.

5. To approve Offset Agreements within their respective jurisdictions and accept Offset-Eligible Improvements.

6. To appoint a Local RRIF Administrator to oversee the determination of appropriate RRIF Fees, the collection of RRIF Fees, the keeping of necessary records of fee collections, the transmittal of the fees on a quarterly basis to the RTC RRIF Administrator, and the initial evaluation of requests for independent fee calculation studies, RRIF Waivers, and refunds to be referred to the RTC RRIF Administrator. The Local RRIF Administrator shall monitor the use of RRIF Waivers against the Notice of RRIF Waiver pursuant to an executed Offset Agreement.

III. IMPOSITION OF RRIF FEES

A. Service Areas

RRIF Fees shall be imposed on all new development within each Service Area. The Service Areas designate the areas within which RRIF Fees are collected and spent.

B. CCFEA Benefit Districts

The CCFEA Benefit Districts are shown in Exhibit C and designate the areas within which CCFEA Credits may be used.

C. Payment Due

1. General. RRIF Fees shall be paid at the time of issuance of a building permit or Certificate of Occupancy, as approved by the Participating Local Government. In the case of mobile home pads, payment shall be made prior to the issuance of a pad permit. Any activity requiring payment of RRIF Fees, may be made by personal check, cashier's check, or money order made payable to the Participating Local Government. Payment shall be made at the office of the Participating Local Government where building permits are issued and shall not be received prior to the time of issuance of a building permit.

2. Invalid Payment. In the event the payment of RRIF Fees subsequently proves to be invalid due to insufficient funds, the following action shall be taken:

   a. Building permits, for which the payment of RRIF Fees subsequently proves to be invalid due to insufficient funds, shall be declared to be revoked. In such case, a stop-work order shall be placed on the site or building for which the building permit has been declared invalid.

   b. The Local RRIF Administrator shall, within thirty (30) days of detection of invalid payment, notify the Feepayer, the contractor, and the property owner by certified mail, return receipt requested, that:

      (1) the RRIF Fee is due by valid payment immediately upon receipt of said letter;

      (2) the stop-work order shall remain in effect until valid payment of the RRIF Fee is made;

      (3) if construction has been completed prior to detection of invalid payment of RRIF Fees, no Final Inspection will be performed and no Certificate of Occupancy will be

issued until valid payment of the RRIF Fee is made; and

(4) the amount due shall be the amount of the RRIF Fee plus the amount charged by the bank for the dishonored payment, plus a service charge of $25.00.

3. Underpayment of RRIF Fee Based on Error or Misrepresentation. If it is determined that the RRIF Fee has been calculated and paid based on an error resulting in underpayment, then the RRIF Fee shall be recalculated based on the fee schedule in effect at the time the RRIF Fee was paid. If the re-calculated RRIF Fee is greater than the amount paid, then the following action shall be taken:

a. The Local RRIF Administrator shall, within thirty (30) days of detection of payment made based on error, cause a "correction notice" to be issued and notify the Feepayer, the contractor, and the property owner by certified mail, return receipt requested, that,

(1) an additional amount is due by valid payment within thirty (30) days of receipt of said letter; and

(2) if the additional amount is not paid within thirty (30) days of the receipt of said letter, the Participating Local Government may pursue collection through liens or other local procedures used to collect fees.

b. If an additional amount is owed, no permits of any type may be issued for the building or structure in question, or for any other part of a development of which the building or structure in question is a part, while the fee remains unpaid.

c. If the additional amount is not paid by the original Feepayer within thirty (30) days of the date of the letter, the Local RRIF Administrator will pursue payment of the additional amount from the current property owner. The Participating Local Government will not be responsible for resolving disputes for payment of additional amounts which may arise between an original Feepayer and the current property owner.

4. Overpayment of RRIF Fee Based on Error. If it is determined that the RRIF Fee has been calculated and paid based on error resulting in overpayment, then the fee shall be recalculated based on the fee schedule in effect at the time the RRIF Fee was paid. If the re-calculated RRIF Fee is less than the amount paid, then the following action shall be taken:

a. The Local RRIF Administrator shall, within thirty (30) days of detection of payment made based on error, notify the Feepayer by certified mail, return receipt requested, that the Feepayer is entitled to a refund.

b. The Feepayer may submit a written request for refund to the Local RRIF Administrator within thirty (30) days of the date of the refund notice letter.

c. Following receipt of a written request for a refund, the amount of the overpayment shall be refunded, without interest, to the Feepayer.

E. Determination of RRIF Fee

1. General. The amount of the RRIF Fee shall be determined by the Local RRIF Administrator based on the fee schedule in effect as of the date of the payment of the RRIF Fee, whether payment is made at the time of issuance of the building permit or the Certificate of Occupancy. RRIF Fee payments cannot be made and will not be received by the Local RRIF Administrator prior to the date of issuance of a building permit. The calculation of exemptions, refunds, and RRIF Waivers and the determination of the RRIF Fee shall be the responsibility of the Local RRIF Administrator and the RTC RRIF Administrator, as specified in this Manual.

2. Payment of RRIF Fees with RRIF Waivers or CCFEA Credits:

a. RRIF Waivers. RRIF Fees may be waived if the RTC RRIF Administrator has issued a Notice of RRIF Waiver to the Participating Local Government, pursuant to a valid, unexpired Offset Agreement, in accordance with the provisions of Section X, Impact Fee Offsets Requested After the adoption of the 5th Edition RRIF GAM/CIP (3/2/2015).

In the event, payment of RRIF Fees were made in cash where RRIF Waivers were available, the Feepayer may submit a written request to the Local RRIF Administrator within ninety (90) days from the date of payment. If approved, the Feepayer shall submit proof of payment by RRIF Waiver to the Local RRIF Administrator prior to receiving the cash refund. All reimbursements will be handled through the Participating Local Government.

b. CCFEA Credits. RRIF Fees may be paid with CCFEA Credits pursuant to Section XI, Unexpired Credits Approved Prior to the adoption of the 5th Edition RRIF GAM/CIP (3/2/2015).

F. Expiration of Building Permits

1. If, following payment of RRIF Fees, a building permit, mobile home set-up permit, or recreational vehicle park building permit expires, is revoked, or is voluntarily surrendered and is, therefore, voided and no construction or improvement of land has commenced, then the Feepayer shall be entitled to a refund, without interest, of the full amount of the RRIF Fee which was paid as a condition for issuance of the building permit.

    a. The Feepayer may submit a written request for such a refund to the Local RRIF Administrator within thirty (30) days of the expiration, revocation, or surrender of the permit.

    b. In the case of an expired, revoked, or voluntarily surrendered permit that was obtained in whole or in part by the use of RRIF Waivers or CCFEA Credits, the entire RRIF Fee may be refunded only if a written request is made to the RTC RRIF Administrator within thirty (30) days of the expiration, revocation, or surrender of the building permit. The refund will be in the same proportion (cash vs. RRIF Waiver vs CCFEA Credit) as the original payment. For refunds related to a RRIF Waiver, the RTC will notify the affected Participating Local Government to adjust the remaining RRIF Waiver balance associated with the Development of Record.

2. If a refund is made, the Feepayer must pay the appropriate RRIF Fee if he reapplies for the permit.

3. If a permit expires and no refund has been issued, a Feepayer will not have to pay the RRIF Fee again if he reapplies for the permit for the same land use of the same lot, parcel, or tract and the RRIF Fee for that land use has not changed.

    a. If the RRIF Fee for the particular land use has increased between the time of original and new building permit, the Feepayer shall pay the difference at the time of re-application. If the RRIF Fee for the particular land use has decreased between the time of original and new building permit, the Feepayer shall be entitled to a refund of the difference at the time of re-application.

    b. A refund for previous payment of an impact fee must be requested by the Feepayer. Any exemption, credit, or refund not so requested prior to or at the time of re-application shall be deemed waived by the Feepayer.

    c. If the RRIF Fee was paid in total or in part with RRIF Waivers, that portion paid with the RRIF Waiver is subject to the terms

and conditions of the Offset Agreement related to the RRIF Waivers.

4. A refund of the RRIF Fee shall not be granted if the building permit expires, but construction has commenced, i.e., the foundation inspection for the structure has been passed. In this case, the Feepayer will not have to pay an impact fee if he re-applies for a building permit, except in the case where the RRIF Fee has increased between the time of the original building permit and the new building permit. In any case of re-application, the provisions of Section IV.F, Change of Use, shall apply.

5. If RRIF Fees were not paid at the time of the building permit, no RRIF Fees shall be due if a building permit, mobile home set-up permit, or recreational vehicle park building permit expires, is revoked, or is voluntarily surrendered and is, therefore, voided and no construction or improvement of land has commenced.

IV. DETERMINATION OF RRIF FEE BASED ON FEE SCHEDULE

The amount of the RRIF Fee will be determined pursuant to the provisions of this Section unless an administrative determination is necessary.

A. Land Use Classification

The Local RRIF Administrator will classify the proposed use into one or more of the land use categories included in the fee schedule, based on the following guidelines.

1. Land Use Definitions. The general land use categories included in the fee schedule are defined as follows:

a. Residential

Single-Family. A single-family dwelling unit located on a single lot.

Multi-Family. Residential properties with two or more housing units.

b. Industrial

General Light Industry. An industrial establishment that usually employs fewer than 500 persons and has an emphasis on activities other than manufacturing. Typical light industrial activities include printing plants, material testing, assembly of data processing equipment, and power stations.

Manufacturing. A site where the primary activity is the conversion of raw materials or parts into finished products.

Size and type of activity may vary substantially from one facility to another. In addition to actual production of goods, manufacturing facilities generally also have office, warehouse, research, and associated functions.

Warehouse. An establishment primarily devoted to the storage of materials, which also may include office and maintenance areas.

Mini-Warehouse. A building in which a storage unit or vault is rented for the storage of goods. Each unit is physically separated from other units and access is usually provided through an overhead door or other common access point. They are typically referred to as "self-storage" facilities.

c. Commercial

General Commercial. A shopping center or an individual free-standing store selling general or specialty merchandise. See Section IV.N for additional information on calculating shopping center fees.

Eating/Drinking Places. Buildings or tenant spaces containing eating or drinking establishments.

Casino/Gaming. An establishment which provides non-restricted gaming operations.

d. Office & Other Services

Schools. (see Note 1 & Note 2 below) – An educational facility that serves students including elementary, middle school, high school, college/university and technical trade schools.

***Note 1.** In accordance with amendments made to NRS 278B, property owned by a public school district is exempt from paying impact fees. However, schools or private uses housed within public school district facilities are not exempt from impact fees.

***Note 2.** The State Attorney General has issued an opinion that the State University System is exempt from local impact fees (Opinion No. 97-29). Private universities, colleges, etc. are subject to impact fees.

Day Care Center. A facility where care for pre-school aged children is provided, normally during the daytime hours. Day care facilities generally include classrooms, offices, eating areas and playgrounds. Some centers also provide after-school care for children.

Lodging. A building or any part thereof, kept, used as, maintained as, or advertised as, or held out to the public to be a place where sleeping accommodations are furnished to the public whether with or without meals and furnishing accommodations for periods of less than one month.

Hospital. Any institution where medical or surgical care and overnight accommodations are provided to non-ambulatory and ambulatory patients. Does not refer to medical clinics or nursing homes.

Nursing Home. A facility whose primary function is to care for persons who are unable to care for themselves. Examples of such facilities include rest homes, chronic care, and convalescent homes. Skilled nurses and nursing aides are present 24 hours a day at these sites. Nursing homes are occupied by residents who do little or no driving; traffic is primarily generated by employees, visitors and deliveries.

Medical-Dental Office Building. A facility that provides diagnoses and outpatient care on a routine basis, but which is unable to provide prolonged in-house medical/surgical care. This type of building is generally operated by multiple private physicians or dentists with high volume patient activity.

General Office. A building or tenant spaces where affairs of businesses, commercial or industrial organizations, or professional persons or firms are conducted. An office building or buildings may contain a mixture of tenants including professional services, insurance companies, investment brokers, and tenant services such as a bank or savings and loan.

Regional Recreational Facilities. Regionally significant recreational facilities available to the public, including but not limited to ball fields, boating or swimming facilities, campsites or other indoor/outdoor recreational uses.

2. Expanded Use Listing. An expanded list of specific land uses is provided in Exhibit A. This list will be used by the Local RRIF Administration in conjunction with the above definitions to assign a specific land use to one of the land use categories in the fee schedule.

3. North American Industry Classification System (NAICS). In the event that the classification established by this Manual is unclear, the most current edition of the NAICS Manual, as published by the Department of Commerce, Bureau of Census, shall be used as the final authority.

4. Alternative Methods. If it is determined that there is no comparable type of land use in the fee schedule or Exhibit A, the RRIF Fee shall be determined administratively as described in Section V of this Manual. If a Feepayer opts not to have the RRIF Fee determined according to the fee schedule or determined administratively, then the Feepayer shall prepare and submit an independent fee calculation study in accordance with Section VI of this Manual.

B. Units of Development

Once a proposed development has been classified into one or more of the general land use categories included in the fee schedule, the RRIF Fee shall be determined by multiplying the fee amount per unit of development for each land use category by the number of proposed development units.

C. Mixed Use Development

If a parcel or development includes both residential and non-residential land uses, the RRIF Fees are assessed for each use based on the fee schedule and the results are aggregated. In some cases, Feepayers may suggest that the RRIF Fee should be reduced to account for internal trips between residential and non-residential land uses. There are no provisions in this Manual for such a reduction. However, the Feepayer has the option of completing an Independent Fee Calculation Study in accordance with Section VI of this Manual.

D. Mixed Use Structures

1. In many instances, a structure or structures may include accessory uses associated with the primary land use. For example, in addition to the actual production of goods, manufacturing facilities may also have office, warehouse, research, and other associated functions. The RRIF Fee shall be assessed based on the primary land use, as determined by the Local RRIF Administrator.

2. To be considered an accessory land use in a mixed use structure or structures, a land use must satisfy two conditions: The principle function of each accessory land use must be to support the primary land use and it must be 25% (see subsection 3 below) or less of the GFA of the primary land use. The Feepayer shall certify in writing to the Local RRIF Administrator that the principle function of any land use claimed as an accessory land use is to support a primary land use and, further, identify the supported primary land use. Any use, which does not meet both these criteria, regardless of size, shall be considered a primary land use and the RRIF Fee shall be calculated accordingly. For example, a Feepayer with a 10,000 square foot structure certifies that the primary land use is 8,000 square feet (SF) of manufacturing with functions, principally in support of the

manufacturing use, consisting of 1,000 SF (12.5%) of warehouse, and 1,000 SF (12.5%) of office. Since the warehouse and office uses have been certified to be principally in support of the primary land use and each supportive function is less than 25% of the primary land use GFA, they are legitimate accessory uses. The RRIF Fee for the entire 10,000 square foot structure is therefore based on the primary land use rate for manufacturing.

3. If any use which supports the primary land use is greater than 25% of the GFA of the primary land use, it becomes an additional primary land use. Therefore, a mixed-use structure may have more than one primary land use. The RRIF Fees are then assessed for each primary land use based on the fee schedule and the results are aggregated. Accessory land uses to the primary land uses are treated as described in Section IV.D. For example, a Feepayer with a 10,000 square foot structure certifies that the primary land use is 6,000 SF of manufacturing, with supportive functions of 3,000 SF (50%) of warehouse, and 1,000 SF (16.7%) of office. Since the warehouse use is greater than 25% of the GFA of the manufacturing use, it becomes an additional primary land use. The RRIF Fee is therefore based on the two primary land use rates: 7,000 SF at the manufacturing rate (6,000 manufacturing + 1,000 office) plus 3,000 SF at the warehouse rate.

4. In the case of a mixed-use structure with more than one primary land use, the RRIF Fees are assessed for each primary land use based on the fee schedule and the results are aggregated. For example, a Feepayer with a 10,000 square foot structure certifies that there are two primary land uses, namely, 8,000 SF of general office and 2,000 SF of daycare that is unrelated to the office operation. The general office primary land use is further broken down to 7,000 SF of general office use and a supportive function of 1,000 SF (14%) of warehouse. The RRIF Fee would then be based on the primary land use rates of 8,000 SF at the general office rate plus 2,000 SF at the daycare rate. If the supporting warehouse function to the general office had been greater than 25% of the general office GFA, the warehouse function would become an additional primary land use. In the above example, if the warehouse area had been 2,000 SF (33%), the RRIF Fee would then be based on three primary land use rates of 6,000 SF at the general office rate, plus 2,000 SF at the warehouse rate, plus 2,000 SF at the daycare rate.

Note: see Exhibit F for blank worksheets

5. In all cases, the burden shall be on the Feepayer to provide written certification to the satisfaction of the Local RRIF Administrator of the breakdown of the primary land uses and any supportive accessory uses in percent and GFA.

Note: 25% is based on the International Building Code, Current Edition

E. Shell Permit

Developers will often apply for a building permit to construct the "shell" of a building, i.e. a Shell Permit. Remodeling permits would be issued later to finish construction of the interior of the structure. The RRIF Fee shall be paid prior to the issuance of the building permit for construction of the shell or prior to the Certificate of Occupancy, as approved by the Local Participating Government. The amount of the RRIF Fee shall be based on the intended land use as described by the developer. If the intended land use is not known, and in the absence of a contract or lease stating what the use will be, the RRIF Fees shall be assessed based on the land use allowed under the existing zoning for the lot or parcel which generates the least traffic impact as determined by the Local RRIF Administrator. If it is found during review of the application for a remodeling permit that the actual land use differs from the intended land use as described by the developer, a determination shall be made as to whether or not an additional RRIF Fee is due based on the procedures for Change of Use in Section IV.F. If so, the additional RRIF Fee shall be paid prior to the issuance of a remodeling permit for the completion of the building.

F. Change of Use

1. In the case of a change of use, redevelopment, or modification of a previous land use, which requires the issuance of a building permit, the RRIF Fee shall be based upon the net increase in the RRIF Fee for the new use as compared to the previous use. The amount of the RRIF Fee due as a result of the change in land use shall be determined and paid at the time that the Feepayer applies for the building permit.

2. Previous land use shall be the most recent lawful land use physically existing and active on the property. The Feepayer shall furnish documentation required by the Local RRIF Administrator to determine the most recent previous use, including any gaps in time when there was no use. In the absence of satisfactory documentation, the Local RRIF Administrator shall treat the parcel as vacant land.

   The burden shall be on the Feepayer to provide written certification to the satisfaction of the Local RRIF Administrator of the breakdown of the primary land uses and any supportive accessory uses in percent and GFA of the existing and the proposed changes to the land use. For example, an existing 10,000 square foot manufacturing structure, as certified by the Feepayer, consists of 8,000 SF of manufacturing and supportive functions of 1,500 SF (18.8%) warehouse and 500 SF (6.3%) office. The proposed changes to this 10,000 square foot structure, as certified by the

Feepayer, will result in 7,500 SF of manufacturing and supportive functions of 1,800 SF (24.6%) of warehouse and 700 SF (9.3%) office. With these changes, the accessory uses still remain below the 25% threshold as stated in Section IV.D, Mixed Use Structures. In this case, no RRIF Fee will be charged. If the entire incremental change had been in the warehouse use (i.e. 7,500 SF of manufacturing, 2,000 SF of warehouse, and 500 SF of office), the warehouse use would become an additional primary land use since the warehouse use is now greater than 25% as stated in Section IV.D, Mixed Use Structures. The RRIF Fee is now based on 8,000 SF at the manufacturing rate plus 2,000 SF at the warehouse rate. If the new RRIF Fee is greater than the original RRIF Fee, an additional fee amount is charged for the difference between the new fee and the original fee. If the new fee amount is less than the original fee amount, no additional fee amount is charged. Under no circumstances will a refund of RRIF Fees be granted for a change in use.

Note: see Exhibit F for blank worksheets

3. The Local RRIF Administrator shall calculate the RRIF Fee due to a change in use. The Local RRIF Administrator shall be guided in the determination of the RRIF Fee by the sources listed in Section IV.A, Land Use Classification. Under no circumstances will a refund of the RRIF Fee be granted for change of use.

G. Auxiliary Uses

Auxiliary land uses are uses which are secondary to the primary land use and are typically not measured in the same units as are used for fee assessment. For example, an apartment complex where the unit of assessment would be per dwelling which has a clubhouse for use of the tenants. The club house would be an auxiliary use and would generally not be assessed a separate impact fee unless it can be established by the Local RRIF Administrator that the auxiliary land use serves as an individual attraction. However, structures that meet the definition of a “dwelling” are not exempted as auxiliary uses.

H. Facilities Constructed for Private Use

For land uses limited exclusively to private use, which are internal to a particular development and for the exclusive use of residents within the development or their guests, and which, therefore have no off-site street impact, e.g., private clubhouse or dining facilities built as part of a planned development, no RRIF Fee will be charged if the following conditions are met:

1. The final approval, which identifies the facility, includes a condition of approval limiting the facility exclusively to private on-site use.

2. There exists sufficient authority and documentation that authorizes the Local RRIF Administrator to revoke the Certificate of Occupancy for the building or structure in question.

3. There exists sufficient authority and documentation which authorizes the Local RRIF Administrator to withhold all permits of all types on any and all phases of the development of which the building or structure is a part of until the correct impact fees are paid for public use of the facility, if public use occurs in violation of the condition.

4. In addition to the above, the Local RRIF Administrator is authorized to proceed with the actions and sanctions delineated in Section III.C.3, Underpayment of Fee Based on Error or Misrepresentation, if public use occurs in violation of the condition.

For land uses that are partially limited to private use internal to a particular development, only the portion of the facility devoted to public use will be assessed a RRIF Fee, if the final approval contains the same conditions listed in subsections 1-4 above, which identify and restrict part of the facility to exclusive private use and grants similar authorization to the Local RRIF Administrator if public use occurs in violation of the condition.

I. Relocation of Dwelling Unit

RRIF Fees shall be assessed for structures or mobile homes moved from one location to another, unless the structure or unit being moved is a replacement of an equivalent use at the new location. If the structure or mobile home so moved is replaced by an equivalent use at the old location, no RRIF Fee shall be due for the replacement use. In every case, the burden of proving past payment of RRIF Fees, exemption or equivalency of use rests with the Feepayer.

J. Model Homes

Single-family model homes constructed on single-family lots shall pay the RRIF Fee for a single-family dwelling unit as shown on the fee schedule. Multi-family models shall pay the multi-family rate.

K. Mobile Homes

RRIF Fee for the set-up of a mobile home residence must be paid prior to the issuance of the requested permit. An exemption will be granted if it can be documented that a RRIF Fee has been paid previously for a mobile home set-up on the same lot, parcel, or space. Documentation to be used by the Local RRIF Administrator may include utility bills for the period of time in question, the tax rolls or other such records deemed appropriate by the Local RRIF Administrator. The RRIF Fee will be based on the single family dwelling.

L. Supplemental or Accessory Dwelling Units; Mother-in-law Attached or Detached Dwellings

RRIF Fee for supplemental (accessory or mother-in-law) units, attached or detached to a single family detached dwelling unit, are assessed at the multi-family rate in addition to the single family rate.

M. Recreational Vehicles (RV's)

The provision of an RV site will be assessed a RRIF Fee at the Lodging (Per Room) rate in the fee schedule. No RRIF Fees shall be assessed for "move in" of a recreational vehicle in an RV park that has already paid a RRIF Fee.

N. Shopping Centers

A shopping center is an integrated group of commercial establishments that is planned, developed, owned and managed as a unit. The RRIF Fee shall be assessed on the gross leasable area.

O. Casino/Gaming

RRIF Fees for new gaming/resort development will be determined based upon the number of hotel rooms and RV spaces, and the appropriate rates for these uses. Separate RRIF Fees for the gaming area or the typical gaming/resort amenities such as restaurants, incidental retail shopping, entertainment facilities, etc. shall not be charged.

For an existing casino/resort development, the RRIF Fees for adding additional rooms will be assessed at the hotel/motel rate. The RRIF Fees for adding additional gaming/casino floor area with no additional rooms will be assessed at the casino gaming area rate. The RRIF Fees for adding additional gaming/casino floor area and rooms will be assessed at either the casino gaming area rate or the hotel/motel rate whichever produces the higher of the two fee amounts.

A Feepayer may request the Local RRIF Administrator or RTC RRIF Administrator to treat a new casino/resort development or an expansion of an existing casino/resort development as a phased project.

A phased project is considered to be a project where multiple building permits will be applied for over a period not to exceed five (5) years within the development area. RRIF Fees will be assessed as indicated in the previous paragraph except the RRIF Fee calculation will combine any previous building permits issued with each new building permit applied for within the five (5) year period. Any RRIF Fees collected on previous building permits will be subtracted from the new RRIF Fee calculation. A credit for a previous payment of RRIF Fees for a phased project must be requested by the Feepayer. Any credit not requested prior to or at the time

of the application for a building permit shall be deemed waived by the Feepayer. It shall be the Feepayer's responsibility to furnish, as required by the Local RRIF Administrator or RTC RRIF Administrator, all information necessary to validate the phased project.

For example, a Feepayer may propose a phased project to expand the casino gaming area in the first year with the intention to expand rooms one (1) year later. A $100,000 RRIF Fee is assessed for the additional gaming/casino floor area at the casino gaming area rate for the first building permit. For the expansion of the rooms a year later, a re-assessed $500,000 RRIF Fee (based on the then current fee schedule) is calculated for the additional rooms at the hotel/motel rate. The RRIF Fee for the additional rooms would be $500,000 - $100,000 previously collected = $400,000.

Other traffic generating land uses of a type or magnitude that are not typically associated with casino/resort development will be charged RRIF Fees, in addition to the room or casino gaming area based fees.

P. Houses of Worship

A building providing public worship services and generally housing an assembly hall or sanctuary, meeting rooms, classrooms and occasionally dining, catering, or party facilities. RRIF Fees will be assessed on the Office space. If applicable, an additional fee amount will be assessed for school and/or daycare areas.

Q. Convenience Store with Gas Pumps

RRIF Fees are assessed based on the total square footage of the convenience store building plus the area covered by the canopy for the gas pumps.

V. ADMINISTRATIVE DETERMINATION OF RRIF FEES

A. General

RRIF Fees shall be assessed in accordance with the land use type in the fee schedule at the time of impact fee payment. If it is determined that there is no comparable type of land use in the fee schedule, then the Local RRIF Administrator shall determine the RRIF Fee pursuant to the provisions of this Section. If the Feepayer disagrees with the RRIF Fee determined administratively (or based on the fee schedule), the Feepayer may prepare an independent fee calculation study in accordance with Section VI of this Manual.

B. Methodology

If it is determined that there is no comparable type of land use in the fee schedule, then the Local RRIF Administrator shall determine the RRIF Fee by:

1. Determining the Most Comparable Use. If the type of development activity is not specified in the fee schedule or in Exhibit A, the Local RRIF Administrator shall determine the RRIF Fee on the basis of the fee schedule applicable to the most nearly comparable type of land use. The Local RRIF Administrator shall be guided in the selection of a comparable type by the reports titled:

    a. Trip Generation – An Informational Report and Trip Generation Handbook (latest edition), prepared by the Institute of Transportation Engineers (ITE).

    b. Articles or reports appearing in the ITE Journal as deemed acceptable by the Local RRIF Administrator.

    c. Studies or reports done by or for the U.S. Department of Transportation, Nevada Department of Transportation, the RTC, Reno, Sparks, or Washoe County, and deemed acceptable by the Local RRIF Administrator.

    These sources should also be used when possible to determine other relevant traffic parameters to the RRIF Fee calculation (i.e., trip length, Percent New Trips). In the event that those parameters are not available, the parameters identified in the fee schedule, applicable to the most nearly comparable type of land use should be used; and

Applying the formula:

IMPACT FEE/UNIT = VMT/Unit x NC

VMT/UNIT = ADT/Unit x A x B x C

Where:

ADT/Unit = Average number of trips generated per unit of development on a weekday

A = Trip Adjustment (%)

B = Trip Length Weight Factor (%)

C = Average Trip Length (Miles)

VMT/Unit = Vehicle-Miles of Travel per unit of development

NC= Net Cost per VMT. For the purposes of this formula, use the current net cost per VMT by Service Area as identified in the RRIF Capital Improvements Plan.

C. Miscellaneous Land Uses Types

The Local RRIF Administrator shall maintain a list of the RRIF Fees determined administratively for miscellaneous land use types. The list of the RRIF Fees previously determined administratively that will be updated periodically as new RRIF Fees are determined.

D. Pre-Development Review RRIF Fee Calculation

Any person contemplating establishing a traffic-generating land development activity may request a preliminary determination of the RRIF Fees due from such development. A person requesting a pre-development review RRIF Fee calculation shall submit to the Local RRIF Administrator the pertinent information identified by the Local RRIF Administrator. Using the information regarding the proposed project as submitted, the Local RRIF Administrator will provide, within fifteen (15) days of the date of submittal, a preliminary calculation of the RRIF Fees due for the proposed project.

VI. INDEPENDENT FEE CALCULATION STUDY

A. Option to the Feepayer

If a Feepayer opts not to have the RRIF Fee determined according to the fee schedule or administratively, then the Feepayer shall prepare and submit an independent fee calculation study in accordance with this Section. The utilization of this option by the Feepayer shall not exempt the Feepayer from paying the RRIF Fee prior to the issuance of a building permit, mobile home set-up permit, or recreational vehicle building permit.

B. Notice of Intent by Feepayer

The Feepayer shall inform the RTC RRIF Administrator in writing of their intent to utilize an independent fee calculation study submitted with a fee of $500, which is non-refundable and does not go toward RRIF Fee, for administrative costs associated with the review and decision on the study. The notice of intent shall include the basis for opting to do an independent fee calculation study. The RTC RRIF Administrator shall then schedule a pre-application meeting with the applicant and the Local RRIF Administrator.

C. Pre-Application Meeting

Before beginning the independent fee calculation study, the Feepayer or their designated representative shall attend a pre-application meeting with the RTC RRIF Administrator and the Local RRIF Administrator. The purpose of the pre-application meeting will be to discuss the procedures of the independent fee calculation study, the methodology to be employed, and the standards to be met.

Results, conclusions, and agreements reached at the pre-application meeting regarding the scope of the study, methodology, required forms or documentation, or procedures, which may not constitute a waiver of the provisions of this Manual, shall be placed in writing by the RTC RRIF Administrator in a memorandum, and a copy of the memorandum shall be sent to the applicant. The applicant shall acknowledge receipt and acceptance of this memorandum, in writing, to the RTC RRIF Administrator. By accepting this memorandum, the applicant is obligated to turn over the completed study to the RTC RRIF Administrator prior to payment of the RRIF Fee. Further, the applicant is obligated to abide by the findings of the study, **even if it results in the need to pay a greater fee than that which would have been paid had the RRIF Fee been determined under the provisions of Section IV or Section V of this Manual.**

D. General

1. The purpose of the independent fee calculation study is to measure the impact of the development in question on the RRIF Capital Improvements included in the RRIF Capital Improvements Plan. The fee computed for the development in question under the independent fee calculation study provisions is not intended to apply to other developments of the same use.

2. The independent fee calculation study shall follow the methodologies and formats which are agreed upon during the pre-application meeting and in accordance with any documentation or methodology required by this Manual.

3. The independent fee calculation study shall be prepared and presented by qualified, registered, and professional engineers with experience in traffic engineering. The methodology shall be consistent with best professional practice and support the central claim of the study. The study shall provide all necessary supporting documentation and information. Failure to adhere to best professional standards is a basis for rejection of the study. The applicant's submission shall certify that the study complies with best professional practices and this attestation shall be sealed.

4. The applicant shall submit the study to the RTC RRIF Administrator, at which time a 30-day review period shall begin.

E. Sufficiency Determination

1. The RTC RRIF Administrator, after consultation with the Local RRIF Administrator, will review the independent fee calculation study for sufficiency, methodology, technical accuracy, and findings. The RTC RRIF Administrator shall have thirty (30) days to inform the applicant, in writing, of any deficiencies or defects in the study, or to find the study complete and competent.

2. If the applicant does not respond to the RTC RRIF Administrator regarding a finding of deficiency within thirty (30) days of receipt of the notice, the RTC RRIF Administrator will consider the independent fee calculation study to be invalid.

3. The thirty (30) day sufficiency review shall begin when the submission is received and date stamped by the RTC RRIF Administrator. If the study is found to be deficient, the thirty (30) day time period shall begin again with the submission of a new or modified study.

F. Notification to Feepayer

Within thirty (30) days of submittal of the independent fee calculation study, the RTC RRIF Administrator shall notify the Feepayer in writing of the acceptance, conditional acceptance, or rejection of the study.

G. Determination of Fee

The determination of the amount of the RRIF Fee shall be made by the RTC RRIF Administrator. If the study is approved, the RRIF Fee will be determined on the basis of the study findings; if the study is denied, the RRIF Fee will be determined using the fee schedule or administratively.

H. Effective Date

The date at which the independent fee calculation study is approved by the RTC RRIF Administrator, or thirty (30) days after submission if there is no finding, shall be the effective date for any fees established pursuant to an independent fee calculation study.

I. Application for a Building Permit

It shall be the responsibility of the Feepayer, at the time of application for a permit, to submit a claim including supporting documentation for modified RRIF Fees resulting from an approved independent fee calculation study.

J. Independent Fee Calculation Guidelines

The impact fee structure identified in the RRIF Program was established based on average travel characteristics for land uses within Washoe County. While those characteristics and resultant RRIF Fees were based on the best available data and sound engineering practices, it is recognized

that individuals may desire to conduct independent surveys of their project's trip generation, trip length, and Percent New Trips and recalculate their particular RRIF Fee per unit of development. All of the following variable inputs to the impact fee formula set forth in Section V.B must be included in any independent fee calculation study unless it is mutually agreeable between the RTC RRIF Administrator and the Feepayer to use established parameters as summarized in the fee schedule.

1. Trip Generation Rate Studies. The trip generation rates used in the calculation of the RRIF Fees are identified in the fee schedule. However, Feepayers conducting an independent fee calculation study shall be permitted to conduct local, independent surveys of trip generation rates to confirm or contradict the rates identified in the fee schedule or to establish rates for land uses not identified in the fee schedule.

   The methodology for conducting an independent survey of trip generation rates is summarized as follows:

   a. A minimum of three (3) sites for the land use in question should be selected. The selected sites should be single-use sites with exclusive driveways.

   b. The site inventory and sites proposed for the survey shall be reviewed by the RTC RRIF Administrator, who will be responsible for the approval of the sites to be surveyed prior to initiation of the survey.

   c. Two-way, 24-hour counts must be made for all driveways for three consecutive weekdays with counts recorded hourly, except during the peak periods of 7:00 a.m. to 9:00 a.m.; 11:00 a.m. to 1:00 p.m.; and 4:00 p.m. to 6:00 p.m. during which periods counts shall be recorded at fifteen (15) minute intervals.

   d. Equipment at each site should be checked periodically to ensure a proper count. No count should be conducted during a special event traffic day. Equipment failure or inclement weather should be grounds for aborting the count. If machine recordings are made, the original tapes must be submitted.

   e. The trip generation date and generation rate shall be summarized and calculated in a report. Trip generation rates shall be calculated using the same unit basis (i.e., dwelling units, gross floor area, etc.) by use as identified in the RRIF Capital Improvements Plan. All calculations and assumptions, such as seasonal adjustments, shall be clearly reported and documented.

f. All traffic counts and analyses shall be conducted by a qualified, state of Nevada registered professional engineer with experience in traffic engineering.

2. Trip Length Studies: Alternative trip length data shall be based upon origin/destination and trip purpose studies conducted at land uses the same as or comparable to the proposed land development activity. As with the trip generation studies, the following conditions shall be met:

   a. A minimum of three sites for the land use in question should be surveyed for three (3) consecutive weekdays.

   b. The site inventory, sites proposed for the surveys, and the detailed survey methodology shall be reviewed and approved by the RTC RRIF Administrator prior to the initiation of the survey.

   c. At a minimum, the following data must be obtained:

      (1) Trip origin by location (major street intersection, landmark);

      (2) Trip destination by location (major street intersection, landmark); and

      (3) Primary trip purpose.

   d. The origin/destination and trip purpose data should be coded and summarized using the summary report form provided by the RTC RRIF Administrator. All calculations and assumptions, including documentation of the sample size confidence level, shall be clearly reported and documented.

   e. All surveys shall be conducted by a qualified, State of Nevada registered professional engineer with experience in traffic engineering.

3. Percent New Trips Studies. Alternative trip data relevant to the Percent New Trips shall be based upon trip purpose studies conducted at land uses the same as are comparable to the proposed land development activity. As with other studies, the following conditions shall be met:

   a. A minimum of three sites should be surveyed for three (3) consecutive weekdays.

   b. The site inventory, sites proposed for the surveys, and the detailed survey methodology must be reviewed and approved

by the RTC RRIF Administrator prior to the initiation of the survey.

c. For all uses, the questions and interpretation of survey results, by land use, shall be as determined by the RTC RRIF Administrator. Trip data will be coded and summarized. All calculations and assumptions, including documentation of the sample size confidence level, shall be clearly recorded and documented.

4. Internal Orientation Studies. Certain mixed use developments may capture a portion of their total trip generation on-site. Those trips would be internal to the site and would not impact the external road network. The degree of internal orientation that can be expected is dependent on the type, character, quantity, and location of uses in the particular mixed-use development.

Trip ends in a mixed-use development are comprised of "attractions" and "productions". The land uses contained in the fee schedule can be classified into those two groups as follows:

Attractions	Productions
- Office/Commercial	- Residential
- Industrial	- Hotel/Motel
- Institutional	
- Recreational	

For mixed use developments not opting to conduct a more refined analysis, a 10% deduction in trip generation will be given for the smaller trip type (i.e., attractions or productions) with that volume also deducted from the predominant trip type were attractions, a 10% deduction would be applied to the attraction total. That volume (10% of the attraction trips) would also be deducted from the production trips. If a Feepayer desires to obtain credit for more than 10% internal orientation for a specific mixed use development, detailed trip studies shall be conducted. Those studies must include, but not be limited to, the following:

a. Detailed site plan identifying development land uses, internal vehicular circulation systems, and internal pedestrian circulation systems.

b. Trip generation by land use, and by attractions and productions.

c. Trip matrix identifying by trip purpose and on-site origins and destinations, inbound and outbound internal trip ends.

d. Trip table identifying total trip generation, external trip ends, and internal trip ends by land use.

VII. STUDIES TO ESTABLISH NEW/REDEFINED LAND USE CATEGORIES

A. Studies by the RTC RRIF Administrator

From time to time, the RTC RRIF Administrator, in conjunction with the Local RRIF Administrators, may undertake studies necessary for the creation of a land use category not included in the fee schedule or to redefine an existing land use category. The results of such studies may be proposed for inclusion in the periodic updates to this Manual.

B. Studies by Others

Third parties interested in proposing the addition of new land uses or the redefinition of existing land uses and the trip generation data associated therewith, shall undertake the necessary independent studies as identified by the RTC RRIF Administrator at their sole expense. Completion and acceptance of such studies by the RTC RRIF Administrator shall in no way be construed as binding the Participating Local Governments to accept the results of such studies or to amend this Manual to incorporate them into the land use fee structure.

1. Notice of Intent

Prior to initiating an independent land use study, the applicant shall inform the RTC RRIF Administrator of its intent in writing. Upon receiving this notice, the RTC RRIF Administrator shall schedule a pre-application meeting with the applicant.

2. Pre-application meeting

Prior to commencing with an independent land use study, the applicant shall meet with the RTC RRIF Administrator to discuss the scope, methodology, procedures, and standards to be met of the required study.

Results, conclusions, and agreements reached at the pre-application meeting regarding the scope of the study, methodology, required forms or documentation, or procedures, which may not constitute a waiver of the provisions of this Manual, shall be placed in writing by the RTC RRIF Administrator in a memorandum, and a copy of the memorandum shall be sent to the applicant.

If the applicant wishes to proceed with the study, it shall acknowledge receipt and acceptance of the RTC RRIF Administrator's memorandum in writing and return this acknowledgment to the RTC RRIF Administrator, with an application fee of $1,500 for administrative costs associated with the review and decision on such a study. By accepting the memorandum, the applicant is obligated to turn over the completed study and assign all rights to the study to the RTC RRIF Administrator upon its completion.

3. RTC RRIF Administrator

Upon completion and acceptance of an independent land use study, the RTC RRIF Administrator shall include the relevant results of the study in the next proposed general update to this Manual for consideration by the Participating Local Governments.

VIII. REFUNDS

A. Expiration, Revocation, Surrender of Permit

Under the conditions defined in Section III.F, Expiration of Building Permit, a Feepayer shall be entitled to a refund, without interest, equal to the full amount of the RRIF Fee paid. In the case of an expired building permit that was obtained in whole or in part by the use of RRIF Waivers or CCFEA Credits issued pursuant to an Offset Agreement or CCFEA, the entire RRIF Fee may be refunded only if a written request is made to the RTC RRIF Administrator within thirty (30) days of the expiration, revocation, or surrender of the building permit. The refund will be in the same proportion (cash vs. RRIF Waiver vs CCFEA Credit) as the original payment. For refunds related to a RRIF Waiver, the RTC RRIF Administrator will notify the affected Participating Local Government and adjust the remaining RRIF Waiver balance associated with the Development of Record.

B. Overpayment

A refund, with interest accrued on the cash amount overpaid, will be made if it is determined, as a result of appeal or independent fee calculation study, that overpayment of the RRIF Fee has occurred.

C. RRIF Revenues Not Expended

Upon the application of owner of record, the RTC RRIF Administrator shall refund the applicable fee paid plus interest accrued if the fee, or any portion thereof, has not been spent for the purpose for which it was collected within ten (10) years after the date on which it was collected.

1. RRIF Fee revenues shall be deemed expended or encumbered when a contract or agreement obligating all or a portion of the payment of said funds shall be approved by the RTC RRIF Administrator.

2. No refunds of RRIF Fees pursuant to the above criteria will be provided for in the event the owner of record does not request such a refund.

3. Before issuance of the refund can be authorized, the owner of record shall submit a written request for refund to the RTC RRIF Administrator. This request must be submitted within one hundred eighty (180) days of the date funds are considered refundable.

4. In applying for the refund, it shall be the applicant's responsibility to pursue the acquisition of, and/or furnish, as required by the RTC RRIF Administrator, all materials and information necessary to validate proof of payment of the RRIF Fee, the date and amount paid, and the permit issued as a result of that payment. The RTC RRIF Administrator shall verify whether the RRIF Fee is refundable, and if so, process the applicant's request.

5. The refunded RRIF Fee, including accrued interest, shall be returned to the owner of record.

D. Recalculation of Fees

1. At the time the review of the RRIF Program is initiated, the RTC RRIF Administrator shall recalculate the RRIF Fees according to the provisions of this Section.

2. The net cost per service unit shall be recalculated using the identical methodology as was used to calculate the net cost per service unit

   in the last update of the RRIF Capital Improvements Plan, but substituting actual costs of completed projects for the estimated costs included in the RRIF Capital Improvements Plan.

3. The RTC RRIF Administrator shall automatically refund the RRIF Fees paid plus interest accrued to all Feepayers if:

   a. The actual cost of the fully completed capital improvements plan is less than the RRIF Fees paid. In such cases, the difference is refunded; or

   b. The recalculated net cost per service unit at the time of a capital improvements plan update is less by more than 10% of that estimated in calculating the RRIF Fees. In such cases, the difference beyond 10% is refunded.

E. Termination

In the event that the imposition of the RRIF Fees is terminated in any or all of the Participating Local Governments, any RRIF Fees collected from development in that jurisdiction and not spent or encumbered at the time of such termination shall be considered refundable upon application of the owner of record.

1. Within thirty (30) days following the effective date of this termination, the Participating Local Government shall turn over all funds in the Participating Local Government's Trust Fund and all pertinent records to the RTC RRIF Administrator.

2. The RTC RRIF Administrator shall notify Feepayers that they may be eligible for a refund upon application of the Feepayer or their successor in interest. The refund application must be submitted by the Feepayer or their successor in interest within one hundred eighty (180) days following the publication of the first notice. Holders of CCFEA Credits issued pursuant to a CCFEA or RRIF Waivers pursuant to an Offset Agreement shall be considered Feepayers for purposes of refund under this termination procedure.

3. Fees available for refund shall be those not expended or encumbered as described in Section VIII.C.

4. No refunds of impact fees will be provided for in the event the owner of record does not request such a refund. Fees available for refund shall be prorated over those eligible Feepayers submitting proper application for refund. In no case shall the Feepayer receive a refund greater than the amount originally paid plus accrued interest.

5. Any RRIF Fees available for refund and not so refunded shall remain in the RTC's Trust Fund. In the event that all Participating Local Governments terminate the imposition of the RRIF Fee, the remaining funds shall be expended on RRIF Capital Improvements identified in the RRIF Capital Improvements Plan.

IX. EXEMPTIONS

A. Must Be Claimed by Feepayer

An exemption must be claimed by the Feepayer at the time of the application of a building permit. An exemption not so claimed shall be deemed waived by the Feepayer.

B. Total Exemptions

The following shall be exempted from payment of RRIF Fees:

1. Alterations. Alteration or expansion of an existing building or use of land where no additional living units will be produced over and above those in the existing use of the property, the use is not changed, and where no additional vehicular trips will be produced over and above those produced by the existing use.

2. RV Site Amendment. An amendment to a recreational vehicle building permit, provided that the amended recreational vehicle building permit does not increase the number of recreational vehicle units permitted.

3. Federal Buildings. A building permit obtained by or for the United States of America. Privately owned properties or facilities leased for general government operations and activities and private residential, commercial or industrial activities constructed or operated through lease agreements on public lands, or in public facilities, shall not be considered governmental or public facilities and shall be subject to the provisions of this Manual.

4. State Buildings. In accordance with an opinion issued by the State Attorney General (Opinion No. 97-29), the State of Nevada is exempt from the payment of impact fees and transportation taxes to local governments.

5. Property owned by a public school district or State University. In accordance with amendments made to NRS 278B and the opinion of the State Attorney General (Opinion No. 97-29), public school districts and the State University System are exempt from paying impact fees. However, private schools and private universities or private uses housed within public school district and public university facilities are not exempt from impact fees.

6. Internal Uses. Under the conditions set forth in Section IV.M, land uses devoted entirely or partially to exclusive private use, which are internal to a particular development and therefore have no off-site street impact.

7. Previous Approval Exemptions.

    a. Development approvals that meet either of the following criteria shall be exempt from payment of RRIF Fees:

        (1) Projects with discretionary approvals from the Elected Board: 1) In the City of Reno prior to May 28, 1991, and the applications for which approvals required the preparation of a traffic report consistent with the City of Reno guidelines and subsequent off-site traffic related improvements other than proportionate share contributions: or 2) outside of Reno but within the

Service Areas prior to the adoption of the Regional Road Impact Fee, and the applications for which approvals required off-site traffic related improvements other than proportionate share contributions.

(2) Those project approvals that meet the above criteria and for which additional traffic studies are required in order to monitor the cumulative traffic impacts of phased development. Such projects shall be required to do the traffic mitigation required as conditions of approval. Projects that meet the first criteria with the exception that no off-site, traffic-related improvements are required other than proportionate share cash contributions shall remain exempt until September 1, 1997. As of September 2, 1997, these projects shall be subject to payment of Fees and all proportionate share cash contributions shall become null and void.

(3) Exhibit D contains the RRIF Exemption List.

b. Such projects shall be required to do the traffic mitigation required as conditions of approval.

c. In the event that a time extension is granted, the exemption from the imposition of RRIF Fees will be retained. If any development approval exempted under this Section is allowed to expire, such exemption shall be null and void. Any subsequent approval and development of the project in any form shall be deemed not to have been approved prior to May 28, 1991, and are subject to the imposition of RRIF Fees.

d. In the event an amendment to a development approval exempted under this Section changes the traffic generation characteristics from those of the original approval, the incremental increase in traffic generation resulting from such amendment shall be subject to the imposition of impact fees

e. In applying for the above-mentioned exemptions, it shall be the applicant's responsibility to furnish, as required by the RTC RRIF Administrator, all materials and information necessary to validate the exemption including, but not limited to, the following:

(1) Current Opinion of Title;

(2) Official document from affected governmental owner stating the proposed land use;

(3) Official documents from zoning hearings;

(4) Old and new construction plans;

(5) Official Certificate of Occupancy and Use records; and

(6) Statements from owner stating past and proposed land use.

f. Projects exempt from the payment of RRIF Fees pursuant to this Section, may nevertheless be required to perform additional traffic mitigation measures if such project is developed in phases, regardless of whether project approval was granted for a total or phased development, and regardless of whether traffic mitigation measures required at the time of project approval have been completed by the applicant. A "phased development" means:

(1) A project which was approved as a phased development.

(2) A project which received approval for a total project, which has not been totally developed pursuant to such approval at the end of a five year period starting with such approval.

C. Exemption Based on Error

Exemptions from payment of RRIF Fees based on error, the Feepayer shall pay the RRIF Fees that would have otherwise been due.

D. Determination

The determination of eligibility for an exemption shall be made by the RTC RRIF Administrator.

X. RRIF WAIVERS REQUESTED AFTER THE 5th EDITION RRIF GAM/CIP (3/2/2015) UPDATE

A. General

1. RRIF Waivers.

a. RRIF Waivers are credits against RRIF Fees for Offset-Eligible Costs in an amount equal to or less than the RRIF Fees owed for the land uses within a Development of Record.

b. RRIF Waivers are approved in a Notice of RRIF Waiver issued pursuant to an Offset Agreement. When a Notice of RRIF Waiver is issued, RRIF Fees assessed by the Participating Local Government will be "waived" until the RRIF Fees waived within the Development

of Record cumulatively equal the amount of Offset-Eligible Costs approved in the Notice of RRIF Waiver.

c. In the event the land uses within the Development of Record are modified greater than 10% of the land uses as identified in the Offset Agreement, RRIF Waivers will be re-evaluated at the then-current RRIF Fee. The determination of a RRIF Waiver modification will be based on a comparison of the RRIF Fees owed for the modified land uses, including any completed portions of the development, and the RRIF Fees owed as identified in the Offset Agreement. The Local RRIF Administrator will notify the RTC RRIF Administrator of the modification for the Development of Record. The RTC RRIF Administrator will issue a new Notice of RRIF Waiver with the remaining value of RRIF Waivers expressed in dollars. All remaining RRIF Waivers shall be utilized at the then-current RRIF Fee as of the date of issuance of the building permit for each unit of development.

2. The RTC RRIF Administrator and legal counsel are the sole officials authorized to communicate, on behalf of the RTC, with a person submitting an application for RRIF Waivers. Representations and communications by other officials, unless expressly authorized by the RTC RRIF Administrator, may not be relied upon for purposes of RRIF Fee obligations, Offered Improvements, or the terms of a proposed Offset Agreement. The Offset Agreement shall supersede all prior written and oral communications, regardless of source.

3. Any offer to dedicate or construct Offset-Eligible Improvements, pursuant to this Section and the Offset Agreement, may be withdrawn at any time prior to the transfer of legal title.

B. Offset Agreement

1. With respect to improvements commenced on or before November 1, 2018, Offset Agreements must be approved prior to the start of work on any Offset-Eligible Improvement and prior to the issuance of any building permit for which RRIF Waivers are requested. With respect to improvements commenced after November 1, 2018, Offset Agreements must be approved prior to the earliest to occur of: (i) twelve (12) months from commencement of construction of the Offset-Eligible Improvement, (ii) completion of work on any Offset-Eligible Improvement, and (iii) utilization of RRIF Waivers earned as a result of construction of any Offset-Eligible Improvement.

2. When the Offered Improvements are completed, the RTC RRIF Administrator will prepare a Notice of RRIF Waiver.

3. The Local RRIF Administrator will inspect and accept the Offset-Eligible Improvements.

4. The RTC RRIF Administrator will issue the Notice of RRIF Waiver, pursuant to the Offset Agreement, to approve the RRIF Waivers.

5. An interim Notice of RRIF Waiver may be issued during phases of construction or dedication of land that provide reasonable assurance that over-crediting shall not occur, if authorized in the Offset Agreement.

6. To the extent that Offered Improvements are ultimately not accepted, or if the Developer of Record is otherwise in material default under the Offset Agreement, the Developer of Record shall pay the actual RRIF Fees which would have otherwise been due.

C. Procedure for Offset Agreements

1. The Developer of Record shall submit an application for RRIF Waivers to the RTC RRIF Administrator on a form provided by the RTC for such purposes.

2. Upon receipt of a complete application for RRIF Waivers, the RTC RRIF Administrator will distribute the application materials to legal counsel, other appropriate RTC staff, and the Local RRIF Administrator for each Participating Local Government in which the Offered Improvements are located (the "affected Participating Local Government").

3. The RTC RRIF Administrator will coordinate with the Local RRIF Administrator for each affected Participating Local Government to ensure all comments are received and given consideration prior to RTC Board approval of the Offset Agreement.

4. After review by legal counsel, other appropriate RTC staff, and the RRIF Administrator of each affected Participating Local Government, the RTC RRIF Administrator will prepare a staff report and Offset Agreement for consideration by the RTC Board and the governing bodies of the affected Participating Local Governments.

   a. The RTC RRIF Administrator's staff report and Offset Agreement will establish which Offered Improvements qualify as Offset-Eligible Costs and the appropriate dollar amount and approved land use designations of any resulting RRIF Waivers, according to the provisions of this Manual.

   b. The amount of RRIF Waivers for a Development of Record may not exceed the actual Offset-Eligible Costs, as described in Section X.

   c. RRIF Waivers shall be expressed in dollars and by the amount of RRIF Fees to be waived in terms of land uses using the fee schedule in effect as of the date of approval of the Offset Agreement.

   d. If the RTC RRIF Administrator determines that cost estimates submitted by the Developer of Record are either unreliable or inaccurate, the final determination of the amount of RRIF Waivers shall be made by the RTC RRIF Administrator based upon reasonable engineering criteria, construction costs estimates,

property appraisals, or other professionally-accepted means of determining the value of the Offered Improvements.

5. Based on the staff report of the RTC RRIF Administrator, the provisions of this Manual, the RRIF Capital Improvements Plan, available funds for RTC projects, and other relevant factors, the RTC Board and the governing bodies of the affected Participating Local Governments will make a final decision whether to accept, reject, or to propose amendments to the Offset Agreement.

6. Once a final decision has been made by the RTC Board and the governing bodies of the affected Participating Local Governments, the RTC RRIF Administrator will send by registered mail a copy or copies of the approved Offset Agreement for the final consent and signature of the Developer of Record. The Offset Agreement will be deemed to have been received by the Developer of Record three (3) days after mailing by the RTC RRIF Administrator.

7. The Developer of Record must sign, date, and return the approved Offset Agreement indicating their consent to the terms therein within thirty (30) days of receiving the approved Offset Agreement from the RTC RRIF Administrator. If the RTC RRIF Administrator does not receive the signed Offset Agreement within thirty (30) days, the application for RRIF Waivers will be deemed withdrawn.

8. Unless an executed Offset Agreement expressly provides otherwise, i.e. if interim RRIF Waivers are authorized in the Offset Agreement, RRIF Waivers will not be approved in a Notice of RRIF Waivers until all Offset-Eligible Improvements have been completed and, if applicable, dedicated to the RTC or the affected Participating Local Governments as provided in the Offset Agreement.

9. Land dedications accepted as an Offset-Eligible Improvement must be accompanied by the following documentation prior to issuance of a Notice of RRIF Waiver, as provided below:

    a. The delivery to the appropriate governmental body of an irrevocable offer of dedication, with sufficient funds to pay all costs of transfer of title including recording.

    b. The escrow of taxes for the current year or the payment of said taxes for the year.

    c. The issuance of a title insurance policy subsequent to recording of the deed and escrow of taxes.

10. Unless expressly provided otherwise in an Offset Agreement, it is the responsibility of the Developer of Record to submit sufficient

documentation to the RTC RRIF Administrator to establish that the terms of the Offset Agreement have been met.

11. Once the RTC RRIF Administrator has made a determination that the terms of the Offset Agreement have been met, the RTC RRIF Administrator will issue a Notice of RRIF Waiver to the Developer of Record.

D. Contents of Applications for RRIF Waivers

1. The application for RRIF Waivers must contain the information and documentation required by this Section and sufficiently identify and describe the Offered Improvements which otherwise would have been built by the RTC with collected RRIF Fees.

2. Each application for RRIF Waivers must contain the following:

   a. The name of the Developer of Record offering to make Offset-Eligible Improvements and requesting RRIF Waivers.

   b. The contribution, payment, construction, or land dedication which will constitute the Offered Improvements and the legal description or other adequate description of the project or development, referred to and the Development of Record, to which the Offered Improvements are related.

   c. The name, address, phone number, fax number, email address and a contact person of the Developer of Record.

   d. The name, Local Government File Number, and three copies of the site plan of the Development of Record.

   e. List of approved land uses and the estimated RRIF Fees for those uses within the Development of Record.

   f. Name, address, phone number, fax number, email address and contact person of the Engineer of Record.

   g. The proposed plans and specifications for the specific construction prepared and certified by a duly qualified engineer, registered and licensed in the State of Nevada.

   h. When a Developer of Record offers to dedicate right-of-way, they shall present:

      (1) Preliminary Title Report.

      (2) Copy of Dedication Map containing proposed dedication.

(3) Documentation sufficient to establish the applicant's opinion of value of property to be offered for dedication, as provided in Section X.

i. Sufficient documentation to verify the costs of the Offered Improvements, in accordance with Section X.

E. Contents of Offset Agreements

1. No dedication or construction project may be accepted in exchange for RRIF Waivers except pursuant to an Offset Agreement, which must include the following:

   a. The projected costs for the Offered Improvements, based on the valuation provisions of Section X, including provisions for verifying costs and facilitating changes in costs or plans.

   b. The time by which the construction of the Offered Improvements shall be paid, completed, or dedicated and any provisions for extensions thereof.

   c. The proposed amount in dollars and land uses of RRIF Waivers, based on the estimated costs of the Offered Improvements.

   d. The terms and conditions that must be met before the RTC RRIF Administrator will issue a Notice of RRIF Waiver, in accordance with the provisions of this Manual.

   e. RRIF Waivers shall be limited to use for the payment of RRIF Fees associated with the Development of Record listed in the Offset Agreement. RRIF Waivers shall not expire.

   f. RRIF Waivers shall be assigned to offset the RRIF Fees within the Development of Record pursuant to the Offset Agreement.

   g. If the designated land uses for the Development of Record identified in the Offset Agreement change, the remaining waivers shall be re-assessed as outlined in the provisions in Section X.A.

   h. A provision requiring that all Offset-Eligible Improvements accepted will be in accordance with RTC requirements and standards.

   i. Any labor, work safety, prevailing wage, or other applicable laws or regulations with which the Developer of Record must comply.

   j. Such other terms and conditions agreed to by the parties.

2. Any changes to an Offset Agreement approved by the RTC Board, other than those addressed in Section X.F, will require an amendment to the Offset Agreement using the same procedures as its original approval.

F. Calculation of RRIF Waivers.

1. Eligibility.

   a. RRIF Waivers may be approved only for Offset-Eligible Costs, which are limited to the costs the RTC otherwise would have incurred for RRIF Capital Improvements.

   b. RRIF Waivers may be provided only pursuant to a valid Offset Agreement, executed according to the provisions of this Manual.

   c. Offset-Eligible Costs are available for RRIF Waivers only if associated with Offset-Eligible Improvements that meet design standards approved by the RTC and the affected Participating Local Government, and only to the extent such costs do not exceed the scope of the project as planned by the RTC and reflected in the RRIF Capital Improvements Plan or as described in the applicable Offset Agreement.

2. Valuation.

   a. RRIF Waivers approved by the RTC pursuant to a Notice of RRIF Waivers will be based on, and may not exceed, the actual verified costs of the dedication or construction of the Offset-Eligible Improvements accepted by the affected Participating Local Government.

   b. The RTC will not approve RRIF Waivers in excess of the RRIF Fees owed for a Development of Record as of the date of the applicable Offset Agreement.

   c. The amount of RRIF Waivers shall be calculated as follows:

      (1) Construction of Facilities and Provision of Equipment. The RRIF Waivers may not exceed the actual cost of construction or equipment, as evidenced by receipts and other sufficient documentation provided by the developer of the public facility and verified by the RTC RRIF Administrator. Actual costs shall be based on local information for similar improvements; may include the cost of construction, planning feasibility, alignment studies, plan-line studies, preliminary engineering, relevant geotechnical, environmental and cultural resource studies, permitting, the cost of all lands, property, rights, easements, and franchises acquired, construction financing charges, plans and specifications, surveys, engineering and legal services, construction inspection and testing, and all other expenses necessary or incident to determining the feasibility or practicability of such construction.

      (2) Dedication of Land.

(a) If the land in question is subject to a valid agreement, zoning approval or development approval, which established a valuation or prescribes a method of valuation, the agreement, zoning approval or development approval shall control.

(b) If the dedication is made pursuant to a condition of discretionary zoning or development approval, the value of the land shall be determined as of the date immediately preceding the discretionary development approval. The value shall be based upon the condition of the property and the regulatory zoning in place immediately prior to the discretionary approval.

(c) Valuation shall be based on the fair market value of the land upon execution of the Offset Agreement by the Developer of Record or final approval of the proposed Offset Agreement by the RTC Board or the governing bodies of the affected Participating Local Government, whichever is earlier.

d. All changes in the estimate of Offset-Eligible Costs or to the approved plans and specifications (prior to or after execution of an Offset Agreement), shall require approval of the RTC RRIF Administrator. The applicant shall provide the RTC RRIF Administrator copies of all contracts or agreements made for design services, construction, or engineering during construction within fifteen (15) days after their execution.

G. Usage of RRIF Waivers.

1. Participating Local Governments shall waive RRIF Fees otherwise owed either at the time of issuance of a building permit or issuance of the Certificate of Occupancy, as the case may be, if the RTC RRIF Administrator has issued a Notice of RRIF Waiver for the Development of Record.

2. RRIF Waivers may be used to pay up to 100% of the RRIF Fees due as the result of development within the Development of Record.

3. RRIF Waivers may not be used to pay for RRIF Fees due as a result of development outside of the Development of Record.

4. RRIF Waivers are transferable to a third party. To transfer RRIF Waivers, the current holder of RRIF Waivers will notify RTC through the RRIF Automation Program of the amount of RRIF Waivers to be transferred and the name and contact information of the third party. RRIF Waivers will be subtracted from the current holder's account and transferred to a new account in the name of the third party.

5. Upon transfer, RRIF Waivers may be used by the transferee to pay up to 100% of the RRIF Fees due as the result of development within the Development of Record.

XI. UNEXPIRED CREDITS APPROVED PRIOR TO THE 5th EDITION RRIF GAM/CIP (3/2/2015) UPDATE

A. Applicability. This Section applies to CCFEAs and to CCFEA Credits issued pursuant to such CCFEAs.

B. Intent. It is the intent of the RTC Board, and affected Participating Local Governments, to carry forward the policies and understanding in place when CCFEAs were entered into, prior to the changes to the adoption of the 5th Edition RRIF GAM/CIP. Therefore, to the extent possible and practical, outstanding CCFEA Credits may be used or transferred as provided prior to adoption of the 5th Edition RRIF GAM/CIP, as provided in this Section and in accordance with the terms of valid, unexpired CCFEAs.

C. CCFEA Credit Usage.

1. The transferability and usage of CCFEA Credits issued pursuant to a valid, unexpired CCFEA are as follows:

a. CCFEA Credits may be used by the Developer of Record to pay for up to 100% of the Regional Road Impact Fees on any traffic generating development of land included in the Development of Record.

b. CCFEA Credits may be used by the Developer of Record to pay for up to 100% of the Regional Road Impact Fees on any traffic generating development of the Developer of Record within the same CCFEA Credit Benefit District as the Development of Record.

c. CCFEA Credits are transferable to a third party. To transfer credits, the current credit holder of CCFEA Credits will notify RTC through the RRIF Automation Program the amount of VMT's to be transferred and the name and contact information of the third party. CCFEA Credits will be subtracted from the current CCFEA Credit holder's account and transferred to a new account in the name of the third party.

d. CCFEA Credits may be used by a third party to pay for up to 100% of the Regional Road Impact Fees on any traffic generating development of land included in the Development of Record.

e. CCFEA Credits may be used by a third party to pay for up to one half of the amount of the RRIF Fees due on any traffic generating development of land within the same CCFEA

Credit Benefit District as the Development of Record. The remaining portion of RRIF Fees due must be paid in cash.

2. CCFEA Credits may not be used outside of the CCFEA Credit Benefit District in which the Development of Record lies.

D. Expiration of Credit

Unused CCFEA Credits shall expire twenty years from the date of the CCFEA.

XII. APPEALS

A. Notice of Appeal

1. A Feepayer or applicant affected by a final administrative decision of the Local RRIF Administrator or the RTC RRIF Administrator may appeal the decision.

2. The RTC RRIF Administrator will consider an appeal of a decision of a Local RRIF Administrator. The Appeal Committee will consider an appeal of a decision of the RTC RRIF Administrator.

3. In order to appeal, the Feepayer or applicant shall file a written notice of appeal with the RTC RRIF Administrator within ten (10) business days of the decision. The notice must:

   a. State with specificity the nature and grounds of the appeal;

   b. Identify the law and facts that are inconsistent with the decision (including the specific provisions of this Manual, the RRIF Capital Improvements Plan, the RRIF Ordinance, and any other laws or regulations);

   c. Describe the decision the applicant believes should have been made, the corrective action that should be taken, and the rationale for that position based on a detailed description of the law and facts (including the specific provisions of this Manual, the RRIF Capital Improvements Plan, the RRIF Ordinance, and any other laws or regulations); and

   d. Provide draft written findings that would support a conclusion that the decision being appealed was erroneous and that the proposed corrective action is necessary.

4. The burden is on the Feepayer or applicant to prove that the decision being appealed was erroneous and that the proposed corrective action is necessary

5. A decision of the RTC RRIF Administrator that constitutes a question of law may not be appealed. The RTC RRIF Administrator, in

consultation with legal counsel, shall determine whether or not a decision constitutes a question of law.

B. Appeals to the RTC RRIF Administrator

1. The RTC RRIF Administrator shall consider an appeal of a final administrative decision of a Local RRIF Administrator.

2. The RTC RRIF Administrator shall have the power to affirm or reverse the decision being appealed. In making its decision, the RTC RRIF Administrator shall make written findings and apply the standards of this Manual. In order to reverse the decision, the RTC RRIF Administrator must conclude that the decision being appealed was erroneous and that the proposed corrective action is necessary. If the decision is reversed, the RTC RRIF Administrator shall specify the appropriate corrective action that should be taken pursuant to this Manual. In no event shall the RTC RRIF Administrator have the authority to negotiate the terms of the corrective action.

3. A Feepayer or applicant may appeal the decision of the RTC RRIF Administrator by filing a notice of intent to appeal with the RTC RRIF Administrator within ten (10) business days of the decision.

C. Appeals to the Appeal Committee

1. If a decision of the RTC RRIF Administrator is appealed, the RTC RRIF Administrator shall schedule a hearing before the Appeal Committee. The RTC RRIF Administrator shall attempt to schedule a hearing to be held within sixty (60) days of receipt of either the notice of appeal or the notice of intent to appeal, as applicable.

2. The RTC RRIF Administrator will provide the appellant's notice of appeal, and the decision of the RTC RRIF Administrator, to the Appeal Committee.

3. The appellant and the RTC RRIF Administrator may file supplemental materials supporting their positions at least fourteen (14) days before the hearing.

4. The appellant and the RTC RRIF Administrator shall have an opportunity to present their positions verbally at the hearing.

5. The Appeal Committee shall have the power to affirm or reverse the decision being appealed. In making its decision, the Appeal Committee shall make written findings and apply the standards of this Manual. In order to reverse the decision, the Appeal Committee must conclude that the decision being appealed was erroneous and that the proposed corrective action is necessary. If the decision is reversed, the Appeal Committee shall specify the appropriate corrective action that should be taken pursuant to this Manual. In no

event shall the Appeal Committee have the authority to negotiate the terms of the corrective action.

6. The RTC RRIF Administrator shall have the right, on the advice of legal counsel, to reject the findings of the Appeal Committee and refuse to carry out the corrective action.

XIII. USE OF FUNDS

A. Deposit in Trust Funds

1. All RRIF Fees collected by each Local RRIF Administrator, pursuant to this Manual, shall be immediately deposited in the Participating Local Government's Trust Fund.

2. Any proceeds in the Participating Local Government's Trust Fund not immediately necessary for expenditure shall be invested in an interest-bearing account. All income derived from these investments shall be retained in the Participating Local Government's Trust Fund until transferred to the RTC's Trust Fund. Record of the Participating Local Government's Trust Fund accounts shall be available for public inspection in the Local RRIF Administrator's office, during normal business hours.

3. No less frequently than quarterly, and pursuant to the RRIF Interlocal Cooperative Agreement, the Local RRIF Administrator shall transfer the funds in the Participating Local Government's Trust Fund to the RTC's Trust Fund. All proceeds in the RTC's Trust Fund not immediately necessary for expenditure shall be invested in an interest-bearing account.

B. Limitations on Expenditures

1. Funds shall only be expended from the RTC's Trust Fund.

2. Except as provided in Section C below, funds shall only be expended on RRIF Capital Improvements in the Service Area in which such RRIF Fees were collected.

3. The expenditure of funds shall be limited to those RRIF Capital Improvements included in the RRIF Capital Improvements Plan.

4. For the purposes of determining whether funds have been spent or encumbered, the first RRIF Fees collected shall be considered the first funds spent or encumbered.

5. If funds transferred to the RTC's Trust Fund are required to be refunded pursuant to Section VIII, Refunds, the RTC RRIF Administrator shall return such funds to the Local RRIF Administrator for refund.

C. Service Areas

RRIF Fees shall be spent in the Service Area in which such RRIF Fees were collected, except that:

1. Where a RRIF Capital Improvement included in the RRIF Capital Improvements Plan is used to define Service Area boundaries, the road demarcating the boundary shall be considered as part of both Service Areas that it bounds, and RRIF Fees from both Service Areas may be used to fund RRIF Capital Improvements for that road, including regionally significant freeway ramps that provide access to a boundary road; or

2. RRIF Fees may be used to fund a RRIF Capital Improvement outside the Service Area in which the RRIF Fees are collected if it is demonstrated, by competent substantial evidence, that the Feepayer will receive sufficient benefit from the RRIF Capital Improvement to comply with the requirements of NRS 278B.

XIV. AMENDMENTS TO THE RRIF CAPITAL IMPROVEMENTS PLAN

A. Biennial Consideration of a Special Request for a New RRIF Capital Improvement Project

The RTC Board and the governing bodies of the Participating Local Governments shall consider any person's proposed amendments to the RRIF Capital Improvements Plan no more often than biennially (once every two years).

B. Procedure

1. Any person, who proposes an amendment to the RRIF Capital Improvements Plan that requires a modification of RRIF Capital Improvements, shall submit an application requesting such an amendment to the RTC RRIF Administrator by the end of the first quarter of the update year. The application shall include the appropriate data and supporting analysis to demonstrate justification for amending the RRIF Capital Improvements Plan, and either adding and/or deleting RRIF Capital Improvements; to the extent necessary, justification for modifications to land use assumptions and trip characteristics and a traffic report (using the guidelines in Exhibit E – Traffic Report Guidelines) shall be included in the application by the applicant.

2. Within ten (10) business days after the end of the first quarter of the update year, the RTC RRIF Administrator shall compile and synthesize all applications submitted by private persons for proposed amendments to the RRIF Capital Improvements Plan, and mail copies of these applications to the Local RRIF Administrators. Prior

to the end of the second quarter of the update year, the RTC RRIF Administrator shall prepare a staff report recommending approval, approval with modifications, or disapproval of each proposed application; in preparing the staff report, the RTC RRIF Administrator shall consider and to the extent appropriate incorporate any comments from the Local RRIF Administrators.

3. During the third quarter of the update year, the RTC Board shall review and consider the applications for proposed amendments to the RRIF Capital Improvements Plan. By the end of the update year, the RTC Board shall submit its recommendations to each of the governing bodies of the Participating Local Governments who shall make a decision on whether to approve, approve with modifications, or disapprove the proposed applications. For an application to receive final approval, it shall require approval by each of the governing bodies of the Participating Local Governments.

4. Based upon the decision of the RTC Board and the governing bodies of the Participating Local Governments, the RTC RRIF Administrator shall prepare the appropriate modifications to the RRIF Capital Improvements Plan and this Manual, which must then be approved in a consolidated form by the governing bodies of each Participating Local Government before they become final.

C. Standard Request for a New Capital Improvement

Any application for an amendment to the RRIF Capital Improvements Plan shall only be approved if the application demonstrates that the land use assumptions or the travel characteristics used in the RRIF Capital Improvements Plan have changed to such a degree, that the modification is necessary to maintain adequate levels of service on the RRIF Network.

D. Special Request for a New Capital Improvement

1. Any person may propose an amendment to include a new capital improvement in the RRIF Capital Improvements Plan during periods other than specified in Section XIV.B.1. The RTC RRIF Administrator will consider applications to amend the RRIF Capital Improvements Plan if the following criteria are met a) a non-refundable fee of $5,000 is provided to fund the cost of processing the amendment; RRIF Waivers will not be given for this fee, if approved, b) the amendment is consistent with a Master Plan that has been approved by the appropriate governing body and Truckee Meadows Regional Planning Agency as necessary, and c) the new capital improvements are for arterial or collector streets and roads that meet the criteria to be included in the RRIF Network as specified in the RRIF Capital Improvements Plan.

2. The RTC RRIF Administrator, with concurrence from the Local RRIF Administrators, will process applications meeting the criteria specified in Section XIV.D.1. The RTC RRIF Administrator shall prepare the appropriate modifications to the RRIF Capital Improvements Plan and this Manual, which must then be approved in a consolidated form by the governing bodies of each Participating Local Government before they become final and before the project would be eligible for RRIF Waivers.

XV. BIENNIAL REVIEW

The RRIF Capital Improvements Plan and this Manual should be reviewed and evaluated by the RTC at least once every two (2) years, to determine if any modifications, additions, or updates need to be made to the RRIF Capital Improvements Plan and this Manual. This review shall be conducted by the RTC RRIF Administrator in consultation and coordination with the RRIF TAC, and any resulting studies, reports, and recommendations shall be submitted to the Capital Improvements Advisory Committee, the RTC Board, and the governing bodies of the Participating Local Governments as required by this Manual, the RRIF Interlocal Cooperative Agreement, and NRS 278B.

XVI. ADOPTION

This Manual has been adopted by resolution of the RTC Board and by each Participating Local Government. This Manual may be amended only by resolution of the RTC Board and by resolutions of the governing bodies of each Participating Local Government.

EXHIBIT A
EXPANDED LIST OF LAND USES

RESIDENTAL

SINGLE-FAMILY

Residential properties with one dwelling unit, including:

- single-family attached or detached residence
- mobile home subdivision
- mobile home on individual lot

MULTI-FAMILY

Two or more dwelling units, including:

Commented [A1]: Two or more

- duplexes
- apartments
- condominiums
- boarding house
- senior assisted living housing
- supplemental units/mother-in-law units/assessor dwelling units as discussed in Section IV. L.

Commented [A2]: Considering reference to Section L

INDUSTRIAL

GENERAL LIGHT INDUSTRIAL

- abattoir and packing plant
- auto repair
- auto painting
- auto body
- equipment rental
- industrial laundry
- heavy equipment repair/service
- material testing labs
- publishing or publishing and printing

MANUFACTURING

- dairy products
- chemical processing/manufacturing
- furniture manufacturer
- textile mill

WAREHOUSING

- storage warehouse
- distribution warehouse
- logisticenter
- regional warehouse development
- data center

MINI-WAREHOUSE

- mini storage warehouse development

COMMERCIAL/RETAIL

GENERAL COMMERCIAL

Shopping centers and free-standing commercial buildings, including:

- adult entertainment
- bakery
- bar/cocktail lounge
- barber shop
- beauty salon
- car wash (operator)
- clothing store
- convenience store
- drug/variety store
- dry cleaning
- electronics sale and service
- ice cream parlor
- jeweler
- massage, tattoo, body painting, etc.
- office supplies
- pawn shop
- pet store
- pet grooming
- pool/billiard parlor
- record store
- quality restaurant
- savings and loan
- shopping center
- shoe repair
- tailor
- video arcade
- video rental

FAST FOOD RESTAURANT

- restaurant (fast food and/or drive through)

OFFICE & OTHER SERVICES

PRIVATE SCHOOLS

- elementary school
  middle school
- junior high school
- high school
- college
- university
- junior college
- community college

DAY CARE CENTER

- child care center
- day care center
- kindergarten

LODGING

- hotel
- motel
- casino hotel
- resort hotel
- RV park

HOSPITAL

- hospital
- psychiatric hospital
- mental institution

NURSING HOME

- convalescent center
- nursing home

MEDICAL OFFICE

- medical clinic
- medical laboratories
- medical/dentist/optometrist/chiropractic offices (>10,000 GFA)
- veterinary clinic
- urgent care

GENERAL OFFICE

General offices and office buildings including:

- accounting offices
- architect
- financial offices
- banks (with or without drive in services)
- insurance office
- medical/dental offices (<10,000 GFA)
- physical therapist offices
- psychologist offices
- law offices
- government offices
- public utility office
- real estate
- recording studio

REGIONAL RECREATIONAL FACILITY

Parks and areas open to the public including:

- public park
- public swimming pool
- ball fields
- flat fields

EXHIBIT B
REGIONAL ROAD IMPACT FEE SERVICE AREAS

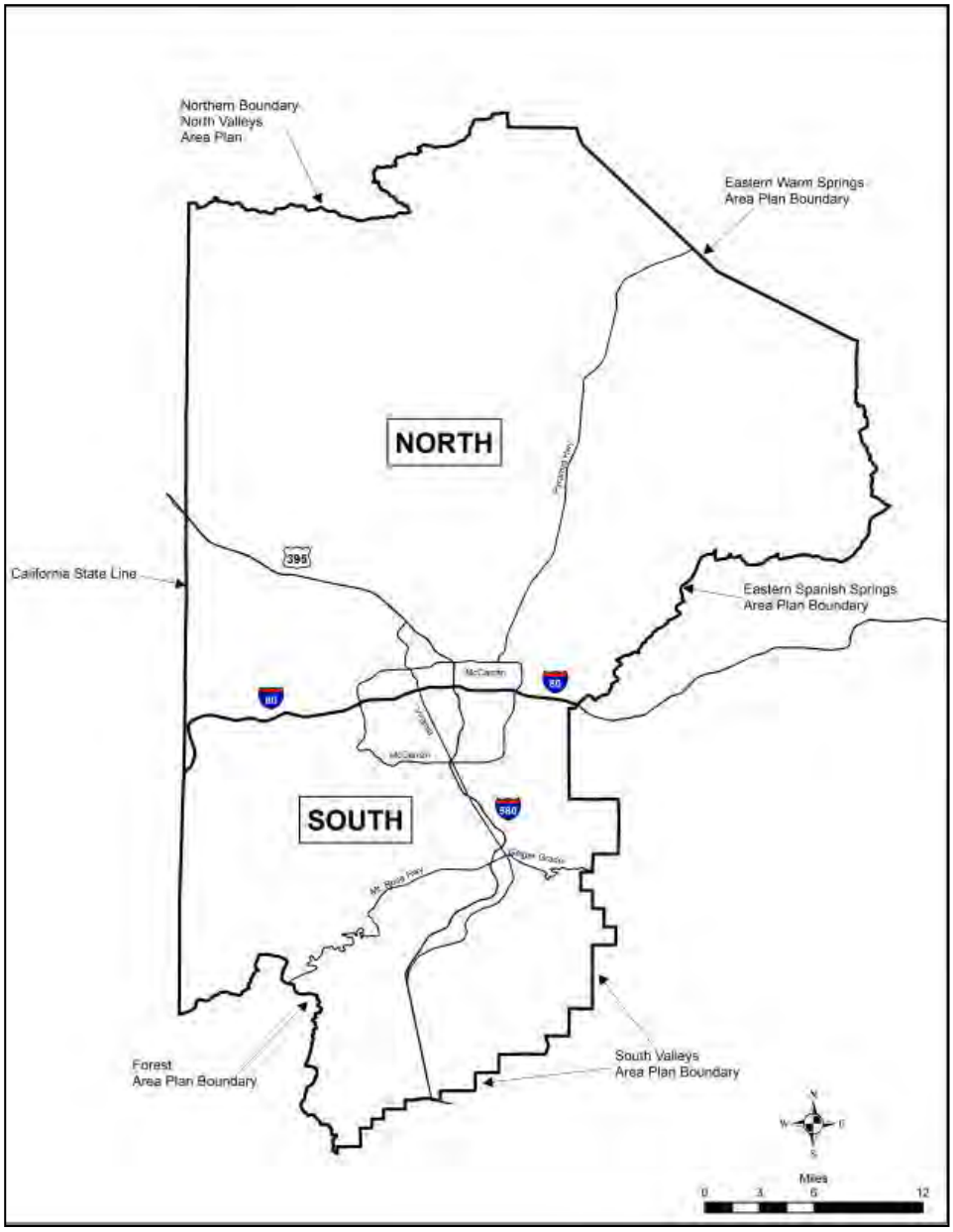


EXHIBIT C
CCFEA CREDIT BENEFIT DISTRICTS

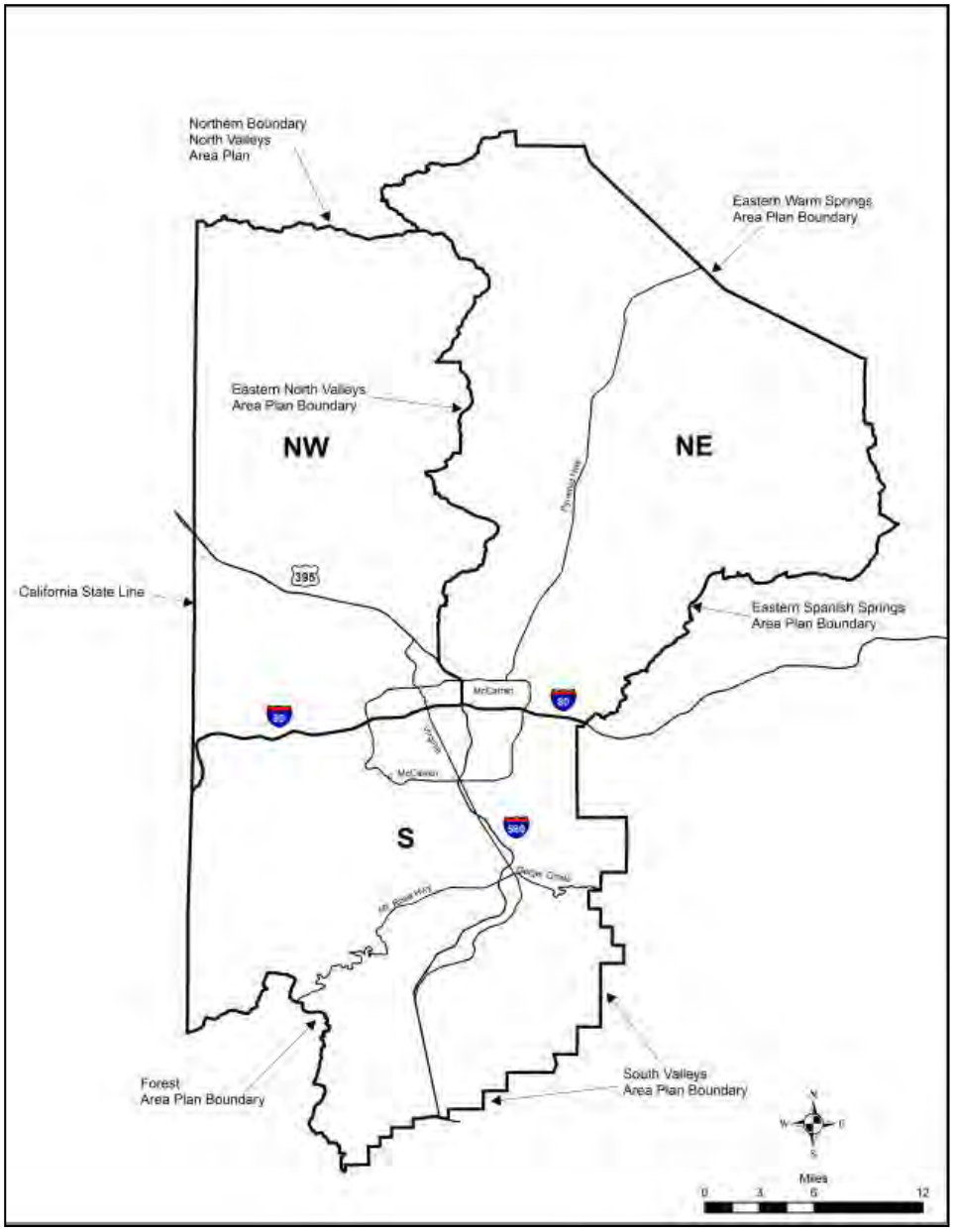


EXHIBIT D

RRIF EXEMPTION LIST

- Caughlin Ranch
- Convention Properties – (Firecreek Crossing)
- South Meadows Phase 1 & 2

EXHIBIT E
TRAFFIC REPORT GUIDELINES
REGIONAL ROAD IMPACT FEE

CITY OF RENO
CITY OF SPARKS
WASHOE COUNTY
REGIONAL TRANSPORTION COMMISION

I. INTRODUCTION

The Regional Road Impact Fee (RRIF) Traffic Report Guidelines provide criteria about traffic report content and techniques necessary to evaluate impacts of new development. The guidelines represent recognition of the comprehensive analyses undertaken as part of development and periodic updating of the RRIF Capital Improvements Program.

The RRIF Capital Improvements Plan uses ten (10) year population and employment land-use assumptions based on approved projects and master plans. Roadway segment and freeway ramp improvements are identified that will be needed within the ten (10) year horizon. These facilities are also analyzed to determine right-of-way requirements for capacity improvements needed beyond ten (10) years. In some instances, a proposed, large development may have not been included in the land-use assumptions to determine future traffic volumes. Other developments may have phasing plans that exceed the time frame of the RRIF Capital Improvements Plan. For these and other cases outlined below, a traffic report may be needed to measure traffic impacts and determine potential improvements not identified in the RRIF Capital Improvements Plan.

The RRIF Traffic Report Guidelines are divided into the following sections:

II. Requirement for Traffic Report
III. Traffic Report Time Lines
IV. Traffic Report Format and Required Elements
V. Recommended Mitigations

II. REQUIREMENT FOR TRAFFIC REPORT

A traffic report may be recommended for developments meeting any one of the following criteria:

A. Projects generating 100 or more peak-hour trips: Capacity analysis of proposed driveways.

B. Projects generating 200 or more peak-hour trips: Report required if RTC staff cannot validate project inclusion in the RRIF Capital Improvements Plan land-use forecast.

C. The project is among those previously approved by an elected board with conditions of approval requiring future traffic reports.

D. Applications for Master Plan Amendment calculated generating 200 or more peak-hour trips or that proposes a change to roadways in the Regional Transportation Plan (RTP) for Washoe County.

E. Projects defined as "Projects of Regional Significance" in the Truckee Meadows Regional Plan.

F. Projects that will be phased over a period of time exceeding ten years.

G. Projects that may impact planned roadway projects, e.g., a proposal may require revised access or be located near an arterial intersection.

H. Projects deemed to have impacts related to intersection capacity, safety, neighborhood or other concerns as identified by the cities of Reno and Sparks, Washoe County, or the State of Nevada Department of Transportation (NDOT).

I. The Regional Transportation Commission (RTC), NDOT or the local entity reserves the right to request additional information necessary to properly assess the impact of the proposed project.

Calculation of trip generation should use appropriate rates found in the latest edition of *TRIP GENERATION* by the Institute of Transportation Engineers (ITE) or other sources approved by RTC staff and the local jurisdiction.

III. TRAFFIC REPORT TIME LINES

A. Project Submittal Deadlines: The appropriate local entity with jurisdiction over approval of development applications should be contacted to determine submittal deadlines.

B. Prior to Submittal of Development Application: To facilitate prompt and efficient review and processing of development applications, RTC staff recommends the following to be completed before submittal of the development application:

1. Project trip generation should be approved by the appropriate local entity.

2. Applicants for projects generating 200 or more peak-hour trips should contact RTC to determine if the proposal is accommodated in the RRIF Capital Improvements Plan land-use forecast. If a report is required, the following steps should then be completed before submittal of the development application:

(a) The applicant's consultant should meet with RTC, the appropriate jurisdiction, and/or NDOT to define the scope of the report including variables identified in these guidelines, such as intersections and peak periods to be analyzed and trip distribution, as well as the potential for pass-by trips, the need for new intersection counts, or agency/neighborhood concerns.

(b) Potential site plan changes may be recommended to provide RIDE or Access service to the project.

3. Traffic reports that require future-year analysis should obtain background traffic volumes developed or approval by RTC staff.

4. The traffic report should be reviewed for completeness and accuracy and approved by appropriate staff at the local jurisdiction.

5. Recommendations on the following pages identify specific improvement that should be depicted on submitted site plans.

C. After Submittal of Development Application:

All traffic issues identified by reviewing agencies following submittal of an approved traffic report should be resolved before the writing of the staff report by the appropriate entity. This will ensure that all recommended conditions of approval associated with traffic concerns could be resolved before official action on the project.

IV. TRAFFIC REPORT FORMAT

All traffic reports shall be prepared by, or under the direction of, a professional engineer with adequate experience in transportation engineering. The report shall be stamped and signed.

A. Project Description: The traffic report should include a description of the following:

1. Existing and proposed land-uses on the site. The project should be described in terms of the amount of development, e.g., number of residential units, non-residential square feet of floor area.

2. Project build-out date and phasing if appropriate.

3. A vicinity map showing the location of the project and surrounding land-uses.

4. The site plan should be shown to scale with clear definition of internal circulation and proposed vehicle and pedestrian access to adjacent streets. Any driveways located across roadways and adjacent to the site should be depicted. Distances from the nearest full movement intersections to project driveways should also be shown. The design of project access must consider proper distance between intersections and project driveways as well as other elements described in appropriate local codes and Regional Transportation Plan (RTP) policies.

5. Any approved or required encroachment permits for roadways under the jurisdiction of NDOT.

6. Nonresidential and multi-family projects should include a description

of RIDE service, if any. Potential location(s) for bus stop(s) and related passenger amenities, e.g., passenger shelters, should be indicated on the proposed site plan.

7. Senior or assisted-care residential projects should include a description of transportation needs of residents, including site plan elements needed to provide Access Para transit service to the project. RTC staff can provide information related to provision of Access service.

B. Roadways Description: The following elements should be described for all facilities adjacent to the site or otherwise included in the traffic report.

1. The roadway descriptions should begin with a list of intersections to be analyzed as required by the appropriate jurisdiction.

2. Existing and proposed roadways should be identified in terms of their functional classification.

3. The number and type of lanes, e.g., through-lanes, left-turn lanes, bike lanes, existing and planned for each roadway segment and intersection to be analyzed in the report.

4. The existence or lack of pedestrian facilities on both sides of roadways adjacent to the site.

5. A vicinity map depicting location of roadways and intersections to be analyzed.

C. Trip Generation: To assess the magnitude of traffic impacts of the proposed, the following must be included in the report:

1. Trip generation rates and peak hours must be determined and approved by the local jurisdiction or RTC staff. Trip generation should be calculated based on approved trip rates found in the latest edition of the ITE *Trip Generation.* If not available in this publication, other trip generation sources or procedures should be proposed for approval.

2. For purposes of driveway analysis, there should be no reduction in calculated trip generation for pass-by or diverted trips. Reductions for intersection analysis should be approved by the local jurisdiction and RTC staff.

3. A table should summarize average daily traffic volumes and peak-hour volumes with subtotals for each land use.

D. Trip Distribution and Assignment: Distribution of project trips should be approved before application submittal by the local jurisdiction in consultation with RTC staff.

1. Trip distribution should be depicted for each peak-period to be analyzed on a vicinity map similar to that used to indicate the location of the project and intersections to be analyzed (see B.5 above).

2. A map should illustrate assignment of project trips for each peak-period to driveways and intersections to be analyzed.

3. Additional maps should illustrate background traffic plus project trips for each peak-period analyzed.

E. Analysis: Analysis at required intersections and roadway segments should consist of the following applicable scenarios for the peak periods required:

1. Existing conditions without project traffic *(New counts of turning movements at key intersections may be required by the local jurisdiction. RTC recommends new counts if existing data is older than 12 months or if circumstances, such as completion of a new facility, make new counts important to the analysis.)*

2. Background conditions at proposed date of project completion (if two or more years in the future).

3. Project traffic plus background traffic at project buildout.

4. 2025 and 2035 projections without project traffic.

5. 2025 and 2035 projections plus project traffic.

6. Demonstrated improvement with recommended mitigations (as required below).

7. Construction impacts including effects on transit service.

Results of the analysis should be depicted in a summary table indicating appropriate Levels of Service or available capacity for each critical movement at required intersections, driveways, or roadway segments. All raw traffic data and analysis worksheets, including computer printouts and turning movements counted, should be provided in appendices.

The impact analysis for existing scenarios should be based on the ”operations” analysis technique described in the latest edition of the *Highway Capacity Manual* (HCM) for the appropriate intersection type (signalized or un signalized). Analysis of 2025 and 2035 projections conditions should utilize the “planning” technique described in the latest edition of the HCM. Any computer software used to assist in the level of service analysis should be approved by the Federal Highway Administration (FHWA) and be consistent with local agency review procedures.

All traffic control warrant analyses shall be conducted in accordance with the latest edition of the *Manual on Uniform traffic Control Devices* (MUTCD) requirements for signalized and unsignalized intersections. In addition, a safety analysis shall be conducted in the vicinity of the proposed project.

V. RECOMMENDED MITIGATIONS

The traffic study should include recommendations to mitigate impacts of project traffic when Levels of Service (LOS) do not meet adopted Level of Service Standards as identified in the RRIF Capital Improvements Plan. Appropriate staff at the local jurisdiction should be consulted to determine if an alternative Level of Service (LOS) is applicable.

Recommended mitigations may include planned public roadway improvements identified in the RRIF Capital Improvements Plan, RTP, or plans of other local agencies. In such cases the site plan should indicate an offer to dedicate right-of-way or provision of setbacks to protect any right-of-way needed to complete planned roadway improvements.

All proposed mitigations should be identified in detail including schematic plans that indicate existing right-of-way and pavement sections proposed improvements and their preliminary costs estimates, and another iteration of the volume/capacity analysis demonstrating the anticipated results of the recommended improvements. Proposed improvements should be shown in a scale drawing indicating all existing and proposed right-of-way lane configuration and channelization including tapers and turn lanes. Levels of Service (LOS) for the street system with proposed mitigations should be presented.

All design must comply with the American Association of State Highway and Transportation Officials (AASHTO), Manual on Uniform Traffic Control Devices (MUTCD), and Institute of Transportation Engineers (ITE) traffic engineering and design guidelines. In addition, all mitigation must comply with local guidelines.

RRIF Waivers: Right-of-way dedications or construction of roadway improvements, which meets the 10-year design, completed by the applicant and identified in the RRIF Capital Improvements Plan may be eligible for RRIF Waivers against RRIF Fees. This Manual indicates no RRIF Waiver shall be given a Feepayer for street improvements and/or site-related improvements not included in the RRIF Capital Improvements Plan.

Site-related improvements refer to capital improvements and right-of-way dedications for direct access improvements to development streets or driveways including, but not limited to, turn lanes and traffic control measures. Questions regarding CCFEA Credits issued pursuant to a CCFEA prior to the adoption of the 5th Edition RRIF GAM/CIP or regarding RRIF Waivers proposed or approved after the adoption of the 5th Edition RRIF GAM/CIP should be directed to the RTC RRIF Administrator.

EXHIBIT F
MIXED USE AND CHANGE OF USE WORKSHEETS

MIXED USE STRUCTURES WORKSHEET				
1. PRIMARY LAND USE _____	1000GFA _____	$/UNIT _____		FEE
SUPPORTIVE FUNCTION LESS THAN 25% OF ABOVE PRIMARY USE				
_____%	_____			
_____%	_____			
TOTAL	_____	x_____	=	_____
1. PRIMARY LAND USE _____	1000GFA _____	$/UNIT _____		FEE
SUPPORTIVE FUNCTION LESS THAN 25% OF ABOVE PRIMARY USE				
_____%	_____			
_____%	_____			
TOTAL	_____	x_____	=	_____
1. PRIMARY LAND USE _____	1000GFA _____	$/UNIT _____		FEE
SUPPORTIVE FUNCTION LESS THAN 25% OF ABOVE PRIMARY USE				
_____%	_____			
_____%	_____			
TOTAL	_____	x_____	=	_____
1. PRIMARY LAND USE _____	1000GFA _____	$/UNIT _____		FEE
SUPPORTIVE FUNCTION LESS THAN 25% OF ABOVE PRIMARY USE				
_____%	_____			
_____%	_____			
TOTAL	_____	x_____	=	_____
FEE TOTAL				_____

CHANGE OF USE WORKSHEET				
PROPOSED PRIMARY LAND USE _____	1000GFA _____	$/UNIT _____		FEE
SUPPORTIVE FUNCTION LESS THAN 25% OF ABOVE PRIMARY USE				
_____%	_____			
_____%	_____			
TOTAL	_____	x_____	=	_____
PROPOSED PRIMARY LAND USE _____	1000GFA _____	$/UNIT _____		FEE
SUPPORTIVE FUNCTION LESS THAN 25% OF ABOVE PRIMARY USE				
_____%	_____			
_____%	_____			
TOTAL	_____	x_____	=	_____
EXISTING USE _____	1000GFA _____	$/UNIT _____		FEE
SUPPORTIVE FUNCTION LESS THAN 25% OF ABOVE PRIMARY USE				
_____%	_____			
_____%	_____			
TOTAL	_____	x_____	=	_____
EXISTING USE _____	1000GFA _____	$/UNIT _____		FEE
SUPPORTIVE FUNCTION LESS THAN 25% OF ABOVE PRIMARY USE				
_____%	_____			
_____%	_____			
TOTAL	_____	x_____	=	_____
FEE FOR THE PROPOSED USE				_____
SUBTRACT FEE PAID ON TOTAL EXISTING USE				_____
FEE TOTAL				_____
NOTE: UNDER NO CIRCUMSTANCES WILL A REFUND BE GRANTED FOR A CHANGE IN USE				_____

EXHIBIT G
EXAMPLE RRIF WAIVER CALCULATION

Example 1: A developer of a 500-unit subdivision builds an improvement listed on the RRIF Capital Improvement Plan. The improvement is estimated to cost $1,000,000. The impact fee for the subdivision, using the current fee schedule, is estimated at $1,860,000. The total amount of RRIF Waivers for the subdivision is $1,000,000. The developer can use the RRIF Waivers to pay his impact fees based on the fee schedule as of the date of the Offset Agreement. Based on the existing fee schedule, the $1,000,000 in RRIF Waivers may be used to pay the impact fees for 264.27 single family homes. Once the RRIF Waivers have been used, the remaining impact fees will be based on the fee schedule in effect at the time of the building permit.

		Impact Fee Based on Dollars		
Proposed Development	500 Single Family Subdivision @ $3784/SFR 14.93 VMTs/SFR)			$1,892,000.00
Proposed CIP Improvement	ROW & widening 2 to 4 lanes			$1,000,000.00
Maximum RRIF Waiver	Based on VMT = $253.39			$1,000,000.00
Number of development units eligible for RRIF Waivers	Fee set by agreement - Based on $3784/SFR (14.93 VMT @ $253.39/VMT)	264.27	SFR	$1,000,000.00
	$1,000,000/$3784 per SFR = 264.27/SFR			
Number of development units **not** covered by RRIF Waivers	New RRIF Fee - Based on $3900/SFR (15 VMT @ $260/VMT)	235.73	SFR	$919,344.61
	500 SFR - 264.27 SFR = 235.73 SFR			
	TOTAL FEES Paid (Waivers + Cash/Credits)	**500**	**SFR**	**$1,919,344.61**

Example 2: The developer in the example above chooses to modify his development of record by changing from a 500-unit subdivision to a 200-unit subdivision and 200,000 sf commercial shopping center. Per the RRIF GAM Section X.A.c, the existing RRIF Waivers will be re-evaluated based on the then current RRIF schedule in effect at the time of issuance of the building permit for all future uses.

		Impact Fee Based on Dollars		
Proposed Development	500 Single Family Subdivision @ $3784/SFR 14.93 VMTs/SFR)			$1,860,000.00
Proposed CIP Improvement	ROW & widening 2 to 4 lanes			$1,000,000.00
Maximum RRIF Waiver	Based on VMT = $253.39			$1,000,000.00
Number of development units eligible for RRIF Waivers	Fee set by agreement - Based on $3784/SFR (14.93 VMT @ $253.39/VMT)	264.27	SFR	$1,000,000.00
	$1,000,000/$3784 per SFR = 264.27/SFR			
Initial phase of subdivision built 100 homes	Fee set by agreement - Based on $3784/SFR (14.93 VMT @ $2253.39/VMT)	100.00	SFR	$378,400.00
Developer modifies his original approval to a total of 200 homes and 200,000 sf commecial shopping center	New RRIF Fee - Based on $3900/SFR (15 VMT @ $260/VMT) for remaining 100 homes	100.00	SFR	$390,000.00
	New RRIF Fee - Based on $7540/1000 GFA (29 VMT @ $260/VMT) for 200,000 sf Commercial shopping center	200,000.00	GFA	$1,508,000.00
	TOTAL FEES Paid (Waivers + Cash/Credits)			**$2,276,400.00**

Note: If RRIF Waivers had been transferred to a third party,ie, for the 200-unit subdivision, their RRIF Waivers would also be re-evaluated under this scenario.

REGIONAL ROAD IMPACT FEE PROGRAM

CAPITAL IMPROVEMENTS PLAN

8TH EDITION

TABLE OF CONTENTS

I. INTENT AND HISTORY
II. SERVICE AREAS/BENEFIT DISTRICTS
III. RRIF NETWORK
IV. STREET PROJECTS AND FACILITY EXPANSIONS NECESSITATED BY AND ATTRIBUTABLE TO NEW DEVELOPMENT
V. SERVICE UNIT - VEHICLE MILES OF TRAVEL (VMT)
VI. IMPACT FEE SCHEDULE EQUIVALENCY TABLE
VII. PROJECTED VEHICLE MILES OF TRAVEL (VMT) FOR EACH SERVICE AREA
VIII. COST PER VEHICLE MILES TRAVELLED (VMT) FOR EACH SERVICE AREA
IX. RRIF FEE SCHEDULE

EXHIBITS

EXHIBIT A – RRIF FEE SCHEDULE
EXHIBIT B – SERVICE AREAS/BENEFIT DISTRICTS
EXHIBIT C – RRIF CIP STREET PROJECTS AND FACILITY EXPANSIONS

REGIONAL ROAD IMPACT FEE SYSTEM
CAPITAL IMPROVEMENTS PLAN

I. INTENT AND HISTORY

The Regional Road Impact Fee (RRIF) program was established in November 1995 pursuant to NRS chapter 278B, *Impact Fees for New Development*. The collection of RRIF fees began in February 1996.

The RRIF program was established by Washoe County, the City of Reno, the City of Sparks, and the Regional Transportation Commission of Washoe County (RTC), within the framework of an interlocal cooperative agreement as authorized by the *Interlocal Cooperation Act* in NRS chapter 277. The RRIF General Administrative Manual (the "RRIF GAM") establishes the guidelines and procedures by which Washoe County, the City of Reno, the City of Sparks, and the RTC jointly administer the RRIF program.

RRIF fees are a charge imposed on new development to finance the costs of certain "street projects" and "facility expansions" necessitated by and attributable to new development. NRS 278B.020; NRS 278B.050; NRS 278B.130. The RRIF program is a way to charge new development its proportionate fair share of those costs.

Pursuant to NRS 278B, impact fee programs require the preparation and adoption of a "capital improvements plan." This 8th Edition of the RRIF capital improvements plan (this "RRIF CIP") was prepared and adopted in connection with the 88th Edition of the RRIF GAM.

This RRIF CIP complies with the requirements in NRS 278B.170 to both establish and explain the methodology used to calculate the amount of the RRIF fees as shown on the RRIF fee schedule presented in Exhibit A. The City of Reno, the City of Sparks, and Washoe County have each adopted ordinances to automatically increase the impact fees annually to account for inflation as authorized by NRS 228B.225. This RRIF CIP also establishes the complete and exclusive list of "street projects" and "facility expansions" that can be funded with RRIF fees, and against which RRIF fees can be credited if a developer constructs part or all of a project on the list.

RTC is the designated Metropolitan Planning Organization (MPO) for the urbanized area of Reno, Sparks and Washoe County. As the MPO, RTC is responsible for developing and approving the long-range Regional Transportation Plan, the short-range Regional Transportation Improvement Plan, and other planning documents. This RRIF CIP uses data and analysis developed by RTC's Planning Department, including the RTC's 2050 Regional Transportation Plan Update (the "2050 RTP-Update"). This RRIF CIP then makes adjustments to that analysis for purposes of this RRIF CIP.

II. SERVICE AREAS/BENEFIT DISTRICTS

Impact fees must be assessed uniformly within defined "service areas" as defined in NRS 278B.100. Impact fee service areas serve two distinct purposes. The first purpose is for fee calculation (the impact fee schedule applies to all new development within a defined service area). The second purpose is to show benefit to fee-paying development (the impact fees collected in the service area are spent within the service area).

Initially, the RRIF program was created using a single service area with three benefit districts under the assumption that a single regional service area is appropriate for a regional road network. The network functions as a system to facilitate the movement of traffic throughout the region. Travel on the network during the peak-hour, the most critical time period, tends to be dominated by relatively long commuting trips.

The benefit districts are shown in Exhibit B and are defined as follows:

- Northwest Benefit District – Starting at the southwest corner of the district at the California Nevada state line and Interstate 80, follow the state line north to the northern boundary of the Washoe County North Valleys Area (i.e., northern boundary of the Red Rock Hydrographic Basin boundary), then east along the northern boundary of the North Valleys Planning Area (i.e. northern boundary of the Red Rock and Bedell Flat Hydrographic Basin boundary), then south along the eastern edge of the North Valleys Planning Area (i.e. eastern boundary of the Bedell Flat and Antelope Valley Hydrographic Basin boundary) to the western edge of the Washoe County Sun Valley Planning Area boundary, then continue south along the western edge of the Sun Valley Planning Area to US 395 at the Sutro Street terminus then southeast along the US 395 alignment to Interstate 80, then west along Interstate 80 to the state line.
- Northeast Benefit District – Starting at the southwest corner of the district at the US395/Interstate 80 interchange, follow US 395 northwest to the Sutro Street terminus, then continue north along the western edge of the Washoe County Sun Valley Planning Area to the eastern edge of the Washoe County North Valleys Planning area, then north to the western edge of the Washoe County Warm Springs Planning Area, then north to the northwest corner of the Warm Springs Planning Area, then east along the northern boundary of the Warm Springs Planning Area, then southwest and south along the boundary of the Warm Springs Planning Area, then west along the southern boundary of the Warm Springs Planning Area to the eastern edge of the Washoe County Spanish Springs Planning Area and the Washoe County Truckee Canyon Planning Area, then southwest along the western edge of the Truckee Canyon Planning Area to Interstate 80, then west along Interstate 80 to US 395.

- South Benefit District – Starting at the northwest corner of the district at the California/Nevada line and Interstate 80, follow Interstate 80 east to the western edge of the Washoe county Truckee Canyon Planning Area, then south along the Washoe County/Storey County line to the Washoe County/Carson City line, then west along the Washoe County/Carson City line to the southern jurisdictional line of the Tahoe Regional Planning Agency and the Washoe County Tahoe Planning Area, then north along the California/Nevada line to Interstate 80.

During the update to the 5th Editions of the RRIF GAM and CIP, the geographic area defining the service boundary was modified to meet the requirements of NRS 278B.100 as amended in 2007. As amended, NRS 278B.100 prohibits a single service area from incorporating an entire city (or county) whose population is over 15,000. A North Service Area was created by combining the Northeast and Northwest Benefit Districts and the South Benefit District was used as the boundary of the South Service Area. The boundaries of the North Service Area and the South Service Areas divide both the City of Reno and Sparks, to meet the requirements of NRS 278B.100. The service areas are shown in Exhibit B.

Separate capital improvement plans and resulting RRIF fees are calculated for each service area. Revenue generated from the payment of RRIF fees can only be spent within the service area in which it was collected.

III. RRIF NETWORK

NRS chapter 278B authorizes the imposition of an "impact fee" for a "street project" defined as "arterial or collector streets or roads which have been designated on the streets and highways master plan adopted by the local government pursuant to NRS 278.220, including all appurtenances, traffic signals and incidentals necessary for any such facilities." *See* NRS 278B.130 (definition of "street project"). NRS chapter 278B also authorizes the imposition of an "impact fee" for a "facility expansion" defined as "the expansion of the capacity of an existing facility associated with a capital improvement to serve new development." *See* NRS 278B.040 (definition of "facility expansion).

The RRIF Program uses RTC's transportation planning efforts as reflected in the 2050 RTP-Update to define the network of regional roads that are either existing or planned in the first 10 years of the 2050 RTP-Update (the "RRIF Network"). RTC maintains a database of all arterial and collector streets and roads, including segment lengths and number of lanes. For purposes of the RRIF Program, the RRIF Network includes existing or planned arterial or collector streets and roads that meet the following criteria:

1. State operated arterials
2. Arterials listed in the 2050 RTP-Update

3. Collectors that have a forecast volume of at least 14,000 annualized average daily trips at "build-out," which is defined as full development based on the approved land use assumptions in each jurisdiction
4. Freeway and highway ramps that connect to arterial or collector streets and roads that are included in the RRIF Network are considered arterial or collector streets and roads

The RRIF Network only includes arterial or collector streets and roads that meet the criteria above that are either existing or planned in the first 10 years of the RTP.

IV. STREET PROJECTS AND FACILITY EXPANSIONS NECESSITATED BY AND ATTRIBUTABLE TO NEW DEVELOPMENT

NRS 278B.170(1) requires that this RRIF CIP include "[a] description of the existing capital improvements and the costs to upgrade, improve, expand or replace those improvements to meet existing needs or more stringent safety, environmental or regulatory standards." NRS 278B.170(2) requires that this RRIF CIP include "[a]n analysis of the total capacity, level of current usage and commitments for usage of capacity of the existing capital improvements." NRS 278B.170(3) requires that this RRIF CIP include "[a] description of any part of the capital improvements or facility expansions and the costs necessitated by and attributable to the new development in the service area based on the approved land use assumptions." NRS 278B.170(7) requires that this RRIF CIP include "the projected demand for capital improvements or facility expansions required by new service units projected over a period not to exceed 10 years."

The 2050 RTP-Update describes the existing capital improvements in each service area by identifying the existing arterial and collector streets and roads that are included in the RRIF Network. However, the 2050 RTP-Update does not identify which planned projects (or percentages of projects) include costs to upgrade, improve, expand or replace those capital improvements to meet existing needs or more stringent safety, environmental or regulatory standards. Further analysis (described below) is required to identify those projects (or percentages of projects) and costs.

The 2050 RTP-Update analyzes the existing capital improvements in terms of total capacity, level of current usage, and commitments for usage of the capacity by analyzing the regional road network as a whole over a period of 30 years. The 2050 RTP-Update establishes the desired level of service for the RRIF Network. The 2050 RTP identifies a list of all planned capital improvements and facility expansions for the regional road network over a period of 30 years needed to meet that level of service.

This RRIF CIP uses the list of projects in the 2050 RTP-Update to identify a list of planned capital improvements and facility expansions for the RRIF Network over the first 10 years of the 2050 RTP-Update. Sound engineering and planning judgment is then applied to make the following adjustments to that list:

1. Programs of projects that are not necessitated by and attributable to new development were removed.
2. Programs of projects (without specifically identified projects) were removed to provide clarity about which specific capital improvements or facility expansions are included in the list.
3. The projects were analyzed to determine the percentage of the cost of each project that adds capacity to the RRIF Network, as compared to the cost of each project to upgrade, improve, expand or replace existing capital improvements.
4. The projects were analyzed to determine the percentage of each project that is attributable to new development in the service area based on the approved land use assumptions.
5. If a project crosses the service area boundary, the costs were divided between the service areas based on the length of the project within each service area.

Following those adjustments, the resulting list of projects is the planned capital improvements and facility expansions necessitated by and attributable to new development in each service area. The list of projects for each service area is attached as Exhibit C.

The costs of the projects listed in Exhibit C reflect the portion of each project (and resulting costs) that is necessitated by and attributable to new development. The total cost of all projects in the North Service Area is $465,466,576, and in the South Service Area is $311,945,850. The combined total cost is $777,412,426.

V. SERVICE UNIT - VEHICLE MILES OF TRAVEL (VMT)

NRS chapter 278B requires this RRIF CIP to use a "service unit" defined as a "standardized measure of consumption, use, generation or discharge which is attributable to an individual unit of development calculated for a particular category of capital improvements or facility expansions." *See* NRS 278B.110 (definition of "service unit").

This RRIF CIP uses average weekday Vehicle Miles of Travel (VMT) as the service unit. VMT is the product of vehicle trips generated by type of land use, multiplied by the average trip length.

VI. IMPACT FEE SCHEDULE EQUIVALENCY TABLE

NRS 278B.170(5) requires this RRIF CIP to include "[a]n equivalency or conversion table which establishes the ratio of a service unit to each type of land use, including but not limited to, residential, commercial and industrial uses."

This section describes the determination of appropriate equivalency rates that estimate the VMT generated by each type of land use. Trip generation rates, expressed as average weekday Vehicle Trip Ends (VTE) by land use type, are from the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition). Rates were established for specific land use types within the broader categories of residential, office, commercial, industrial, and institutional land uses. Rates are per dwelling unit, 1,000 square feet of gross floor area, or other appropriate unit of development.

Since ITE rates represent the total number of trips (inbound and outbound) associated with a specific land use, all trip rates have been divided by two to eliminate double-charging any particular trip. This places the burden of travel equally between the origin and destination of the trip.

Trip adjustment factors also include adjustments to accommodate pass-by and diverted trips. Pass-by trips are those trips that are already on a particular route for a different purpose and simply stop at a particular development on that route. For example, a stop at a convenience store on the way home from the office is a pass-by trip for the convenience store. A pass-by trip does not create an additional burden on the street system and therefore should not be counted in the assessment of impact fees. A diverted trip is similar to a pass-by trip, but a diverted trip is made from the regular route to make an interim stop. On a system-wide basis, this trip also does not add an additional burden on the street system, so it is not considered in assessing impact fees.

In addition, residential development has a larger trip adjustment factor of 52.7% to account for commuters leaving Washoe County for work. In other words, residential development is assigned all inbound trips plus 2.7% of outbound trips to account for job locations outside of Washoe County, calculated as follows. According to the 2022 National Household Travel Survey weekday work trips are typically 24.75% of production trips (i.e., all out-bound trips). As shown in the Census Bureau's web application, OnTheMap indicates that approximately 22.1% of resident workers traveled outside the county for work in 2022. In combination, these factors (0.2475 x 0.50 x 0.221 = 0.027) support the additional 2.7% allocation of trips to residential development.

For commercial development, the trip adjustment factor is less than 50% because retail development attracts vehicles as they pass by on arterial and collector roads. For an average shopping center, ITE data indicate 34% of the vehicles that enter are passing by on their way to some other primary destination. The remaining 66% of attraction trips have the commercial site as their primary destination. Because attraction trips are half of

all trips, the trip adjustment factor is 66% multiplied by 50%, or approximately 33% of the trip ends.

Many institutional land uses, like schools, also have significant pass-by and diverted link trips as children are dropped off and picked up by parents on their way to some other primary destination. Given this travel pattern, the pass-by adjustment for schools and daycare utilized the commercial trip adjustment factor.

The average trip length, measured in miles, is derived from the regional travel demand model that the RTC Planning Department created as part of the 2050 RTP-Update. The recommended trip lengths by service area for the regional road network excludes travel on local streets and freeways. The average trip length is 2.91 miles for the North Service Area and 2.47 miles for the South Service Area.

Trip length weighting factors are used to account for trip length variations by the type of land use. Per the 2022 National Household Travel Survey, vehicle trips from residential development account for 121% of the average trip length. Conversely, shopping trips associated with commercial development are roughly 66% of the average trip length while other non-residential development typically accounts for trips that are 73% of the average for all trips.

The result of combining trip generation and trip length information is an equivalency table establishing the number of VMT generated by various land use types per unit of development. The equivalency rates are presented in Tables 1 and 2.

Table 1
North Service Area
Service Unit Generation by Land Use

Land Use Type	*Development Unit*	*Avg Wkdy Veh Trip Ends*	*Trip Rate Adjustment*	*Trip Length Adjustment*	*8th Ed North VMTs*
Residential					
Single Unit	Dwelling	9.24	53%	121%	17.24
3+ Units per Structure	Dwelling	5.75	53%	121%	10.73
Industrial					
Light Industrial	1000 Sq Ft	4.87	50%	73%	5.17
Manufacturing	1000 Sq Ft	4.75	50%	73%	5.05
Warehouse	1000 Sq Ft	1.71	50%	73%	1.82
Mini-Warehouse	1000 Sq Ft	1.45	50%	73%	1.54
Commercial					
Retail and Eating/Drinking Places	1000 Sq Ft	37.01	33%	66%	23.46
Casino Gaming Area	1000 Sq Ft	46.05	50%	73%	48.91
Office & Other Services					
Lodging	Room	3.35	50%	73%	3.56
Public Park	Acre	0.78	50%	73%	0.83
Schools and Daycare	1000 Sq Ft	22.50	33%	73%	15.77
Hospital	1000 Sq Ft	10.77	50%	73%	11.44
Nursing Home	1000 Sq Ft	6.75	50%	73%	7.17
Office and Other Services	1000 Sq Ft	10.84	50%	73%	11.51
Medical Office	1000 Sq Ft	36.00	50%	73%	38.24

The VMT for each land use type is the resulting calculation of Average Weekday Vehicle Trip Ends x Trip Rate Adjustment x Trip Length Adjustment x Average Trip Length for the North Service Area (2.91 miles).

Table 2
South Service Area
Service Unit Generation by Land Use

Land Use Type	Development Unit	Avg Wkdy Veh Trip Ends	Trip Rate Adjustment	Trip Length Adjustment	8th Ed South VMT's
Residential					
Single Unit	Dwelling	9.24	53%	121%	14.63
3+ Units per Structure	Dwelling	5.75	53%	121%	9.10
Industrial					
Light Industrial	1000 Sq Ft	4.87	50%	73%	4.39
Manufacturing	1000 Sq Ft	4.75	50%	73%	4.28
Warehouse	1000 Sq Ft	1.71	50%	73%	1.54
Mini-Warehouse	1000 Sq Ft	1.45	50%	73%	1.31
Commercial					
Retail and Eating/Drinking Places	1000 Sq Ft	37.01	33%	66%	19.91
Casino Gaming Area	1000 Sq Ft	46.05	50%	73%	41.52
Office & Other Services					
Lodging	Room	3.35	50%	73%	3.02
Public Park	Acre	0.78	50%	73%	0.70
Schools and Daycare	1000 Sq Ft	22.50	33%	73%	13.39
Hospital	1000 Sq Ft	10.77	50%	73%	9.71
Nursing Home	1000 Sq Ft	6.75	50%	73%	6.09
Office and Other Services	1000 Sq Ft	10.84	50%	73%	9.77
Medical Office	1000 Sq Ft	36.00	50%	73%	32.46

The VMT for each land use type is the resulting calculation of Average Weekday vehicle Trip Ends x Trip Rate Adjustment x Trip Length Adjustment x Average Trip Length for the South Service Area (2.47 miles).

VII. PROJECTED VEHICLE MILES OF TRAVEL (VMT) FOR EACH SERVICE AREA

NRS 278B.170(4) requires "[a] table which establishes the specific level or quantity of use, consumption, generation or discharge of a service unit for each category of capital improvements or facility expansions."

This RRIF CIP uses the regional travel demand model that the RTC Planning Department created as part of the 2050 RTP-Update to determine the 10 year growth in VMT. The travel demand model uses TMRPA's Population & Employment model based on the 2024 Consensus Forecast to predict where and what type of growth will occur. Information on that future growth is incorporated into the travel demand model by location (travel analysis zones). Population is converted to number of housing units and housing types based on

statistical data from the 2023 American Community Survey for Washoe County. Employment is broken down into employment categories and total square footage using standardized square foot per employee by employment type. Projections are calculated for 2025 and 2035 and prorated for the intermediate years to determine the 10-year growth.

Table 3 and Table 4 below show the projected 10-year growth in VMT per service area (highlighted in green).

Table 3
North Service Area Travel Demand

North Service Area	*2025*	*2035*	*2025-2035 Increase*
Total Population	335,845	366,859	31,014
Total Housing Units	127,334	138,962	11,628
Single Housing Units	89,944	98,157	8,213
2+ Housing Units	37,391	40,805	3,414
Industrial Jobs	26,606	29,321	2,715
Commercial Jobs	10,891	12,176	1,285
All Other Services Jobs	58,926	67,212	8,286
Total Jobs	96,423	108,709	12,286
KSF			
Industrial KSF	78,573	86,591	8,018
Commercial KSF	5,446	6,088	643
All Other Services KSF	18,047	20,585	2,538
Vehicle Trips			
Single Unit Trips	470,512	513,478	42,965
2+ Units Trips	134,670	146,968	12,297
Industrial Trips	67,180	74,036	6,855
Commercial Trips	66,508	74,355	7,847
All Other Services Trips	97,817	111,572	13,755
Total Vehicle Trips	836,688	920,407	83,720
Weekday Vehicle Miles of Travel (VMT)	2,609,147	2,862,585	253,438

Table 4
South Service Area Travel Demand

South Service Area	*2025*	*2035*	*2025-2035 Increase*
Total Population	220,162	240,493	20,331
Total Housing Units	83,474	91,096	7,622
Single Housing Units	58,962	64,346	5,384
2+ Housing Units	24,511	26,750	2,238
Industrial Jobs	48,960	51,489	2,529
Commercial Jobs	17,030	18,328	1,298
All Other Services Jobs	149,696	157,977	8,281
Total Jobs	215,686	227,794	12,108
KSF			
Industrial KSF	144,589	152,058	7,469
Commercial KSF	8,515	9,164	649
All Other Services KSF	45,848	48,384	2,536
Vehicle Trips			
Single Unit Trips	308,443	336,608	28,166
2+ Units Trips	88,283	96,344	8,062
Industrial Trips	123,624	130,010	6,386
Commercial Trips	103,996	111,923	7,926
All Other Services Trips	248,495	262,242	13,746
Total Vehicle Trips	872,841	937,127	64,286
Weekday Vehicle Miles of Travel (VMT)	2,026,196	2,183,691	157,494

VIII. COST PER VEHICLE MILES TRAVELLED (VMT) FOR EACH SERVICE AREA

This RRIF CIP determines the cost per VMT by dividing the unfunded portion of the costs of the projects listed in Exhibit C (the "RRIF Share") by the projected increase in VMT in each service area. A separate cost per VMT is determined for each service area.

In order to determine the unfunded portion, this RRIF CIP takes into account other available funding sources (federal, state and local funds) that are available to pay for the costs of the projects listed in Exhibit C. Those other available funding sources are accounted for in order to avoid possible double payment for growth-related improvements from those funding sources. The amount of other available fundings sources is determined using the financial plans and revenue projections developed in conjunction with the first 10 years of the 2050 RTP-Update, with further detail and adjustments for purposes of this RRIF CIP. *See* 2050 RTP-Update, Chapter 11 – Investing Strategically. The following table presents the results of those calculations:

Table 5
Funding Needs and Available Funding Sources

Funding Source	2025-2034 Total
Total Cost	$777,412,426
Available Local, State and Federal Funding Sources	$627,507,765
Unfunded Portion (i.e., the RRIF Share)	$149,904,660

The other available funding sources are regional in nature and are not required to be used in one service area or the other. Therefore, this RRIF CIP developed a formula to determine the percentage of the RRIF Share that should be attributable to each service area. This RRIF CIP calculated the total costs of all projects listed in Exhibit C by service area. This RRIF CIP then divided the total costs in each service area, by the combined cost of both service areas, to determine the percentage of the total RRIF Share for each service area. The following table presents the results of those calculations:

Table 6
Percentage of RRIF Share by Service Area

Project Costs	North Service Area	South Service Area	2025-2034 Total
2050 RTP: Capacity Related Improvements	$465,466,576	$311,945,850	$777,412,426
% Capacity Related RTP	59.87%	40.13%	100%

For purposes of this RRIF CIP, 59.87% of the RRIF Share is attributable to the North Service Area and 40.13% of the RRIF Share is attributable to the South Service Area. The RRIF Share in each service area was then divided by the projected increase in VMT in each service area to determine the cost per VMT in each service area. The following table presents the results of the calculations above:

Table 7
Cost per Vehicle Miles Traveled (VMT)

Description	North Service Area	South Service Area
Total RRIF Share	$149,904,660	
% RRIF Eligible RTP	59.87%	40.13%
RRIF Share by Service Area	$89,753,658	$60,151,002
VMT Growth by Service Area	253,438	157,494
$/VMT for RRIF Share	$354.14	$381.93

IX. RRIF FEE SCHEDULE

The RRIF fee for a given land use type is the product of the VMT generated by each type of land use and the cost per VMT. The RRIF fees for each land use type in each service area are presented in Exhibit A.

EXHIBIT A

REGIONAL RAOD IMPACT FEE SCHEDULE – 8th Edition

Development Type	Development Unit	North VMT's	8th Ed RRIF North	South VMT's	8th Ed RRIF South
Residential					
Single Unit	Dwelling	17.24	$6,105.37	14.63	$5,587.79
3+ Units per Structure	Dwelling	10.73	$3,799.92	9.10	$3,477.45
Industrial					
Light Industrial	1000 Sq Ft	5.17	$1,831.85	4.39	$1,676.88
Manufacturing	1000 Sq Ft	5.05	$1,786.71	4.28	$1,635.56
Warehouse	1000 Sq Ft	1.82	$643.22	1.54	$588.80
Mini-Warehouse	1000 Sq Ft	1.54	$545.42	1.31	$499.28
Commercial			`		
Retail and Eating/Drinking Places	1000 Sq Ft	23.46	$8,307.01	19.91	$7,604.27
Casino Gaming Area	1000 Sq Ft	48.91	$17,321.70	41.52	$15,856.35
Office & Other Services					
Lodging	Room	3.56	$1,260.10	3.02	$1,153.50
Public Park	Acre	0.83	$293.40	0.70	$268.58
Schools and Daycare	1000 Sq Ft	15.77	$5,585.82	13.39	$5,113.29
Hospital	1000 Sq Ft	11.44	$4,051.13	9.71	$3,708.42
Nursing Home	1000 Sq Ft	7.17	$2,539.01	6.09	$2,324.22
Office and Other Services	1000 Sq Ft	11.51	$4,077.46	9.77	$3,732.53
Medical Office	1000 Sq Ft	38.24	$13,541.39	32.46	$12,395.84

EXHIBIT B

RRIF SERVICE AREAS

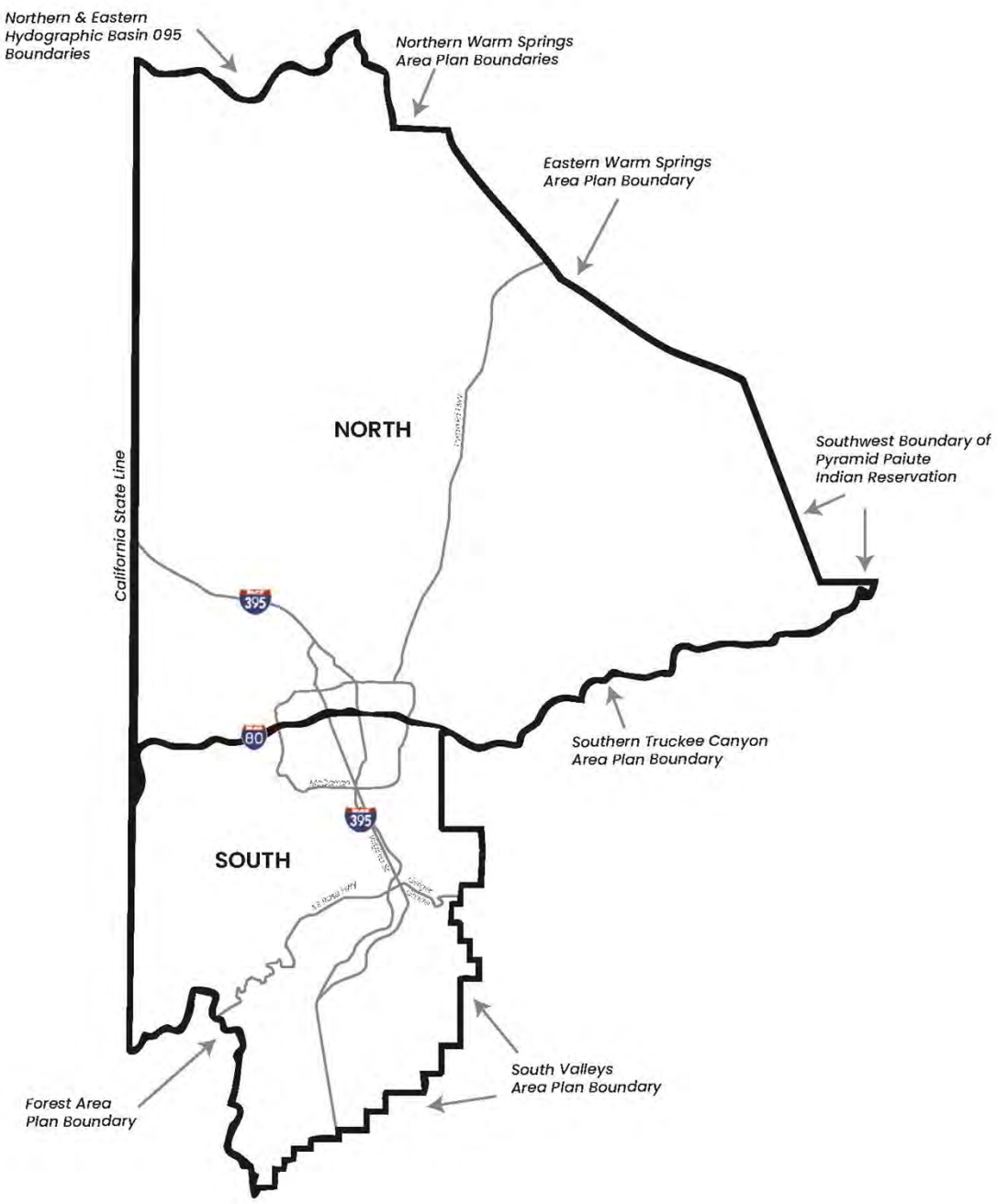
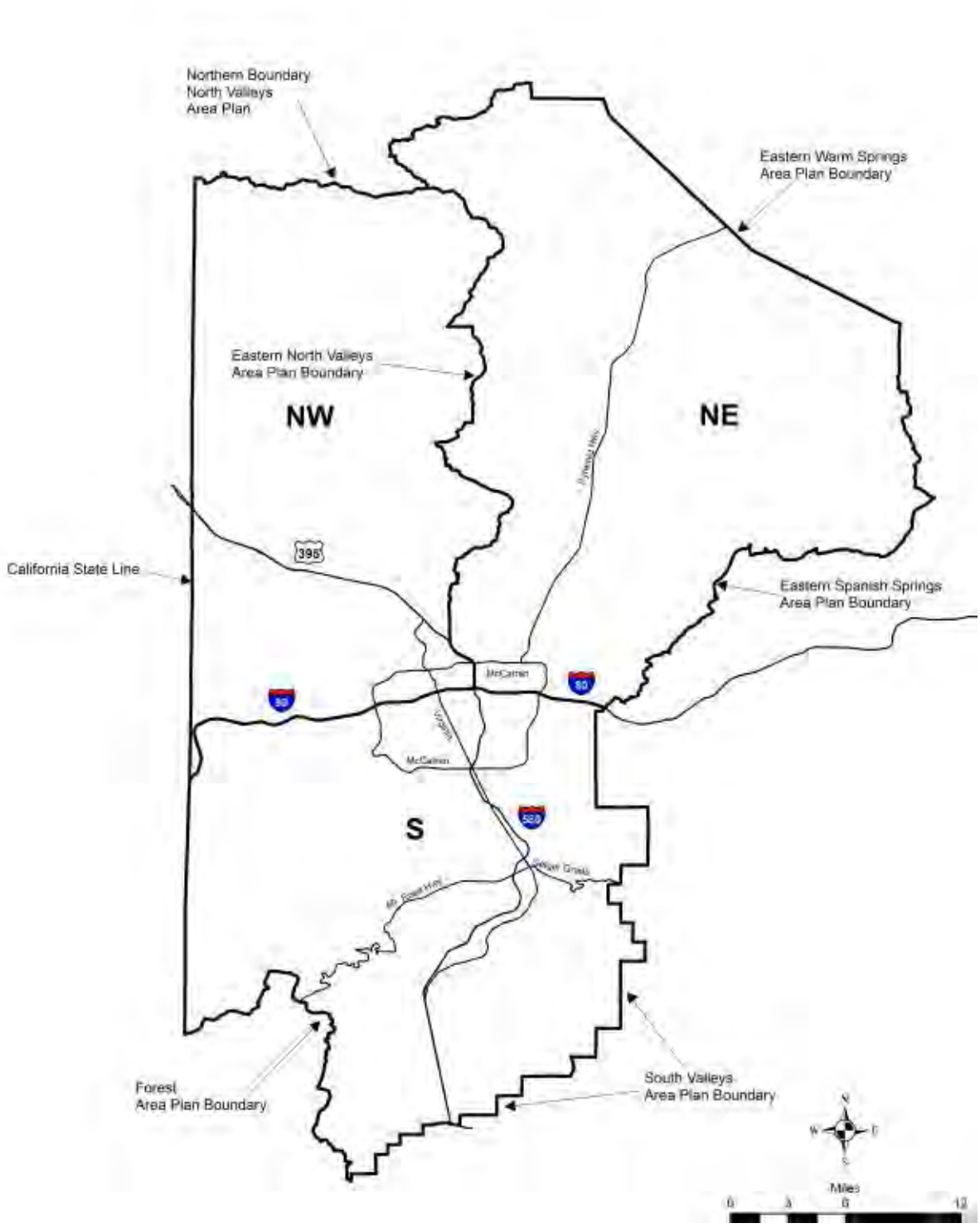


EXHIBIT B

RRIF BENEFIT DISTRICTS



EXHIBT C

CIP STREET PREOJECTS AND FACILITY EXPANSION

NORTH SERVICE AREA

RTP Timeframe	Service Area	Roadway Name	Limits	Project Description	RTP $	Capacity Related North $
2025-34	N	4th Street (Sparks)	Victorian Ave to Queen Way	Bike Lanes	$8,200,000.00	$1,640,000.00
2025-34	N	9th Street/G Street	Wells Avenue to El Rancho Drive	Enhanced sidewalks and bike lanes	$11,300,000.00	$2,260,000.00
2025-34	N	9th Street Extension	Valley Rd To N Wells Ave	New 2 Lane Road	$5,000,000.00	$1,750,000.00
2025-34	N	Andelin Ranch Regional Road Network*	Extension of Scheidbar Dr, Extension of Stonebrook Pkwy	Private - Widen 2 to 4 lanes	$9,100,000.00	$455,000.00
2025-34	N	Buck Drive	Lemmon Dr to N Hills Blvd	Widen 2 to 4 lanes	$4,000,000.00	$3,400,000.00
2025-34	N	Dolores Drive	Existing Dolores west to Lazy 5 Pkwy	Private - New 2 Lane Road	$1,743,000.00	$0.00
2025-34	N	Eagle Canyon Drive	Pyramid Hwy to W Calle de la Plata	Widen 2 to 4 lanes	$30,000,000.00	$15,000,000.00
2025-34	N	Evans Avenue and Highland Avenue	Intersection Capacity	Spot/Intersection Improvement	$850,000.00	$850,000.00
2025-34	N	Highland Ranch Parkway	Five Ridges Pkwy to Pyramid Hwy	Private - Widen 2 to 4 lanes	$10,398,582.00	$7,798,936.50
2025-34	N	Lazy 5 Parkway	W Sun Valley Arterial to Pyramid Hwy	Private - New 4 lane road west of Pyramid Hwy transitioning to 2 lanes at future development entrance	$32,071,200.00	$6,414,240.00
2025-34	N	Lear Blvd	Military Road to Lemmon Drive (new connection)	Widen New Road 2 to 4 lanes	$36,500,000.00	$9,125,000.00
2025-34	N	Lemmon Drive	Fleetwood Dr to Chickadee Dr	Widen 2 to 4 lanes - Fleetwood Dr to Chickadee Dr	$68,000,000.00	$57,800,000.00
2025-34	N	McCarran Boulveard at Clear Acre Ln.	Add intersection capacity	Spot/Intersection Improvement	$2,000,000.00	$2,000,000.00
2025-34	N	McCarran Boulvard	Mae Anne Avenue/West 7th Street	Spot/Intersection Improvement	$3,100,000.00	$3,100,000.00
2025-34	N	McCarran Boulevard	Prater Way (Add SB left and modify rights)	Spot/Intersection Improvement	$4,400,000.00	$4,400,000.00
2025-34	N	McCarran Boulevard	Sutro St. (Add NB thru and modify rights)	Spot/Intersection Improvement	$2,700,000.00	$2,700,000.00
2025-34	N	McCarran Boulevard	Interstate 80 to Las Brisas Blvd.	Multimodal	$3,400,000.00	$680,000.00
2025-34	N	Military Road	Lear Blvd to Echo	Widen 2 to 4 lanes	$5,500,000.00	$4,675,000.00
2025-34	N	Military Road	Lemmon Dr to Lear Blvd	Widen 2 to 4 lanes	$38,500,000.00	$32,725,000.00
2025-34	N	Moya Boulevard	Red Rock Rd to Echo Ave	Widen 2 to 4 lanes	$23,900,000.00	$20,315,000.00
2025-34	N	Moya Boulevard Extension	Lemmon Dr to Echo Ave	Private - New 2 lane road	$86,104,200.00	$8,179,899.00
2025-34	N	Norht Hills Boulevard	Golden Valley Rd to Buck Dr	Widen 2 to 4 lanes	$36,500,000.00	$31,025,000.00

2025-34	N	North Virginia Street	Panther Dr to Stead Blvd	Widen from 2 to 4 lanes and multimodal improvements	$85,000,000.00	$72,250,000.00
2025-34	N	Panther Drive Extension	N. Virginia to Panther to N. Hills Blvd	Capacity	$15,500,000.00	$13,175,000.00
2025-34	N	Parr Boulevard	Ferrari McLeod to Raggio Pkwy	Widen 2 to 4 lanes		$0.00
2025-34	N	Parr Boulevard Interchange	At Us 395	Private - Interchange improvements	$7,100,000.00	$3,550,000.00
2025-34	N	Prater Way	Pyramid Way to Probasco Way and Sparks Blvd to Petes Way	Bike Lanes	$15,800,000.00	$3,160,000.00
2025-34	N	Pyramid Highway	Egyptian Dr to Ingenuity Ave	Add Southbound Lane (Operations Improvements)	$15,000,000.00	$12,750,000.00
2025-34	N	Pyramid Hwy/Sun Valley/US 395 Connector Phase 2	Disc Drive Widening	Widen Disc drive from Pyramid Hwy to Vista Blvd	$25,250,000.00	$21,462,500.00
2025-34	N	La Posada Drive and Cordoba Boulevard	Roundabout	Spot/Intersection Improvement	$5,000,000.00	$5,000,000.00
2025-34	N	Silver Knolls Boulevard	Red Rock Rd to Silver Knolls Blvd	Private - New 2 Lane Road	$86,200,000.00	$8,189,000.00
2025-34	N	Sparks Boulevard	Baring Blvd to Disc Drive	Roadway Widening	$45,700,000.00	$38,845,000.00
2025-34	N	University Area Roadway Improvements Phase 1	Multiple Locations	Multimodal	$3,500,000.00	$350,000.00
2025-34	N	US 395/Stead Boulevard Interchange	Interchange Phase Improvements	Spot/Intersection Improvement	$2,500,000.00	$2,500,000.00
2025-34	N	Victorian Avenue	16th Street to Pyramid Way	Multimodal	$5,300,000.00	$1,060,000.00
2025-34	N	Vista Knoll Parkway	Walmart Driveway To Lemmon Dr	Private - New two lane road	$10,200,000.00	$510,000.00
2025-34	N	West 7th Street/Golden Valley Road	Spearhead Way to Sun Valley Blvd	Widen 2 to 4 lanes	$62,900,000.00	$53,465,000.00
2025-34	N	West 7th Street/Golden Valley Road	Spearhead Way to Sun Valley Blvd	Safety/Multimodal	$23,700,000.00	$4,740,000.00
2025-34	N	Whitelake Parkway	US 395 Interchange Improvements	Private - Interchange Improvements	$32,536,000.00	$3,253,600.00
2025-34	N	Whitelake Parkway (North)	US 395 to Village Pkwy.	Private - Widen 2 to 4 lanes	$3,253,600.00	$813,400.00
2025-34	N	Whitelake Parkway (South)	US 395 to Stonegate Entrance	Private - Widen 2 to 4 lanes	$8,000,000.00	$2,000,000.00
					Total	$89,753,658

EXHIBT C

CIP STREET PREOJECTS AND FACILITY EXPANSION

SOUTH SERVICE AREA

RTP Timeframe	Service Area	Roadway Name	Limits	Project Description	RTP $	Capacity Related South $
2025-34	S	Arrowcreek Parkway	Wedge Pkwy to Zolezzi Ln	Widen 2 to 4 lanes	$15,400,000	$15,400,000
2025-34	S	Damonte Ranch Parkway	Veterans Pkwy to Rio Wrangler Pkwy	Private - New 2 lane road	$8,250,200	$4,125,100
2025-34	S	Geiger Grade Realignment	Virginia St to Toll Rd	New 4 lane road	$84,500,000	$42,250,000
2025-34	S	Keystone Ave	Truckee Bridge Replacement	Bridge Replacement	$74,800,000	$26,180,000
2025-34	S	Lake Street	At Truckee River	Bridge Replacement	$33,500,000	$11,725,000
2025-34	S	McCarran Boulevard	at Cashill Blvd	Spot/Intersection Improvement	$5,100,000	$5,100,000
2025-34	S	McCarran Boulvard	at Mira Loma Dr	Spot/Intersection Improvement	$3,400,000	$3,400,000
2025-34	S	McCarran Boulevard	Keitzke Ln to Greensboro Dr	Intersection and Operations	$6,500,000	$6,500,000
2025-34	S	McCarran Bouelvard	Longley Ln. to Airway Dr.	Capacity/Safety	$15,000,000	$15,000,000
2025-34	S	McCarran Bouelvard	Plumb Ln. to I-80	Capacity	$46,400,000	$46,400,000
2025-34	S	Meridian & Santerra (Verdi)	Verdi Regional Road Network	Private - Traffic and circulation improvements	$31,955,000	$23,966,250
2025-34	S	Mill Street	Keitzke to Terminal	Roadway widening and multimodal	$32,000,000	$24,000,000
2025-34	S	Mt Rose Corridor Improvements (Group 1 Projects)	Douglas Fir Dr to Bordeaux Dr	Safety/Multimodal	$17,100,000	$17,100,000
2025-34	S	Peckham Ln	Lakeside Dr to Airway Dr	Safety/Multimodal	$15,100,000	$1,510,000
2025-34	S	Pembroke Drive	McCarran Blvd to Veterans Pkwy	Widen 2 to 4 lanes, multimodal	$16,000,000	$16,000,000
2025-34	S	Plumb Ln Bike lanes and Sidewalks	Kietzke Lane to Terminal Way	safety multimodal	$9,100,000	$1,820,000
2025-34	S	Ridgeview Drive	End of Ridgeview Dr to McCarran Blvd	Private - New 2 lane road	$13,300,000	$3,325,000
2025-34	S	Rio Wrangler Parkway	Damonte Ranch Pkwy to Veterans Pkwy	Private - New 2 lane road	$5,461,400	$2,730,700
2025-34	S	Rio Wrangler parkway	Steamboat Pkwy and McCauley Ranch Blvd	Spot/Intersection Improvement	$7,000,000	$7,000,000
2025-34	S	Rio Wranlger Parkway	South Meadows Pkwy to Bucephaius Pkwy	Private - New 2 lane road	$6,972,000	$3,486,000
2025-34	S	Robb Drive	4th St to I-80	Private - New 2 lane road	$28,100,000	$2,810,000
2025-34	S	South Virginia Street	at South Hill Dr	Private - Spot/Intersection Improvement	$1,000,000	$1,000,000
2025-34	S	S. Virginia St	at Holcomb Ranch Ln	Spot/Intersection Improvement	$913,500	$913,500
2025-34	S	South Virginia Street	Moana Lane to Meadowood Mall Circle	Safety/Multimodal	$16,200,000	$4,050,000
2025-34	S	South Virginia Street	Plumb Lane to Peppermill Ln	Safety/Multimodal	$6,200,000	$1,550,000
2025-34	S	South Meadows Parkway	Mojave Sky Drive to Rio Wrangler	Private - New 4 lane road	$7,204,400	$3,602,200
2025-34	S	Steamboat Parkway	at Hampton Park Dr	Spot/Intersection Improvement	$913,500	$913,500
2025-34	S	Talus Valley Regional Road Network (South Meadows)	Multiple locations	Private - Traffic and circulation improvements	$12,084,800	$9,063,600
2025-34	S	Veterans Parkway	at Carat Ave	Spot/Intersection Improvement	$1,260,000	$1,260,000

2025-34	S	Veterans Parkway	South Virginia St to Damonte Ranch	Widen 4 to 6 lanes	$6,090,000	$6,090,000
2025-34	S	4th Street {Reno}	Vine St to Sierra St	Safety/Multimodal	$8,500,000	$850,000
					Total	$60,151,002

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 5.5.**

To: Regional Transportation Commission

From: Christian Schonlau, Director of Finance/CFO

SUBJECT: Regional Roads Maintenance Needs Study

RECOMMENDED ACTION

Receive a report regarding regional road maintenance needs and available funding to perform roadway maintenance activities. (Informational Only)

BACKGROUND AND DISCUSSION

The Board directed staff to engage in a study to better understand the ongoing maintenance and operations needs of local jurisdictions during the FY 2024 tentative budget presentation at the April 21, 2023, Board meeting. Specific items requested for study were funding allocated to each jurisdiction, and how that funding was being expended on maintenance of local roadways, specifically: pothole repair, signals, lighting, and bike facilities.

RTC awarded a contract to Nichols Consulting Engineers (NCE) on April 19, 2024. The contract scope included Meeting and Project Coordination, Data Gathering, and a Data Summary and Report. The scope of the contract was limited to gathering existing conditions and funding related to regional roadway maintenance, and did not include work related to recommendations or alternatives analysis.

NCE conducted several meetings with RTC and local jurisdictions to define the scope of their work, and data necessary to complete their report. Data requests were sent to the local jurisdictions and data was provided by staff at each of the entities. Data gathered was summarized into memos to the jurisdictions, which were then reviewed and commented on by the participating entities prior to compiling into the final report. A draft report was delivered to RTC in January 2025, and comments were provided by RTC staff on the form and format of the report. A second draft was received by RTC in March of 2025. RTC requested a more concise summary of findings be added to the report in April, and the final report was delivered in May.

The full report is attached to this agenda item. In summary, based on current priorities and uses of available revenues, all of the jurisdictions (including RTC) have insufficient resources to complete all necessary maintenance activities and each jurisdiction has deferred maintenance due to this shortfall in all of their maintenance categories.

RTC is currently implementing recommendations from the ITS Strategic Master Plan as we build up the regional traffic management center. Additionally, RTC and local jurisdictions are maturing their pavement management programs to include better data collection, treatment alternatives, and inventory management practices. These actions are key recommendations from the maintenance needs study.

RTC is also currently undertaking a study with the Guinn Center, which will conclude and be presented to the Board in July. From this study, there will be several revenue replacement alternatives presented to the Board. RTC will seek guidance from the Board on which strategy to pursue and begin taking steps toward those recommendations in the upcoming fiscal year. Without a revenue alternative or changes in current priorities and uses of available resources, RTC and the local jurisdictions will be faced with deeper shortfalls in maintenance and operations funding as alternative fuel and more efficient vehicles enter the roadways.

This item supports Strategic Roadmap Goal #6, "Sustainable maintenance of our roads" and FY2025 RTC Goal, "Complete analysis of local and regional maintenance needs and potential solutions via maintenance study".

FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

4/19/2024 - Approval of a contract with NCE to perform the Maintenance Needs Study.

Maintenance Needs Study

Final Report

Washoe County

Regional Transportation Commission of Washoe County

1105 Terminal Way
Reno, NV 89502

May 2025

NCE
300 E 2nd Street, Suite 1210
Reno, NV 89501
NCE Project No. 173.51.25

Kimley»Horn
6671 Las Vegas Blvd South, Suite 320
Las Vegas, NV 89119

Maintenance Needs Study

Final Report

Washoe County

May 2025

Prepared for:

Regional Transportation Commission of Washoe County
1105 Terminal Way
Reno, NV 89502

Prepared by:

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NCE Project No. 173.51.25

Executive Summary

Roadways play a crucial role in transportation systems and are an essential component of the traveling public's safety. As a part of the Regional Transportation Commission of Washoe County (RTC)'s mission to build a better community through quality transportation systems, the RTC has established this study to identify and summarize current pavement maintenance, ITS infrastructures, financial and funding sources, and normal operation and maintenance practices. This data will offer the RTC insights supporting planning and delivery of roadway projects in a fair, equitable, and fiscally responsible manner, promoting the long-term sustainability of the roadway system.

Pavement Maintenance

The cities of Reno and Sparks, and Washoe County have used PAVER as their pavement management program (PMP) since the 1980s. From the late 1990s to early 2000s, the RTC extracted the RTP road data from local agencies' PAVER databases for pavement management purposes. In 2023, RTC integrated this data into StreetSaver. Washoe County maintains the largest network of non-regional roadways (non-RTP roads), followed by the cities of Reno and Sparks, while the RTC maintains roadways identified in the Regional Road System (RTP roads). Agencies utilize ASTM D64333 distress protocols for pavement inspections. RTC engages consultants to update pavement condition data for the entire RTP network every 3 years. For non-RTP roadways, 1/3 of the network is inspected and updated annually by each agency. Current average network PCIs for RTC and each agency are all exceed 70, with the RTP roads having the highest PCI and Washoe County's non-RTP roads the lowest. Surface seals are the predominant treatment for all agencies to maintain network PCI. The RTC allocates approximately $50K/mile annually for pavement maintenance and rehabilitation (M&R), followed by the City of Reno at $22K/mile, and City of Sparks at $15K/mile. However, due to the funding constraints, Washoe County only has an annual budget of approximately $4K/mile for roadway surface sealing and rehabilitation.

ITS Infrastructure

There are 418 signalized intersections in the Washoe County region which are owned by either the City of Reno, City of Sparks, Washoe County, or Nevada Department of Transportation (NDOT). Interlocal agreements between the local agencies allow the cities of Reno and Sparks to operate and maintain all of the region's signals. The RTC funds the region's Signal Timing program.

Financial & Funding Sources

Each agency receives funding from various revenue streams to support roadway maintenance, some of which are dedicated and some of which fluctuate from year to year. All agencies receive dedicated funding from the Nevada Motor Vehicle Fuel Tax (MVFT), with the RTC receiving the largest allotment from this fund ($96,662,346 in FY2023 including Consumer Price Index [CPI] and Producer Price Index [PPI]). Including revenue associated with road bonds, Washoe County receives the second largest allocation at more than $10.0 million, largely due to land area, which is factored into the allocation formula. The cities of Reno and Sparks received $7.3 million and $3.0 million, respectively, in FY2023. Across all agencies, vehicle efficiency was noted as a potential threat to future funds, as the amount of gas that modern vehicles require declines.

The agencies have had to identify additional funding streams to help offset the cost of roadway maintenance. These sources are typically variable year-over-year and are often influenced by property valuation, the amount

of development, or the weather. The RTC receives funds from a 1/16% cent sales tax that supplements MVFT revenue. Washoe County receives additional funding from curb and gutter cuts, and transfers from the County's General and Capital Facilities Funds. The Capital Facilities Fund has been the next steadiest source of roadway funding following the MVFT. The largest portion of the City of Reno's road funds come from the property tax override, which is currently set to terminate in 2038. The sunset of the override would present significant funding shortfalls for repairs and maintenance. Reno also supplements its roadway funds with Truckee Meadows Water Authority (TMWA) right-of-way tolls and excavation and encroachment fees. The City of Sparks receives most of its maintenance funding through the combination of the MVFT and NV Energy franchise fees. Sparks also supplements its funding with TMWA right-of-way tolls.

Operations and Maintenance

Normal operations and maintenance, including patching and crack sealing, snow removal, street sweeping, landscaping, lighting, sidewalks, signage, striping, etc., are usually performed by local agencies. Each agency has different software or system to monitor existing inventory, condition or repair records. The City of Reno uses Streetscape to map assets in a Geographic Information System (GIS), stores traffic striping data in CAD, and tracks maintenance records with MaintStar and ServiceNow, but is planning to transition to Elements XS in 2026. The City of Sparks uses MaintStar for asset inventory and maintenance tracking. Washoe County updates its inventory through GIS and manages operations via Asset Essentials. Each agency adopts a unique approach to prioritizing operation and maintenance activities, and the variation in strategies reflects differences in resources and organizational priorities. Washoe County focuses on the maintenance of ditches, drainage structures, and pipes that are essential for stormwater management with an annual budget of $875,000. The City of Reno's 2025 budget of $25.3 million covers the general fund, street fund, and sewer fund allocations. The City of Sparks indicated that only a portion of existing asset maintenance record and inventory was stored in the City's MaintStar database. However, no asset needs or available funding was provided by the City.

Summary Table of Revenues, Expenses, and Deferred Maintenance

The revenues, expenses, pavement network and deferred maintenance collected from each agency are summarized in the table below.

Item	Agency			
	Reno	Sparks	Washoe County	RTC
Revenues[1]				
Motor Vehicle Fuel Tax[2] ($M)	$7.4	$3.0	$6.7	$47.1
1/16% Sales Tax ($M)				$7.3
Street Curb and Gutter Cuts ($M)			$0.5	
Transfers from General Fund ($M)			$1.2	
Transfers from Capital Facilities ($M)			$1.9	
Property Tax Override ($M)	$22.2			
Excavation and Encroachment ($M)	$0.5			
TMWA Right-of-Way Tolls ($M)	$3.2	$0.5		
NV Energy Franchise Fees ($M)		$3.3		
Total Annual Revenue($M)	**$33.3**	**$6.8**	**$10.5**	**$54.4**
MVFT Percent of Total	22.1%	43.6%	65.3%	86.6%

ITS Expenses				
ITS Maintenance Activities	$560,000[3]	$50,000	$70,000[3]	$420,000[4]
Pavement Needs and Budget				
Total centerline miles	519.8	274.8	652.8	446.0
Network PCI	76.1	77.5	70.8	79.8
Deferred Maintenance ($M)	$360.1	$129.4	$27.7	$70.3
10-Year Needs ($M)	$580.9	Not available	$98.8	$529.2
10-Year Estimated Budget ($M)	$115.0	$40.0	$29.0	$225.0
10-Year Shortfall ($M)	**-$465.9**	**Not available**	**-$69.8**	**-$304.2**

[1] Revenue reported for fiscal year 2023 (FY2023-2024)

[2] The RTC MVFT data in this table excludes CPI and PPI streams

[3] On average, the City of Reno spends $560K annually on labor costs to maintain its signals and those under contract with Washoe County and NDOT. Washoe County has an agreement with the City of Reno, where it is agreed that the County will pay up to $70,000 per contract year on ITS maintenance services.

[4] The RTC funds the signal timing program, while the amount varies per year, FY 2025 and 2026 allocated $420K each year.

Table of Contents

1 Background and Objective 1

1.1 Background 1
1.2 Project Objectives 1
1.3 Project Approach 2

2 Data Collection 4

2.1 Data Collection Checklists 4
2.2 Coordination with Local Agencies 7

3 Pavement Maintenance 9

3.1 Pavement Management Program 9
3.2 Pavement Condition and Maintenance Strategies 11
3.3 Pavement Needs and Funding 19
3.4 Summary 21

4 ITS Infrastructure 22

4.1 Existing ITS Infrastructure Inventory 22
4.2 Existing ITS Operations and Maintenance 22
4.3 ITS Planning and Approval Processes 25
4.4 ITS Needs and Funding 26
4.5 Summary 27

5 Financial and Funding Sources 28

5.1 Motor Vehicle Fuel Tax 28
5.2 Other Revenue Sources 38

6 Normal Operation and Maintenance 45

6.1 Normal Operation and Maintenance Practices 45
6.2 Normal Operation and Maintenance Needs and Funding 46
6.3 Shortfall 46
6.4 Summary 47

7 Summary and Recommendations 49

7.1 Project Summary 49
7.2 Recommendations 50

List of Figures

Figure 1. Centerline Miles in each Jurisdiction 10
Figure 2. Centerline Miles Maintained by each Agency 10
Figure 3. Centerline Miles of RTP and non-RTP roads of each Functional Classification 11
Figure 4. Pavement Condition Categories as Defined by each Maintenance Agency 12
Figure 5. Pavement Strategies adopted by Maintenance Agency 13
Figure 6. Pavement Strategies adopted by Maintenance Agency 14
Figure 7. Historical average PCIs and Target PCI by Maintenance Agency 18
Figure 8. 2024 PCI by Condition Category for each Agency based on RTC's PCI scale 19
Figure 9. Nevada MVFT Tax Statutory Streams 30
Figure 10. Washoe County Taxes Paid per Gallon of Gas for FY2023 – 2024 31
Figure 11. RTC MVFT Revenues for FY2014 – 2015 through FY2023 – 2024 32
Figure 12. Washoe County MVFT Revenues for FY2014 – 2015 through FY2023 – 2024 33
Figure 13. City of Reno MVFT Revenues for FY2014 – 2015 through FY2023 – 2024 34
Figure 14. City of Reno MVFT Revenues by Statutory Authority for FY2014 – 2015 through FY2023 – 202435
Figure 15. City of Sparks MVFT Revenues for FY2014 – 2015 through FY2023 – 2024 36
Figure 16. City of Sparks MVFT Revenue Breakdown for FY2023 – 2024 36
Figure 17. Annual MVFT Revenues for each Agency for FY2014 – 2015 through FY2023 – 2024 37
Figure 18. Shares of Revenue Associated with MVFT for FY2023 – 2024 38
Figure 19. RTC 1/16% Sales Tax Revenues in FY2014 – 2015 and FY2023 – 2024 39
Figure 20. Washoe County Other Revenue Streams in FY2014 – 2015 and FY2023 – 2024 40
Figure 21. City of Reno Other Revenue Streams in FY2014 – 2015 and FY2023 – 2024 42
Figure 22. City of Sparks Other Revenue Streams in FY2014 – 2015 and FY2023 – 2024 43
Figure 23. Comparison of Revenue Streams for each Agency for FY2023 – 2024 44

List of Tables

Table 1. Data Collection Checklist: Pavement Maintenance....4
Table 2. Data Collection Checklist: ITS Infrastructure....5
Table 2-1. Existing ITS Device Inventory....5
Table 3. Data Collection Checklist: Financial/Funding Sources....6
Table 4. Data Collection Checklist: Normal Operation and Maintenance....6
Table 5. Data Collection Meetings (2024)....7
Table 6. Treatment costs by Maintenance Agency....15
Table 7. Quantity of Preventive Maintenance Treatments in M&R Histories from 2019 to 2023 for each Maintenance Agency....17
Table 8. Quantity of Rehabilitation and Reconstruction in M&R Histories from 2019 to 2023 for each Maintenance Agency....17
Table 9. Needs and 2024 Unfunded Backlog for each Maintenance Agency....20
Table 10. Pavement M&R Budget for each Maintenance Agency....21
Table 11. Summary of ITS Inventory....22
Table 12. Summary of Existing Signal Agreements....23
Table 13. City of Reno Estimated Annual Maintenance Labor Hours....25
Table 14. Summary of Regional ITS Planning and Approval Processes....25
Table 15. RTC Signal Timing Program Budget....26
Table 16. Statutory Authorities for MVFT and Receiving Agency....29
Table 17. Washoe County MVFT Revenues by Statutory Authority, FY 2021-2022-FY 2024-2025....33
Table 18. City of Reno MVFT Revenues by Statutory Authority, FY2014 through FY2023....35
Table 19. Washoe County Other Revenue Streams for FY2021 – 2022 through FY2024 – 2025....41
Table 20. Operation and Maintenance Prioritization Methods by Jurisdiction....46
Table 21. Summary of Needs and Budget....47

List of Appendices

Appendix A

Data Collection Check List

Appendix B

Pavement Management Program Summary Spreadsheet (NCE)

Appendix C

ITS Infrastructure Program Summary Spreadsheet (KIMLEY-HORN)

Appendix D

Funding Sources Summary Spreadsheet (KIMLEY-HORN)

Appendix E

Data Collection Summary Memo for Each Agency (NCE and KIMLEY-HORN)

Appendix F

Signal Agreements

Appendix G

City of Reno Operation and Maintenance Work Order History Summary

Appendix H

Roads Fund FY2021-FY2025 Budget Summary

1 Background and Objective

1.1 Background

Roadways play a crucial role in transportation systems, serving as the primary infrastructure that supports people's daily activities and facilitates economic growth. Roadways are essential not only for connectivity but also for the safety and efficiency of the traveling public. Properly maintained roadways contribute a safe and smooth travel experience for all road users. Therefore, the maintenance and management of roadway assets are critical tasks for local agencies, requiring a well-organized management strategy, effective system(s), and sufficient resources to ensure success.

The Regional Transportation Commission of Washoe County (RTC), formed in July 1979[1], plays a key role in the maintenance and management of roadways assets. The RTC funds and maintains roadways identified in the Regional Road System (referred to as RTP roads in the following sections), including[2]:

- Arterials that are direct connections between freeways and other arterials.
- Collectors that cross a significant travel barrier or provide access to major existing or future regional facilities.
- Industrial roadways with freight movement.
- Roadways that include a transit route.

At the same time, the cities of Reno and Sparks, and Washoe County provide preservation services for non-regional roadways (or non-RTP roads) and day to day maintenance for all non-state-maintained, publicly owned facilities. As a part of its mission to build a better community through quality transportation systems, the RTC has established this study to identify and summarize current pavement maintenance, Intelligent Transportation System (ITS) infrastructures, financial and funding sources, and normal operation and maintenance practices within the Washoe County Metropolitan Planning Organization (MPO) boundary.

1.2 Project Objectives

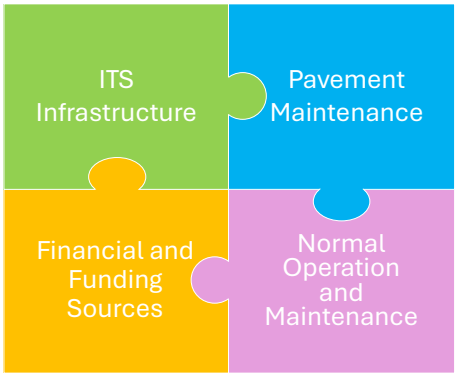
The assets in a roadway system include pavement, traffic system infrastructure, sidewalks, curb ramps, drainage structures, etc. Maintenance is performed to ensure these assets continue to serve residents effectively. For this study, maintenance activities have been generally categorized as:

- Pavement preservation, including preventative maintenance, corrective maintenance, rehabilitation, and reconstruction.
- Normal operations and maintenance, including patching and crack sealing, snow removal, street sweeping, landscaping, lighting, sidewalks, signage, striping, etc.
- Traffic system operations and maintenance, including traffic signals, signal timing equipment, and other traffic management systems.

[1] Regional Transportation Commission of Washoe County, Nevada. n.d. "About the RTC – RTC Washoe." Accessed October 8, 2024. https://rtcwashoe.com/about/about-the-rtc/.
[2] Regional Transportation Commission. 2021. *2050 Regional Transportation Plan*. https://rtcwashoe.com/wp-content/uploads/2023/12/FINAL-RTP-12.21.23-online-1.pdf

To capture the current state of the pavement and roadway system, and to gain an understanding of the maintenance practices, maintenance needs, and available funding, the NCE team has coordinated with the RTC, the cities of Reno and Sparks, and Washoe County to collect available data for:

- **Pavement Maintenance**: Pavement management program and updates, pavement strategies and costs, pavement needs and available funding.
- **Intelligent Transportation System (ITS) Infrastructure**: Existing infrastructure inventory, existing operations and maintenance, planning and approval processes, infrastructure needs and available funding.
- **Financial and Funding Sources**: Motor Vehicle Fuel Tax (MVFT) and other revenue sources for roadway or ITS maintenance.
- **Normal Operation and Maintenance**: Asset management system, asset needs and funding, and other normal operations and maintenance practices.



This data will offer the RTC insights supporting planning and delivery of roadway projects in a fair, equitable, and fiscally responsible manner, promoting the long-term sustainability of the roadway system.

1.3 Project Approach

The NCE team adopted the following approach to guide this study from inception to completion and to align with project objectives.

1. Define Project Scope and Objectives

   This study began with a kickoff meeting, which was held on June 25, 2024, to clearly define the scope, action items, goals, and timelines with all agencies. It was determined this study will focus on summarizing existing information provided by each agency. Data analysis and further identification of needs and shortfalls will be further discussed as a part of a subsequent study.

2. Task Execution

   - Meeting and Project Coordination

     Regular coordination meetings were held throughout the project to ensure continuous communication. Routine monthly meetings were held with RTC to provide updates on the project progress and to discuss any potential project challenges.

   - Data Collection

     The NCE team gathered relevant information using various methods and sources, including developing a data collection checklist, conducting data collection meetings, retrieving pavement data from existing pavement management programs, reviewing agencies' websites, summarizing responses in data collection checklists, and following up on emails and meetings with all agencies. Further details are described in Section 2.2 "Coordination with Local Agencies".

- Data Summary and Reporting

  After the data was collected, it was summarized and complied into initial data summary memorandums, which were distributed to each agency on November 1, 2024. The final data summary memorandums, incorporating feedback on the initial memorandums, responses to follow-up questions, and insights from follow-up meetings with agencies, were submitted on December 23, 2024. All these inputs serve as the foundation for this report.

3. Communication and Collaboration

   Effective communication and collaboration were maintained throughout this study, ensuring agencies were kept informed of progress, and feedback was incorporated into the deliverables to enhance this study's completeness.

2 Data Collection

2.1 Data Collection Checklists

The NCE team collaborated with the RTC to create data collection checklists for the categories described in Section 1.2 Project Objectives. The data collection checklist details are presented in Tables 1 through 4 below. Agency responses are provided in Appendix A, and data collection memorandums are included in Appendix E.

Table 1. Data Collection Checklist: Pavement Maintenance

No.	Item
1	What Pavement Management System (PMS) software does your agency use?
2	How many streets/roads does your agency maintain? (number of sections and centerline miles by functional class)
3	What distress protocol does your agency use? (ASTM D6433[3] or MTC[4])
4	Does your agency have Geographic Information System (GIS) shapefiles linked to PMS software?
5	How often does your agency update pavement inspections?
6	How does your agency update pavement condition data? (walking, windshield, or automated?) (in-house or by contractor?)
7	What other condition data do you also collect? (deflection, ride quality, friction, drainage, core, etc.)
8	What is your current network condition (Pavement Condition Index, PCI)? (by entire network and by functional class)
9	How does your agency setup condition categories in PMS? (e.g., PCI 70 to 100 – Very Good)
10	Does your agency have portland cement concrete (PCC) pavement in your network?
11	What pavement strategies/treatments does your agency apply on various conditions of pavement? (treatments by PCI range)
12	What factors/items are included in the treatment costs? (e.g., paving materials, labor, concrete repairs, striping, traffic control, etc.)
13	How often does your agency update the treatment costs in your PMS?
14	Does your agency use sustainable pavement practices? (e.g., Cold-in-Place Recycling [CIR], Hot In-Place Recycling [HIPR], Full Depth Reclamation [FDR], etc.)

[3] ASTM International. 2023. *ASTM D6433-23 Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys*. West Conshohocken, PA. www.astm.org.
[4] Metropolitan Transportation Commission. 2022. *PCI Distress Identification Manuals (flexible pavement 5th Edition March 2022, rigid pavement 4th Edition March 2018)*. San Francisco, CA.

No.	Item
15	If yes, what sustainable pavement practices does your agency utilize? Reclaimed Asphalt Pavement Cold-in-Place Recycling (CIR) Warm Mix Asphalt Permeable/Porous Pavement Full Depth Reclamation (FDR) Subgrade Stabilization Rubberized Asphalt Concrete Pavement Preservation (e.g., slurry seal, chip seal, fog seal, cape seal, etc.)
16	How does your agency prioritize streets for maintenance and rehabilitation?
17	What is the target PCI for your network?
18	What is your current annual paving budget?
19	What are your pavement needs for the entire network?
20	What is your emergency repair process? (e.g., potholing repairs)
21	Other related data?

Table 2. Data Collection Checklist: ITS Infrastructure

No.	Item
1	**Operation and Maintenance Asset Management Records:** Review **Table 2-1** below and confirm if the device totals traffic signals, traffic cabinets, and traffic cameras are still accurate. Please provide updated information if available.
2	**Work Order History:** Provide the last 2 to 3 years of Work Order history or Operation and Maintenance expenditures related to ITS Infrastructure.
3	**Maintenance Schedules/Procedures:** What are existing maintenance schedules and processes for ITS Infrastructure?
4	**Planning/Funding Maintenance:** What planning, decision-making, and approval processes do you have when maintaining ITS infrastructure?

Table 2-1. Existing ITS Device Inventory

ITS Device	City of Reno	City of Sparks	Washoe County	Nevada Department of Transportation [NDOT]
Traffic Signals	191	73	24	131
Traffic Cabinet	191	73	24	131
Traffic Camera	46	30	-	-

*Note: The numbers have been updated according to the information collected in this study.

Table 3. Data Collection Checklist: Financial/Funding Sources

No.	Item
1	Prepare an inventory of existing revenue streams that are currently used to fund maintenance for your agency/community.
2	Have any new sources been added or removed in the last 5 years? Have budgets or how the revenue is used changed?
3	Please provide current budget documents, as well as 3 – 5 years' history.
4	Have there been any unexpected changes to revenue streams in the last 5 years? How did that impact how maintenance needs were met?
5	Please provide current Annual Comprehensive Financial Report [ACFR] documents, as well as 3 – 5 years history.
6	Have any studies been prepared outside this effort that review/summarize funding sources for roadway/ITS maintenance? Can you share these?
7	Please provide the current Capital Improvement Project (CIP).
8	What are your biggest concerns about current and future revenue/expenditure differences as they relate to maintenance?
9	Are there federal or state sources that provide one-time or reoccurring revenue support for maintenance needs?
10	Are there grants or other sources you have utilized? How does the use of sources like this influence your budget planning?
11	Other related data?

Table 4. Data Collection Checklist: Normal Operation and Maintenance

No.	Item
1	Does your agency have any asset inventory? In what format do you save the inventory? (e.g., curb ramps, sidewalk, striping, etc.)
2	What assets require maintenance in your agency?
3	What are the total needs for your asset maintenance?
4	What is your existing annual budget to maintenance these assets?
5	Does your agency have existing asset maintenance records or work order history?
6	How does your agency maintain the existing assets? (in-house or by contractor)
7	What is your regular maintenance schedule or process?
8	What are your emergency repairs and maintenance processes?
9	What are your CIP needs and projects?
10	What normal operations and maintenance does your agency perform? Crack sealing Patching Sweeping Snow removal Landscaping Roadway striping Concrete repairs (sidewalk, curb and gutter, curb ramp, etc.)

No.	Item
	Strom drain maintenance Guardrail repairs Shoulder maintenance Culvert cleaning Others
11	How does your agency operate or maintain the above items? (e.g., regular monitor/inspect, repair, or work orders) (in-house or by contractor?)
12	How does your agency track or save operation and maintenance records?
13	How does your agency prioritize operation and maintenance activities?
14	What is your annual budget for operations and maintenance?
15	Other related data?

2.2 Coordination with Local Agencies

To gather the necessary information, the NCE team employed the following approaches:

1. Data Collection Meetings

   The NCE team organized data collection meetings with agencies to facilitate direct information exchange, ensure clarity on the scope of the required data, and discuss the collected items. Data collection meetings were held on the dates shown in Table 5.

Table 5. Data Collection Meetings (2024)

Agency	Public Work Group	Finance Group
RTC	8/26	8/21
Washoe County	8/26	9/10
Reno	7/31	8/5
Sparks	8/26	9/4

2. Retrieving Pavement Data from Existing Pavement Management Programs

   Independent of this study, NCE has worked with each agency to update pavement conditions annually over the years: RTC since 2010, City of Sparks since 2011, Washoe County since 2012, and City of Reno since 2022, and has access to agencies' existing pavement management programs. For this project, NCE retrieved an overview of the pavement inventory, inspection update frequency and methods, the current condition of the networks, historical maintenance and rehabilitation records, and the pavement maintenance strategies from each agencies' existing pavement management programs. NCE shared this information with the agencies to serve as a starting point for the checklists on pavement maintenance data collection.

3. Reviewing Agencies' Website

The NCE team conducted comprehensive searches on each agencies' websites to gather publicly available reports, funding resources, construction bid tabs, and related documentation. This effort aimed to identify supplemental information for data compilation.

4. Summarizing Data Collection Checklist Responses

Responses to data collection checklists were received from agencies between August and October 2024. The NCE team sent follow-up emails in September and October 2024 to follow up on any missing or unclear information from initial submissions.

5. Compiling Data Collection Memorandums and Follow-up Meetings

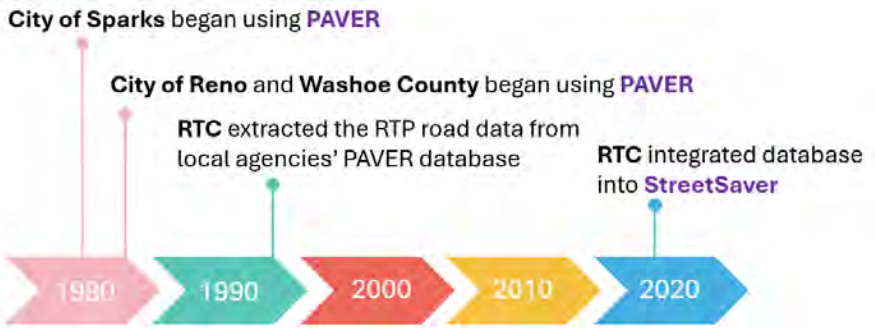
Draft data collection memorandums were sent to each agency on November 1, 2024, and responses were received throughout November 2024. To clarify the comments from the cities of Reno and Sparks and the Washoe County, follow-up meetings were held on November 21, December 12, and December 13, 2024, respectively. The meetings provided additional insights, which were incorporated into the final data summary memorandums sent out on December 23, 2024. This valuable information was integrated into the report to ensure accuracy and alignment with the details provided by agencies.

3 Pavement Maintenance

Pavement networks are often the most valuable asset an agency owns. Maintaining pavement in an acceptable condition is essential to ensuring a safe and functional driving environment. To achieve this, agencies implement systematic pavement management programs to manage pavement assets in a cost-effective way. Pavement management includes inventory data management, pavement condition data collection and analysis, pavement strategies and needs development, and historical maintenance measures implementation. This section will focus on the existing pavement management program (PMP), pavement condition and maintenance strategies, historical maintenance and rehabilitation records, and pavement needs and funding for each agency.

3.1 Pavement Management Program

A current PMP with accurate pavement condition data is an essential tool to maintain and repair roadways and use allocated funding most efficiently. All agencies have been involved in pavement management for over 30 years and have a long history of using PMPs. The cities of Reno and Sparks, and Washoe County have used **PAVER** as their PMP for developing roadway inventory, updating inspections and historical records, and establishing GIS shapefiles since the mid-1980s. PAVER is also a decision-support tool for maintenance and funding allocation for agencies. From the late 1990s to early 2000s, the RTC extracted the RTP road data from local agencies' PAVER databases for pavement management purposes. In 2023, RTC integrated this data into **StreetSaver,** and has since used StreetSaver as a decision-support tool for maintenance practice and funding allocation.



Pavement inventory is a key component of pavement management. Figure 1 shows the total centerline miles of the roadway network within each agency's jurisdiction. The **City of Reno** and the **Washoe County** have similarly sized roadway systems, totaling approximately **757** and **741 centerline miles**, respectively (including RTP and non-RTP roads). The **City of Sparks** has a smaller roadway system, totaling approximately **395 centerline miles**. Each agency is responsible for the normal operations and maintenance of its respective roadway networks.

Washoe County maintains the largest network of non-RTP roads, with approximately **653 centerline miles**, followed by the **City of Reno,** with approximately **520 centerline miles**, and the **City of Sparks,** with approximately **275 centerline miles** (Figure 2). **RTC** maintains approximately **446 centerline miles** of RTP roads. Arterial roads make up the largest portion of RTP roads, with approximately 284 centerline miles, while residential roads make up the largest portion of the non-RTP roads, with approximately 968 centerline miles. The City of Sparks has not identified any roads in the current database as residential, and it is therefore advisable for the City of Sparks to re-evaluate and update its inventory data in PAVER. In addition, there are 154 parking lot sections listed in Washoe County's database, but parking lot maintenance is separated from annual paving projects and funded by other funding sources (e.g., General Fund).

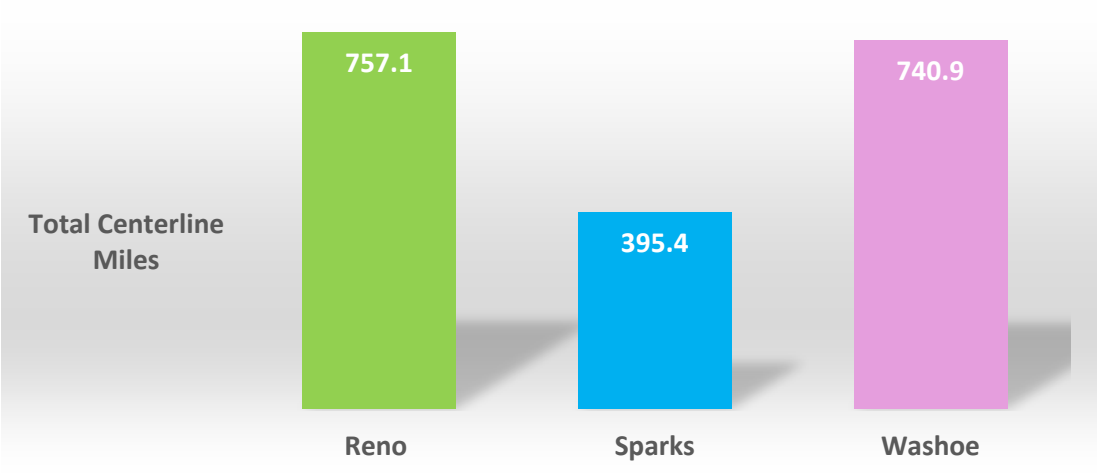


Figure 1. Centerline Miles in each Jurisdiction

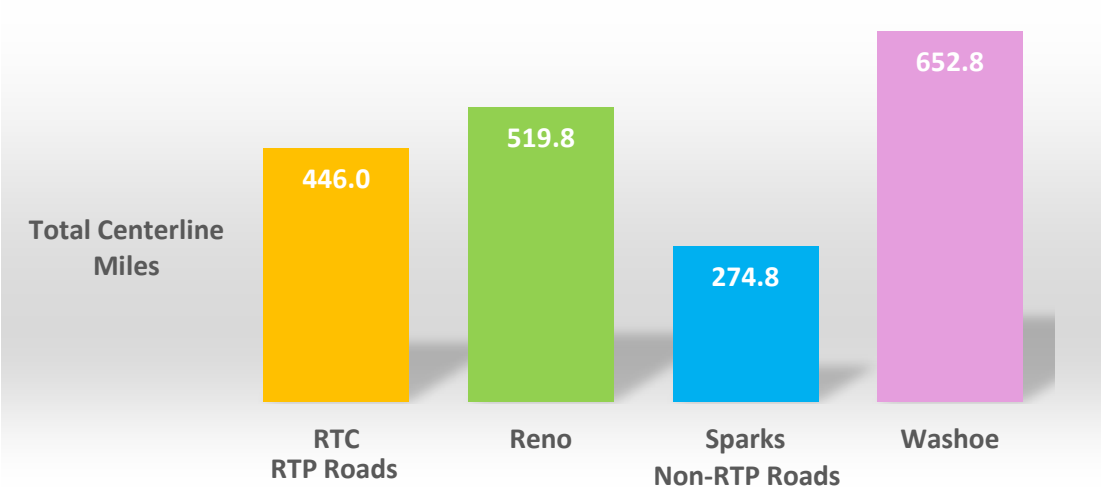


Figure 2. Centerline Miles Maintained by each Agency

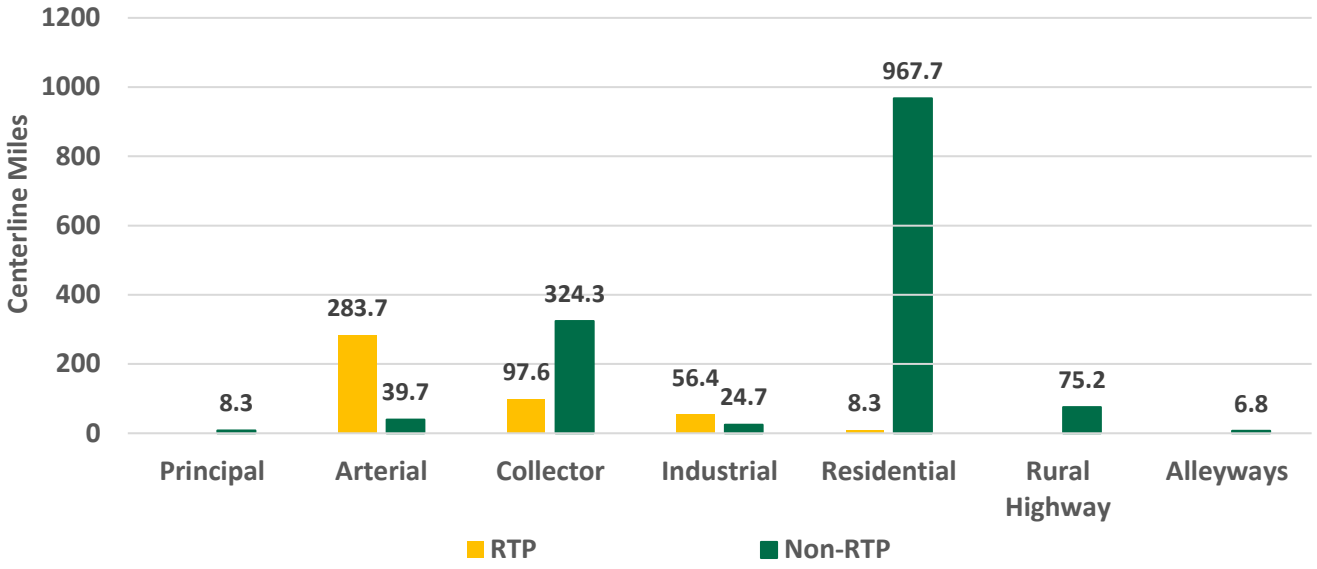


Figure 3. Centerline Miles of RTP and non-RTP roads of each Functional Classification

Pavement condition data is the "fuel" for any pavement management engine. The RTC, the cities of Reno and Sparks, and Washoe County adopted ASTM D6433[3] as the distress protocol for pavement condition inspection. RTC engages consultants to update pavement condition data for the entire RTP network every 3 years. For non-RTP roadways, 1/3 of the network is inspected and updated annually by each agency. Additionally, parking lots in Washoe County are inspected every 3 years. Walking surveys are conducted to update the pavement condition data for non-RTP roads. Since 2022, semi-automated inspection has been implemented for RTP roads. Prior to that, walking surveys were used for updating pavement condition data for RTP roads as well. In addition to pavement condition inspections, Washoe County has collected core samples in the last 5 years.

3.2 Pavement Condition and Maintenance Strategies

Pavement conditions are affected by the environment, traffic loads and volumes, construction materials, and pavement age. Pavement condition is typically quantified using the pavement condition index (PCI), which ranges from 0 (worst) to 100 (best). Each agency uses different ranges to classify pavement performance levels. Figure 4 illustrates how agencies categorize pavement condition based on PCIs.

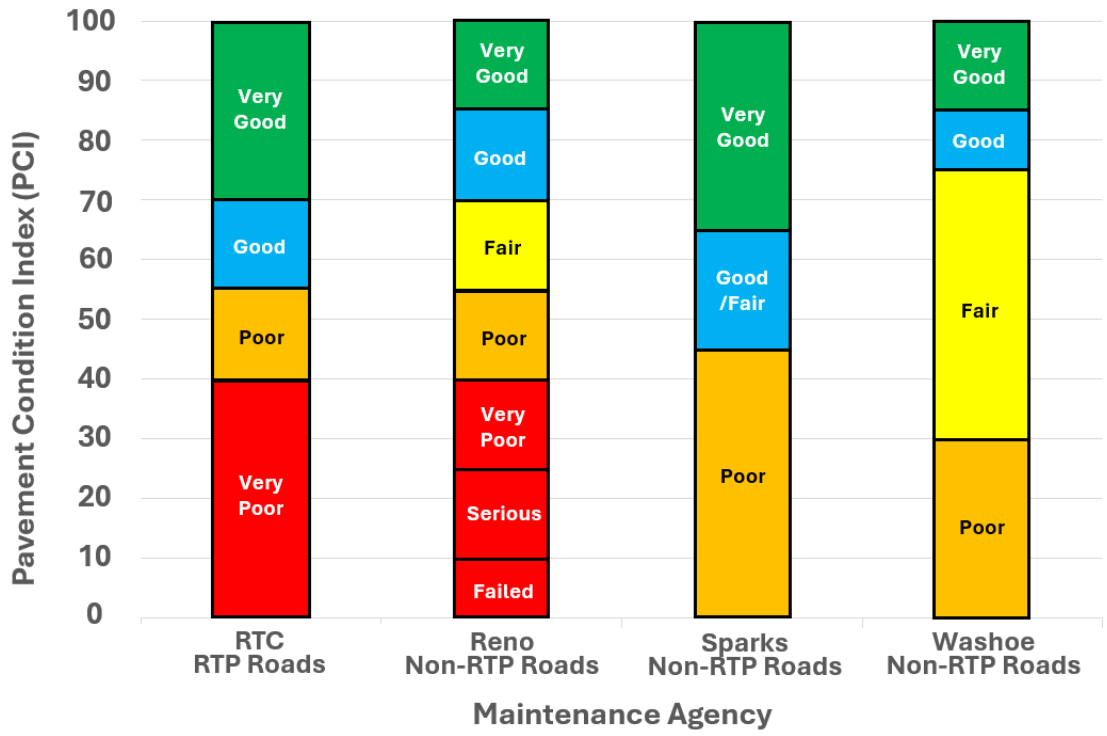


Figure 4. Pavement Condition Categories as Defined by each Maintenance Agency

The City of Reno divides PCI into 7 condition categories, while the RTC and Washoe County divide PCI into 4 condition categories, and the City of Sparks divides it into 3 condition categories. In the City of Sparks' condition categories, a large range of PCIs are considered "Very Good", whereas in Washoe County' condition categories, a large range of PCIs are considered "Fair." In the RTC's and the City of Reno's condition categories, a large range of PCIs are considered "Poor" or "Failed." Variations in the definition of pavement condition categories can lead to different decisions regarding the selection of maintenance treatments.

The pavement condition category is closely tied to pavement maintenance strategies, which include various treatments and practices selected based on PCI. Figure 5 summarizes maintenance strategies for asphalt concrete (AC) pavements and portland cement concrete (PCC) pavements. It was observed that the treatment ranges adopted by the City of Sparks do not align with the PCI condition categories. For instance, in the City of Sparks, the PCI breakpoint between "Good/Fair" and "Poor" is set as PCI=45. However, the threshold separating corrective maintenance (including surface seal and mill and overlay) from reconstruction is PCI=50. Pavement sections within "Good/Fair" or "Poor" condition might receive the same treatment. When conducting pavement needs and budget scenario analyses, it is important to use the same PCI ranges as those used for pavement condition categories. This ensures the results correspond to the actual field conditions, allowing pavement maintenance planning to be carried out on a consistent basis.

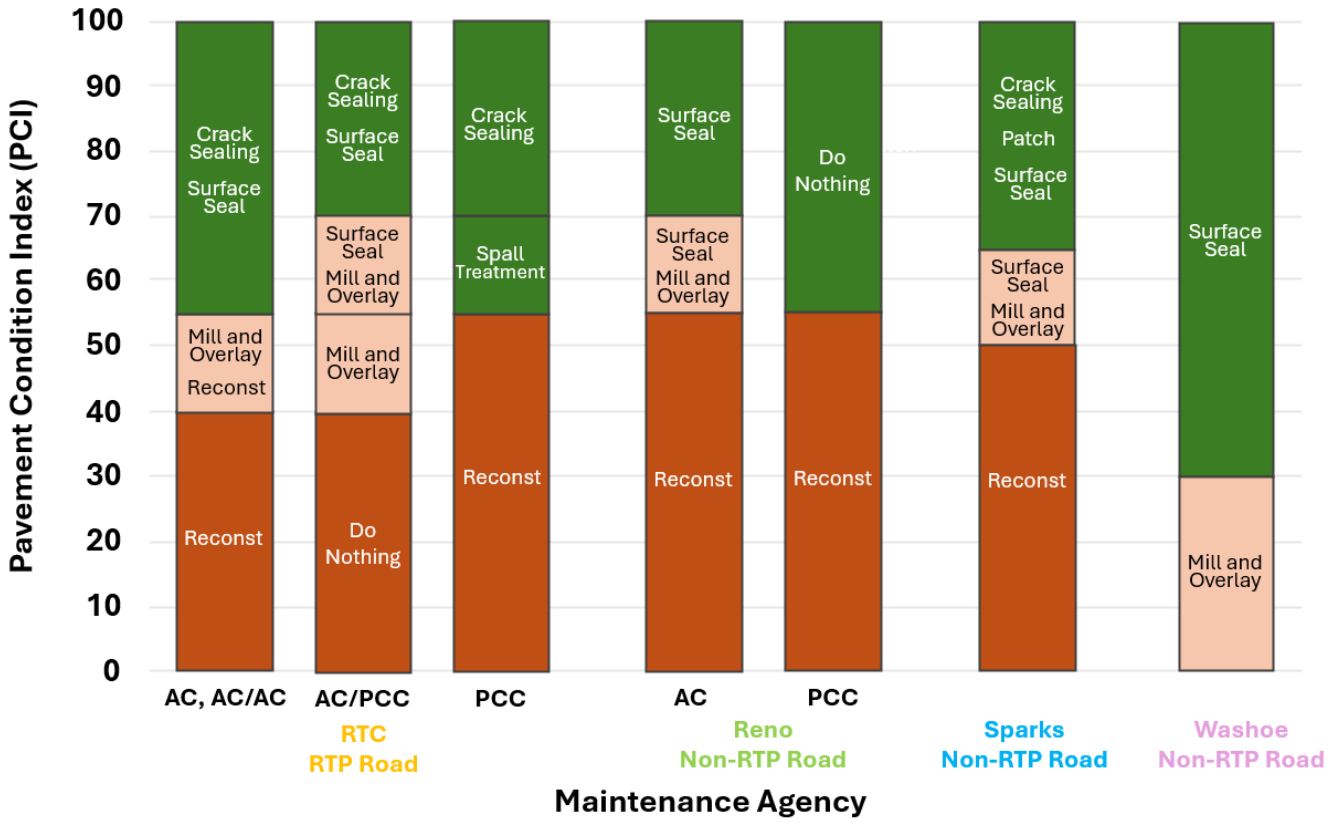


Figure 5. Pavement Strategies adopted by Maintenance Agency

Surface seal is usually applied on roadway in "Fair" to "Good" condition (PCI ranges 50 – 70) to prevent water from reaching the subgrade and reduce further fatigue cracking and rutting that requires more costly rehabilitation or reconstruction in the future. Sections in "Poor" to "Fair" condition (PCI ranges 30 – 50) with higher percentage of load-related distresses that might need rehabilitation treatment (ex. mill and overlay with localized repairs) to improve pavement structure capacity, restore pavement condition, and extend pavement service life. Sections in "Very Poor" or "Failed" condition (PCI less than 30) usually exhibit high severity load-related distresses, highly raveled surface or subgrade material failures. More comprehensive treatments (ex. reconstruction or FDR) will be utilized to remove and rebuild pavement structures. Currently, RTC and the cities of Reno and Sparks primarily apply surface seals and overlay to pavements with PCIs exceeding 50. However, Washoe County utilizes surface seal over a broader PCI range (30 –100) due to insufficient budget to maintain large roadway network in the region. Example photos with similar PCIs of different agencies are listed in Figure 6. Longspur Court in Washoe County (Figure 6a) will receive surface seal based on existing pavement strategies. The treatment might not address the structure distresses issue or potential subgrade failure. On the other hand, Park Street in City of Reno (Figure 6b) has similar PCI as Longspur Court will be rehabilitated with higher construction cost.



(a) Washoe County Longspur Court PCI = 40



(b) City of Reno Park Street PCI = 45

Figure 6. Pavement Strategies adopted by Maintenance Agency

AC and PCC have different maintenance requirements and costs, with PCC typically offering a longer pavement service life and higher maintenance costs. According to the information in PAVER, there are 40 PCC sections in the City of Reno, comprising 37 RTP sections and 3 non-RTP sections. There are 35 PCC sections in the City of Sparks, including 23 RTP sections and 12 non-RTP sections. Ten of the non-RTP PCC sections are alleyways. While most PCC sections are in RTP roads, the RTC performs small-scale maintenance measures when PCI is above 55, transitioning to reconstruction when PCI falls below 55 for PCC pavements. The City of Reno has a defined maintenance strategy for its PCC sections; performing reconstruction when PCI falls below 55. The City of Sparks has not set specific treatment guidelines and works with the RTC to determine appropriate maintenance for these sections.

Maintenance and rehabilitation treatments are selected based on PCI, and the associated costs are directly influenced by the techniques used. Treatment costs associated with various maintenance techniques are summarized in Table 6. The City of Sparks has not finalized the treatment types and costs in PAVER; the costs shown in this table are estimates provided and used by the City of Sparks to calculate unfunded backlog. The RTC uses $1.00/linear feet (LF) for crack seal in AC pavements and $1.50/LF in PCC pavements. For surface seal on AC pavement, costs vary by treatment type: slurry seal is the lowest at a unit cost of $3.42/square yard (SY), microsurfacing costs approximately $5.00/SY, and cape seal, which involves 2 layers of material, costs $7.50/SY. Rehabilitation and reconstruction costs vary depending on the thickness and techniques applied. The City of Reno pays the highest treatment cost among agencies for mill and overlay, at 54.00/SY. Reconstruction costs also differ significantly; the City of Sparks has the lowest treatment cost at $117.00/SY, while the RTC has the highest at $250.00/SY. Among all treatments listed in the table, PCC reconstruction stands out as the most expensive, costing $275.00/SY.

Table 6. Treatment costs by Maintenance Agency

Surface Type	Treatment Type	Treatment Cost by Maintenance Agency			
		RTC: RTP Roads	Reno: non RTP	Sparks: non RTP	Washoe: non RTP
AC	Crack Seal	$1.00/ LF		Preventive* Maintenance $9.00/SY ($1.00/SF)	
	Microsurfacing	$5.00/ SY			$5.00/SY ($0.55/SF)
	Slurry Seal		$3.42/SY ($0.38/SF)		
	Cape Seal			Corrective** Maintenance $27.00/SY ($3.00/SF)	$7.50/SY ($0.83/SF)
	Mill and Overlay	2" mill and overlay $46.00/SY	$54.00/SY ($6.00/SF)		3"– 4" mill and overlay $48.00/SY ($5.33/SF)
	Reconstruction	6" AC/12" Aggregate Base (AB) $250.00/SY	$207.00/SY ($23.00/SF)	Reconstruction*** $117.00/SY ($13.00/SF)	
PCC	Crack Seal	$1.50/LF			
	Spall Treatment	$12.00/SY			
	Reconstruction	$275.00/SY			

Note: * including microsurfacing, crack seal, patching, and T-Patch
** including micro-mill, microsurfacing, cape seal, crack seal, T-patch, and grind and overlay
***including roadbed modification, pulverize, 4-inch AC on 6 to 8 inches aggregate base (AB) or treated base

Based on the bid tabs provided by the agencies, costs of surface seal treatments are relatively consistent across projects. For example, slurry seal ranges from $3.00/SY to $4.00/ SY, cape seal ranges from $7.00/SY to $9.00/SY, and microsurfacing costs approximately $7.00/SY to $10.00/SY. The higher cost of microsurfacing can be attributed to the inclusion of a significant amount of pavement striping and marking items as well as base repair within those projects.

The costs for mill and overlay vary more, ranging from approximately $30.00/SY to $60.00/SY, depending on the project scope and requirements. In addition, the RTC and the cities of Reno and Sparks have implemented full depth reclamation (FDR) in recent years. The costs of FDR projects vary widely depending on the extent of repair, pavement striping and marking, utility adjustment, and traffic control items. The lower FDR project costs in these bid tabs are around $73.00/SY, with higher costs reflecting more extensive or complex project requirements.

In recent years, agencies have begun using more cost-effective or newer technologies on pavement maintenance and rehabilitation. However, these treatments are not yet standard approach and not updated in agencies' decision tree. To improve cost efficiency and sustainability, it is suggested that agencies incorporate cost-saving options, such as cold-in-place recycling (CIR) or FDR, into their decision-making frameworks.

Table 7 and Table 8 summarize the maintenance and rehabilitation (M&R) records, respectively, retrieved from agencies' PMP systems between 2019 and 2023. To better interpret the scale of each treatment within the scope of the network and allow for a clearer comparison of treatment intensity, the percentage of total treated lane miles (total quantity of the treated lane miles divided by the total lane miles of network) is summarized in the tables. The data reveals that surface seals were the primary treatment across all agencies, with the RTC and

the City of Reno applying surface seals over half of their respective networks over the past 5 years. The City of Sparks has more regular crack sealing practices before surface seal or roadway rehabilitation. The RTC implemented the most comprehensive range of treatments, including a higher percentage of overlays and reconstruction than local agencies. Additionally, PCC reconstruction was performed only by the RTC. The City of Sparks also conducted mill and overlays, but no maintenance and rehabilitation records were updated in City's database. The data in Tables 7 and 8 are exported directly from the agencies' PMP databases and may not include all localized repair records or recently completed surface seal and rehabilitation projects.

Table 7. Quantity of Preventive Maintenance Treatments in M&R Histories from 2019 to 2023 for each Maintenance Agency

Year	Crack Sealing (Lane Miles)				Surface Seal (Lane Miles)				Localized Treatment (Lane Miles)			
	RTC RTP Roads	Non RTP			RTC RTP Roads	Non RTP			RTC RTP Roads	Non RTP		
		Reno	Sparks	Washoe		Reno	Sparks	Washoe		Reno	Sparks	Washoe
2019	1.7	0.0	7.7	0.0					0.0	0.5	0.0	0.0
2020	2.1	0.0	40.8	0.0					30.8	0.1	0.0	0.0
2021	0.0	0.0	27.9	0.0					49.6	0.1	0.0	0.0
2022	0.0	0.0	13.4	0.0					13.4	1.7	0.0	0.0
2023	165.6	0.0	0.0	0.0					4.6	0.0	0.0	0.0
Total	169.4	0.0	89.8	0.0					98.4	2.4	0.0	0.0
Total treated %	14.8%	0.0%	16.6%	0.0%					8.6%	0.2%	0.0%	0.0%

Table 8. Quantity of Rehabilitation and Reconstruction in M&R Histories from 2019 to 2023 for each Maintenance Agency

Year	Overlay with AC (Lane Miles)				Reconstruct as AC (Lane Miles)				Reconstruct as PCC (Lane Miles)			
	RTC RTP Roads	Non RTP			RTC RTP Roads	Non RTP			RTC RTP Roads	Non RTP		
		Reno	Sparks	Washoe		Reno	Sparks	Washoe		Reno	Sparks	Washoe
2019	3.4	0.4	0.0	0.0	6.2	0.1	2.7	0.0	0.0	0.0	0.0	0.0
2020	2.4	0.1	0.0	2.7	8.4	6.9	4.2	0.0	0.1	0.0	0.0	0.0
2021	2.2	1.2	0.0	9.9	4.3	6.4	1.8	0.0	0.4	0.0	0.0	0.0
2022	16.9	0.4	0.0	0.0	8.6	8.2	2.5	0.0	0.0	0.0	0.0	0.0
2023	7.9	4.3	0.0	5.8	19.1	7.2	6.7	0.0	0.5	0.0	0.0	0.0
Total	32.8	6.4	0.0	18.4	46.6	28.8	17.9	0.0	1.0	0.0	0.0	0.0
Total Treated %	2.9%	0.6%	0.0%	1.4%	4.1%	2.8%	3.3%	0.0%	0.1%	0.0%	0.0%	0.0%

Figure 7 illustrates the average PCIs of RTP roads and non-RTP roads over the past five years and the target PCI values set by each agency. Note the average PCIs of RTP roads for 2019, 2020, and 2022 are sourced from the RTC Annual Report[5,6,7], while the average PCIs for 2021, 2023, and 2024 are exported from StreetSaver. Additionally, the average PCIs for the cities of Reno and Sparks and Washoe County were extracted from PAVER. Washoe County has a lower target PCI than RTC and the City of Reno, while the City of Sparks does not have an official performance target PCI for its maintained network. Average PCIs have decreased slightly over the past five years. During this period, the average PCI for RTP roads consistently met or exceeded the target PCI of 80. Prior to 2022, the average PCIs for the City of Reno and Washoe County also met or exceeded their respective targets, with PCI = 78 for the City of Reno and PCI = 73 for Washoe County. The City of Sparks carried out more reconstruction in 2023 than in 2019 to 2022, resulting in a slight increase in the average PCI.

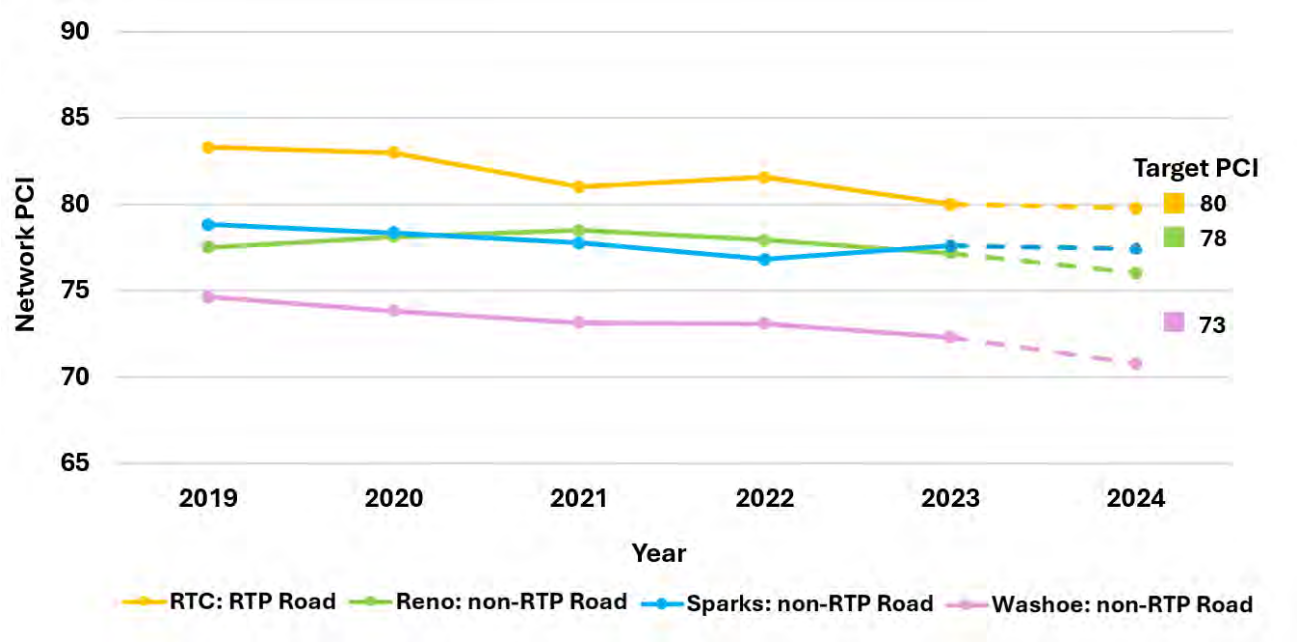


Figure 7. Historical average PCIs and Target PCI by Maintenance Agency

Figure 8 illustrates the distribution of PCI condition categories as a percentage of the total roadway area for each maintenance agency based on RTC's PCI scale. The 2024 average PCI for RTP roads is the highest at 79.8, followed by non-RTP roads in the cities of Sparks and Reno, with average PCIs of 77.5 and 76.1, respectively. The non-RTP roads in Washoe County have the lowest 2024 average PCI at 70.8. Note the 2024 network PCIs do not include completed paving projects and pavement inspection updates performed in 2024, so these values will likely change once all recent data has been entered.

[5] Regional Transportation Commission. 2019. *2019 Annual Report*. https://rtcwashoe.com/wp-content/uploads/2023/10/RTC_AnnualReport2019-FINAL.pdf.
[6] Regional Transportation Commission. 2020. *2020 Annual Report*. https://rtcwashoe.com/wp-content/uploads/2023/10/Annual-Report-2020-FINAL-1-1.pdf.
[7] Regional Transportation Commission. 2022. *2022 Annual Report*. https://rtcwashoe.com/wp-content/uploads/2023/10/RTC-AnnualReport-2022-FINAL.pdf.

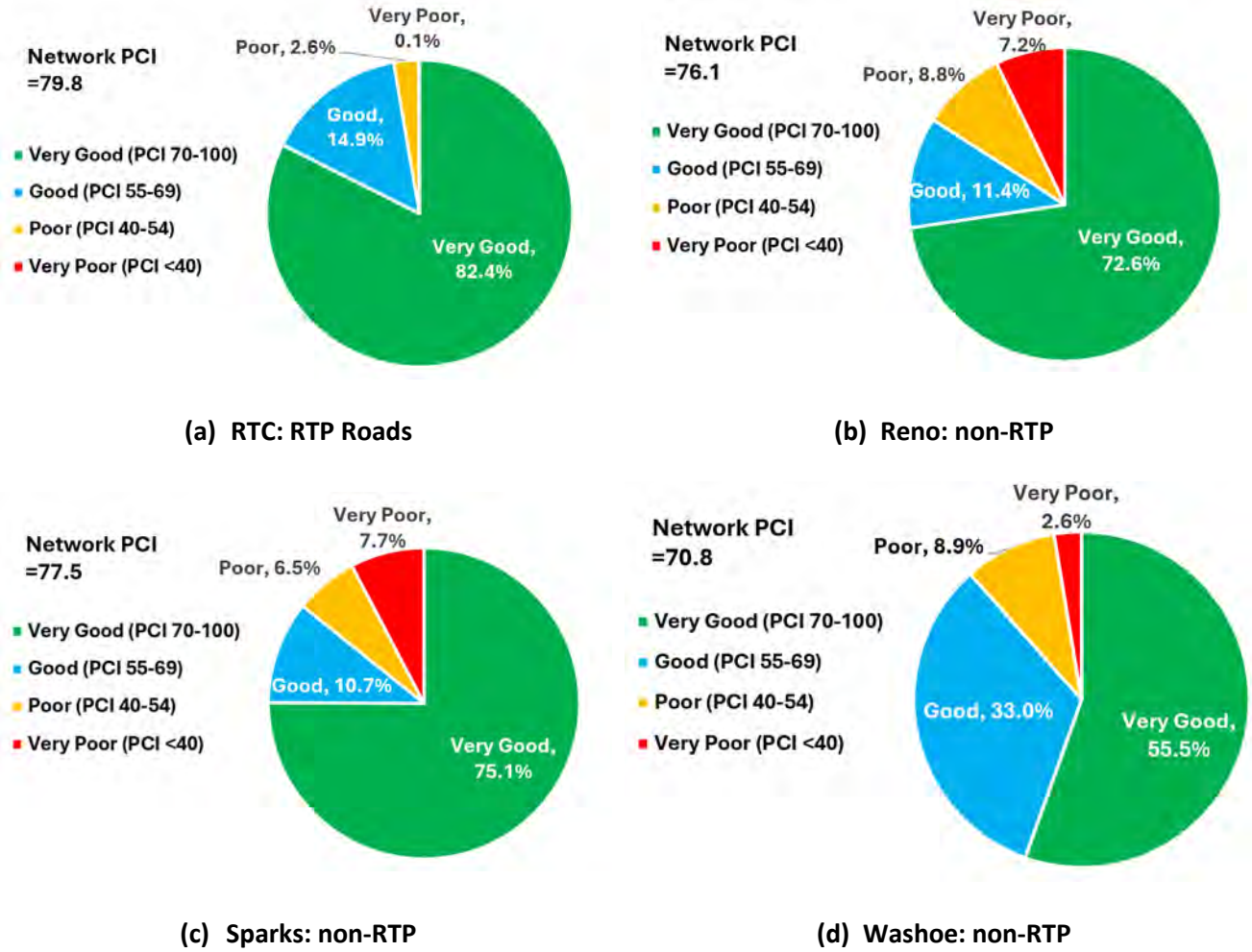


Figure 8. 2024 PCI by Condition Category for each Agency based on RTC's PCI scale

Pavement condition and decision trees are key components in developing pavement M&R plans. However, other considerations are also included when selecting or prioritizing streets for maintenance. Additional considerations include structural distress percentages, historical M&R records, traffic volume, equitable resource distribution across districts, surface seal cycle, and resident and staff inputs. These factors are also essential in the street selection process and require careful balancing to address their respective impacts effectively. Moreover, it is suggested to coordinate street selection with ongoing utility projects to avoid conflicts and reduce redundant work. Additionally, grouping the annual maintenance and rehabilitation plan by treatment types and geographic zones can enhance efficiency in project execution, enable more competitive bidding, and achieve economy of scale pricing.

3.3 Pavement Needs and Funding

Pavement needs for the network represent the cost associated with performing M&R treatments based on the strategies and costs defined in previous section. The pavement needs and 2024 unfunded backlogs of each agency are shown in Table 9. Note the needs or unfunded backlog are calculated by agencies' PMP database or provided by agencies.

Table 9. Needs and 2024 Unfunded Backlog for each Maintenance Agency

Item	Maintenance Agency			
	RTC: RTP Roads	Reno: non RTP	Sparks: non RTP	Washoe: non RTP
Pavement Needs (2024 to 2033)	$529.2 million	$922.6 million	Not available	$98.8 million
Pavement Needs per Centerline Mile ($/mile)	$1,186K	$1,118K	Not available	$151K
2024 Unfunded Backlog	$70.3 million	$499.3 million	$129.4 million	$27.7 million
2024 Unfunded Backlog per Centerline Mile ($/mile)	$158K	$693K	$471K	$42K
Calculation Resource	StreetSaver	PAVER	City of Sparks	PAVER

RTP roads and non-RTP roads in the City of Reno have relatively high 10-year pavement needs per centerline mile due to Reno's maintenance strategies and the higher treatment cost established in the decision tree (over $200.00/SY to reconstruct roadway under poor to failed condition categories). Additionally, the City of Reno has the highest 2024 unfunded backlog per centerline mile among the agencies. This is because the City performs reconstruction when PCI falls below 55, and that includes approximately 16% of the area of non-RTP roads in the City. In contrast, the non-RTP roads in Washoe County have the lowest 2024 unfunded backlog per centerline mile because Washoe County applies surface seal to sections with a broad range of PCI scores (PCI exceeding 30) and only assigns mill and overlay to roads with PCIs below 30 with lower unit cost ($48.00/SY). The City of Sparks has not set up treatment strategies and unit costs in PAVER and therefore used rough unit costs to estimate existing unfunded backlog. The relatively high 2024 unfunded backlog per centerline mile is due to the City applying reconstruction to sections with PCIs below 50. It is suggested the City review the treatment cost and finalize the decision tree in the PAVER database for a more precise assessment of the pavement needs and in support of more effective maintenance planning.

Table 10 summarizes the pavement M&R budgets of the agencies, including the paving budgets allocated per centerline mile. Funding challenges are a common concern for all agencies. Despite these constraints, they are making significant efforts to optimize their available resources and implement effective strategies for maintaining their roadway system. The RTC allocates approximately $22.5 million annually for roadway maintenance, rehabilitation, and reconstruction ($7.5 million for pavement maintenance and $15.0 million for rehabilitation or reconstruction and corrective projects), representing the highest budget per centerline mile among the agencies. As a result, the RTC was able to conduct more pavement M&R treatments and maintain higher network PCI for RTP roads. The City of Reno's annual budget for roadway preventive maintenance and reconstruction for fiscal year 2025 is $11.5 million. In the 5-Year Capital Improvement of the City of Sparks, an average of $4.0 million for fiscal year (FY) 2025 to FY2029 is available for pavement management program within the City. Washoe County's existing annual budget for maintaining pavement is approximately $2.9 million. Of that, $2.1 million is designated for preventive maintenance contracts and potential mill and overlay, while approximately $0.75 million is allocated for concrete repair or dig out for surface seal and pavement projects. The County has the lowest budget per centerline mile, which contributes to a lower network PCI for non-RTP roads.

Table 10. Pavement M&R Budget for each Maintenance Agency

Item	Maintenance Agency			
	RTC: RTP Roads	Reno: non RTP	Sparks: non RTP	Washoe: non RTP
Pavement M&R Budget per year	$22.5 million	$11.5 million	$4.0 million	$2.9 million
Pavement M&R Budget per Centerline mile ($/mile)	$50K	$22K	$15K	$4K

3.4 Summary

The RTC, the cities of Reno and Sparks, and Washoe County have been engaged in pavement management for over 30 years and have a long history of utilizing PMPs. Since the mid-1980s, the cities of Reno and Sparks and Washoe County began using PAVER as their PMP. From the late 1990s to early 2000s, the RTC extracted the RTP road data from local agencies' PAVER databases for pavement management purposes. In 2023, RTC integrated this data into StreetSaver, which has since been employed as a decision-support tool for maintenance practice and funding allocation.

Washoe County maintains the largest network of non-RTP roads, with approximately **653 centerline miles**, followed by the **City of Reno** with approximately **520 centerline miles** of non-RTP roads, and the **City of Sparks** with approximately **275 centerline miles** of non-RTP roads. **RTC** maintains approximately **446 centerline miles** of RTP roads. The cities of Reno and Sparks and Washoe County oversee the normal operations and maintenance of their entire roadway systems, including RTP and non-RTP roads.

The RTC, the cities of Reno and Sparks, and Washoe County adopted ASTM D6433[3] as the distress protocol for pavement condition inspection. RTC engages consultants to update pavement condition data for the entire RTP network every 3 years. For non-RTP roadway network, 1/3 of the network is inspected and updated each year. Pavement condition is typically quantified using PCI. According to the historical M&R records, surface seals were the primary treatment across all agencies, with the RTC and the City of Reno applying them to the largest portions of their respective networks. The RTC implemented the most comprehensive range of treatments. The RTC and the cities of Reno and Sparks follow a policy for reconstruction, especially when PCI values fall below 40 to 50. During the last 5 years, the average PCI for RTP roads consistently met or exceeded the target value of PCI = 80. Additionally, the 2024 PCI distribution by condition category shows that the RTP roads have the highest proportion of pavement in the "Very Good" category (PCI > 70), accounting for approximately 82% of the area, and only 0.1% of the RTP roads have a PCI below 40. This result suggests that the RTC's maintenance practice is yielding effective results.

The City of Reno has the highest 2024 unfunded backlog per centerline due to the maintenance strategies (performing reconstruction when PCI falls below 55) and the higher treatment cost (over $200.00/SY to reconstruct roadway) established in the decision tree. In contrast, the non-RTP roads in Washoe County have the lowest 2024 unfunded backlog per centerline miles. This is primarily because the County applies surface seal to sections with PCIs exceeding 30 and assigns mill and overlay to roads with PCIs below 30 with lower unit cost ($48.00/SY). The RTC allocates approximately $22.5 million annually for roadway maintenance, rehabilitation, and reconstruction, representing the highest budget per centerline mile among the agencies. As a result, the RTC was able to conduct more pavement M&R treatments and maintain higher network PCI for RTP roads. Washoe County has the lowest budget per centerline miles, which contributes to a lower network PCI for non-RTP roads.

4 ITS Infrastructure

ITS infrastructure data for traffic signals, traffic cabinets, and Pan-Tilt-Zoom (PTZ) cameras from the RTC, City of Reno, City of Sparks, and Washoe County were requested during coordination meetings (Table 5) to evaluate the current state of the region's ITS infrastructure. ITS data requested included:

- Operation and maintenance asset management records
- Work order history
- Maintenance schedules and procedures
- Planning and funding maintenance

The following subsections summarize the existing ITS infrastructure inventory, ITS operations and maintenance efforts, ITS planning and approval processes, and ITS needs and funding identified by each agency. A summary of the agency responses is included in Appendix A.

4.1 Existing ITS Infrastructure Inventory

As of mid-2024, there were 418 traffic signals, 418 traffic cabinets, and 77 PTZ cameras within the region (Table 11). Of the 418 traffic signals, 191 are owned by the City of Reno, 73 by the City of Sparks, 24 by Washoe County, and 130 by the Nevada Department of Transportation (NDOT).

Table 11. Summary of ITS Inventory

ITS Device	City of Reno	City of Sparks	Washoe County[1]	NDOT[1, 2]	Total
Traffic Signals (# of signalized intersections)	191	73	24	130	**418**
Traffic Cabinet	191	73	24	130	**418**
Traffic Camera (PTZ)	46	31	-	-	**77**

[1] Signalized intersections that are maintained by the City of Reno but are owned by Washoe County or NDOT are included here. Seventeen of the 24 signals are owned by NDOT.
[2] Signals within City of Reno and City of Sparks that are owned by NDOT. One of the NDOT signals has shared responsibility among the cities, with the City of Reno conducting regular maintenance and the City of Sparks providing signal timing support.

4.2 Existing ITS Operations and Maintenance

Though the cities of Reno and Sparks, Washoe County, and NDOT own the physical ITS signal infrastructure throughout the region, only the cities of Reno and Sparks oversee and perform the region's maintenance needs.

4.2.1 Signal Timing Plans

The RTC does not own or maintain any physical ITS infrastructure. It does, however, manage the region's Signal Timing Program. The Signal Timing Program covers all intersections within the region. In this program, the University of Nevada, Reno is contracted to develop signal timing plans which are reviewed by city engineering staff and implemented into their Advanced Traffic Management System (ATMS.now) system.

4.2.2 Existing ITS Operations and Maintenance Agreements

The City of Reno has an agreement with Washoe County to maintain and operate its 24 traffic signals and cabinets. The cities of Reno and Sparks and Washoe County also have agreements with NDOT to maintain the signals on NDOT roadways. The City of Reno's interlocal agreement with NDOT includes the maintenance and operation of 87 signals. The City of Sparks's agreement includes 43 signals, and Washoe County's agreement includes 17 signals. Responsibility for 1 of the NDOT signals is shared among the cities, with the City of Reno conducting regular maintenance and the City of Sparks providing signal timing support. The 17 signals listed in the NDOT and Washoe County agreement are maintained by the City of Reno, in addition to the 87 NDOT-owned signals the city maintains within its jurisdiction. The interlocal agreements between NDOT and the local agencies can become the standard when coordinating maintenance responsibilities between agencies as stated in the RTC *Intelligent Transportation System Strategic Master Plan*[8]. The existing agreements are summarized in Table 12 and located in Appendix F as summarized in the RTC *Intelligent Transportation System Strategic Master Plan*[8].

Table 12. Summary of Existing Signal Agreements

Agreement	Key Elements
NDOT/Reno Agreement	• Covers ownership, maintenance, operation, and repair of 871 intersections (responsibility for 1 of the intersections is shared, with the City of Sparks providing signal timing updates, and City of Reno providing maintenance). • Does not include capital improvements. • NDOT is responsible for any costs that exceed $1,500 per intersection and are not covered by insurance. • The term of agreement is 2 years.
NDOT/Sparks Agreement	• Covers ownership, maintenance, operation, and repair of 43 NDOT intersections. Responsibility for 1 additional NDOT signal is shared, with the City of Sparks providing signal timing updates and the City of Reno providing maintenance. • Does not include capital improvements. • NDOT is responsible for any costs that exceed $1,500 per intersection and are not covered by insurance, including emergency replacements. • The term of agreement is 2 years.
Reno/Washoe County Agreement	• Covers maintenance of 23 intersections. • Completed services must not exceed $70,000 per contract year unless there has been an amendment. • The term of agreement is 5 years.
NDOT/Washoe County Agreement	• Covers ownership, maintenance, operation, and repair of 17 intersections. • Does not include capital improvements. • NDOT is responsible for any costs that exceed $1,500 per intersection and are not covered by insurance. • The term of agreement is indefinite.

Source: RTC Washoe, *Intelligent Transportation System Strategic Master Plan (2024)* [8]

[8] Regional Transportation Commission. 2024. *RTC Washoe ITS Strategic Master Plan Final Report*. https://rtcwashoe.com/wp-content/uploads/2024/12/2024-12-30-RTC-Washoe-ITS-Master-Plan_FINAL.pdf.

City of Reno ITS Operations and Maintenance

The City of Reno maintains 302 signalized intersections (191 Reno intersections, 87 NDOT intersections, and 24 Washoe County intersections), 17 of which are owned by NDOT. The City of Reno conducts annual preventative maintenance on its traffic signals and cabinets. Updates to the system such as battery and fan replacements are documented during preventative maintenance.

The agreement between the City of Reno and NDOT includes:

- Replacement and repairs of signal system equipment due to incidental damage
- Emergency replacement and repair of signal system equipment

The agreement between the City of Reno and Washoe County includes:

- Regular Traffic Signal Maintenance
    - Signal preventative maintenance
    - Cabinet/ground preventative maintenance
    - Safety/conflict monitors
    - General signal maintenance
    - Illuminated street name sign maintenance
- Additional Traffic Signal Services
    - School flasher maintenance
    - Signal response pedestrian signal repair
    - Bench repair
    - Vehicle detection
    - Bulb replacement
    - Signal head repair
    - Cabinet rehab/construction
    - New signal inspection
    - Review traffic signal design plans
    - Signal interconnect
    - USA locates
    - Limited street light maintenance

The City of Reno provided more than 3 years of maintenance work order history (January 2021 – June 2024), which was reviewed and categorized as preventative maintenance (for signals and cabinets), signal head repair, or inspections. A detailed summary of the maintenance activities is provided in Appendix G. On average, the City of Reno spends approximately 6,144 man-hours annually to maintain existing ITS infrastructure. Of the 6,144 man-hours, approximately 8 percent or 474.5 man-hours were spent on preventative maintenance (e.g., routine

inspections) while 92 percent or 5,669.5 man-hours were spent on reactive maintenance (e.g., repair or replacement of broken hardware) (Table 13). Additionally, approximately 95 percent of the 6,144 man-hours took place during regular hours, and 5 percent were overtime hours. Based on the fee schedule provided in the agreement between the City and Washoe County (regular hourly pay of $88.57 and overtime pay of $132.85), an estimated annual budget spent on maintenance activities was calculated. Overall, the City of Reno spends nearly $560K annually on labor costs to maintain its signals and those under contract with Washoe County and NDOT. Refer to Appendix G for further details.

Table 13. City of Reno Estimated Annual Maintenance Labor Hours

Maintenance Type	City of Reno	Washoe County	NDOT	Total
Preventative Maintenance	373.5	47.5	53.5	474.5
Reactive Maintenance	4,712.5	240.5	716.5	5,669.5
Total Maintenance (man-hours)	5,086	288	770	6,144

City of Sparks ITS Operations and Maintenance

The City of Sparks allocates approximately $50,000 annually for maintaining its ITS infrastructure. Maintenance teams conduct routine maintenance and repair issues and equipment failures. Maintenance includes replacing, repairing, and upgrading switches, cameras, controllers, and other hardware. The City of Sparks maintains 117 signalized intersections, 44 of which are NDOT-owned signals. No other work history was provided. The agreement between the City of Sparks and NDOT (see Appendix F) includes:

- Replacement and repairs of signal system equipment due to incidental damage
- Emergency replacement and repair of signal system equipment

4.3 ITS Planning and Approval Processes

Each agency has its own approach to planning and performing yearly maintenance of the region's signalized intersections and associated ITS infrastructure. A summary of each agency's ITS planning and approval processes is included in Table 14.

Table 14. Summary of Regional ITS Planning and Approval Processes

Agency	ITS Planning and Approval Processes
RTC	The RTC does not have a planning or approval process as it does not own or maintain any physical ITS infrastructure.
City of Reno	The planning and decision-making process for funding maintenance of the City of Reno's ITS infrastructure is coordinated among the City's Traffic Engineering and Maintenance and Operations teams. This coordination allows the teams to utilize both their programmed budget and grant funding for preventative maintenance and major rehabilitation projects. In making their scheduling and funding decisions, the 2 teams consider: • Historical maintenance data • Manufacturer legacy hardware support • Changes in traffic volume • New construction that may require the need for new intersections or significant upgrades to existing intersections • Funding impacts (primarily when grant or other time-limited funding is involved)

City of Sparks	The City of Sparks performs routine maintenance at all signal locations under its jurisdiction, but handles repairs, replacements, and improvements on a reactive basis, addressing issues as they arise rather than following a schedule. The City coordinates with its maintenance teams to identify and recommend replacements or upgrades, especially at locations where issues or failures are frequent or public concerns and complaints are received. In general, upgrades to signals vary from year to year depending on the need and available budgets.
Washoe County	As all maintenance for Washoe County's signals is performed by the City of Reno, Washoe County does not have any planning or approval procedures for the actual maintenance work done. The County will, however, discuss and approve or decline additional funding requests from the City of Reno, which will impact the maintenance work that Reno does for the County.

4.4 Existing ITS Funding and Needs

Existing funding associated with the maintenance of the region's ITS infrastructure as described in Section 4.2 is summarized in this section based on the data provided by the local agencies. The RTC should commence the implementation of the RTC Intelligent Transportation System Strategic Master Plan[8] strategies associated with the maintenance and operation of ITS infrastructure to determine the ITS infrastructure funding needs for the region. The strategies associated with the maintenance and operations of the system include:

Strategy #2: Enhance Regional ITS and Signal Asset Management Database (In-Progress)

Strategy #5: Enhance ITS Upgrade/Lifecycle Replacement Program

Strategy #6: Enhance ITS New Capital Investments (In-Progress)

Strategy #8: ITS Design Standards and Specifications

Strategy #20: Management of Network Switches

Strategy #21: Dedicated Funding for ITS Upgrades/Lifecycle Replacement Program

Strategy #22: Enhance Funding for ITS New Capital Investments

Strategy #23: Agreements for Operations and Maintenance (O&M) for ITS and Signals in Region

4.4.1 Existing RTC Funding

The RTC sets aside an annual budget to cover updates and maintenance to the Signal Timing Program. A summary of the RTC's annual budgets for FY2021 through FY2026 is included in Table 15.

Table 15. RTC Signal Timing Program Budget

Fiscal Year	Amount
FY 2021	$443,276.40
FY 2022	$336,777.80
FY 2023	$261,600.60
FY 2024	$303,936.40
FY 2025	$420,000.00
FY 2026	$420,000.00

Note: Data as of August 27, 2024.

4.4.2 Existing Washoe County Funding

Per the Washoe County and the City of Reno agreement (see Appendix F), the County reimburses the City of Reno for maintenance costs up to $70,000 per year. Any exceptions to this budget must be agreed upon yearly.

4.4.3 Existing City of Reno Funding

The City of Reno's ITS maintenance needs are funded by a combination of an annual budget and grant funds. Grants and other time-limited funding are distributed among projects according to "greatest impact" as determined by the Traffic Engineering and Maintenance and Operations teams. The City of Reno also receives a maximum of $70,000 annually (unless additional expenses are agreed upon) from Washoe County to maintain all 24 of their traffic signals and cabinets. Under their contract with NDOT, the City of Reno is reimbursed for individual maintenance and repair costs that exceed $1,500 and is fully reimbursed for any emergency repairs and replacements at NDOT signals.

4.4.4 Existing City of Sparks Funding

The City of Sparks funds its ITS needs through a designated annual budget. A substantial portion of this funding is allocated for purchasing hardware necessary for repairs and upgrades throughout the year. Under their contract with NDOT, Sparks is reimbursed for individual maintenance and repair costs for each of the 43 NDOT locations it maintains. Additionally, NDOT fully reimburses the City of Sparks for any emergency repairs and replacements at their intersections.

4.5 Summary

In summary, there are 418 signalized intersections in the Washoe County region that are owned by either the City of Reno, City of Sparks, Washoe County, or NDOT. Interlocal agreements exist between the local agencies allow the cities of Reno and Sparks to operate and maintain all of the region's signals. The RTC funds the region's Signal Timing Program.

5 Financial and Funding Sources

This section summarizes the findings from a review of revenue streams currently available to support costs associated with pavement and ITS maintenance for the cities of Reno and Sparks, Washoe County, and the RTC.

Financial data were requested during data collection meetings with each agency's financial staff (Table 5). Following these meetings, annual budgets, annual comprehensive financial reports (ACFR), and other supplemental documents were reviewed. In addition to these materials, the City of Reno provided a summary of revenue streams associated with the Nevada Motor Vehicle Fuel Tax (MVFT). The Fuel Tax Summary document included revenue trends for all 4 agencies. A summary table of responses to questions posed in the data collection meetings is included in Appendix A.

It should be noted at the time this project began, budget data for FY2023 – 2024 was the most recent available. For this reason, data from FY2023 – 2024 was utilized throughout this analysis. Budget data for FY2024 – 2025 was released while the assessment was well underway.

5.1 Motor Vehicle Fuel Tax

This section provides an overview of the MVFT and details of the 4 agencies' revenue from this funding stream.

5.1.1 Motor Vehicle Fuel Tax Overview

MVFT includes several statutory authorities that generate revenue based on all motor vehicle fuel sales except for aviation fuel. These statutory authorities include:

- **NRS365.192** – A $0.01 MVFT in Washoe County. This funding goes to Washoe County and the cities of Reno and Sparks and is distributed formulaically based on population, lane miles, and land area. The RTC does not receive any revenue from this stream.
- **NRS365.190** – An additional $0.0175 MVFT in Washoe County. This funding goes to Washoe County and the cities of Reno and Sparks and is distributed formulaically based on population, lane miles, and land area. The RTC does not receive any revenue from this stream.
- **NRS365.180** – An additional $0.036 MVFT in Washoe County. Of this, $0.0125 is allocated to Washoe County Road bonds and $0.0235 to Washoe County. The City of Reno, City of Sparks, and the RTC do not receive any revenue from this stream.
- **NRS373.030** – An $0.09 MVFT in Washoe County, distributed to the RTC. The cities of Sparks and Reno and Washoe County do not receive any revenue from this stream.
- **NRS365.175** – $0.1765 base rate to the State Highway Fund and is distributed to RTC. The cities of Reno and Sparks and Washoe County do not receive any revenue from this stream.

The share of total revenue allocated to street and ITS repair and maintenance generated by MVFT varies by agency. For example, the MVFT comprises only 22.1% of the City of Reno's revenue allocated for maintenance and repair of streets and ITS infrastructure. However, Washoe County's revenue stream is 65.3% from the MVFT. The City of Sparks' share is 43.6%, while the RTC's MVFT share of revenue for maintenance and repair is 93.0%. Each agency has other sources that support the annual revenue budget, but these sources, and their impact, vary. These sources are explained in Section 5.2 of this report.

Nevada's MVFT is indexed, meaning it is adjusted annually based on a formula that ties it to inflation. It is important to note all agencies mentioned the challenges related to the increasing efficiency of modern motor vehicles, many of which require less fuel to operate. The goal of indexing is to support the collection of a revenue stream that is adequate to cover the cost of maintaining and improving the transportation infrastructure, not to account for vehicles with higher fuel efficiency or running on electricity.

The statutory authorities are indexed in different ways. First, NRS373.065 authorizes Washoe County to levy an additional tax equal to the amount authorized by NRS365.180, NRS365.190, NRS362.192, and NRS373.030 multiplied by the average of the past 5 years Consumer Price Index (CPI) or 4.5%. Secondly, NRS373.066 provides the authorization to impose a tax indexing on state and federal fuel taxes to inflation; this is indexed by a 10-year rolling average of the Producer Price Index (PPI), which measures the average change in the cost of nonresidential construction. PPI across all applicable sources is capped at 7.8%.

The revenues collected as part of the MVFT are then distributed to the cities of Reno and Sparks, Washoe County, and the RTC. Distribution methods vary depending on the statutory authority. Table 16 demonstrates the various tax descriptions, the tax rate, and the jurisdiction or authority that receives the funding stream.

Table 16. Statutory Authorities for MVFT and Receiving Agency

Tax Description	Tax Rate	Washoe County	Reno	Sparks	RTC
NRS365.192 Base	$0.01	X	X	X	
NRS365.192 CPI	$0.01	X	X	X	
NRS365.192 PPI	$0.01	X	X	X	
NRS365.190 Base	$0.0175	X	X	X	
NRS365.190 CPI	$0.0175	X	X	X	
NRS365.190 PPI	$0.0175	X	X	X	
NRS365.180 Base	$0.0125	X			
NRS365.180 CPI	$0.0125	X			
NRS365.180 PPI	$0.0125	X			
NRS365.180 Base	$0.0235	X	X	X	
NRS365.180 CPI	$0.0235	X	X	X	
NRS365.180 PPI	$0.0235	X	X	X	
NRS373.030 Base	$0.09				X
NRS373.030 CPI	$0.09				X
NRS373.030 PPI	$0.09				X
PPI State/Federal					X
PPI Special Funds					X

Revenue from NRS365.192 is distributed based on the share of population in each jurisdiction. As of July 1, 2023, the City of Reno accounted for 54.5% of the total Washoe County population, the City of Sparks accounted for 22.4%, and unincorporated Washoe County accounted for the balance at 23.1%. NRS365.190 is distributed based on property valuations and NRS373.180 is distributed equally based on population, land area, local road miles, and vehicle miles traveled. It is important to note the factors utilized in the calculation result in Washoe

County receiving more revenue, primarily due to the land area factor of the distribution formula, than the cities of Reno and Sparks combined.

The optional $0.09 Washoe County tax (NRS373.030), a portion of NRS365.175, and indexing of the State and Federal Fuel Tax are revenue streams allocated to RTC. Figure 9 demonstrates the separate statutory streams for the Nevada MVFT.

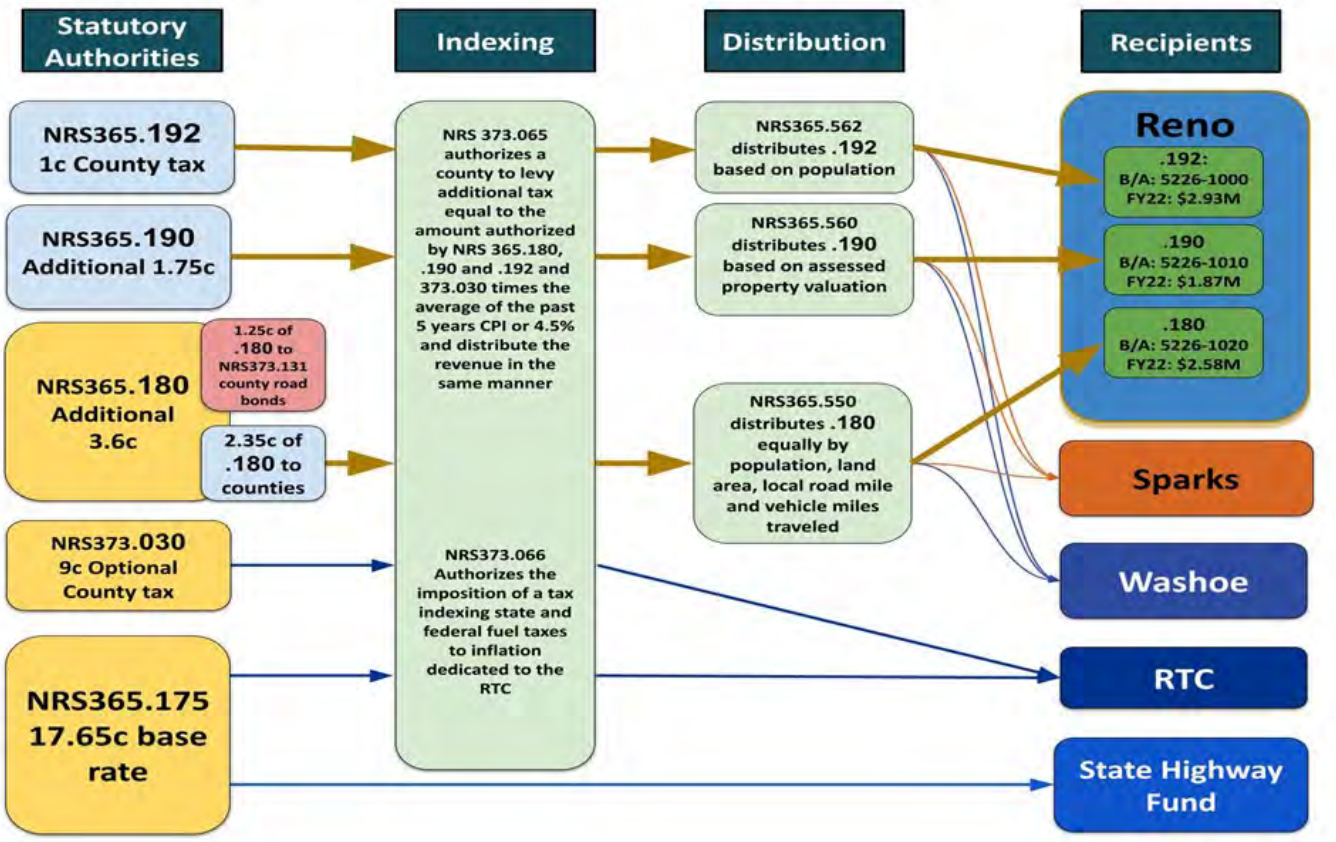


Figure 9. Nevada MVFT Tax Statutory Streams

Figure 10 summarizes Washoe County taxes paid per gallon of gas as of FY2023 – 2024. The total tax rate across all statutory authorities was $0.93313 per gallon. The PPI stream comprised 41.2% of the total, the largest share across the authorities, followed by Federal (19.8%) and State (19.7%).

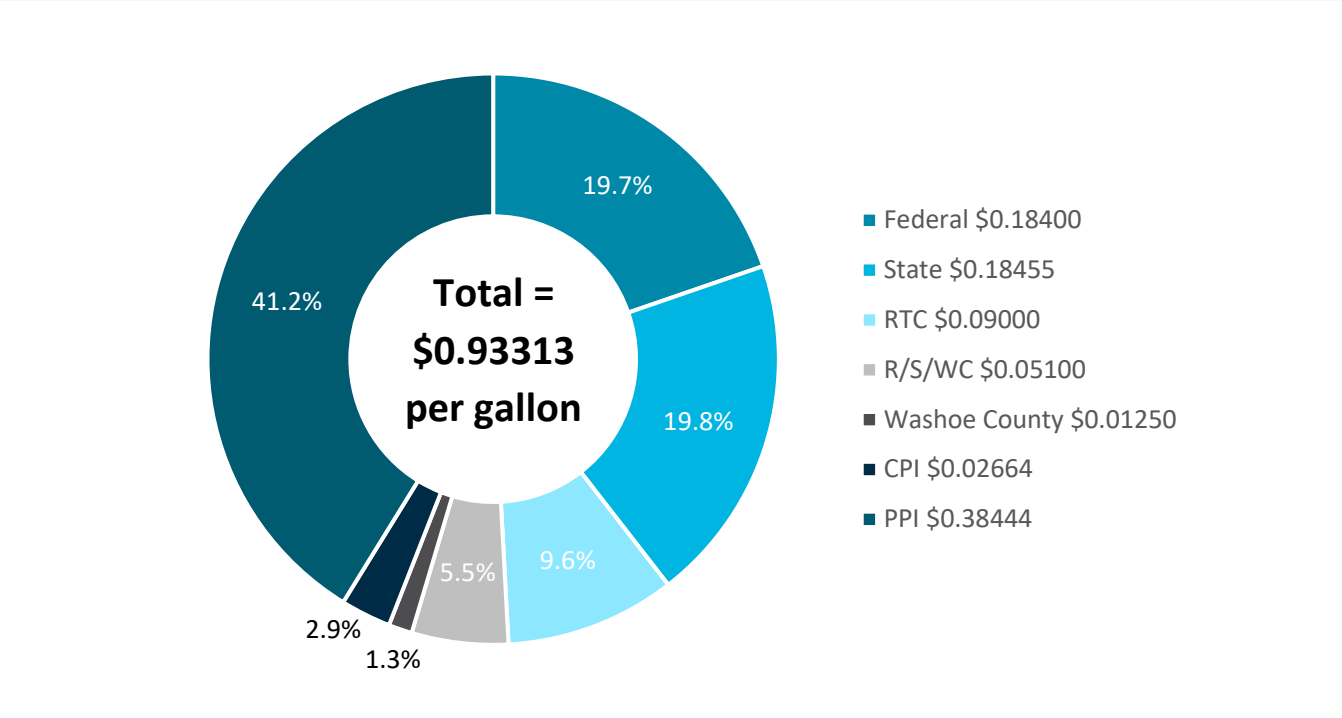


Figure 10. Washoe County Taxes Paid per Gallon of Gas for FY2023 – 2024

5.1.2 RTC Motor Vehicle Fuel Tax Revenue

MVFT revenue generated to the RTC is based on NRS373.030, including base, CPI, and PPI. RTC also receives funding from PPI on State/Federal Rates and on Special Fuels. The fuel tax revenue allocated to RTC increased substantially year-over-year between FY2014 and FY2019, reaching the largest amount on record in FY2019 (Figure 11). The average annual increase during that time was 13.0%. As a result of reduced vehicle miles traveled during the COVID-19 pandemic, the RTC's revenue stream from the fuel tax decreased between FY2019 and FY2020 by 1.5%. Recovery occurred through FY2023 averaging an increase of 4.2% per year. RTC's $96.7 million in fuel tax revenue in FY2023 represented more than 80% of the total collected across the 4 agencies. Additionally, MVFT comprises 93.0% of the total revenue allocated for street and ITS maintenance and repair for the RTC.

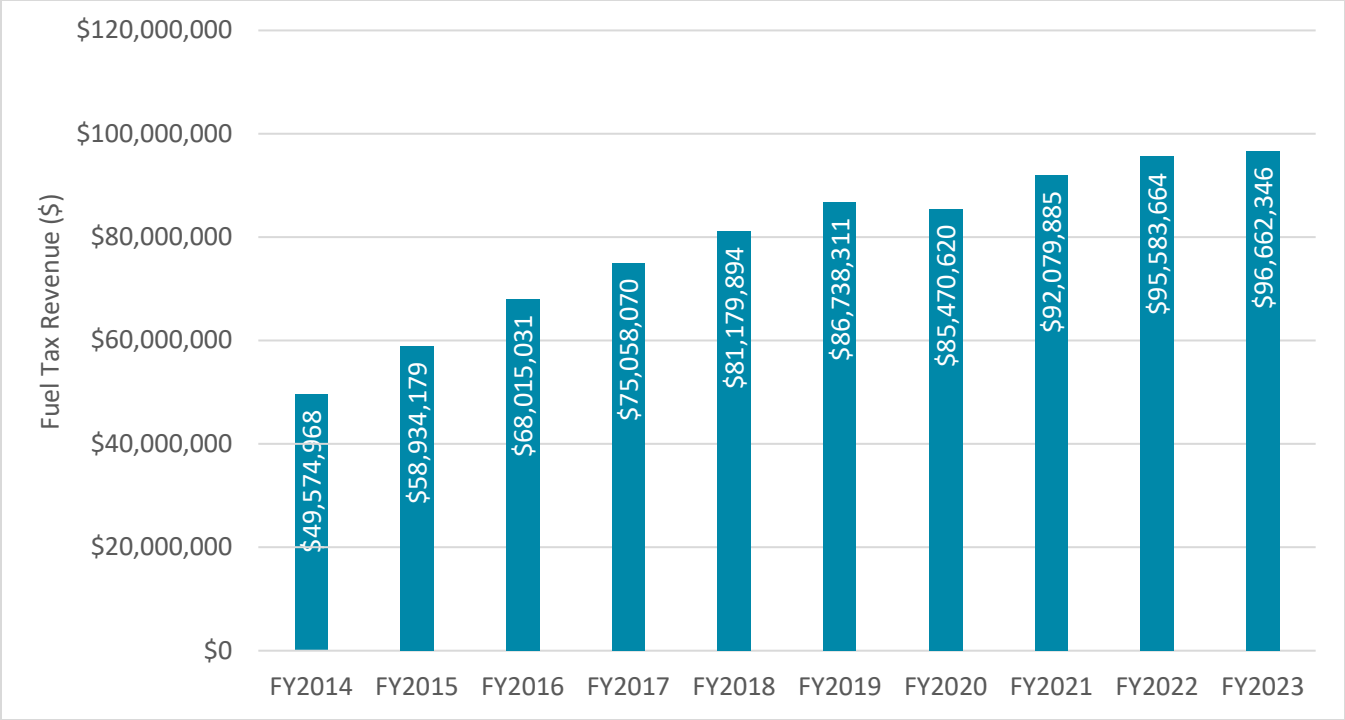


Figure 11. RTC MVFT Revenues for FY2014 – 2015 through FY2023 – 2024

5.1.3 Washoe County Motor Vehicle Fuel Tax Revenue

Figure 12 demonstrates the revenues associated with the MVFT for Washoe County between FY2014 and FY2023. The graph breaks the revenue streams down between NRS365.192 ($0.01), NRS365.190 ($0.0175), and the county portion of NRS365.180 ($0.0235), and the $0.0125 revenue stream allocated to county road bonds. In total, in FY2023 Washoe County received more than $10.6M from the MVFT. The impact of reduced travel during the COVID-19 pandemic is apparent in the graphic, with a decrease in total revenue shown in FY2020. As of FY2023, the total revenue has exceeded the total in FY2019, demonstrating recovery to pre-pandemic levels. In FY2023, the MVFT represented 65.3% of the total revenue available to fund street maintenance and repair and ITS infrastructure.

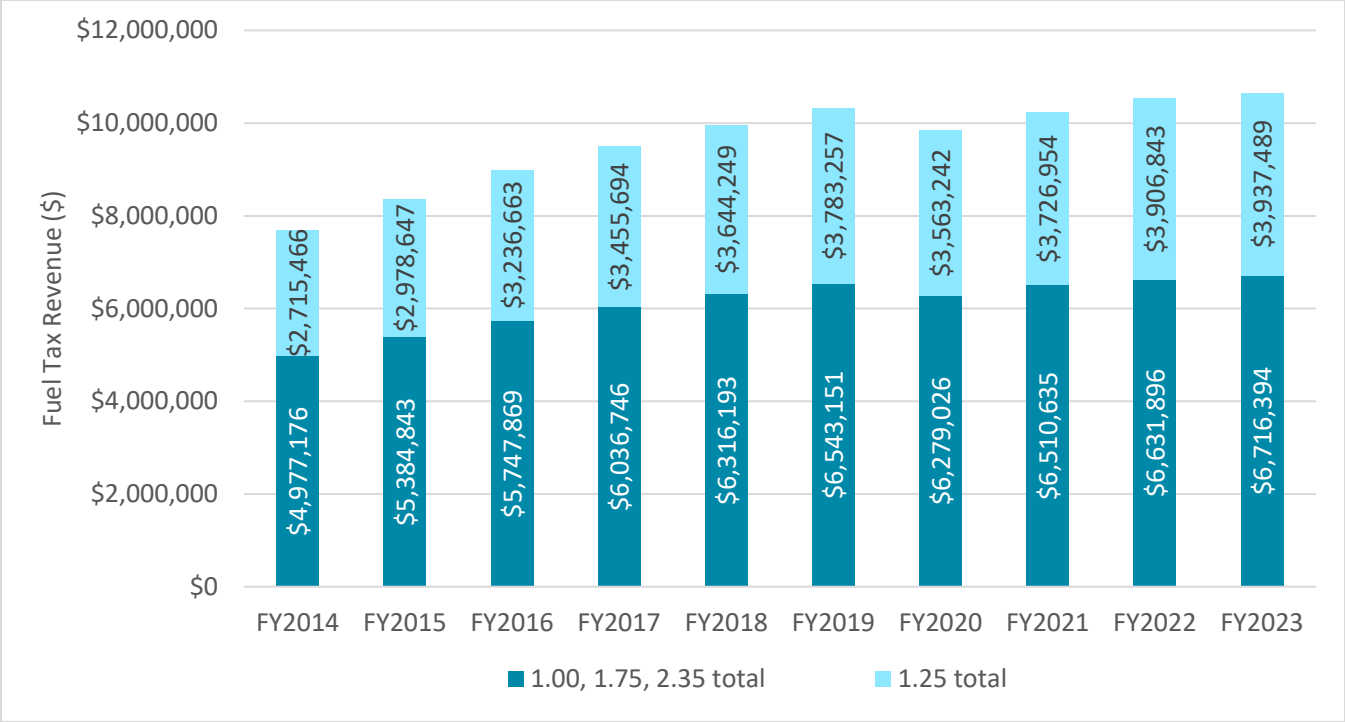


Figure 12. Washoe County MVFT Revenues for FY2014 – 2015 through FY2023 – 2024

Washoe County uses a portion of the MVFT for stormwater maintenance and repair, signage, striping, and snow removal. This generally represents about 25% of the road team professional's workload. While the cities of Reno and Sparks collect stormwater fees to pay for the maintenance of the stormwater system, Washoe County does not. This reduces the amount of funding and resources available directly for pavement and ITS repair and maintenance.

Table 17 demonstrates the total fuel tax revenue stream for Washoe County broken down by statutory authority since FY2021. A breakdown of all road fund revenue streams and expenditures is included in Appendix H. Since FY2021, NRS365.180 has typically comprised approximately 57.0% – 58.0% of the total revenue to Washoe County, followed by NRS365.190 averaged at 30.6%, and NRS365.192 at approximately 12.2%. These totals do not include the portion of NRS365.180 that is dedicated to county bonds. It should be noted that Washoe County provided data through FY2024, whereas the other 3 agencies provided data through FY2023. FY2024 is included in the table below.

Table 17. Washoe County MVFT Revenues by Statutory Authority, FY 2021-2022-FY 2024-2025

Fiscal Year	NRS365.192 ($0.01)	NRS365.190 ($0.0175)	NRS365.180 ($0.0235)	Total
FY2021	$805,300	$1,999,983	$3,705,322	$6,510,605
FY2022	$821,314	$2,028,779	$3,781,803	$6,631,896
FY2023	$809,950	$2,081,475	$3,824,969	$6,716,394
FY2024	$822,731	$2,061,102	$3,957,015	$6,840,848

5.1.4 City of Reno Motor Vehicle Fuel Tax Revenue

In FY2023, the City of Reno received nearly $7.4 million in total fuel tax revenue (Figure 13). The fuel tax revenue allocated to the City of Reno increased year-over-year between FY2014 and FY2019, reaching the largest amount on record in FY2019. Between FY2014 and FY2019, the average annual increase in MVFT increased by an average of 6.9% per year. As a result of reduced vehicle miles traveled during the COVID-19 pandemic, the City's revenue stream from the fuel tax decreased between FY2019 and FY2020 by 5.5%. Recovery occurred through FY2022 averaging an increase of 4.9% per year, however, a modest decrease of 0.5% occurred between FY2022 and FY2023. The City's $7.4 million in MVFT revenue in FY2023 represented 6.3% of the total collected across the 4 agencies.

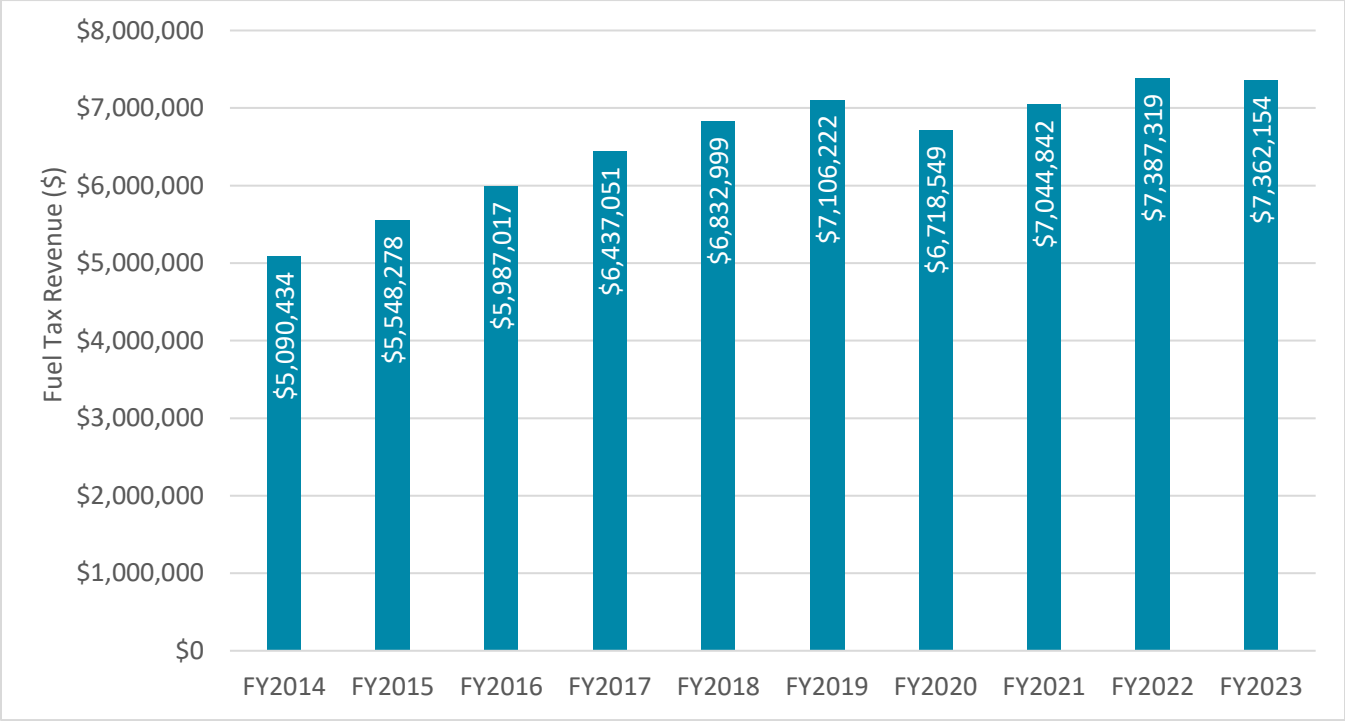


Figure 13. City of Reno MVFT Revenues for FY2014 – 2015 through FY2023 – 2024

Table 18 and Figure 14 demonstrate the total fuel tax revenue stream for the City of Reno broken down by statutory authority. Since FY2014, NRS365.190 has typically comprised approximately 39% – 40% of the total revenue to Reno, followed by NRS365.180 averaged at 34.5%, and NRS365.192 at approximately 25%.

Table 18. City of Reno MVFT Revenues by Statutory Authority, FY2014 through FY2023

Fiscal Year	NRS365.192 ($0.01)	NRS365.190 ($0.0175)	NRS365.180 ($0.0235)	Total
FY2014	$1,343,842	$2,084,199	$1,662,393	$5,090,434
FY2015	$1,451,836	$2,252,171	$1,844,271	$5,548,278
FY2016	$1,548,840	$2,382,195	$2,055,981	$5,987,017
FY2017	$1,649,543	$2,545,964	$2,241,544	$6,437,051
FY2018	$1,738,151	$2,693,955	$2,400,892	$6,832,999
FY2019	$1,803,807	$2,798,567	$2,503,848	$7,106,222
FY2020	$1,730,377	$2,705,375	$2,282,797	$6,718,549
FY2021	$1,814,272	$2,839,538	$2,391,032	$7,044,842
FY2022	$1,869,798	$2,932,706	$2,584,816	$7,387,319
FY2023	$1,867,099	$2,903,152	$2,591,903	$7,362,154

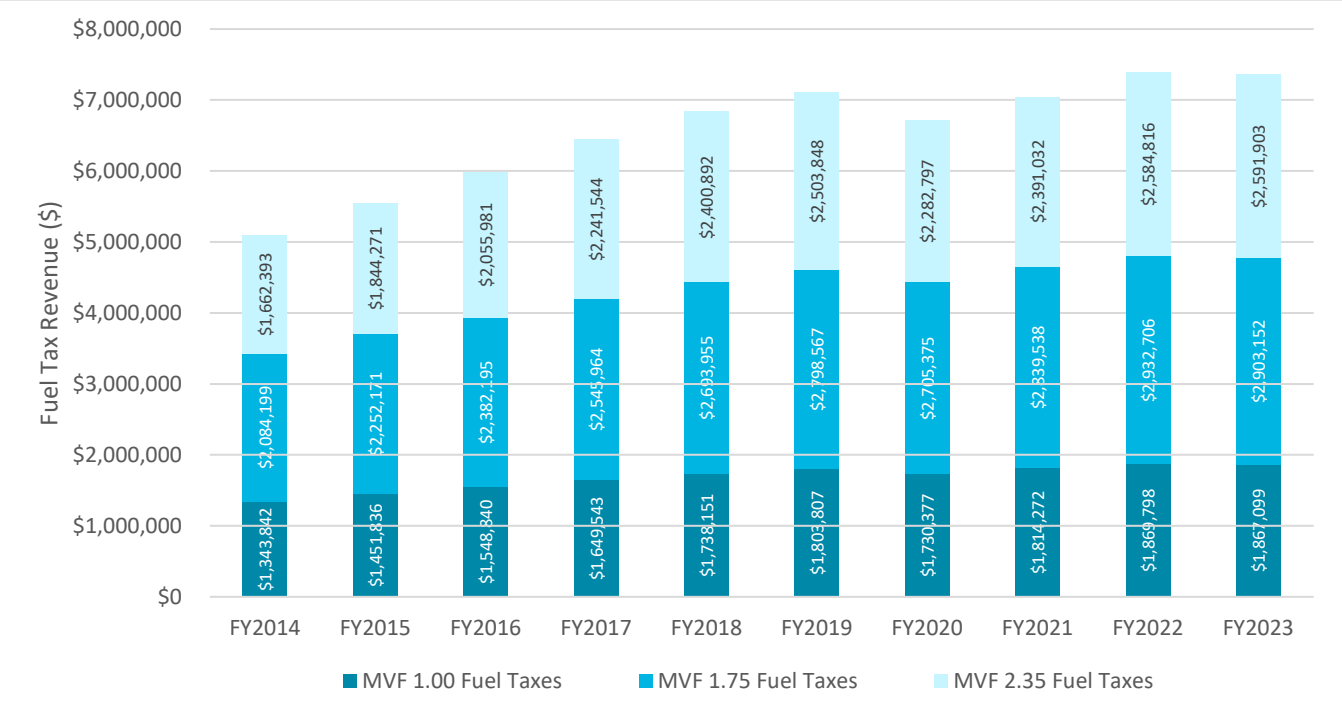


Figure 14. City of Reno MVFT Revenues by Statutory Authority for FY2014 – 2015 through FY2023 – 2024

5.1.5 City of Sparks Motor Vehicle Fuel Tax

In FY2023, the City of Sparks received over $2.9 million in total fuel tax revenue (Figure 15). The fuel tax revenue allocated to the City of Sparks increased year-over-year between FY2014 and FY2019, reaching the largest amount on record in that year. Between FY2014 and FY2019, the MVFT increased by 7.1% per year on average. As a result of reduced vehicle miles traveled during the COVID-19 pandemic, the City's revenue stream from the fuel tax decreased between FY2019 and FY2020 by 4.4%. Since FY2020, the City's fuel tax revenue has been

more sporadic, with an increase between FY2020 and FY2021, followed by a decrease in FY2022. Between FY2022 and FY2023, the City's fuel tax revenue increased by 18.0%.

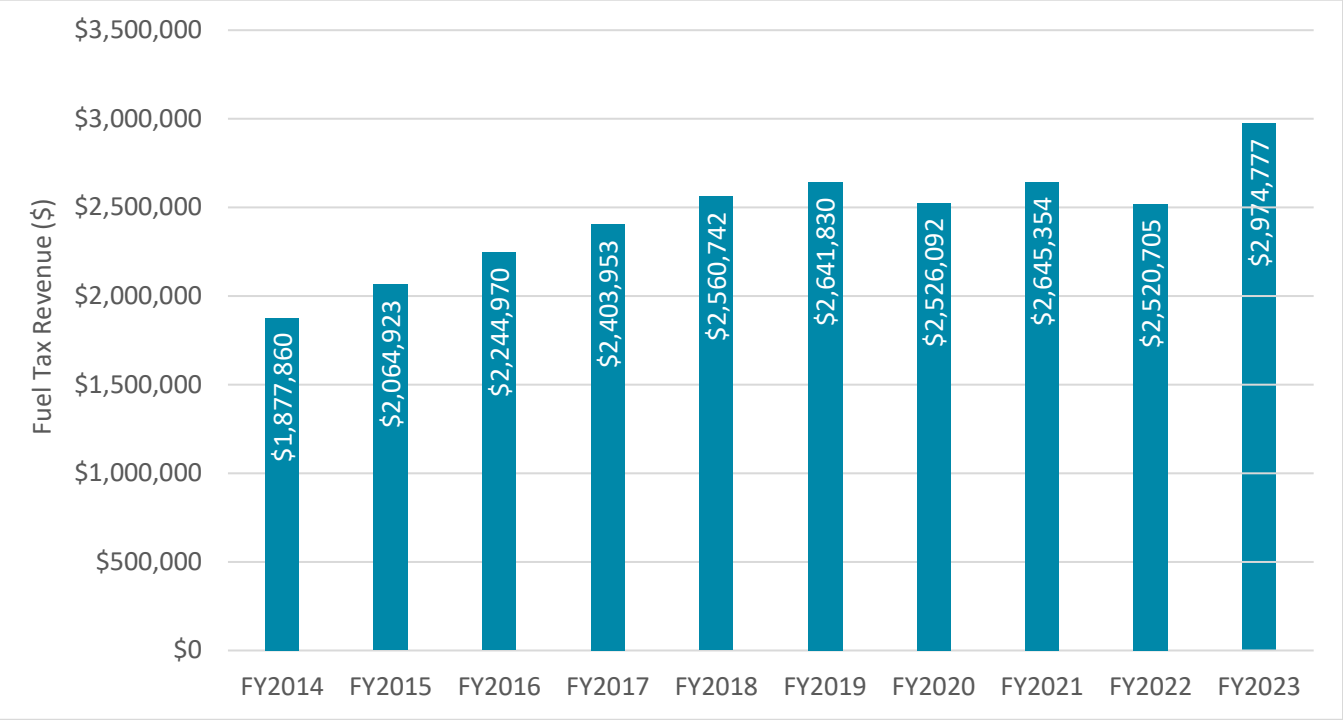


Figure 15. City of Sparks MVFT Revenues for FY2014 – 2015 through FY2023 – 2024

Figure 16 demonstrates the breakdown in MVFT revenue from each statutory authority for FY2023 – 2024. The 3 statutory authorities are relatively balanced, each providing between 27.7% and 36.5% of the total.

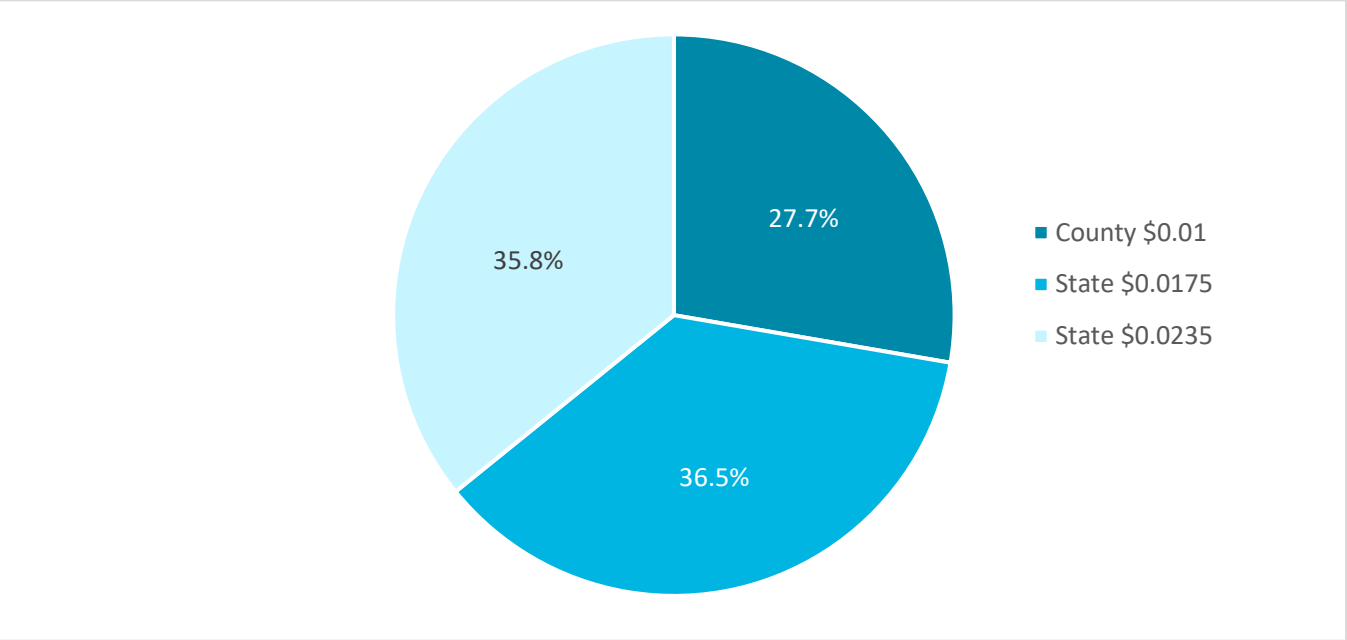


Figure 16. City of Sparks MVFT Revenue Breakdown for FY2023 – 2024

5.1.6 Motor Vehicle Fuel Tax Summary

Figure 17 compares MVFT revenue across agencies between FY2014 and FY2023. Including the funding from PPI on State/Federal Rates as well as PPI on Special Fuels, the RTC receives the largest portion of MVFT among the agencies. It should be noted the graphic below excludes the $0.0125 revenue stream allocated to county road bonds. When including that statutory authority, Washoe County receives the next largest amount, largely due to the land area portion of the allocation formula.

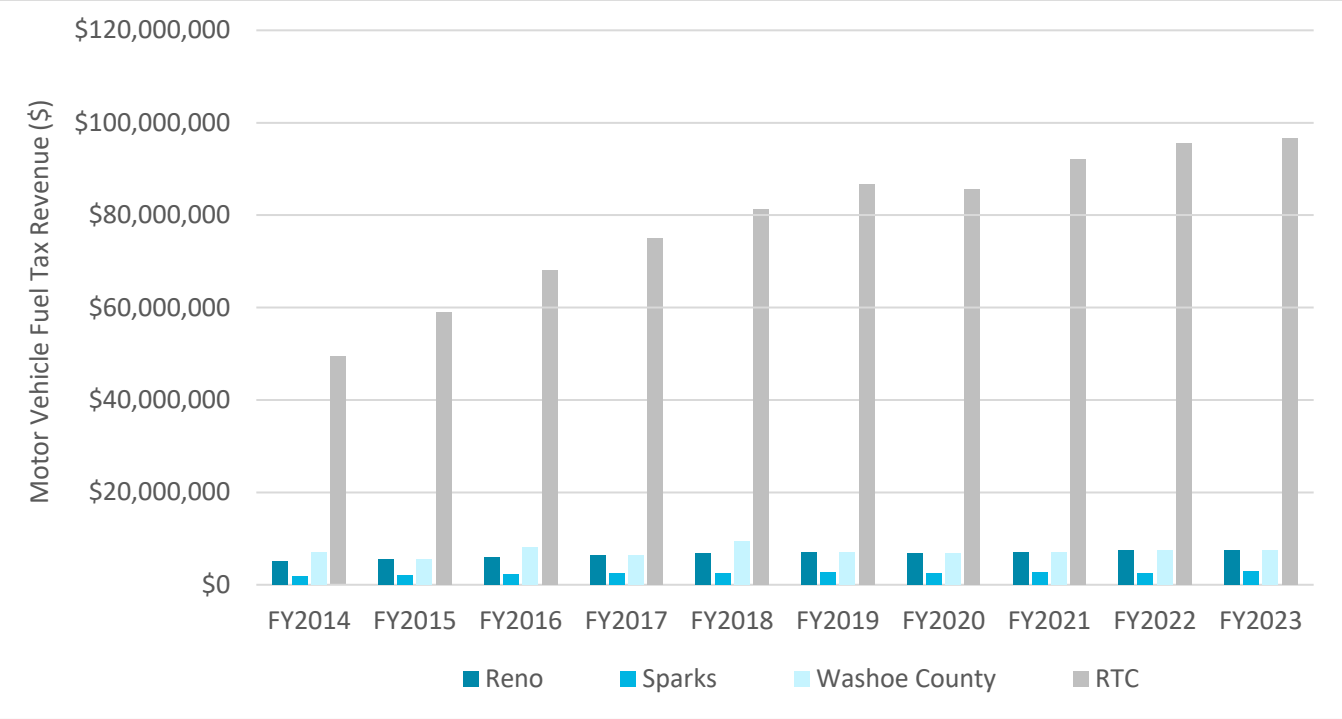


Figure 17. Annual MVFT Revenues for each Agency for FY2014 – 2015 through FY2023 – 2024

For revenue used to fund the maintenance and repair of streets and ITS infrastructure, the RTC relies the most notably on MVFT, representing 93.0% of the total revenue to that agency in FY2023 (Figure 18). Approximately 65.3% of Washoe County's revenue is from MVFT. Recall that Washoe County benefits from the allocation formula due to the comparatively large land area, which is 1 of 3 metrics considered in the calculation. MVFT represents 43.3% of the total for Sparks, and Reno's revenue is comprised of 22.1% MVFT streams, the lowest of the 4 agencies.

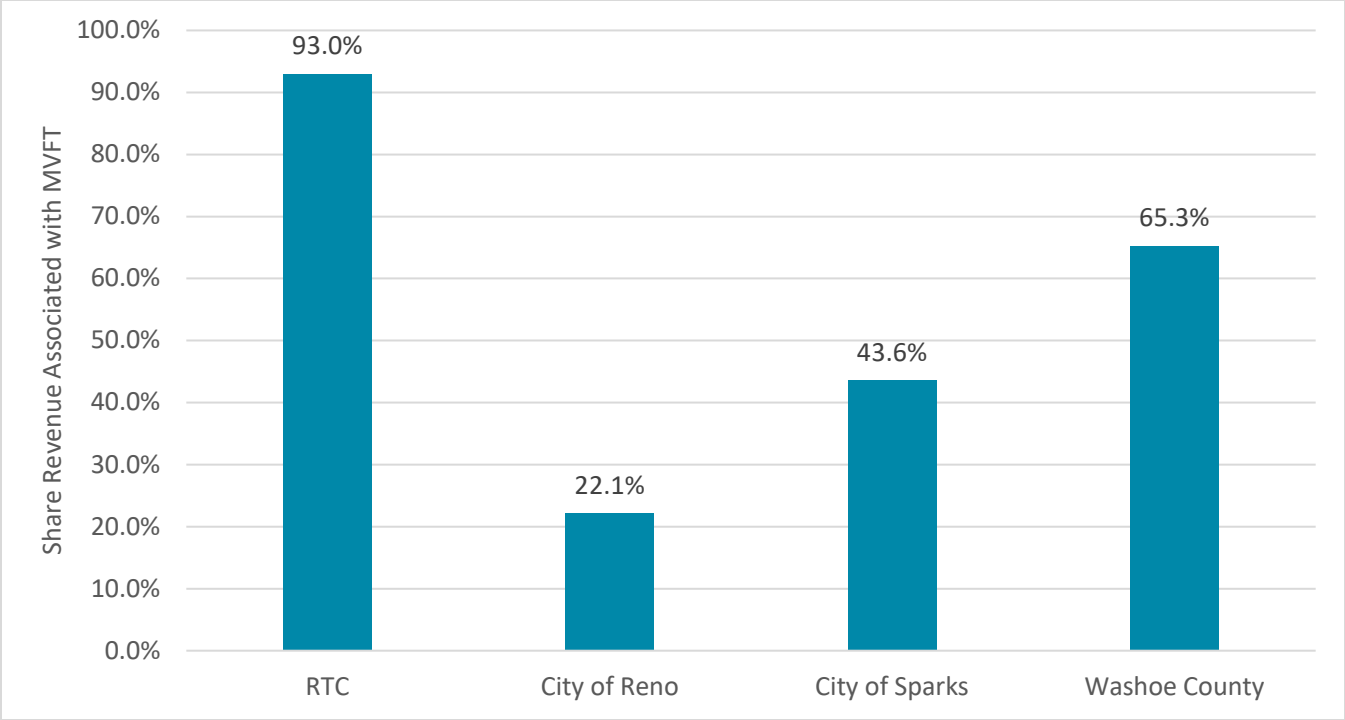


Figure 18. Shares of Revenue Associated with MVFT for FY2023 – 2024

5.2 Other Revenue Sources

Beyond the MVFT revenues, each agency supplements their maintenance funding with additional resources. A description of the type and amount of additional funding that each agency receives is provided in the following sections.

5.2.1 RTC Additional Revenue Sources

Sales Tax

Washoe County voters approved a 1/4% sales tax to help fund fixed-route and paratransit service (RTC RIDE and RTC ACCESS) in September 1982. In July 2003, an additional 1/8% sales tax was approved to help fund a combination of transit and roadways. The allocation of the 1/8% additional sales tax is flexible, but typically 1/2 is dedicated to transit and 1/2 is dedicated to street maintenance and repair, including pavement preservation. However, during the COVID-19 pandemic, transit ridership drastically declined and more of the 1/8% sales tax revenue was shifted to supporting transit than in previous years.

RTC's sales tax revenue dedicated to the street and highway program reached $7.3 million in FY2023. This represents a 66.4% increase from $4.4 million in FY2014 (Figure 19). The impact on transit ridership from the COVID-19 pandemic is apparent in the totals allocated. In FY2020, an additional $2.8 million in revenue was allocated from the sales tax revenue to support the struggling transit system.

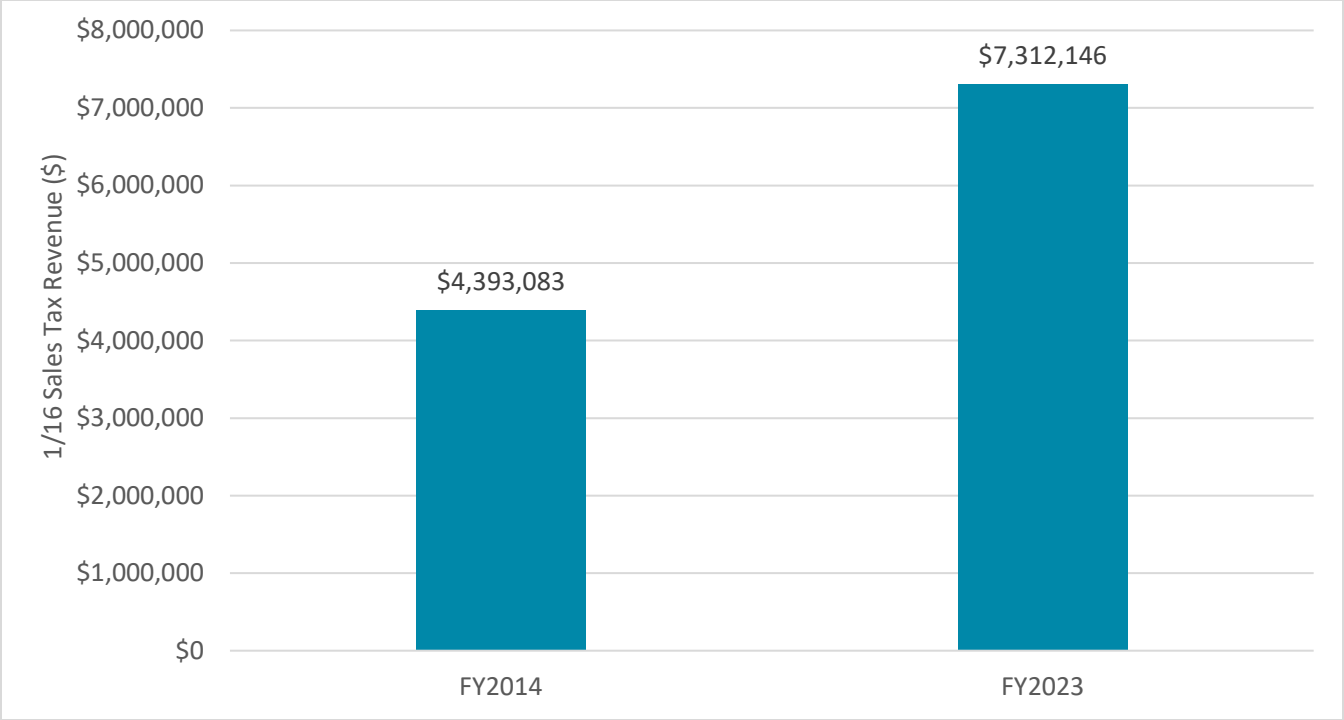


Figure 19. RTC 1/16% Sales Tax Revenues in FY2014 – 2015 and FY2023 – 2024

Regional Impact Fee (General Street and Highway Needs)

Washoe County collects Regional Road Impact Fees (RRIF) on behalf of RTC. Established in 1995, the fees are collected by the Washoe County Building Department following the issuance of a building permit and are based on the adopted impact fee schedule at that time. The purpose of the fees is to help offset the cost of increased demand on critical roadway systems in the County. Impact fees are collected in designated areas in the County and are used to support the construction of capacity improvements, such as new roads and ramps, road widening and intersection improvements, and to preserve right-of-way for future capacity. These funds are not used specifically for street maintenance and repair. In FY2023, RTC collected approximately $8.5 million in RRIF in cash and another $1.7 million in offset agreements. Note that this funding stream is not allocated specifically to the maintenance and repairs of roadways and ITS infrastructure, although a portion can be allocated towards those needs.

Investment Income (General Street and Highway Needs)

RTC invests fund balances to generate additional income for the street and highway program. Like the RRIF, these funds are not specifically dedicated to the maintenance and repair of the road network. Fund balances typically range from $100 to $200 million. In FY2023, the investment income generated revenue for the street and highway program of $2.8 million. Note this funding stream is not allocated specifically to the maintenance and repairs of roadways and ITS infrastructure, although a portion can be allocated towards those needs.

5.2.2 Washoe County Additional Revenue Sources

Washoe County has 3 additional revenue streams that are utilized to maintain and repair the street network: (1) street, curb, and gutter cuts, and allocations (transfers in) from the (2) General Fund and the (3) Capital Facilities Fund (Figure 20).

- **Street, Curb, and Gutter Cuts**: Washoe County collects fees from street, curb, and gutter cuts and allocates that revenue to street repair and maintenance. In FY2023, Washoe County collected $481,813 from this revenue source. This is a slight decrease from $660,396 in FY2014.
- **General Fund and Capital Facilities Fund Allocations**: The elected officials for Washoe County allocate a portion of the General Fund and a portion of the Capital Facilities Fund to support the repair and maintenance of streets and ITS infrastructure. These funds, while generally consistent year-over-year, are discretionary and are considered by elected officials annually. In FY2023, Washoe County allocated $1.2 million from the General Fund and $1.9 million from the Capital Facilities Fund.

Combining all 3 sources of additional revenue for street and ITS maintenance and repair, the total amount of revenue generated for Washoe County has decreased between FY2014 and FY2023. As shown in Figure 20, a decrease in the amount transferred from the General Fund is the primary reason the total amount declined during that time frame. Table 19 shows the total over the last four fiscal years.

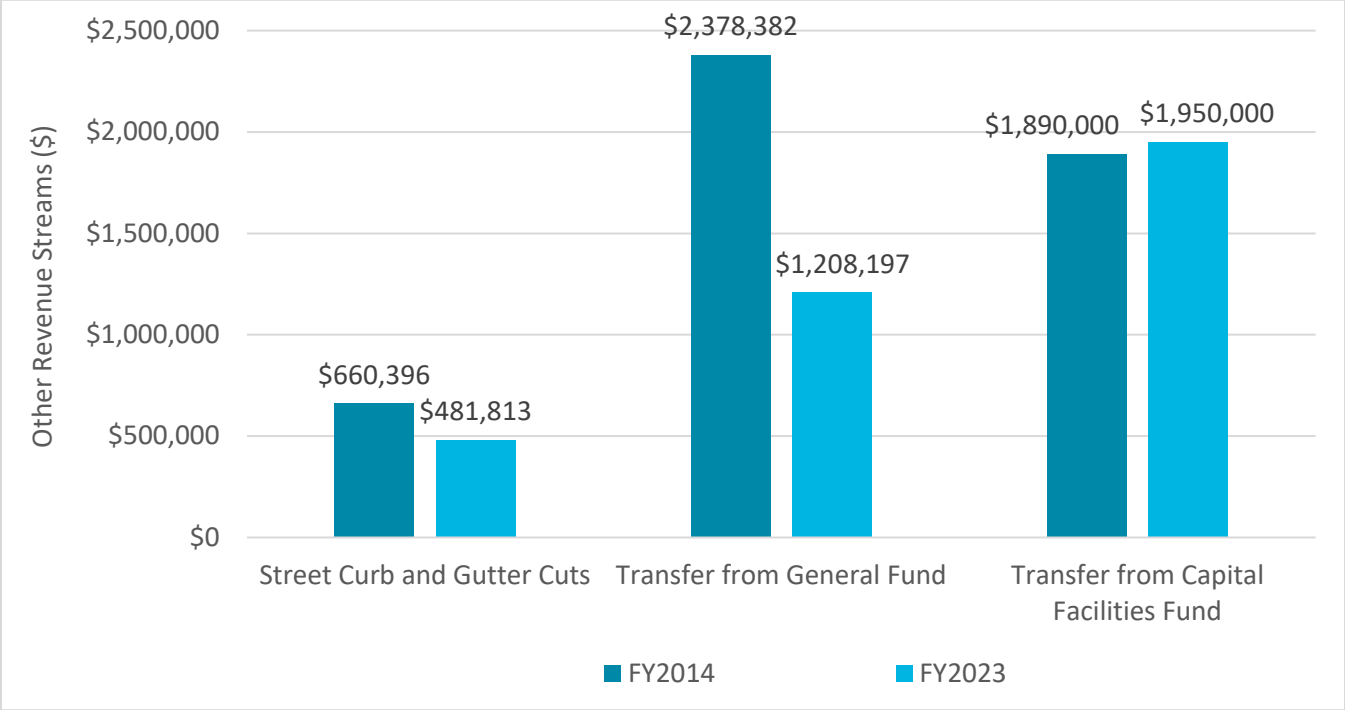


Figure 20. Washoe County Other Revenue Streams in FY2014 – 2015 and FY2023 – 2024

Table 19. Washoe County Other Revenue Streams for FY2021 – 2022 through FY2024 – 2025

Fiscal Year	Street Curb and Gutter Cuts	General Fund	Capital Facilities Fund	Total
FY2021	$572,625	$1,073,620	$1,950,000	$3,596,245
FY2022	$429,902	$2,879,305	$1,950,000	$5,259,207
FY2023	$481,812	$1,208,197	$1,950,000	$3,640,009
FY2024	$808,854	$2,496,267	$1,950,000	$5,255,121

Revenue associated with street, curb, and gutter cut fees decreased by 15.9% from FY2021 to FY2023. Revenue allocated from the General Fund increased by $134,577 during that time period. For both streams, a strong increase was experienced between FY2023 and FY2024.

It should be noted revenue allocated from the General Fund is related to needs communicated as part of the Capital Improvement Plan. Since FY2021, revenue in this stream ranged from nearly $1.1 million in FY2021 to $2.9 million in FY2022. The FY2024 allocated amount was nearly $2.5 million. The transfer from the Capital Facilities Fund remains more consistent; between FY2021 and FY2024 the allocation has remained the same.

5.2.3 City of Reno Additional Revenue Sources

The City of Reno also collects revenue that supports ongoing pavement and ITS maintenance from 3 additional sources beyond the MVFT: ad valorem (property tax override), excavation and encroachment permits, and Truckee Meadows Water Authority (TMWA) right-of-way tolls. It should be noted the property tax override represents the largest revenue stream that addresses street and ITS maintenance and repair for the City of Reno. While the MVFT represents 22.1% of the total revenue available, the property tax override represents 66.8%.

- **Ad Valorem (Property Tax Override)**: In 1993, the City of Reno citizens approved via voter referendum that a portion of the ad valorem property tax revenue be allocated specifically to street maintenance and repair (acquiring, constructing, reconstructing, improving, and maintaining city streets). This is the largest source of revenue available to the City of Reno to fund street maintenance and is notably larger than the MVFT. The allocation is $0.2298 per $100 in assessed property valuation. In FY2023, the property tax override allocated to street maintenance and repair resulted in revenue generation of $22.2 million. The property tax override is currently approved through 2038. If another voter approval fails to extend the override, the City would lose a critical share of financial resources supporting the maintenance and repair of City streets.
- **Excavation and Encroachment Permits**: The City of Reno also allocates revenues generated through applications for excavation and encroachment permits to street maintenance and repair. These permits are focused on work that is performed within the City of Reno right-of-way. In FY2023, the City of Reno generated $501,467 in revenue from this source. This source does not exclusively fund street maintenance and repair; some of the revenue is dedicated to administration of the excavation and encroachment program.
- **TMWA Right-of-Way Tolls**: A third source of additional revenue to support street repair and maintenance is from the TMWA right-of-way tolls, also known as franchise fees. This is a pass-through fee imposed by a local government entity on utility and cable television companies for the right to have

utility infrastructure located within the right-of-way of City of Reno streets. The fee is defined as 5% of the water charge. In FY2023, right-of-way tolls generated nearly $3.2 million in revenue for the City of Reno.

Across all 3 sources, the amount of revenue generated for the City of Reno has increased between FY2014 and FY2023 (Figure 21). Each of the sources highlighted in this section are variable: the property tax override increases by the pace of development and overall valuation of properties in the City of Reno, excavation and encroachment permits can be influenced by the pace of development but also by necessary work performed in the public right-of-way (could include replacement or capacity projects), and TMWA water tolls are influenced by new development and weather patterns. The property tax override increased from $13.3 million in FY2014 to more than $22.2 million in FY2024, a 67.2% increase. Excavation and encroachment permit revenue increased by more than 218.1% during that same time frame, and TMWA right-of-way tolls increased by 23.4%. Again, it's important to note Reno's property tax override is set to sunset in 2038. Without reauthorization, the City could lose a substantial portion of their funding for street maintenance and repair.

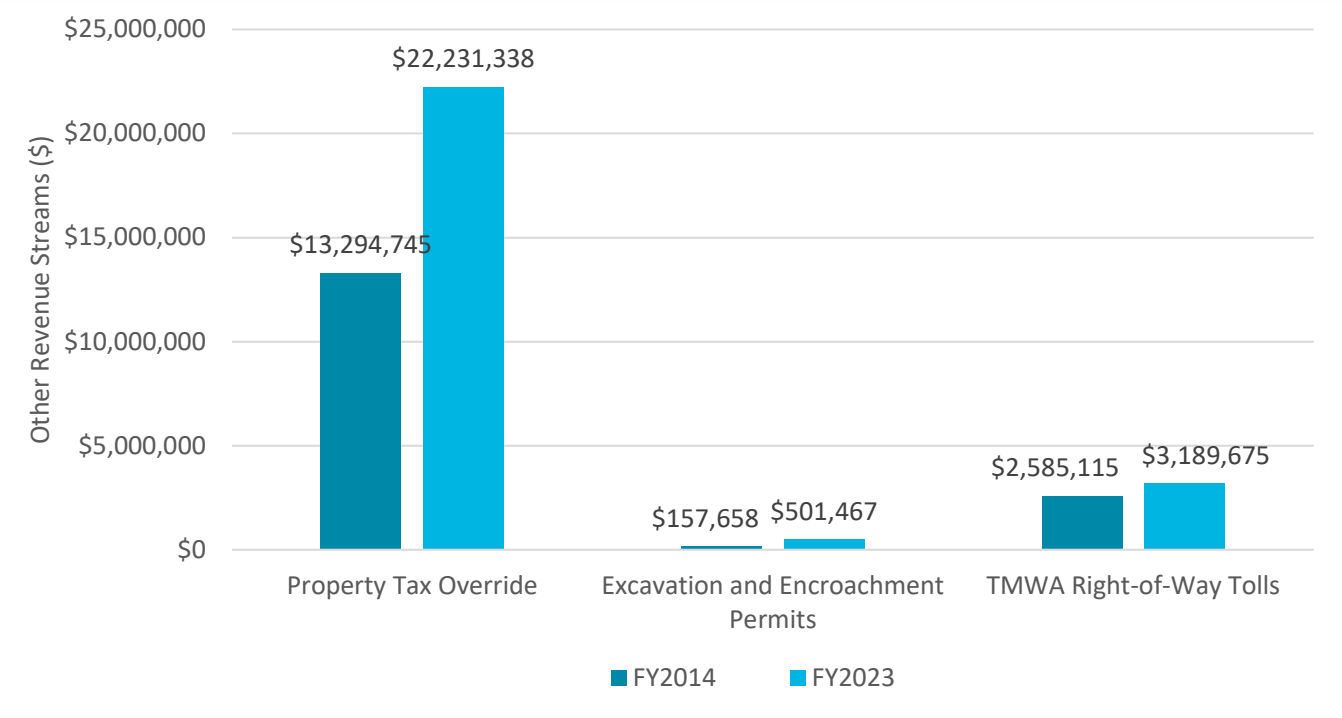


Figure 21. City of Reno Other Revenue Streams in FY2014 – 2015 and FY2023 – 2024

5.2.4 City of Sparks Additional Revenue Sources

The City of Sparks also collects revenue that supports ongoing pavement and ITS maintenance from 3 sources beyond the MVFT: TMWA right-of-way tolls, NV Energy-Electric, and NV Energy-Natural Gas, all franchise fees. It should be noted in Figure 22, electric and natural gas franchise fees have been combined.

- **TMWA Right-of-Way Tolls**: The City of Sparks collects additional revenue to support street repair and maintenance from the TMWA right-of-way tolls, also known as franchise fees. This is a pass-through fee imposed by a local government entity on utility and cable television companies for the right to have

utility infrastructure located with the right-of-way of City of Sparks streets. The fee is defined as 5% of the water charge. In FY2023, the City of Sparks collected $511,425 in TMWA right-of-way tolls.

- **NV Energy-Electric and Natural Gas:** Revenue from electric and natural gas franchise fees are dedicated to street maintenance and operations by the City of Sparks. In FY2023, the City collected $3.3 million across the 2 franchise fee types, with electric representing nearly 3/4 of the total. It should be noted that franchise fees can be redirected at the direction of the Sparks City Council. Not all of this stream is automatically dedicated to street, pavement, and ITS repairs and maintenance. As an example, in 2017 the Council redirected this stream for 1 annual period to achieve goals for the parks system.

Across both sources, the amount of revenue generated for the City of Sparks has increased between FY2014 and FY2023 (Figure 22). Both of these sources, which can be used for street maintenance and repair, are notably influenced by the pace of development in the community. The TMWA right-of-way tolls decreased slightly between FY2014 and FY2023, from $690,000 to $511,425. However, offsetting that decrease, the 2 franchise fees associated with NV Energy (Electric and Gas) increased by 57.4% during the same period. These 2 sources generated a combined total revenue of $3.8 million for the City of Sparks.

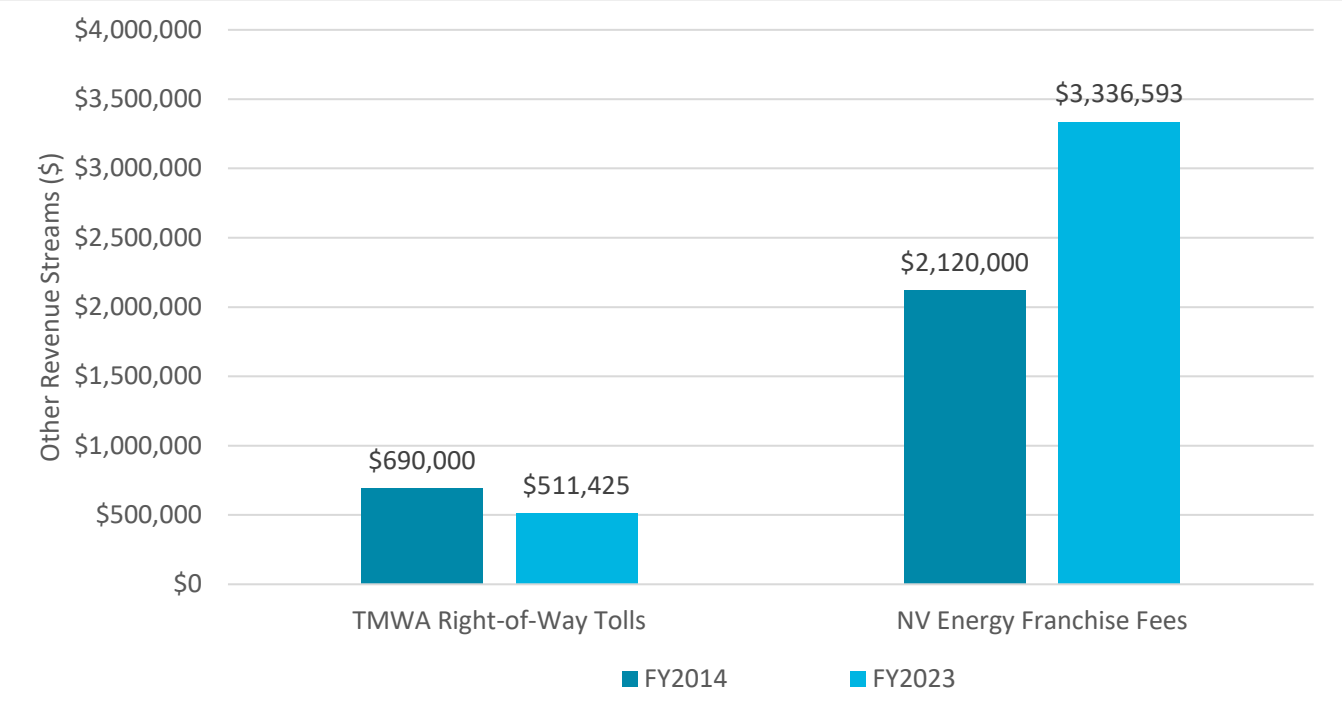


Figure 22. City of Sparks Other Revenue Streams in FY2014 – 2015 and FY2023 – 2024

5.2.5 Additional Revenue Sources Summary

Figure 23 compares the distribution of revenue for the MVFT and other additional sources for all 4 agencies. The RTC data does not include the revenue streams from CPI or PPI and Washoe County does not include the MVFT that is allocated to the road bonds. The RTC has the smallest share of revenue associated with non-MVFT funding streams, relying only on the 1/16% sales tax revenue for additional sources. The City of Reno, however, relies heavily on the property tax override to fund street and ITS infrastructure maintenance and repair,

offsetting more than 2/3 of the total revenue. The City of Sparks and Washoe County are more balanced between the MVFT and the additional sources to fund these needs.

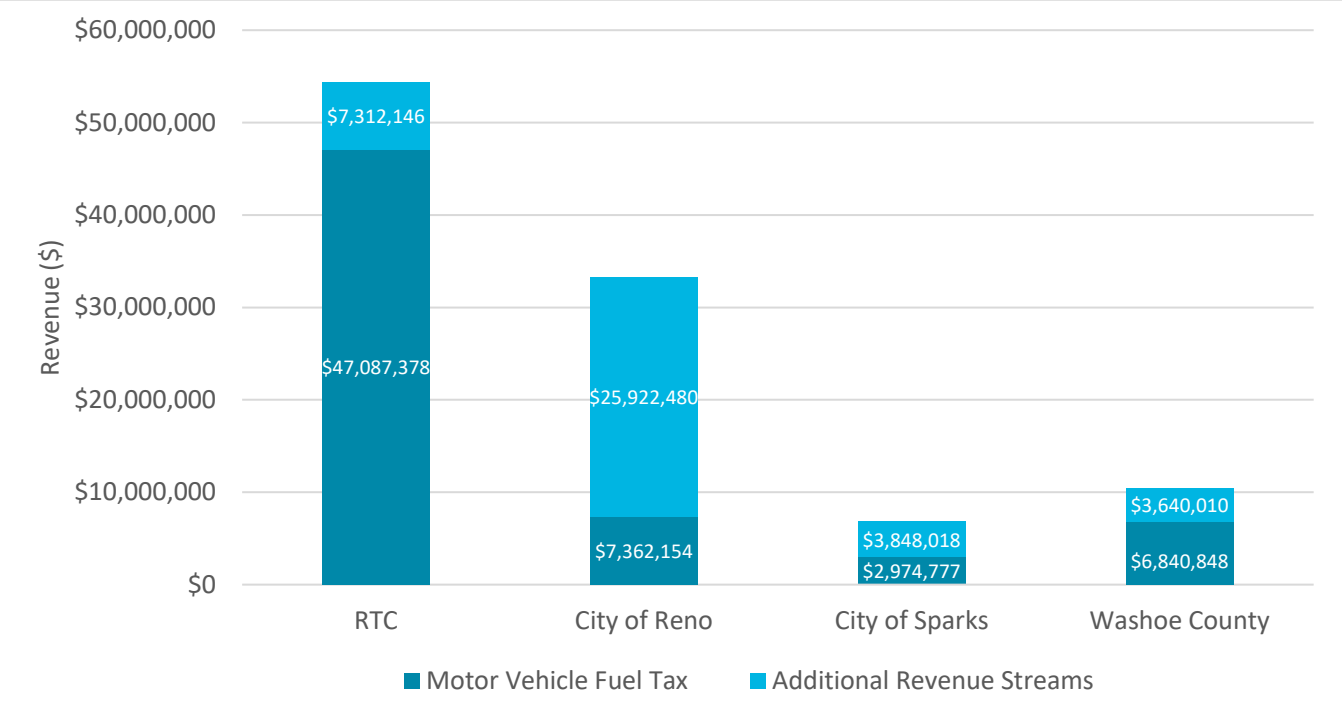


Figure 23. Comparison of Revenue Streams for each Agency for FY2023 – 2024

6 Normal Operation and Maintenance

Normal operations and maintenance, including patching and crack sealing, snow removal, street sweeping, landscaping, lighting, sidewalks, signage, striping, etc., are performed by local agencies. Consequently, there is no asset inventory or management system in place at RTC. This section will focus on the normal operation and maintenance practices, associated needs and funding, as well as the shortfall identified between the needs and budget required for maintaining pavement and assets.

6.1 Normal Operation and Maintenance Practices

The City of Reno has implemented the asset management system Streetscape to collate pedestrian ramp locations, sidewalk inventory, sidewalks discontinuity points, sidewalk obstruction points, landscaped median information, and parking meter information in GIS format, and also maintains a CAD file containing traffic striping information. The maintenance records for the City of Reno are tracked and stored using both MaintStar and ServiceNow, with plans to transfer to ServiceNow in 2025 and Elements XS in 2026.

The City of Sparks uses MaintStar to maintain its asset inventory and track operation and maintenance records. However, only parts of existing asset maintenance records and inventory are saved in the City's MaintStar database. Washoe County maintains its inventory, including curb, ditch, drainage structure, lighting, manhole, storm water, pipe, road striping, and signs, up to date using GIS and manages operation and maintenance records through Computerized Maintenance Management System (CMMS) Asset Essentials.

Regarding maintenance frequencies, Washoe County specifies regular schedules for the maintenance of drainage assets, including ditches, drainage structures, and pipes, typically on a 5-, 10-, or 15-year basis. The City of Sparks's asset maintenance is influenced by the availability of funding and City staff, and asset maintenance in assigned areas may take 1 to 5 years to complete. The City of Reno adopts a seasonal approach to maintenance work. For example, crack sealing is performed in the fall and winter, while wide crack repair, surface sealing, and overlay are scheduled for spring and summer.

Table 20 summarizes the operation and maintenance prioritization methods adopted by these agencies. The City of Reno prioritizes its asset maintenance activities through an annual programming that considers seasonal work requirements and prioritizes emergency repairs based on their potential threat to public safety or property. The City of Sparks focuses on key factors such as hazards, public safety, known maintenance issues, and regular maintenance practice. In areas where there is adequate staffing, the City of Sparks performs inspection-based plans and prioritizes operation and maintenance activities based on inspection findings. Washoe County prioritizes its operation and maintenance activities using risk calculations evaluated by supervisor districts. The distribution of resources varies on demand and is based on the number of assets in each district. Each agency adopts a unique approach to prioritizing operation and maintenance activities and the variation in strategies reflects differences in resources and organizational priorities.

Table 20. Operation and Maintenance Prioritization Methods by Jurisdiction

Jurisdiction	Prioritization Method	Key Factors Consideration
Reno	Annual programing	Seasonal work requirements
Sparks	Inspection-based planning (where staffing is adequate)	Hazards, public safety, known maintenance issues, and regular maintenance practice
Washoe	Risk calculations evaluated by supervisor districts	Distribution of resources, number of assets

6.2 Normal Operation and Maintenance Needs and Funding

The normal operation and maintenance needs and funding information provided by agencies variously. Washoe County focuses on the maintenance of ditches, drainage structures, and pipes that are essential for stormwater management. The existing annual budget for these assets is $875,000, while the CIP needs are $5.2 million provided by the County. This highlights a significant gap, as the budget falls considerably short of meeting the CIP requirements. The City of Reno's adopted annual budget for normal operation and maintenance in 2025 is $25.3 million. This budget includes 3 main components: the general fund, the street fund, and 35% of the sewer fund, but does not include public works maintenance expenses such as slurry seal performed by contractors. The City of Sparks indicated that only a portion of existing asset maintenance record and inventory was stored in the City's MaintStar database, but no detailed inventory or funding information was provided by the City.

The above observation reveals a significant deficiency in the management of assets, which are essential safety and traffic components of transportation networks. The maintenance and rehabilitation of these essential components are integral to pavement M&R projects and may account for approximately 30%[9] of the total transportation asset needs. To ensure a reliable and well-maintained road system, it is essential to develop a comprehensive inventory of these assets and associate them with their corresponding pavement sections. This system should include detailed documentation of all assets, their locations, conditions, and maintenance histories. Additionally, integrating regular inspections and data updates into the inventory system will improve tracking of asset performance and needs estimation. This will ensure the efficient management of the entire transportation system.

6.3 Shortfall

Table 21 summarizes the needs and budget for pavement and normal operation and maintenance from Section 3.3 and Section 6.2. To compare with the 10-yr pavement needs, the paving budgets from Section 3.3 are multiplied by 10 to project the 10-yr estimated budget.

[9] NCE. 2023. *California Statewide Local Streets and Roads Needs Assessment (Final Report)*. www.SaveCaliforniaStreets.org.

Table 21. Summary of Needs and Budget

Item		Maintenance Agency			
		RTC: RTP Roads	Reno: non RTP	Sparks: non RTP	Washoe: non RTP
Pavement	10-yr Needs	$529.2 million	$922.6 million	Not available	$98.8 million
	10-yr Estimated Budget	$225.0 million	$115.0 million	$40.0 million	$29.0 million
	10-yr Shortfall	-$304.2 million	-$465.9 million	Not available	-$69.8 million
Normal Operation and Maintenance	CIP Needs	Not available	Not available	Not available	$5.2 million (Stormwater)
	Budget	Not available	$25.3 million	Not available	$875,000 (Stormwater)
	Shortfall	Not available	Not available	Not available	-$4.3 million (Stormwater)

Shortfalls for pavement and asset needs are identified by the numbers in the table. The City of Sparks has not set up treatment strategies and unit costs in PAVER and did not provide information associated with pavement needs, so no corresponding data is available in the table. In addition, only the Washoe County provided existing budget and CIP needs for stormwater assets, limiting the identification of partial shortfalls in asset management to the County. It was observed there are significant shortfalls in pavement maintenance and rehabilitation works . Addressing these shortfalls and ensuring sufficient resources are available should be a key next step for agencies to consider.

6.4 Summary

The City of Reno has implemented the asset management system Streetscape to collate asset locations in GIS format and maintains a CAD file containing traffic striping information. The maintenance records for The City of Reno are tracked and stored using both MaintStar and ServiceNow. The City of Sparks uses MaintStar to maintain its asset inventory and track operation and maintenance records. Washoe County keeps its inventory up to date using GIS and manages operation and maintenance records through Asset Essentials.

Washoe County schedules drainage asset maintenance on a 5-, 10-, or 15-year basis and prioritizes activities using risk calculations based on supervisor district evaluations and resource distribution. The City of Sparks prioritizes street selections by considering hazards, public safety, and known maintenance issues. The City of Reno follows an annual program influenced by seasonal work requirements. Each agency adopts a unique approach to prioritizing operation and maintenance activities, and the variation in strategies reflects differences in resources and organizational priorities.

Washoe County focuses on the maintenance of ditches, drainage structures, and pipes that are essential for stormwater management. The existing annual budget for the above assets is $875,000, and the CIP needs for stormwater system are $5.2 million. The City of Reno's adopted annual budget for normal operation and maintenance in 2025 is $25.3 million. This budget includes 3 main components: the general fund, the street fund, and 35% of the sewer fund, but does not include public works maintenance expenses such as slurry seal performed by contractors. The City of Sparks indicated that only a portion of existing asset maintenance record

and inventory was stored in the City's MaintStar database. However, no information related to asset needs or available funding resources was provided.

7 Summary and Recommendations

7.1 Project Summary

Roadways play a crucial role in transportation systems and are an essential component of the traveling public's safety. As a part of the RTC's mission to build a better community through quality transportation systems, the RTC has established this study to identify and summarize current pavement maintenance, ITS infrastructures, financial and funding sources, and normal operation and maintenance practices. This data will offer the RTC insights supporting planning and delivery of roadway projects in a fair, equitable, and fiscally responsible manner, promoting the long-term sustainability of the roadway system.

7.1.1 Pavement Maintenance

The cities of Reno and Sparks, and Washoe County have used PAVER as their PMP since the 1980s. From the late 1990s to early 2000s, the RTC extracted the RTP road data from local agencies' PAVER databases for pavement management purposes. In 2023, RTC integrated this data into StreetSaver. Washoe County maintains the largest network of non-RTP roads, followed by the cities of Reno and Sparks, while the RTC maintains the RTP roads. Agencies utilize ASTM D6433[3] distress protocols for pavement inspection updates. RTC engages consultants to update pavement condition data for the entire RTP network every 3 years. For non-RTP roadways, 1/3 of the network is inspected and updated annually by each agency. Current average network PCIs for RTC and each agency are all exceed 70, with the RTP roads having the highest PCI and Washoe County's non-RTP roads the lowest. Surface seals are the predominant treatment for all agencies to maintain network PCI. The RTC allocates approximately $50K/mile annually for pavement M&R, followed by the City of Reno at $22K/mile, City of Sparks at $15K/mile. However, due to the funding constraints, Washoe County only has an annual budget of approximately $4K/mile for roadway surface sealing and rehabilitation.

7.1.2 ITS Infrastructure

There are 418 signalized intersections in the Washoe County region which are owned by either the City of Reno, City of Sparks, Washoe County, or NDOT. Interlocal agreements between the local agencies allow the cities of Reno and Sparks to operate and maintain all of the region's signals. The RTC funds the region's Signal Timing program.

7.1.3 Financial & Funding Sources

Each agency receives funding from various revenue streams to support roadway maintenance, some of which are dedicated and some of which fluctuate from year to year. All agencies receive dedicated funding from the MVFT, with the RTC receiving the largest allotment from this fund ($96,662,346 in FY2023 including CPI and PPI). Including revenue associated with road bonds, Washoe County receives the second largest allocation at more than $10.0 million, largely due to land area, which is factored into the allocation formula. The cities of Reno and Sparks received $7.3 million and $3.0 million, respectively, in FY2023. Across all agencies, vehicle efficiency was noted as a potential threat to future funds, as the amount of gas that modern vehicles require declines.

The agencies have had to identify additional funding streams as needed to help offset the cost of roadway maintenance. These sources are typically variable year-over-year and are often influenced by property valuation, the amount of development, or the weather. The RTC receives funds from a 1/16% cent sales tax that

supplements MVFT revenue. Washoe County receives additional funding from curb and gutter cuts, and transfers from the County's General and Capital Facilities Funds. The Capital Facilities Fund has been the next steadiest source of roadway funding following the MVFT. The largest portion of the City of Reno's road funds come from the property tax override, which is currently set to terminate in 2038. The sunset of the override would present significant funding shortfalls for repairs and maintenance in the City. Reno also supplements its roadway funds with TMWA right-of-way tolls and excavation and encroachment fees. The City of Sparks receives most of its maintenance funding through the combination of the MVFT and NV Energy franchise fees. Sparks also supplements its funding with TMWA right-of-way tolls.

7.1.4 Operations and Maintenance

Normal operations and maintenance, including patching and crack sealing, snow removal, street sweeping, landscaping, lighting, sidewalks, signage, striping, etc., are performed by local agencies. Each agency has different software or system to monitor existing inventory, condition or repair records. The City of Reno uses Streetscape to map assets in GIS, stores traffic striping data in CAD, and tracks maintenance records with MaintStar and ServiceNow, but is planning to transition to Elements XS in 2026. The City of Sparks uses MaintStar for asset inventory and maintenance tracking. Washoe County updates its inventory through GIS and manages operation via Asset Essentials. Each agency adopts a unique approach to prioritizing operation and maintenance activities, and the variation in strategies reflects differences in resources and organizational priorities. Washoe County focuses on the maintenance of ditches, drainage structures, and pipes that are essential for stormwater management with an annual budget of $875,000. The City of Reno's 2025 budget of $25.3 million covers the general fund, street fund, and sewer fund allocations. The City of Sparks indicated that only a portion of existing asset maintenance record and inventory was stored in the City's MaintStar database. However, no asset needs or available funding was provided by the City.

7.2 Recommendations

In this study, the NCE team identified and summarized current roadway maintenance practices, ITS infrastructure, and roadway maintenance needs and examined how funding was allocated to those needs. Based on this information, the NCE team has listed the following recommendations for further consideration or next phase study in this project.

1. Pavement Inventory Management

   During the review of pavement inventory information from the agencies' PMP databases, it was observed the City of Sparks has not identified any residential roads in its current roadway inventory, and an initial review of checklist responses revealed discrepancies between the inventory information in the City of Reno's PAVER database and its checklist replies. Additionally, Washoe County's inventory database includes parking lot sections that are not funded through the annual paving budget but instead rely on the General Fund. Additionally, all agencies updated completed project records into their PMP database, but it may not include all localized repair records or all paving projects over the past few years. Therefore, it is advisable for the agencies to re-evaluate and update their PMP databases (including function classifications, roadway inventory, historical M&R records, decision tree, etc.) regularly to ensure accurate management and maintenance planning.

2. Other Pavement Testing Data

Overall, RTC and local agencies do not collect or conduct other pavement testing for performance evaluation and design. In general, pavement coring and soil laboratory testing are performed to determine the pavement layer thicknesses, evaluate base and subgrade characteristics, and analyze the nature of the distresses in existing pavement sections. Ground Penetrating Radar (GPR) is used to measure pavement thickness, identify voids in subsurface structures, and detect changes in subsurface materials. Deflection testing is also employed to assess the structural capacity of the pavement, providing valuable data for overlay and rehabilitation design. The information is essential for developing effective pavement design and rehabilitation strategies. In addition, the International Roughness Index (IRI), which measures the longitudinal profile in the wheel path, is commonly used as an indicator of ride quality. When conducting pavement design, agencies may consider incorporating additional types of pavement testing data alongside the PCI to support a more comprehensive performance evaluation.

3. Pavement Maintenance Strategies

In recent years, agencies have begun using more cost-effective or newer technologies on pavement maintenance and rehabilitation. However, these treatments are not yet standard approach and not updated in agencies' decision tree. It is suggested that the agencies incorporate more cost-saving options, such as cape seal, CIR or FDR, into their decision-making frameworks, and re-evaluate the strategy as well as update the treatment costs in their decision trees. Moreover, the City of Sparks has not finalized treatment costs in its PAVER database. Conducting an annual review and updating M&R treatment strategies and associated treatment costs to reflect current construction techniques and costs will provide more accurate budget analysis results and enhance pavement management performance.

4. Street Prioritization and Selection

According to the checklist replies from agencies, structural distress percentages, historical M&R records, traffic volumes, equitable resource distribution across districts, surface seal cycles, and resident and staff inputs are included when selecting or prioritizing streets for maintenance. These factors are essential in the street selection process and require careful balancing to address their respective impacts effectively. Additionally, grouping the annual maintenance and rehabilitation plan by treatment types and geographic zones can enhance efficiency in project execution, enable more competitive bidding and achieve economy of scale pricing.

5. Asset Management

The observations outlined above highlight a significant gap in the completeness of asset inventories and the availability of information on asset needs and funding resources. To address this issue, it is suggested that agencies develop and implement a comprehensive inventory management system to include detailed documentation of all assets, including their locations, conditions, and maintenance histories. Additionally, integrating regular inspections and data updates into the inventory system will enhance tracking of asset performance and needs estimation. Moreover, incorporating bike facilities into the asset inventory will ensure this critical mode of transportation is considered within the broader maintenance and management framework.

Further, linking assets to their corresponding pavement sections will ensure the efficient management of the entire transportation system. For example, the Asset Management Modules in StreetSaver Plus utilize

GIS mapping to display assets alongside pavement section data. This system tracks work and conditions, supports effective asset maintenance, and seamlessly integrates with pavement data in StreetSaver online.

6. ITS Infrastructure

It is recommended that the RTC start implementing the *RTC Intelligent Transportation System Strategic Master Plan*[8] strategies associated with operations, maintenance, and standardization of ITS standards and specifications across the local agencies. These strategies include:

- Strategy #2: Enhance Regional ITS and Signal Asset Management Database (In-Progress)
- Strategy #5: Enhance ITS Upgrade/Lifecycle Replacement Program
- Strategy #6: Enhance ITS New Capital Investments (In-Progress)
- Strategy #8: ITS Design Standards and Specifications
- Strategy #20: Management of Network Switches
- Strategy #21: Dedicated Funding for ITS Upgrades/Lifecycle Replacement Program
- Strategy #22: Enhance Funding for ITS New Capital Investments
- Strategy #23: Agreements for Operations and Maintenance (O&M) for ITS and Signals in Region

7. Coordination Among Agencies

Emergency repairs are typically carried out by local agencies to address immediate maintenance issues (ex. pothole repair or drainage repair). However, it is recommended local agencies share localized treatment data or on-going utility projects with the RTC to provide valuable input for planning pavement maintenance on the RTP roads.

8. Financial and Funding Awareness

Annual financial and funding sources are not easily modified. MVFT allocations are approved by statute, making them challenging to amend on short notice. Additional local sources, as described in this report, may provide more flexibility for local agencies, but could require elected leadership buy-in or voter referendum. Awareness of gaps between maintenance and repair for streets, pavement, and ITS infrastructure and the financial sources that are available is critical for the local agencies to support sustainable decision making. The following action items should be considered from a financial and funding perspective to ensure that the costs of maintenance and repair for street, pavement, and ITS infrastructure do not exceed the available funding.

- Prepare regular updates to the 4 agency memos to provide local and regional decision-makers with up-to-date information on costs of street, pavement, and ITS maintenance and repair costs and trends in available revenue streams.
- Maintain an inventory of research on national and local trends related to the motor vehicle fuel tax and best practices in creative sources for annualized funding.
- Work with area leaders to create awareness and positive messaging for critical funding sources. As an example, the City of Reno should promote the importance of the property tax override to support a successful referendum to extend the funding source.

- Research and apply for grants that could support priority street, pavement, and ITS infrastructure maintenance projects.

9. Funding Shortfalls

Based on the needs and budget for pavement and assets from Section 3.3 and Section 6.2, shortfalls were identified and described in Section 6.3. It was observed there are significant shortfalls in pavement maintenance and rehabilitation works. To address the gap between the existing funding and needs, it is suggested agencies pursue additional funding. Potential sources include:

- American Rescue Plan Act (ARPA)
- Community Development Block Grants (CDBG)
- Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- Federal Emergency Management Agency (FEMA)
- Highway Safety Improvement Program (HSIP)
- Bipartisan Infrastructure Investment and Jobs Act (IIJA)
- Regional Surface Transportation Program (RSTP)
- Surface Transportation Program (STP)
- Secure Rural Schools and Community Self-Determination Act

This study identifies and summarizes current practices related to pavement maintenance, ITS infrastructures, financial and funding sources, and normal operation and maintenance activities. The information is gathered through coordination with agencies data collection meetings, retrieving pavement data from existing pavement management programs, reviewing agencies' website, summarizing data collection checklist responses, and conducting follow-up meetings.

Funding challenges remain a common concern across all agencies. Despite these constraints, agencies are making significant efforts to optimize their available resources and implement effective strategies to manage their roadway system, including pavement, ITS infrastructure, sidewalks, curb ramps, drainage structures, etc. Data analysis and further identification of needs and shortfalls is suggested to conducted in the subsequent study to better understand the existing system and develop a long-term plan aimed at achieving a healthier fiscal environment and a sustainable transportation environment.

Appendix A

Data Collection Check List

RTC – Maintenance Needs Study

Agency: _____RTC_____

Data Collection Checklist: Pavement Maintenance

No.	Item	Agency Response	Comments/Notes
1	What PMS software does your agency use?	Street Saver	
2	How many streets/roads does your agency maintain? (no. of sections and centerline miles by functional class)	445.82 center lane miles, 1,141.32 lane miles, 3.63 square miles of pavement area. 67.7% arterial, 18.3% collector, 12.4% other.	
3	What distress protocol does your agency use? (ASTM D6433 or MTC)	ASTM D6433	
4	Does your agency have GIS shapefile linked to PMS software?	Yes	
5	How often does your agency update pavement inspections?	Entire network never 3 years	
6	How does your agency update pavement condition? (walking, windshield or automated?) (in-house or by contractor)	Via semi-automated data collection	
7	What other condition data do you also collect? (Deflection, ride quality, friction, drainage, core, etc.)	M&R history	
8	What is your current network condition (PCI)? (entire network and by functional class)	Overall network 79, Arterial 79, Collector 78, Other (industrial) 77.	
9	How does your agency setup condition categories in PMS? (ex. PCI 70 to 100 – Very Good)	PCI 70 to-100 Very Good 55 to 70 Good 40 to 55 Poor <40 Very Poor	
10	Does your agency have PCC pavement in your network?	Yes, minor amount, 2.2%	
11	What pavement strategies/ treatments does your agency apply on various conditions of pavement? (treatment by PCI range)	See decision tree in street saver for treatment strategies based on PCI.	

12	What factors/items are included in the treatment costs? (ex. paving materials, labor, concrete repairs, striping, traffic control, etc.)	Treatment costs are based on historical bid costs RTC has received in past years then inflated	
13	How often does your agency update the treatment costs in your PMS?	Every year treatment costs are evaluated and determined if update is necessary.	
14	Does your agency use sustainable pavement practices? (ex. CIR, HIPR, FDR, etc.)	Not as much as I'd like to; however mixes include RAP; and RTC has fairly mature pavement perservation program that includes crack seal, slurry seal, and patching.	
15	If yes, what sustainable pavement practices does your agency utilize? Reclaimed Asphalt Pavement Cold-in-Place Recycling Warm Mix Asphalt Permeable/Porous Pavement Full Depth Reclamation Subgrade Stabilization Rubberized Asphalt Concrete Pavement Preservation (ex. slurry seal, chip seal, fog seal, cape seal)	FDR RAP Warm Mix Preventive Maintenance	We have been doing lots of Ful Depth Reclamation on our reconstruction projects and have done some CIR and Warm Mix in the past. We are researching Warm Mix additives tp allow more RAP in our mixes. Currently the standard has become 15% RAP. Because the vast majority of our streets are in good condition we are in preventive (keeping goods road good) mode and have a mature program that has provided enormous benefit to the network performance life. Also for the RTC, the term "pavement preservation" includes rehab, reconstruction done on existing streets and are programmed that way.
16	How does your agency prioritize streets for maintenance and rehabilitation?	Rehab reconstruct PCI<55, then ranked by ADT. Preventive Maintenance Candidate Streets - PCI>55 (focus is on PCI>70) on 7 year cycle.	

		Corrective Maintenance Candidate Streets- PCI between 40 and 70 – Generally mill and fill candidates to address multiple PM treatments – other tools are cape seals, double Micros as well as full depth patching and crack sealing.	
17	What is the target PCI for your network?	80	
18	What is your current annual paving budget?	Annual budget for rehab reconstruct and pavement preservation is $22.5M ($7.5m pavement preservation, $15m rehab/reconstruct and corrective projects)	
19	What is your pavement needs for the entire network?	RTC has determined through analysis in Street Saver to maintain PCI of 80 on overall network while managing back log of deferred maintenance that an annual budget of $28.5m is necessary for the next 10 years. RTC aims to evaluate this budget amount and decision tree every three years and project forward annual budgetary needs.	
20	What is your emergency repair process? (ex. potholing repairs)	RTC does not perform emergency repairs.	
21	Other related data?		

Data Collection Checklist: ITS Infrastructure

No.	Item	Agency Response	Comments/Notes
1	**O&M Asset Management Records:** Review **Table 1** below and confirm if the device totals traffic signals, traffic cabinets and traffic cameras are still accurate. Please provide updated information if available.	N/A	
2	**Work Order History:** Provide the last two to three years of Work Order history or O&M expenditures related to ITS Infrastructure.	Signal Timing Budgets: FY2021: $443,276.42 FY2022: $336,777.76 FY2023: $261,600.57 FY2024: $303,936.42 FY2025: $420,000 FY2026: $420,000	
3	**Maintenance Schedules/Procedures:** What are existing maintenance schedules and processes for ITS Infrastructure?	N/A	
4	**Planning/Funding Maintenance:** What planning, decision-making, and approval processes do you have when maintaining ITS infrastructure?	N/A	

Data Collection Checklist: Financial/Funding Sources

No.	Item	Agency Response	Comments/Notes
1	Prepare an inventory of existing revenue streams available that are currently used to fund maintenance for your agency/community.	Fuel tax - $0.09 County option base, CPI adjustment, and PPI adjustment Sales tax - 1/16%	
2	Have any new sources been added or removed in the last five years? Have budgets or how the revenue is used changed?	No.	
3	Please provide current budget documents, as well as 3-5 years history.	Provided link to website	
4	Have there been any unexpected changes to revenue streams in the last five years? How did that impact how maintenance needs were met?	Not unexpected, but gas taxes have been flat or in decline and not sufficiently keeping pace with inflation.	
5	Please provide current ACFR documents, as well as 3-5 years history.	Provided link to website	
6	Have any studies been prepared outside this effort that review/summarize funding sources for roadway/ITS maintenance? Can you share these?	No.	
7	Please provide the current CIP.	Provided link to website	
8	What are your biggest concerns about current and future revenue/expenditure differences as it relates to maintenance?	Revenue does not keep pace with maintenance costs.	
9	Are there federal or state sources that provide one-time or reoccurring revenue support for maintenance needs?	None.	
10	Are there grants or other sources that you have utilized? How does the use of sources like this influence your budget planning?	None.	
11	Other related data?		

Data Collection Checklist: Normal Operation and Maintenance

No.	Item	Agency Response	Comments/Notes
1	Does your agency have any asset inventory? What format do you save the inventory? (ex. curb ramps, sidewalk, striping, etc.)		
2	What assets require maintenance in your agency?		
3	What are the total needs for your asset maintenance?		
4	What is your existing annual budget to maintenance these assets?		
5	Does your agency have existing asset maintenance records or work order history?		
6	How does your agency maintain the existing assets? (in-house or by contractor)		
7	What is your regular maintenance schedule or processes?		
8	What are your emergency repairs and maintenance processes?		
9	What is your CIP needs and projects?		
10	What normal operations and maintenance does your agency perform? Crack sealing Patching Sweeping Snow removal Landscaping Roadway striping Concrete repairs (sidewalk, C&G) Strom drain maintenance Guardrail repairs Shoulder maintenance Culvert cleaning Others		
11	How does your agency perform operation or maintenance on the above items? (ex. regular monitor/inspect, repair, or work orders) (in-house or by contractor)		

12	How does your agency track or save operation and maintenance records?		
13	How does your agency prioritize these operation and maintenance activities?		
14	What is your annual budget for operations and maintenance?		
15	Other related data?		

RTC – Maintenance Needs Study

Agency: City of Reno

Data Collection Checklist: Pavement Maintenance

<table>
<tr><th>No.</th><th>Item</th><th>Agency Response</th><th>Comments/Notes</th></tr>
<tr><td>1</td><td>What PMS software does your agency use?</td><td>PAVER</td><td></td></tr>
<tr><td>2</td><td>How many streets/roads does your agency maintain?
(no. of sections and centerline miles by functional class)</td><td>
<table>
<tr><td></td><td>mi</td><td># of sect</td></tr>
<tr><td>Alley</td><td>22.01</td><td>422</td></tr>
<tr><td>Utility</td><td>12.51</td><td>69</td></tr>
<tr><td>Arterial</td><td>158.54</td><td>404</td></tr>
<tr><td>Collector</td><td>99.43</td><td>362</td></tr>
<tr><td>Industrial</td><td>46.57</td><td>231</td></tr>
<tr><td>Local</td><td>449.62</td><td>3415</td></tr>
<tr><td>Parking</td><td></td><td>127</td></tr>
</table>
</td><td></td></tr>
<tr><td>3</td><td>What distress protocol does your agency use?
(ASTM D6433 or MTC)</td><td>ASTM D6433</td><td></td></tr>
<tr><td>4</td><td>Does your agency have GIS shapefile linked to PMS software?</td><td>Yes – Contact Greg Johnson
johnsongr@reno.gov</td><td></td></tr>
<tr><td>5</td><td>How often does your agency update pavement inspections?</td><td>Every 3 years, 1/3 of the network each year</td><td></td></tr>
<tr><td>6</td><td>How does your agency update pavement condition?
(walking, windshield or automated?)
(in-house or by contractor)</td><td>Manual - (Local/Alley/Etc) In-house & contractor

Automated - (Regional) contractor</td><td></td></tr>
<tr><td>7</td><td>What other condition data do you also collect?
(Deflection, ride quality, friction, drainage, core, etc.)</td><td>None.</td><td></td></tr>
<tr><td>8</td><td>What is your current network condition (PCI)?
(entire network and by functional class)</td><td>
<table>
<tr><td></td><td>PCI</td></tr>
<tr><td>Network</td><td>75.6</td></tr>
<tr><td>Alley</td><td>38.68</td></tr>
<tr><td>Utility</td><td>60.32</td></tr>
<tr><td>Arterial</td><td>79.22</td></tr>
<tr><td>Collector</td><td>72.77</td></tr>
<tr><td>Industrial</td><td>71.36</td></tr>
<tr><td>Local</td><td>76.75</td></tr>
<tr><td>Parking</td><td>55.17</td></tr>
</table>
</td><td></td></tr>
</table>

<table>
<tr><th>No.</th><th>Item</th><th>Agency Response</th><th>Comments/Notes</th></tr>
<tr><td>9</td><td>How does your agency setup condition categories in PMS?
(ex. PCI 70 to 100 – Very Good)</td><td>Very Good 86-100
Good 71-85
Fair 56-70
Poor 41-55
Very Poor 26-40
Serious 11-25
Failed 0-10</td><td></td></tr>
<tr><td>10</td><td>Does your agency have PCC pavement in your network?</td><td><table><tr><th></th><th>mi</th><th># of sec</th></tr><tr><td>Alley</td><td>17.59</td><td>320</td></tr><tr><td>Utility</td><td>0.02</td><td>1</td></tr><tr><td>Arterial</td><td>4.30</td><td>34</td></tr><tr><td>Collector</td><td>0.35</td><td>4</td></tr><tr><td>Industrial</td><td>0.00</td><td>0</td></tr><tr><td>Local</td><td>0.12</td><td>2</td></tr><tr><td>Parking</td><td></td><td>11</td></tr></table></td><td></td></tr>
<tr><td>11</td><td>What pavement strategies/ treatments does your agency apply on various conditions of pavement?
(treatment by PCI range)</td><td>Slurry/Microsurfacing PCI 70-100
Mill and Overlay PCI 56-70
Cape Seal PCI 56-70
Asphalt Patching PCI Varies
Rehab/Reconstruct <55</td><td>PCI ranges for treatments generally fall within these limits. Treatments also selected by distress type and years between last treatment</td></tr>
<tr><td>12</td><td>What factors/items are included in the treatment costs?
(ex. paving materials, labor, concrete repairs, striping, traffic control, etc.)</td><td>All Construction Activities: Materials, Labor, Striping, Traffic Control</td><td></td></tr>
<tr><td>13</td><td>How often does your agency update the treatment costs in your PMS?</td><td>Annually</td><td></td></tr>
<tr><td>14</td><td>Does your agency use sustainable pavement practices?
(ex. CIR, HIPR, FDR, etc.)</td><td>Yes</td><td></td></tr>
<tr><td>15</td><td>If yes, what sustainable pavement practices does your agency utilize?
Reclaimed Asphalt Pavement
Cold-in-Place Recycling
Warm Mix Asphalt
Permeable/Porous Pavement
Full Depth Reclamation
Subgrade Stabilization
Rubberized Asphalt Concrete
Pavement Preservation (ex. slurry seal, chip seal, fog seal, cape seal)</td><td>Full Depth Reclamation (FDR)/Road Bed Modification (RBM)
RAP in AC up to 30%
Permeable/Porous Pavement (one parking lot)
Warm Mix Asphalt (2009 construction year)
Pavement Preservation: slurry seal, cape seal</td><td></td></tr>
</table>

No.	Item	Agency Response	Comments/Notes
16	How does your agency prioritize streets for maintenance and rehabilitation?	The City is broken into 3 triads for inspection, preventative maintenance, and reconstruction, and we rotate through these triads on a 3-year cycle. Streets with a PCI >70 are candidates for preventative maintenance on a 6-9 year basis. Streets with a PCI <55 are candidates for reconstruction. A list of all neighborhood streets <55 within that year's triad is developed and streets in close proximity are grouped into units for cost-effective construction. These units are ranked by PCI along with sewer condition/criticality. Special considerations are also evaluated such as other utility placements or proximity to schools, healthcare, etc. The final recommended list of projects is presented to City Council for confirmation, and the remaining streets stay on the list for future consideration.	
17	What is the target PCI for your network?	78 for neighborhood streets 80 for regional roads	
18	What is your current annual paving budget?	$11.5M for FY25 which includes preventative maintenance and reconstructions	
19	What is your pavement needs for the entire network?	$482 Million (Local Roads only, 12/29/2023)	
20	What is your emergency repair process? (ex. potholing repairs)	Employee or citizen reports location to Reno Direct, Service Request created.	
21	Other related data?	Current "known" sidewalk needs?	

Data Collection Checklist: ITS Infrastructure

No.	Item	Agency Response	Comments/Notes
1	**O&M Asset Management Records:** Review **Table 1** below and confirm if the device totals traffic signals, traffic cabinets and traffic cameras are still accurate. Please provide updated information if available.	Reno owns & maintains: - 191 traffic signals - 191 traffic cabinets - 46 traffic cameras (PTZ) Reno maintains on behalf of Washoe County: - 23 traffic signals - 23 traffic cabinets Reno maintains on behalf of NDOT: - 87 traffic signals - 87 traffic cabinets	
2	**Work Order History:** Provide the last two to three years of Work Order history or O&M expenditures related to ITS Infrastructure.	See attachment titled Work Order History for O&M expenditures sent with email (Received data summarized in a separate table.)	
3	**Maintenance Schedules/Procedures:** What are existing maintenance schedules and processes for ITS Infrastructure?	Annual signal cabinet preventative maintenance (PM) scheduling and annual traffic signal PM scheduling. PMs are being updated annually to reflect updates in the hardware (for example, battery and fan replacements)	
4	**Planning/Funding Maintenance:** What planning, decision-making, and approval processes do you have when maintaining ITS infrastructure?	Planning and decision-making for funding the maintenance of ITS infrastructure is coordinated between the traffic engineering and maintenance & operations teams to utilize both programmed budget and grant funding to perform PM work and major rehabilitation projects. Some factors that inform this coordinated effort include historical maintenance data, manufacturer legacy hardware support, changes in traffic volume, and new construction that would require new intersections or significant changes in occupancy to existing ones. For grant and time-limited funding, we identify where the funds would have the greatest impact. Two examples of this being: 1. Regional Transportation Commission Spot Project funding program; and 2. Community development block grants (CDBG) for pedestrian crossing upgrades	

No.	Item	Agency Response	Comments/Notes
		(upgrading infrastructure to support visually impaired citizens)	

Table 1: Existing ITS Device Inventory in Washoe County

ITS Device	City of Reno	City of Sparks	Washoe County	NDOT[1]	Total
Traffic Signals[2]	191	71	23[3]	131[4]	**416**
Traffic Cabinet	191	71	23[3]	131[4]	**416**
Traffic Camera (PTZ)	46	16	-	-	**62**

[1] NDOT locations only include those currently associated with the RTC arterial network where NDOT has dedicated the slate fiber optic tube to local transportation networks.
[2] CoR is assuming Traffic Signals to mean signalized intersections.
[3] CoR maintains 23 signalized intersections and traffic cabinets for Washoe County.
[4] CoR maintains 87 NDOT signalized intersections and traffic cabinets.
Source: RTC Washoe ITS Strategic Master Plan (2024)

Data Collection Checklist: Financial/Funding Sources

No.	Item	Agency Response	Comments/Notes
1	Prepare an inventory of existing revenue streams available that are currently used to fund maintenance for your agency/community.	**Fuel tax** – 1.75 cent tax base, 1.75 cent CPI adjustment, 1.75 cent PPI adjustment, 2.35 tax base, 2.35 cent CPI adjustment, 2.35 cent PPI adjustment, 1 cent county maintenance base, 1 cent CPI adjustment, 1 cent PPI adjustment. FY23 COR fuel tax revenues was $7,362,153. **Ad Valorem (Property Tax Override)**: FY23 $22,231,338 **Excavation and encroachment permits**: FY23 $501,467 **TMWA Right of Way Tolls**: FY23 $3,189,675	
2	Have any new sources been added or removed in the last five years? Have budgets or how the revenue is used changed?	No new sources in the last 5 years. Budgets and revenues have not changed but for CPI increases.	
3	Please provide current budget documents, as well as 3-5 years history.	FY25 State Budget Documents: FY25 FINAL STATE DOCUMENT.xls (reno.gov) (budget book not yet available) FY24 Budget Book: 638265584834570000 (reno.gov) FY23 Budget: City Manager's Budget Message | FY23 Budget Book (Locked) (cleargov.com) FY22 Budget: 637969408415900000 (reno.gov)	
4	Have there been any unexpected changes to revenue streams in the last five years? How did that impact how maintenance needs were met?	Due to the COVID pandemic and the decrease in fuel sales, the fuel tax revenues for FY21 were slightly reduced.	
5	Please provide current ACFR documents, as well as 3-5 years history.	FY20 ACFR 637499434841300000 (reno.gov) FY21 ACFR A-010 - Issued Report and Financial Statements (797225 - June 2021 - Audit 797225 [6/30/2021] (In Process)) (reno.gov) FY22 ACFR Microsoft Word - {096AC6CF-923C-4E8F-9B91-F8437604368C}.docx (reno.gov)	

No.	Item	Agency Response	Comments/Notes
		FY23 ACFR Microsoft Word - {5DA021EF-3CF2-417E-9D2E-0B8541E65108}.docx (reno.gov) FY24 ACFR: not available yet	
6	Have any studies been prepared outside this effort that review/summarize funding sources for roadway/ITS maintenance? Can you share these?	See attachment titled "White Paper – Status of Pavement Condition and Funding Needs March 2015" See Fuel Tax PowerPoint	
7	Please provide the current CIP.	FY25 CIP Detail.xlsx	
8	What are your biggest concerns about current and future revenue/expenditure differences as it relates to maintenance?	Our allocation of the fuel tax revenues are not sufficient to meet our current road maintenance needs. The property tax override sunsets in 2038. If this is not renewed, the City will lose $22,231,338 (FY23) in revenues for road maintenance.	
9	Are there federal or state sources that provide one-time or reoccurring revenue support for maintenance needs?	Fuel tax – 1.75cent tax base, 1.75 cent CPI adjustment, 1.75cent PPI adjustment, 2.35 tax base, 2.35 cent CPI adjustment, 2.35 cent PPI adjustment, 1cent county maintenance base, 1 cent CPI adjustment, 1 cent PPI adjustment. FY23 Reno's share of fuel tax revenues was $7,362,153.	
10	Are there grants or other sources that you have utilized? How does the use of sources like this influence your budget planning?	We have not received grants or other sources for street maintenance. The Regional Transportation Commission has been awarded federal funds for bridge replacements within the City of Reno.	
11	Other related data?		

Data Collection Checklist: Normal Operation and Maintenance

No.	Item	Agency Response	Comments/Notes
1	Does your agency have any asset inventory? What format do you save the inventory? (ex. curb ramps, sidewalk, striping, etc.)	Streetscape assets all in GIS format: 1. Ped Ramp Locations 2. Sidewalk Centerlines 3. Sidewalks Discontinuity points 4. Sidewalk Obstruction points 5. Landscaped Medians 6. Parking Meters Traffic Striping CAD file available	
2	What assets require maintenance in your agency?	Streets, traffic and parking control infrastructure, sidewalks/curb and gutter, medians and right of way, bridges, guard rail and shoulder infrastructure, catch basins, culverts, roadside ditches, stormwater retention basins, and stormwater pipe	
3	What are the total needs for your asset maintenance?		Larger Conversation
4	What is your existing annual budget to maintenance these assets?		Larger Conversation
5	Does your agency have existing asset maintenance records or work order history?	Yes	
6	How does your agency maintain the existing assets? (in-house or by contractor)	Both in-house and contractors	
7	What is your regular maintenance schedule or processes?	Weather and temperature dictate which maintenance activities take place (ex. cracksealing is done in the fall and winter, asphalt/widecrack repair spring & summer)	
8	What are your emergency repairs and maintenance processes?	Prioritized by threat to bodily injury or property damage (ex. sinkhole or trip hazard)	
9	What is your CIP needs and projects?		Public Works Question
10	What normal operations and maintenance does your agency perform? Crack sealing Patching Sweeping Snow removal	Cracksealing Patching Sweeping Snow Removal Median & ROW Landscaping Roadway Striping Concrete Repairs	

No.	Item	Agency Response	Comments/Notes
	Landscaping Roadway striping Concrete repairs (sidewalk, C&G) Strom drain maintenance Guardrail repairs Shoulder maintenance Culvert cleaning Others	Guardrail Repairs Shoulder Maintenance Crosswalk Thermo & Painting Sign Installation & Maintenance Decorative Lighting Maint. & Repair Storm Drain Maintenance Culvert Cleaning Catch Basin Cleaning	
11	How does your agency perform operation or maintenance on the above items? (ex. regular monitor/inspect, repair, or work orders) (in-house or by contractor)	A combination of scheduled and monitored work that leads to inspections and the creation of work orders that are completed in-house or are compiled and handed to a contractor to complete.	
12	How does your agency track or save operation and maintenance records?	FY25+ – ServiceNow FY23 and FY24 – ServiceNow and MaintStar FY22 and prior – MaintStar	
13	How does your agency prioritize these operation and maintenance activities?	Annual programming of seasonal work and changes in temperature/weather that dictates what is prioritized for maintenance & repair.	
14	What is your annual budget for operations and maintenance?	FY21 Actual – $15,387,079.36 FY22 Actual – $16,953,866.68 FY23 Actual – $20,319,320.19 FY24 Unaudited Actual – $20,891,138.39 FY25 Adopted– $25,295,084.40	This includes the general fund, street fund, and 35% of the sewer fund from the relevant M&O subdepartments. The sewer fund percent estimate in this is based on previous historical analyses related to the utilization of M&O budget on stormwater expenses. Note that this does not include public works maintenance expenses such as slurry seal contracts.
15	Other related data?		

RTC – Maintenance Needs Study

Agency: _____Sparks_____

Data Collection Checklist: Pavement Maintenance

No.	Item	Agency Response	Comments/Notes
1	What PMS software does your agency use?	PAVER	
2	How many streets/roads does your agency maintain? (no. of sections and centerline miles by functional class)	A-Principle = 33 B-Arterial = 118 C-Collector = 1,751 D-Industrial = 3 N-Alleyways = 106	
3	What distress protocol does your agency use? (ASTM D6433 or MTC)	ASTM D6433	
4	Does your agency have GIS shapefile linked to PMS software?	Yes	
5	How often does your agency update pavement inspections?	1/3 of the network every 3 years	
6	How does your agency update pavement condition? (walking, windshield or automated?) (in-house or by contractor)	Non-RTP sections walking surveys	
7	What other condition data do you also collect? (Deflection, ride quality, friction, drainage, core, etc.)	none	
8	What is your current network condition (PCI)? (entire network and by functional class)	Overall = 79.6 Non-RTP = 77.5 Non-RTP A = 91.9 Non-RTP B = 75.0 Non-RTP C = 77.9 Non-RTP D = 81.4 Non-RTP N = 41.6	
9	How does your agency setup condition categories in PMS? (ex. PCI 70 to 100 – Very Good)	PCI 100-65 – Very Good PCI 64-45 – Good/Fair PCI 44-0 - Poor	
10	Does your agency have PCC pavement in your network?	Yes – RTP & Non-RTP	

11	What pavement strategies/ treatments does your agency apply on various conditions of pavement? (treatment by PCI range)	PCI 100-65 (Preventive), micro surfacing seal, crack seal, Minor patching, T-patch PCI 64-45 (Corrective), micro-mill, Micro surfacing, cap seals, crack seals, grind/overlay, T-patch PCI 44-0 – Reconstruction (Roadbed modification, pulverize, 4"AC on 6-8" AB or treated base	Starting using T-patch 2 years ago for the larger cracks (greater than 1-1/2") with good success. Also utilizing micro-mills the last couple of years with good success
12	What factors/items are included in the treatment costs? (ex. paving materials, labor, concrete repairs, striping, traffic control, etc.)	Traffic control, labor, striping, utility work, curb & gutter, sidewalk, curb ramp, structural sections	
13	How often does your agency update the treatment costs in your PMS?	Not updated	
14	Does your agency use sustainable pavement practices? (ex. CIR, HIPR, FDR, etc.)	Yes	
15	If yes, what sustainable pavement practices does your agency utilize? Reclaimed Asphalt Pavement Cold-in-Place Recycling Warm Mix Asphalt Permeable/Porous Pavement Full Depth Reclamation Subgrade Stabilization Rubberized Asphalt Concrete Pavement Preservation (ex. slurry seal, chip seal, fog seal, cape seal)	Roadbed Modification Pavement Preservation	
16	How does your agency prioritize streets for maintenance and rehabilitation?	PCI and complaints	
17	What is the target PCI for your network?	Nothing established officially but constantly compared to other agencies in the area and based on received complaints to elected officials.	
18	What is your current annual paving budget?	Annual average roadway budgets are between $3-5M. This is not just paving. It is also preventative maintenance, sidewalks, signs, striping, safety, signals and anything else related to transportation.	
19	What is your pavement needs for the entire network?	Not sure how to answer this expect to say MORE. We are not keeping current with annual preventative	

		maintenance cycles and other maintenance type work. We have a significant backlog on roadways needing rehabilitation. We also have a backlog in signal maintenance, neighborhood traffic calming requests, just to name a few.	
20	What is your emergency repair process? (ex. potholing repairs)	Notify maintenance – place cold mix, hot mix or Gap Mastic	Gap mastic is a recent tool used for pot holes and pavements that have delamination
21	Other related data?		

Data Collection Checklist: ITS Infrastructure

No.	Item	Agency Response	Comments/Notes
1	**O&M Asset Management Records:** Review **Table 1** below and confirm if the device totals traffic signals, traffic cabinets and traffic cameras are still accurate. Please provide updated information if available.	Sparks own & maintains: - 73 traffic signals - 73 traffic cabinets - 30 traffic cameras (PTZ) Sparks maintains on behalf of NDOT: - 43 traffic signals - 43 traffic cabinets There is one (1) NDOT owned signal that is primarily maintained by Reno, but the timing is maintained by Sparks.	
2	**Work Order History:** Provide the last two to three years of Work Order history or O&M expenditures related to ITS Infrastructure.	We are unable to provide log of work order history. We roughly spend 50k a year replacing/updating switches, cameras, controllers, etc.	
3	**Maintenance Schedules/Procedures:** What are existing maintenance schedules and processes for ITS Infrastructure?	There isn't a set schedule, when a problem occurs, we address it and replace It or, if possible, upgrade it.	
4	**Planning/Funding Maintenance:** What planning, decision-making, and approval processes do you have when maintaining ITS infrastructure?	We are allocated a certain budget a year for ITS equipment. We purchase existing or new equipment to ensure adequate inventory for replacing out dated equipment and/or emergency repairs.	

Data Collection Checklist: Financial/Funding Sources

No.	Item	Agency Response	Comments/Notes
1	Prepare an inventory of existing revenue streams available that are currently used to fund maintenance for your agency/community.	Revenue streams for the City's Road Fund include gasoline taxes, electric and gas franchise fees, and right of way fees.	
2	Have any new sources been added or removed in the last five years? Have budgets or how the revenue is used changed?	No.	
3	Please provide current budget documents, as well as 3-5 years history.	All budget documents (past and current) can be found on the City's website. Provided link to website	
4	Have there been any unexpected changes to revenue streams in the last five years? How did that impact how maintenance needs were met?	Not unexpected, but gas taxes have been flat or in decline and not sufficiently keeping pace with inflation.	
5	Please provide current ACFR documents, as well as 3-5 years history.	All ACFR's through FY23 can be found on the City's website. The FY24 ACFR is scheduled to be presented to City Council in December 2024. Provided link to website	
6	Have any studies been prepared outside this effort that review/summarize funding sources for roadway/ITS maintenance? Can you share these?	No.	
7	Please provide the current CIP.	The CIP for FY25 (and prior years if desired) can be found on the City's website. Provided link to website	
8	What are your biggest concerns about current and future revenue/expenditure differences as it relates to maintenance?	hat gas taxes as currently allowed by Nevada law will be insufficient to meet the City's needs.	
9	Are there federal or state sources that provide one-time or reoccurring revenue support for maintenance needs?	Unknown.	
10	Are there grants or other sources that you have utilized? How does the use of sources like this influence your budget planning?	If grants become available, those would typically be considered one-time and used for one-time projects, but actual usage would be determined based upon the terms of the grant award.	
11	Other related data?		

Data Collection Checklist: Normal Operation and Maintenance

No.	Item	Agency Response	Comments/Notes
1	Does your agency have any asset inventory? What format do you save the inventory? (ex. curb ramps, sidewalk, striping, etc.)	Partial in our MMS system, Maintstar	
2	What assets require maintenance in your agency?	All - Curb, gutter, sidewalk, road striping and markings, pavement, roadway lighting, traffic signals, signs, medians, right of way landscaping and weed abatement, street sweeping and debris removal, and more	
3	What are the total needs for your asset maintenance?	Need more information to answer this.	
4	What is your existing annual budget to maintenance these assets?	Need more information to answer this, include fully loaded staff costs, service and supply, CIP?	
5	Does your agency have existing asset maintenance records or work order history?	Existing asset maintenance records and some sections have a work order system in operation. Currently, looking to upgrade our system.	
6	How does your agency maintain the existing assets? (in-house or by contractor)	in-house and by contractor	
7	What is your regular maintenance schedule or processes?	Size and scope of maintenance items are larger than budget and staffing levels. We work through assigned areas until complete. May take a year may take 5 years.	
8	What are your emergency repairs and maintenance processes?	Need more information to answer this	
9	What is your CIP needs and projects?	Needs and projects vary and are continuous. Priority given to what mostly benefits the public and staff	
10	What normal operations and maintenance does your agency perform? Crack sealing Patching Sweeping Snow removal Landscaping Roadway striping	Crack sealing Patching Sweeping Snow removal Landscaping Roadway striping Concrete repairs (sidewalk, C&G) Strom drain maintenance Guardrail repairs	

	Concrete repairs (sidewalk, C&G) Strom drain maintenance Guardrail repairs Shoulder maintenance Culvert cleaning Others	Shoulder maintenance Culvert cleaning Plus much more	
	How does your agency perform operation or maintenance on the above items? (ex. regular monitor/inspect, repair, or work orders) (in-house or by contractor)	Monitor and repair with work orders for known maintenance issues. In house and on contract	
12	How does your agency track or save operation and maintenance records?	MMS in Maintstar	
13	How does your agency prioritize these operation and maintenance activities?	Hazard, public safety, known maintenance issues, regular maintenance. In areas with adequate staffing, we perform inspection-based plans.	
14	What is your annual budget for operations and maintenance?	Need more information to answer this, include fully loaded staff costs, service and supply, CIP?	
15	Other related data?		

RTC – Maintenance Needs Study

Agency: _Washoe County_____

Data Collection Checklist: Pavement Maintenance

No.	Item	Agency Response	Comments/Notes
1	What PMS software does your agency use?	PAVER	
2	How many streets/roads does your agency maintain? (no. of sections and centerline miles by functional class)	**# of Sections (Total 3,096)** Non-RTP = 2,962 RTP = 134 **# of Sections By FC (Non-RTP)** A-Arterial = 8 B-Collector = 88 C-Residential = 2,819 D-Industrial = 9 E-Rural Highway = 38 **Centerline Miles by FC (Non-RTP)** A-Arterial = 11.62 B-Collector = 39.63 C-Residential = 519.39 D-Industrial = 7.04 E-Rural Highway = 75.23	
3	What distress protocol does your agency use? (ASTM D6433 or MTC)	ASTM D6433	
4	Does your agency have GIS shapefile linked to PMS software?	Yes	
5	How often does your agency update pavement inspections?	1/3 of the network every 3 years	
6	How does your agency update pavement condition? (walking, windshield or automated?) (in-house or by contractor)	Non-RTP sections walking surveys	
7	What other condition data do you also collect? (Deflection, ride quality, friction, drainage, core, etc.)	County has limited core information. Only performed one overlay project over the past 5 years.	

8	What is your current network condition (PCI)? (entire network and by functional class)	Overall All = 71.8 Overall Non-RTP = 70.8 Non-RTP A-Arterial = 70.4 Non-RTP B-Collector = 76.2 Non-RTP C-Residential = 71.5 Non-RTP D-Industrial = 43.9 Non-RTP E-Rural Highway = 63.2	
9	How does your agency setup condition categories in PMS? (ex. PCI 70 to 100 – Very Good)	See PAVER database	
10	Does your agency have PCC pavement in your network?	No, RTP No, Non-RTP	
11	What pavement strategies/ treatments does your agency apply on various conditions of pavement? (treatment by PCI range)	Generally cape seals on PCI's from 30-80. Microseals on pavement with PCI > 80. Rehab/Reconstruct PCI < 20.	
12	What factors/items are included in the treatment costs? (ex. paving materials, labor, concrete repairs, striping, traffic control, etc.)	County to provide bid tabs, including contractors' projects and in-house projects	
13	How often does your agency update the treatment costs in your PMS?	Rarely.	
14	Does your agency use sustainable pavement practices? (ex. CIR, HIPR, FDR, etc.)	No	
15	If yes, what sustainable pavement practices does your agency utilize? Reclaimed Asphalt Pavement Cold-in-Place Recycling Warm Mix Asphalt Permeable/Porous Pavement Full Depth Reclamation Subgrade Stabilization Rubberized Asphalt Concrete Pavement Preservation (ex. slurry seal, chip seal, fog seal, cape seal)	No	
16	How does your agency prioritize streets for maintenance and rehabilitation?	Select streets by neighborhoods; even distribution via 5 supervisor districts; use PAVER to get last M&R, PCI and focus on higher traffic volume area (sometimes with worse PCI sections first) County only does cape seal project and fewer microsurfacing on higher PCI sections	

17	What is the target PCI for your network?	73	
18	What is your current annual paving budget?	$3M; not including in-house crack sealing and base repairs	
19	What is your pavement needs for the entire network?	Would like to get entire network on a 7-10year slurry cycle, reconstruct/rehab PCI's less than 20, perform all stop-gap work.	
20	What is your emergency repair process? (ex. potholing repairs)	Only on flood damage repairs via contractor In-house crew does potholing repair regularly	
21	Other related data?	154 parking lot sections. Overall weighted avg PCI for parking lots 62.8. Different funding sources for parking lots maintenance (by general fund)	

Data Collection Checklist: ITS Infrastructure

No.	Item	Agency Response	Comments/Notes
1	**O&M Asset Management Records:** Review **Table 1** below and confirm if the device totals traffic signals, traffic cabinets and traffic cameras are still accurate. Please provide updated information if available.	Washoe County owns: - 24 traffic signals - 24 traffic cabinets Signals are maintained by City of Reno, per traffic signal maintenance agreement.	
2	**Work Order History:** Provide the last two to three years of Work Order history or O&M expenditures related to ITS Infrastructure.	The County has a $70,000/year traffic signal maintenance agreement with the City of Reno.	
3	**Maintenance Schedules/Procedures:** What are existing maintenance schedules and processes for ITS Infrastructure?	The County follows the City of Reno's traffic signal maintenance schedule.	
4	**Planning/Funding Maintenance:** What planning, decision-making, and approval processes do you have when maintaining ITS infrastructure?	We have a 5-year maintenance agreement with the City of Reno for County traffic signals.	

Data Collection Checklist: Financial/Funding Sources

No.	Item	Agency Response	Comments/Notes
1	Prepare an inventory of existing revenue streams available that are currently used to fund maintenance for your agency/community.	Fuel tax - $0.09 County option base, CPI adjustment, and PPI adjustment Sales tax - 1/16%	
2	Have any new sources been added or removed in the last five years? Have budgets or how the revenue is used changed?	No.	
3	Please provide current budget documents, as well as 3-5 years history.	Provided link to website	
4	Have there been any unexpected changes to revenue streams in the last five years? How did that impact how maintenance needs were met?	Not unexpected, but gas taxes have been flat or in decline and not sufficiently keeping pace with inflation.	
5	Please provide current ACFR documents, as well as 3-5 years history.	No.	
6	Have any studies been prepared outside this effort that review/summarize funding sources for roadway/ITS maintenance? Can you share these?	Provided link to website	
7	Please provide the current CIP.	Provided link to website	
8	What are your biggest concerns about current and future revenue/expenditure differences as it relates to maintenance?	Revenue does not keep pace with maintenance costs.	
9	Are there federal or state sources that provide one-time or reoccurring revenue support for maintenance needs?	None.	
10	Are there grants or other sources that you have utilized? How does the use of sources like this influence your budget planning?	None.	
11	Other related data?		

Data Collection Checklist: Normal Operation and Maintenance

No.	Item	Agency Response	Comments/Notes
1	Does your agency have any asset inventory? What format do you save the inventory? (ex. curb ramps, sidewalk, striping, etc.)	County to provide GIS shapefile of existing asset inventory	
2	What assets require maintenance in your agency?	Pavement, storm water	
3	What are the total needs for your asset maintenance?	Pavement: $13.7M Stormwater: $2M	
4	What is your existing annual budget to maintenance these assets?	Pavement: $5.1M Stormwater: $875K	
5	Does your agency have existing asset maintenance records or work order history?	Only has maintenance schedule of drainage asset (5 year/10 year) Other asset maintenance based on best practice	
6	How does your agency maintain the existing assets? (in-house or by contractor)	Sewer – in house crew? CIP project on parking lot only, not for roads	
7	What is your regular maintenance schedule or processes?	Prioritize using condition assessments and criticality	
8	What are your emergency repairs and maintenance processes?	Address as needed	
9	What is your CIP needs and projects?	Pavement: $10.5M Stormwater: $5.2M	
10	What normal operations and maintenance does your agency perform? Crack sealing Patching Sweeping Snow removal Landscaping Roadway striping Concrete repairs (sidewalk, C&G) Strom drain maintenance Guardrail repairs Shoulder maintenance Culvert cleaning Others	Major in house and County has internal tracking system; County to provide records in table/spreadsheet?	
11	How does your agency perform operation or maintenance on the above items?	In House	

	(ex. regular monitor/inspect, repair, or work orders) (in-house or by contractor)		
12	How does your agency track or save operation and maintenance records?	CMMS Asset Essentials	
13	How does your agency prioritize these operation and maintenance activities?	By risk calculation evaluated by supervisor districts (risk management) ; not even distributed by district annually, depends on needs; by amounts of asset in the areas	
14	What is your annual budget for operations and maintenance?	County to provide $$ information	
15	Other related data?		

Appendix B

Pavement Management Program Summary Spreadsheet (NCE)

No.	Item	RTC			Reno	Sparks	Washoe County
1	What PMS software does your agency use?	StreetSaver			PAVER	PAVER	PAVER
2	How many streets/roads does your agency maintain? (no. of sections and centerline miles by functional class)	**# of Sections (Total 1,199)**			**# of Sections (Total 4,424)**	**# of Sections (Total 2,367)**	**# of Sections (Total 3,096)**
		COR	COS	WC	Non-RTP = 3,715	Non-RTP = 2,011	Non-RTP = 2,962
		709	356	134	RTP = 709	RTP = 356	RTP = 134
		# of Sections By FC and Agency (Total A=655, C=280, O=229, R=35)			**# of Sections By FC (Non-RTP)**	**# of Sections By FC (Non-RTP)**	**# of Sections By FC (Non-RTP)**
		COR	COS	WC	A-Arterial = 8	A-Principal = 33	A-Arterial = 8
		A - Arterial = 411	A - Arterial = 187	A - Arterial = 57	B-Collector = 197	B-Arterial = 118	B-Collector = 88
		C - Collector = 142	C - Collector = 81	C - Collector = 57	C-Residential = 3,411	C-Collector = 1,751	C-Residential = 2,819
		O - Other = 135	O - Other = 81	O - Other = 13	D-Industrial = 97	D-Industrial = 3	D-Industrial = 9
		R - Residential/Local = 21	R - Residential/Local = 7	R - Residential/Local = 7	N-Not Applicable = 2	N-Alleyways = 106	E-Rural Highway = 38
		Centerline Miles by FC and Agency (Total 445.82)			**Centerline Miles by FC (Non-RTP)**	**Centerline Miles by FC (Non-RTP)**	**Centerline Miles by FC (Non-RTP)**
		COR	COS	WC	A-Arterial = .68	A-Principal = 8.32	A-Arterial = 11.62
		A - Arterial = 158.77	A - Arterial = 70.19	A - Arterial = 54.70	B-Collector = 53.24	B-Arterial = 27.39	B-Collector = 39.63
		C - Collector = 43.89	C - Collector = 27.88	C - Collector = 25.77	C-Residential = 448.27	C-Collector = 231.50	C-Residential = 519.39
		O - Other = 29.79	O - Other = 20.99	O - Other = 5.57	D-Industrial = 16.89	D-Industrial = .75	D-Industrial = 7.04
		R - Residential/Local = 4.83	R - Residential/Local = 1.45	R - Residential/Local = 1.99	N-Not Applicable = .71	N-Alleyways =6.83	E-Rural Highway = 75.23
3	What distress protocol does your agency use? (ASTM D6433 or MTC)	ASTM D6433			ASTM D6433	ASTM D6433	ASTM D6433
4	Does your agency have GIS shapefile linked to PMS software?	Yes, RTP roads are included in each agencies GIS shapefile			Yes	Yes	Yes
5	How often does your agency update pavement inspections?	Every 3 years			1/3 of the network every 3 years	1/3 of the network every 3 years	1/3 of the network every 3 years
6	How does your agency update pavement condition? (walking, windshield or automated?) (in-house or by contractor)	Semi-automated (started in 2022, walking prior to 2022)			Non-RTP sections walking surveys	Non-RTP sections walking surveys	Non-RTP sections walking surveys
7	What other condition data do you also collect? (Deflection, ride quality, friction, drainage, core, etc.)						
8	What is your current network condition (PCI)? (entire network and by functional class) ***Average weighted Predicted PCI as of 1/1/2024. Does not include gravel sections.**	Overall = 79.8			Overall All = 77.7 Non-RTP = 76.1	Overall All = 79.6 Non-RTP = 77.5	Overall All = 71.8 Overall Non-RTP = 70.8
		Arterial = 80.4			Non-RTP A-Arterial = 72.9	Non-RTP A-Principal = 91.9	Non-RTP A-Arterial = 70.4
		Collector = 79.1			Non-RTP B-Collector = 70.3	Non-RTP B-Arterial = 75.0	Non-RTP B-Collector = 76.2
		Other (Industrial) = 77.8			Non-RTP C-Residential = 77.3	Non-RTP C-Collector = 77.9	Non-RTP C-Residential = 71.5
		Residential/Local = 80.6			Non-RTP D-Industrial = 66.0	Non-RTP D-Industrial = 81.4	Non-RTP D-Industrial = 43.9
					Non- RTP N-Not Applicable = 81.7	Non-RTP N-Alleyways = 41.6	Non-RTP E-Rural Highway = 63.2
9	How does your agency setup condition categories in PMS? (ex. PCI 70 to 100 – Very Good)	PCI 71-100 Very Good			PCI 86-100 Very Good		
		PCI 56-70 Good			PCI 71-85 Good		
		PCI 41-55Poor			PCI 56-70 Fair		
		PCI 0-40 Very Poor			PCI 0-55 Poor to Failed		
10	Does your agency have PCC pavement in your network?	Yes (Reno and Sparks)			Yes, RTP	Yes, RTP	No, RTP
					Yes, Non-RTP	Yes, Non-RTP	No, Non-RTP
11	What pavement strategies/ treatments does your agency apply on various conditions of pavement? (treatment by PCI range)	AC and AC/AC			AC		
		70-90 Crack Fill, Crack Fill w/ Microsurfacing, 2" Mill and Overlay w/ Minor (2%) Digouts 55-70 Non-Load Related - Crack Fill w/ Microsurfacing 95% or Cape Seal 5% 55-70 Load Related Crack Fill w/ Microsurfacing and (2%) Digouts 40-55 2" Mill and Overlay w/ Digouts (20%) or Rehabilitation Reconstruct (80%) 0-40 Reconstruct Structure AC (6" AC/12" AB)				86-100 Seal Cracks, Crack Seal and Microsurfacing 71-85 Crack Seal and Microsurfacing, Wide Crack Repair 56-70 Crack Seal and Microsurfacing, Thin (1.5"-2") Mill and Overlay, Pacthing, Wide Crack Repair, Cape Seal, Base Repair 0-55 Full Section Reconsturct		
		AC/PCC			PCC		
		70-90 Crack Fill, Crack Fill w/ Microsurfacing 55-70 Non-Load Related - Crack Fill w/ Microsurfacing 95% or Cape Seal 5% 55-70 Load Related Crack Fill w/ Microsurfacing or 2" Mill and Overlay 40-55 2" Mill and Overlay 0-40 Do Nothing			86-100 Do Nothing 71-85 Do Nothing 56-70 Do Nothing 0-55 Full Section Reconsturct		
		PCC					
		70-90 Crack Fill 55-70 Non-Load and Load Related - Spall Treatment 40-55 Reconstruct Structure 0-40 Reconstruct Structure					
12	What factors/items are included in the treatment costs? (ex. paving materials, labor, concrete repairs, striping, traffic control, etc.)	Traffic control, labor, striping, utility work, curb & gutter, sidewalk, curb ramp, paving materials			Traffic control, labor, striping, utility work, curb & gutter, sidewalk, curb ramp, paving materials		
13	How often does your agency update the treatment costs in your PMS?						
14	Does your agency use sustainable pavement practices? (ex. CIR, HIPR, FDR, etc.)						
15	If yes, what sustainable pavement practices does your agency utilize? Reclaimed Asphalt Pavement Cold-in-Place Recycling Warm Mix Asphalt Permeable/Porous Pavement Full Depth Reclamation Subgrade Stabilization Rubberized Asphalt Concrete Pavement Preservation (ex. slurry seal, chip seal, fog seal, cape seal)						
16	How does your agency prioritize streets for maintenance and rehabilitation?						

No.	Item	RTC	Reno	Sparks	Washoe County
17	What is the target PCI for your network?	80	78 for neighborhood streets		73
18	What is your current annual paving budget?	$22.5M - $7.5 preventative and $the rest	$11.5M		$3M
19	What is your pavement needs for the entire network?				
20	What is your emergency repair process? (ex. potholing repairs)				
21	Other related data?				154 parking lot sections. Overall weighted avg PCI for parking lots 62.8.

Appendix C

ITS Infrastructure Program Summary Spreadsheet (KIMLEY-HORN)

No.	Item	City of Reno	City of Sparks	RTC Washoe	Washoe County
1	**O&M Asset Management Records**: Review Table 1 below and confirm if the device totals traffic signals, traffic cabinets and traffic cameras are still accurate. Please provide updated information if available.	Reno owns & maintains: - 191 traffic signals - 191 traffic cabinets - 46 traffic cameras (PTZ) Reno maintains on behalf of Washoe County: - 23 traffic signals - 23 traffic cabinets Reno maintains on behalf of NDOT: - 87 traffic signals - 87 traffic cabinets	Sparks own & maintains: - 73 traffic signals - 73 traffic cabinets - 31 traffic cameras (PTZ) Sparks maintains on behalf of NDOT: - 43 traffic signals - 43 traffic cabinets There is one (1) NDOT owned signal that is primarily maintained by Reno, but the timing is maintained by Sparks.	N/A	Washoe County owns: - 24 traffic signals - 24 traffic cabinets Signals are maintained by City of Reno, per traffic signal maintenance agreement.
2	**Work Order History**: Provide the last two to three years of Work Order history or O&M expenditures related to ITS Infrastructure.	See attachment titled Work Order History for O&M expenditures sent with email. (Received data summarized in a separate table.)	We are unable to provide log of work order history. We roughly spend 50k a year replacing/updating switches, cameras, controllers, etc.	Signal Timing Budgets: FY2021: $443,276.42 FY2022: $336,777.76 FY2023: $261,600.57 FY2024: $303,936.42 FY2025: $420,000 FY2026: $420,000	The County has a $70,000/year traffic signal maintenance agreement with the City of Reno.
3	**Maintenance Schedules/Procedures**: What are existing maintenance schedules and processes for ITS Infrastructure?	Annual signal cabinet preventative maintenance (PM) scheduling and annual traffic signal PM scheduling. PMs are being updated annually to reflect updates in the hardware (for example, battery and fan replacements).	There isn't a set schedule, when a problem occurs, we address it and replace It or, if possible, upgrade it.	N/A	The County follows the City of Reno's traffic signal maintenance schedule.
4	**Planning/Funding Maintenance:** What planning, decision-making, and approval processes do you have when maintaining ITS infrastructure?	Planning and decision-making for funding the maintenance of ITS infrastructure is coordinated between the traffic engineering and maintenance & operations teams to utilize both programmed budget and grant funding to perform PM work and major rehabilitation projects. Some factors that inform this coordinated effort include historical maintenance data, manufacturer legacy hardware support, changes in traffic volume, and new construction that would require new intersections or significant changes in occupancy to existing ones. For grant and time-limited funding, we identify where the funds would have the greatest impact. Two examples of this being: 1.Regional Transportation Commission Spot Project funding program; and 2.Community development block grants (CDBG) for pedestrian crossing upgrades (upgrading infrastructure to support visually impaired citizens)	We are allocated a certain budget a year for ITS equipment. We purchase existing or new equipment to ensure adequate inventory for replacing out dated equipment and/or emergency repairs.	N/A	We have a 5-year maintenance agreement with the City of Reno for County traffic signals.

Appendix D

Funding Sources Summary Spreadsheet (KIMLEY-HORN)

No.	Item	City of Reno	City of Sparks	RTC Washoe	Washoe County
1	Prepare an inventory of existing revenue streams available that are currently used to fund maintenance for your agency/community.	**Fuel Tax** – 1.75 cent tax base, 1.75 cent CPI adjustment, 1.75 cent PPI adjustment, 2.35 tax base, 2.35 cent CPI adjustment, 2.35 cent PPI adjustment, 1 cent county maintenance base, 1 cent CPI adjustment, 1 cent PPI adjustment. FY23 COR fuel tax revenues was $7,362,153. **Ad Valorem (Property Tax Override):** FY23 $22,231,338 **Excavation and encroachment permits:** FY23 $501,467 **TMWA Right of Way Tolls:** FY23 $3,189,675	Revenue streams for the City's Road Fund include gasoline taxes, electric and gas franchise fees, and right of way fees.	Fuel tax - $0.09 County option base, CPI adjustment, and PPI adjustment Sales tax - 1/16%	Fuel Tax
2	Have any new sources been added or removed in the last five years? Have budgets or how the revenue is used changed?	No new sources in the last 5 years. Budgets and revenues have not changed but for CPI increases.	No.	No.	None aware of
3	Please provide current budget documents, as well as 3-5 years history.	*Provided* FY25 State Budget Documents *Provided* FY2424 Budget Book *Provided* FY23 Budget Book *Provided* FY22 Budget Book	All budget documents (past and current) can be found on the City's website. *Provided* link to website	*Provided* link to website	None available
4	Have there been any unexpected changes to revenue streams in the last five years? How did that impact how maintenance needs were met?	Due to the COVID pandemic and the decrease in fuel sales, the fuel tax revenues for FY21 were slightly reduced.	Not unexpected, but gas taxes have been flat or in decline and not sufficiently keeping pace with inflation.	Not unexpected, but gas taxes have been flat or in decline and not sufficiently keeping pace with inflation.	None aware of
5	Please provide current ACFR documents, as well as 3-5 years history.	*Provided* 2020-2023 ACFR City of Reno documents	All ACFR's through FY23 can be found on the City's website. The FY24 ACFR is scheduled to be presented to City Council in December 2024. *Provided* link to website	*Provided* link to website	
6	Have any studies been prepared outside this effort that review/summarize funding sources for roadway/ITS maintenance? Can you share these?	*Provided* "White Paper – Status of Pavement Condition and Funding Needs March 2015" *Provided* Summary Fuel Tax PowerPoint	No.	No.	Being prepared curerntly with NCE. Expect deliverables in December 2024.
7	Please provide the current CIP.	*Provided* FY25 CIP	The CIP for FY25 (and prior years if desired) can be found on the City's website. *Provided* link to website	*Provided* link to website	*Provided* FY25 CIP
8	What are your biggest concerns about current and future revenue/expenditure differences as it relates to maintenance?	Our allocation of the fuel tax revenues are not sufficient to meet our current road maintenance needs. The property tax override sunsets in 2038. If this is not renewed, the City will lose $22,231,338 (FY23) in revenues for road maintenance.	That gas taxes as currently allowed by Nevada law will be insufficient to meet the City's needs.	Revenue does not keep pace with maintenance costs.	Revenue does not keep pace with maintenance costs.
9	Are there federal or state sources that provide one-time or reoccurring revenue support for maintenance needs?	Fuel tax – 1.75cent tax base, 1.75 cent CPI adjustment, 1.75cent PPI adjustment, 2.35 tax base, 2.35 cent CPI adjustment, 2.35 cent PPI adjustment, 1cent county maintenance base, 1 cent CPI adjustment, 1 cent PPI adjustment. FY23 Reno's share of fuel tax revenues was $7,362,153.	Unknown.	None.	Occasionally. TIGER Grants, Flap Grant.
10	Are there grants or other sources that you have utilized? How does the use of sources like this influence your budget planning?	We have not received grants or other sources for street maintenance. The Regional Transportation Commission has been awarded federal funds for bridge replacements within the City of Reno.	If grants become available, those would typically be considered one-time and used for one-time projects, but actual usage would be determined based upon the terms of the grant award.	None.	See Question #9.
11	Other related data?	n/a			

Appendix E

Data Collection Summary Memo for Each Agency (NCE and KIMLEY-HORN)

MEMORANDUM

Date:	12/20/2024	Project Number:	173.51.25
To:	Regional Transportation Commission of Washoe County (RTC)		
From:	Janice Wang, Becca Regalado, Mei-Hui Lee (NCE), Anabel Hernandez and Jessica Rossi (Kimley-Horn)		
Subject:	Memo of data collection for RTC		

Roadway plays a crucial role in transportation systems and is an essential component of the traveling public's safety. As a part of the Regional Transportation Commission (RTC) of Washoe County's mission to build a better community through quality transportation systems, the RTC has established this study to identify and summarize current roadway maintenance practices, Intelligent Transportation System (ITS) infrastructure, and needs and available funding within the Washoe County Metropolitan Planning Organization boundary. In general, RTC funds and maintains roadways identified in the Regional Road System (referred to as RTP roads in the following sections) and local governments provide preservation services for non-regional roadways (or non-RTP roads) and day-to-day maintenance for all non-state-maintained, publicly owned facilities. The RTP roads include[1]:

- Arterials that are direct connections between freeways and other arterials.
- Collectors that cross a significant travel barrier or provide access to major existing or future regional facilities.
- Industrial roadways with freight movement.
- Roadways that include a transit route.

This study will identify roadway maintenance needs in the cities of Reno and Sparks, in Washoe County, and in the region overall, and examine how funding is allocated to those needs at the local and regional levels. The results will allow RTC to continue to plan and deliver roadway projects in a fair, equitable, and fiscally responsible manner.

The NCE team has coordinated with RTC, the cities of Reno and Sparks, and Washoe County to collect available data for:

- **Pavement Maintenance**: Pavement management program, pavement strategies and costs, pavement needs and available funding.
- **ITS Infrastructure**: Existing infrastructure inventory, existing operations and maintenance, planning and approval processes, infrastructure needs and available funding.
- **Financial and Funding Sources**: Motor vehicle fuel tax and other revenue sources for roadway or ITS maintenance.
- **Normal Operation and Maintenance**: Asset management system, asset needs and funding, and other normal operations and maintenance.

[1] *2050 Regional Transportation Plan*. Regional Transportation Commission. https://rtcwashoe.com/wp-content/uploads/2023/12/FINAL-RTP-12.21.23-online-1.pdf

This document summarizes the data provided by RTC for each category listed in this study.

1. Data Collection Checklists

The NCE team created data collection checklists for the categories described above. These are presented in Tables 1 through 4 below. Responses from RTC are included in Attachment A.

Table 1. Data Collection Checklist: Pavement Maintenance

No.	Item
1	What Pavement Management System (PMS) software does your agency use?
2	How many streets/roads does your agency maintain? (number of sections and centerline miles by functional class)
3	What distress protocol does your agency use? (ASTM D6433[2] or MTC[3])
4	Does your agency have Geographic Information System (GIS) shapefile linked to PMS software?
5	How often does your agency update pavement inspections?
6	How does your agency update pavement condition data? (walking, windshield, or automated?) (in-house or by contractor?)
7	What other condition data do you also collect? (deflection, ride quality, friction, drainage, core, etc.)
8	What is your current network condition (Pavement Condition Index, PCI)? (by entire network and by functional class)
9	How does your agency setup condition categories in PMS? (e.g., PCI 70 to 100 – Very Good)
10	Does your agency have portland cement concrete (PCC) pavement in your network?
11	What pavement strategies/treatments does your agency apply on various conditions of pavement? (treatments by PCI range)
12	What factors/items are included in the treatment costs? (e.g., paving materials, labor, concrete repairs, striping, traffic control, etc.)
13	How often does your agency update the treatment costs in your PMS?
14	Does your agency use sustainable pavement practices? (e.g., Cold-in-Place Recycling [CIR], Hot In-Place Recycling [HIPR], Full Depth Reclamation [FDR], etc.)
15	If yes, what sustainable pavement practices does your agency utilize? Reclaimed Asphalt Pavement Cold-in-Place Recycling (CIR) Warm Mix Asphalt Permeable/Porous Pavement Full Depth Reclamation (FDR) Subgrade Stabilization Rubberized Asphalt Concrete Pavement Preservation (e.g., slurry seal, chip seal, fog seal, cape seal, etc.)
16	How does your agency prioritize streets for maintenance and rehabilitation?

[2] *ASTM D6433-23 Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys*. ASTM International. West Conshohocken, PA, 2023, www.astm.org.

[3] *PCI Distress Identification Manuals (flexible pavement 5th Edition March 2022, rigid pavement 4th Edition March 2018)*. Metropolitan Transportation Commission. San Francisco CA.

No.	Item
17	What is the target PCI for your network?
18	What is your current annual paving budget?
19	What are your pavement needs for the entire network?
20	What is your emergency repair process? (e.g., potholing repairs)
21	Other related data?

Table 2. Data Collection Checklist: ITS Infrastructure

No.	Item
1	**O&M Asset Management Records:** Review **Table 2-1** below and confirm if the device totals traffic signals, traffic cabinets, and traffic cameras are still accurate. Please provide updated information if available.
2	**Work Order History:** Provide the last 2 to 3 years of Work Order history or O&M expenditures related to ITS Infrastructure.
3	**Maintenance Schedules/Procedures:** What are existing maintenance schedules and processes for ITS Infrastructure?
4	**Planning/Funding Maintenance:** What planning, decision-making, and approval processes do you have when maintaining ITS infrastructure?

Table 2-1. Existing ITS Device Inventory

ITS Device	City of Reno	City of Sparks	Washoe County	Nevada Department of Transportation [NDOT]
Traffic Signals	191	73	24	131
Traffic Cabinet	191	73	24	131
Traffic Camera	46	30	-	

*Note: The numbers have been updated according to the information collected in this study.

Table 3. Data Collection Checklist: Financial/Funding Sources

No.	Item
1	Prepare an inventory of existing revenue streams that are currently used to fund maintenance for your agency/community.
2	Have any new sources been added or removed in the last 5 years? Have budgets or how the revenue is used changed?
3	Please provide current budget documents, as well as 3 – 5 years history.
4	Have there been any unexpected changes to revenue streams in the last 5 years? How did that impact how maintenance needs were met?
5	Please provide current Annual Comprehensive Financial Report [ACFR] documents, as well as 3 – 5 years history.
6	Have any studies been prepared outside this effort that review/summarize funding sources for roadway/ITS maintenance? Can you share these?
7	Please provide the current Capital Improvement Project (CIP).

No.	Item
8	What are your biggest concerns about current and future revenue/expenditure differences as they relate to maintenance?
9	Are there federal or state sources that provide one-time or reoccurring revenue support for maintenance needs?
10	Are there grants or other sources you have utilized? How does the use of sources like this influence your budget planning?
11	Other related data?

Table 4. Data Collection Checklist: Normal Operation and Maintenance

No.	Item
1	Does your agency have any asset inventory? In what format do you save the inventory? (e.g., curb ramps, sidewalk, striping, etc.)
2	What assets require maintenance in your agency?
3	What are the total needs for your asset maintenance?
4	What is your existing annual budget to maintenance these assets?
5	Does your agency have existing asset maintenance records or work order history?
6	How does your agency maintain the existing assets? (in-house or by contractor)
7	What is your regular maintenance schedule or process?
8	What are your emergency repairs and maintenance processes?
9	What is your CIP needs and projects?
10	What normal operations and maintenance does your agency perform? Crack sealing Patching Sweeping Snow removal Landscaping Roadway striping Concrete repairs (sidewalk, curb and gutter, curb ramp, etc.) Strom drain maintenance Guardrail repairs Shoulder maintenance Culvert cleaning Others
11	How does your agency operate or maintain the above items? (ex. regular monitor/inspect, repair, or work orders) (in-house or by contractor?)
12	How does your agency track or save operation and maintenance records?
13	How does your agency prioritize operation and maintenance activities?
14	What is your annual budget for operations and maintenance?
15	Other related data?

2. Pavement Maintenance

Data collected about Pavement Maintenance focused on the existing pavement management program (PMP), pavement strategies, and pavement needs and funding for each agency. The details are stated as follows.

2.1 Pavement Management Program

Pavement networks are often the most valuable asset an agency owns. A current PMP with accurate pavement inventory and condition data is an essential tool to maintain and repair roadways and use allocated funding most efficiently. RTC began using PAVER as its PMP in the late 1990s to early 2000s for developing roadway inventory, updating inspections and historical records, and establishing GIS shapefile in the database. RTC integrated its PAVER database into StreetSaver in 2023 and has since used StreetSaver as a decision-support tool for maintenance practice and funding allocation.

The RTP roads include approximately 446.0 centerline miles (or 1,199 sections) of road, which can be divided into different functional classifications shown in Table 5. Arterial roads make up the largest portion of RTP roads, with approximately 284 centerline miles, while residential roads (or roadways that include a transit toute) make up the smallest portion of RTP roads, with less than 10 centerline miles. RTP roads are primarily asphalt concrete (AC) pavement sections. There are 37 sections of portland cement concrete (PCC) in Reno and 23 sections in Sparks.

Table 5. Centerline Miles and Number of Sections by Jurisdiction and Functional Classification

Functional Classification	Centerline miles (# sections) by Jurisdiction			
	City of Reno	City of Sparks	Washoe County	RTP Roads (Total)
Arterial	158.8 (411)	70.2 (187)	54.7 (57)	**283.7 (655)**
Collector	43.9 (142)	27.9 (81)	25.8 (57)	**97.6 (280)**
Other*	29.8 (135)	21.0 (81)	5.6 (13)	**56.4 (299)**
Residential**	4.8 (21)	1.5 (7)	2.0 (7)	**8.3 (35)**
Total	**237.3 (709)**	**120.6 (356)**	**88.1 (134)**	**446.0 (1,199)**

* refers to industrial roadways with freight movement
** refers to roadways that include a transit route

Pavement condition data is the "fuel" for any pavement management engine. RTC adopts ASTM D6433[2] as the distress protocol for pavement condition inspection and engages consultants to update pavement condition data for entire RTP network every 3 years. Semi-automated inspection has been implemented since 2022. Before that, walking surveys were used to update pavement condition. Only pavement condition is inspected and updated in current PMP system, and no other pavement related testing (e.g., coring, deflection, friction, or profiler) was performed on RTP roads by RTC. Other pavement testing is usually performed by local agencies if needed for design or construction.

Pavement condition is typically quantified using the pavement condition index (PCI), which ranges from 0 (worst) to 100 (best). Pavement condition is affected by the environment, traffic loads and volumes, construction materials, and age. RTC divides the PCI scale into 4 condition categories as shown in Table 6. Pavements in "Very Good" condition have a PCI at or above 70, pavements in "Good" condition have a PCI between 55 and 69, pavements in "Poor" condition have a PCI between 40 and 54, and pavements in "Very Poor" condition have a PCI below 40.

Table 6. RTC-Pavement Condition Breakdown

Condition Category	PCI Range
Very Good	70 – 100
Good	55 – 69
Poor	40 – 54
Very Poor	< 40

PCI is a key performance measure aimed at achieving the RTP goal of Managing Existing Systems Efficiently, and the performance target is set at PCI goal 80 or above. The current (2024) PCI of RTP roads is 79.8; Figure 1 shows PCIs of RTC roads broken down by their functional classifications. The average pavement condition for arterials, collectors, and residentials (or roadways that include a transit toute) is similar with PCIs of 80.4, 79.1, and 80.6, respectively, followed by others (industrial roads) with PCI of 77.8. Figure 2 shows current RTP road PCIs in area percentage by condition category. Approximately 82% of the RTP roads have a current PCI greater than 70, placing them in the "Very Good" category. However, less than 3% of RTP roads are in "Poor" of "Very Poor" condition with PCI less than 55.

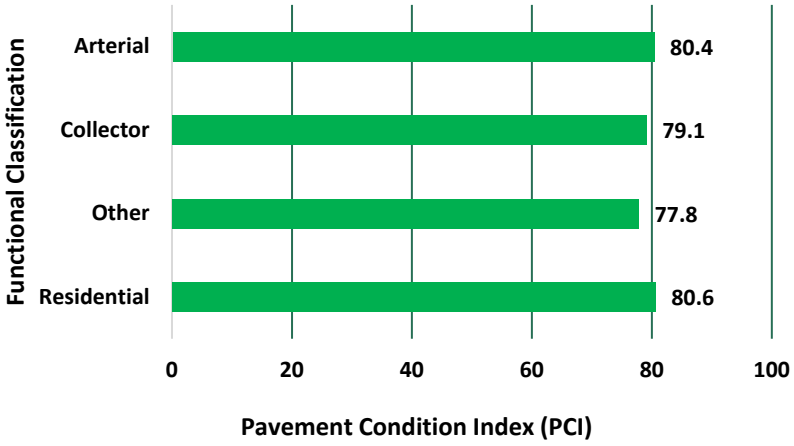


Figure 1. Average PCIs by Functional Classification

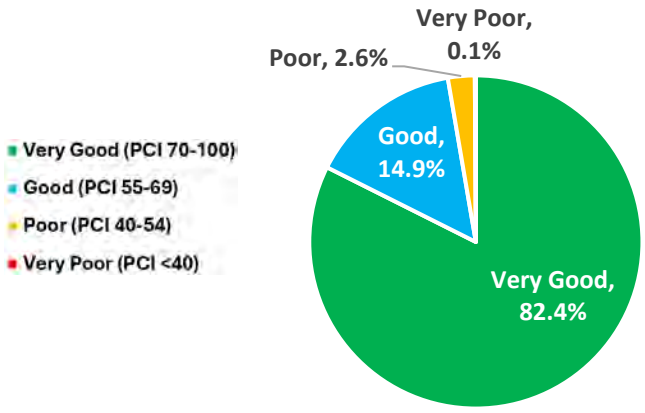


Figure 2. Area Percentage by Condition Category

The average network PCIs from 2017 to 2024 are summarized in Table 7. PCIs for RTP roads have met or exceeded the target since 2017. The 2023 and 2024 PCI values were exported from StreetSaver and 2024 PCI value does not include ongoing or completed construction projects from this year.

Table 7. RTP PCI target and Performance Measure Status

Year	PCI Target	Performance Measure Status	Performance Target Status
2017	80	PCI = 83.3*	Exceeded Goal
2018	80	PCI = 83.3*	Exceeded Goal
2019	80	PCI = 83.3*	Exceeded Goal
2020	80	PCI = 83.0*	Exceeded Goal
2022	80	PCI = 81.6*	Exceeded Goal
2023	80	PCI = 80.0**	Matched Goal
2024	80	PCI = 79.8**	Pending

*2017 to 2022 Annual Report, RTC

**Exported from StreetSaver database; 2024 PCI does not include ongoing or completed construction projects in 2024

Maintenance and rehabilitation records from 2017 to 2023 are listed in Table 8. The RTC has performed localized repairs and surface seal, including microsurfacing, chip seal, cape seal, and slurry seal, annually to keep roads in good condition. An average of 123 lane miles per year of road were surface sealed in 2017 to 2023. In addition, a total of 104.9 lane miles of road were reconstructed since 2017. RTC hasn't conducted annual crack sealing project over the past few years, but 165.6 lane miles of roads were cracked sealed in 2023. All completed projects have played a significant role in preserving the overall pavement condition, ensuring that the network PCI remains consistently above 80.

Table 8. Quantity of Treatments (Lane Miles) in M&R Histories from 2017 to 2023

Year	Crack Seal	Surface Seal	Localized Treatment	Overlay with AC	Reconstruct as AC	Reconstruct as PCC	Total for year
2017	N/A	40.1	83.7	4.8	0.6	N/A	129.2
2018	3.2	131.2	34.9	5.8	13.3	N/A	188.4
2019	1.7	208.5	N/A	3.4	6.2	N/A	219.8
2020	2.1	124.0	30.8	2.4	8.4	0.1	167.8
2021	N/A	99.5	49.6	2.2	4.3	0.4	156.0
2022	N/A	111.3	13.4	16.9	8.6	N/A	150.2
2023	165.6	144.6	4.6	7.9	19.1	0.5	342.3
Total	**172.6**	**859.2**	**217.0**	**43.4**	**60.5**	**1.0**	**1353.7**

2.2 Pavement Strategies and Costs

Pavement maintenance strategies encompass various treatments and practices aiming at addressing deterioration and keeping pavement in acceptable condition throughout its service life. Maintenance and rehabilitation treatments are selected based on PCI, and the associated costs are directly influenced by the condition at the time of application. The maintenance cost of pavements in good condition is generally lower

than the rehabilitation and reconstruction cost of pavements in poor or very poor condition. Therefore, applying the appropriate treatments at the right time is crucial for effectively utilizing the budget and maintaining pavement quality.

The strategies shown in Table 9 are utilized by the RTC for roadway maintenance and rehabilitation. In general, crack fill or surface seal with digouts will be applied on AC pavements in good or very good condition. Mill and overlay will be applied on AC pavements in poor condition. Conventional reconstruction will be performed on AC pavements in very poor condition. In general, crack fill will be applied on PCC in very good condition, spall treatment will be applied on PCC in good condition, and reconstruction will be applied on PCC in poor or very poor condition. Note that only 2 sections in the inventory have AC over PCC surfaces, and both sections are in very good condition (PCI above 85). Therefore, there is no specific strategy needed for AC over PCC pavement in very poor condition.

Table 9. RTC Decision Tree

Surface	Condition Category	Treatment	Unit Cost
AC and AC/AC	Very Good PCI 100 – 70	Crack fill Crack fill with microsurfacing	$1.00/linear feet (LF) $5.00/square yard (SY)
	Good PCI 69 – 55	Non-Load Related: Crack fill with microsurfacing (95%*) or cape seal (5%*)	$5.50/SY
		Load Related: Crack fill with microsurfacing and digouts	$9.00/SY
	Poor PCI 54 – 40	2" mill and overlay with digouts (20%*) or rehabilitation reconstruct (80%*)	$213.00/SY
	Very Poor PCI < 40	Reconstruct structure AC (6" AC/12" AB)	$250.00/SY
AC/PCC	Very Good PCI 100 – 70	Crack fill Crack fill with microsurfacing	$1.00/ LF $5.00/SY
	Good PCI 69 – 55	Non-Load Related: Crack fill w/microsurfacing (95%*) or cape seal (5%*)	$5.50/SY
		Load Related: Crack fill w/microsurfacing or 2" mill and overlay	$26.00/SY
	Poor PCI 54 – 40	2" mill and overlay	$46.00/SY
	Very Poor PCI < 40	Do nothing	$0/SY
PCC	Very Good PCI 100 – 70	Crack fill	$1.50/ LF
	Good PCI 69 – 55	Spall treatment	$12.00/SY
	Poor PCI 54 – 40	Reconstruct structure	$275.00/SY
	Very Poor PCI < 40	Reconstruct structure	$275.00/SY

Note: * percentage refers to the likelihood of a treatment being applied

Treatment costs shown in Table 9 include paving materials and non-paving items (e.g., traffic control, striping, utility work, curb and gutter, sidewalk, curb ramp), soft cost (e.g., labor, engineering design), and contingency.

Treatment costs are evaluated and calibrated every year with recent projects bid results. Based on the bid tabs from 2022 to 2024, RTC has performed crack sealing, microsurfacing, patching (or localized repairs), mill and overlay, full depth reclamation, base repair/roadbed modification, and reconstruction as pavement maintenance and rehabilitation practices.

Sustainability is a global concern and a crucial issue in pavement practices. Many resources are consumed throughout the life cycle of pavement, from construction to maintenance. Adopting sustainable pavement practices can help reduce the environmental impact of pavement-related activities and conserve valuable resources. In recent years, RTC has implemented a significant amount of full depth reclamation in its reconstruction projects and has previously utilized cold-in-place recycling and warm mix asphalt. RTC is currently researching warm mix additives to increase the use of reclaimed asphalt pavement in asphalt mixes. With most RTP roads in very good or good condition, RTC is currently focusing on preventive maintenance. The efforts reflect RTC's commitment to achieving a sustainable pavement system, and RTC has developed a mature pavement maintenance system that has greatly benefited the network performance life.

The RTC collaborates annually with the cities of Reno, Sparks, and Washoe County to develop the pavement maintenance project list by utilizing the project selection and prioritization process outlined in Regional Preventive Maintenance (RPM) Program, Regional Corrective Maintenance (CM) program and Regional Rehabilitation and Reconstruction (R&R) Program.

Pavements with inspection update within 3 years and a projected PCI between 56 and 100, and structural distress (alligator and rutting) affecting 0 to 5% of the pavement area are considered potential candidates for preventive maintenance. Corrective maintenance is recommended for pavements with structural distress affecting 6% to 25% of the pavement area, while pavements with a projected PCI between 0 and 55, and structural distress (alligator and rutting) affecting more 25% of the pavement area are considered potential candidates for rehabilitation and reconstruction.

Three priority levels are defined for preventive maintenance efforts,

- Priority Level 1: Predicted PCI values between 56 to 85, with structural distresses less than 5%.
- Priority Level 2: Predicted PCI values between 86 to 100, with structural distresses less than 5%
- Priority Level 3: PCI values lower than 56 will typically not be considered for preventive maintenance. Exceptions may occur if extensive cost-effective pavement repairs are completed prior to the preventive maintenance treatment
- Additionally, pavements within an existing preventive maintenance cycle will be considered as candidate projects, even if they do not meet the specified selection criteria.

The prioritization of corrective maintenance candidate projects (ex. surface seal, patch and thin overlay) is determined using the following criteria:

- First priority: Predicted PCI <=55, with structural distress affecting 5% to 25% of the pavement area.
- Second priority: Predicted PCI between 56 to 100, with structural distress affecting 6% to 15% of the pavement area
- Third priority: Predicted PCI between 56 to 100, with structural distress affecting 16% to 25% of the pavement area.

Rehabilitation and reconstruction candidates are categorized by their functional classifications and ranked based on average daily traffic (ADT) within each functional classification. Projects with higher traffic volumes will be addressed first. Within each ADT traffic value, pavements are further ranked by PCI ratings, with higher PCI values receiving higher priority.

Since RTC is responsible for maintaining RTP roads and emergency repairs are managed by local agencies, RTC does not conduct emergency repairs.

2.3 Pavement Needs and Funding

The Street and Highway Program managed by RTC Engineering Department is responsible for program development, design, construction, and contract management of roadway projects. Roadway project selection is a cooperative regional process involving the cities of Reno and Sparks, and Washoe County. In 2023, RTC spent approximately $87.7 million on street and highway improvement projects; this accounted for 69.1% of the total government expenses. A major source of funding for street and highway projects is the motor vehicle fuel tax. Detailed information is shown in Section 4 “Financial and Funding Sources”. Governmental expenses and revenues in 2023 are shown in Figures 3 and 4.

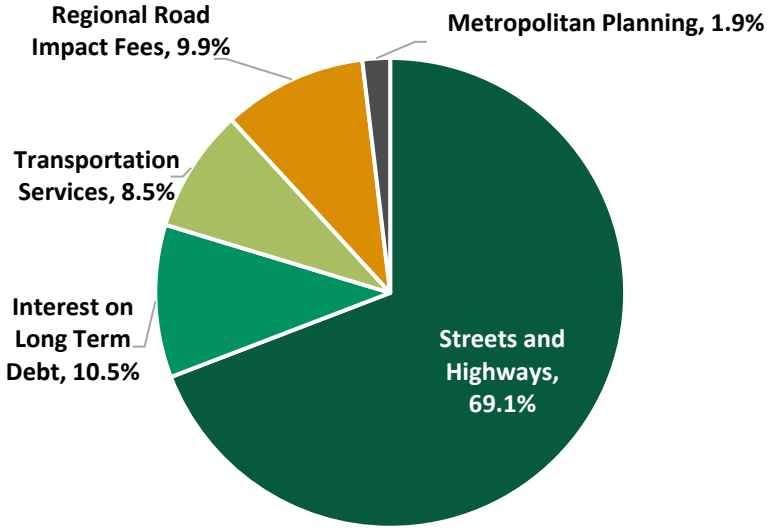


Figure 3. Governmental Activity Expenses by Function in 2023[4]

[4] *Annual Comprehensive Financial Reports Fiscal Year Ended June 30, 2023*. Regional Transportation Commission. https://rtcwashoe.com/wp-content/uploads/2024/01/Final-ACFR-FY23-web.pdf

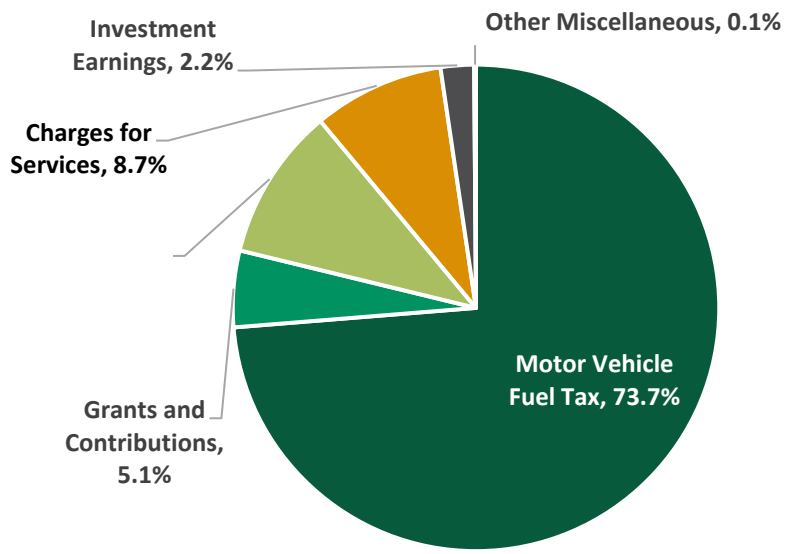


Figure 4. Governmental Activity Revenues by Function in 2023[4]

Through analysis in StreetSaver, the pavement needs for the RTP roads are $529 million over the next 10 years (2024-2033) and the unfunded backlog is approximate $70 million in 2024. RTC plans to evaluate this amount and update the decision tree every 3 years to project annual budget requirement. However, RTC's annual paving budget for roadway maintenance, rehabilitation, and reconstruction is approximately $22.5 million per year ($7.5 million for pavement maintenance and $15.0 million for rehabilitation or reconstruction and corrective projects).

2.4 Summary

The RTC has integrated the previous PAVER database into StreetSaver in 2023, which now serves as a decision-support tool for maintenance practices or funding allocation. The RTC funds and maintains approximate 446.0 centerline miles (or 1,199 sections) RTP roads and has adopted ASTM D6433[2] as the distress protocol for pavement condition inspection. To ensure comprehensive assessment, the RTC engages consultant to update pavement inspection for entire RTP network every 3 years. In 2022, semi-automated inspection has been implemented.

The current (2024) PCI of RTP roads is 79.8 with a performance target set as PCI = 80 or higher. Recent bid tabs indicate that RTC has performed crack sealing, microsurfacing, patch (or localized repairs), mill and overlay, FDR, base repair/roadbed modification and reconstruct as pavement maintenance and rehabilitation practices over the past few years. Through analysis in StreetSaver, the pavement needs for the RTP roads are $529 million over the next 10 years (2024-2033) and the unfunded backlog is approximate $70 million in 2024. However, RTC's annual paving budget for roadway maintenance, rehabilitation and reconstruction is approximately $22.5 million per year.

3. ITS Infrastructure

The RTC does not own or maintain any ITS infrastructure, but it does manage the region's Signal Timing program. A summary of the annual budget spent by the RTC on its Signal Timing program is included in Table 10. The Signal Timing Program covers all intersections within the region. In this program, the University of Nevada, Reno develops the signal timing which is then reviewed and implemented by City staff.

Table 10. RTC Signal Timing Program Budget

Fiscal Year	Amount
FY 2021	$443,276.4
FY 2022	$336,777.8
FY 2023	$261,600.6
FY 2024	$303,936.4
FY 2025	$420,000.0
FY 2026	$420,000.0

Note: Data as of August 27, 2024

4. Financial and Funding Sources

This section summarizes the findings of a review of revenue streams that are available to support costs associated with pavement and ITS maintenance for RTC. Following an interview with finance and budget staff on August 21st, 2024, a thorough review of annual budget and annual comprehensive financial reports (ACRF) documents was completed by the consultant team. It should be noted that at the time this project began, financial data for fiscal year (FY) 2023-2024 was the most recent budget data available. For this reason, data from FY 2023-2024 was utilized throughout this analysis for consistency. FY 2024-2025 information was released while the review was already underway. A summary table of the responses from the agency is included in Attachment A.

4.1 Motor Vehicle Fuel Tax

This section provides an overview of the motor vehicle fuel tax followed by details of RTC's revenue from this funding stream.

Motor Vehicle Fuel Tax Overview

Although the Motor Vehicle Fuel Tax is the most prominent source of revenue available to fund pavement and ITS maintenance for Washoe County, revenue associated with the Motor Fuel Tax's Consumer Price Indexing and Producer Price Indexing are the most notable for RTC. There are several statutory authorities that generate revenue based on all motor vehicle fuel sales, except for aviation fuel. These statutory authorities include:

- **NRS365.192** - $0.01 motor vehicle fuel tax in Washoe County; this funding goes to Washoe County and the cities of Reno and Sparks and is distributed formulaically based on population, lane miles, and land area. RTC does not receive any revenue from this stream.

- **NRS365.190** – additional $0.0175 motor vehicle fuel tax in Washoe County; this funding goes to Washoe County and the cities of Reno and Sparks and is distributed formulaically based on population, lane miles, and land area. RTC does not receive any revenue from this stream.
- **NRS365.180** – additional $0.036 motor vehicle fuel tax in Washoe County, broken down further into $0.0125 towards Washoe County Road bonds and $0.0235 to Washoe County. RTC does not receive any revenue from this stream.
- **NRS373.030** – optional $0.09 motor vehicle fuel tax in Washoe County and is distributed to RTC.
- **NRS365.175** – $0.1765 base rate to the State Highway Fund and is distributed to RTC.

Nevada's Motor Vehicle Fuel Tax is indexed, meaning it is adjusted annually based on a formula that ties it to inflation. It is important to note that all agencies made note of the challenges related to the increasing efficiency of modern motor vehicles, many of which require less fuel to operate. The goal of indexing is to support collection of a revenue stream that is adequate to cover the cost of maintaining and improving transportation infrastructure.

The statutory authorities are indexed in different ways. First, NRS 373.065 authorizes Washoe County to levy an additional tax equal to the amount authorized by NRS 365.180, 365.190, 362.192, and 373.030 multiplied by the average of the past five years Consumer Price Index (CPI) or 4.5%. Secondly, NRS 373.066 provides the authorization to impose a tax indexing for state and federal fuel taxes to inflation; this is indexed by a 10-year rolling average of the Producer Price Index (PPI), which measures the average change in the cost of nonresidential construction. PPI across all applicable sources is capped at 7.8%.

The revenues collected as part of the Motor Vehicle Fuel Tax are then distributed to the cities of Reno and Sparks, Washoe County, and the RTC. Distribution methods vary depending on the statutory authority. Table 11 demonstrates the various tax descriptions, the tax rate, and the jurisdiction or authority that receives the funding stream.

Table 11. Statutory Authorities for Motor Vehicle Fuel Tax and Receiving Agency

Tax Description	Tax Rate	Washoe County	Reno	Sparks	RTC
NRS365.192 Base	$0.01	X	X	X	
NRS365.192 CPI	$0.01	X	X	X	
NRS365.192 PPI	$0.01	X	X	X	
NRS365.190 Base	$0.0175	X	X	X	
NRS365.190 CPI	$0.0175	X	X	X	
NRS365.190 PPI	$0.0175	X	X	X	
NRS365.180 Base	$0.0125	X			
NRS365.180 CPI	$0.0125	X			
NRS365.180 PPI	$0.0125	X			
NRS365.180 Base	$0.0235	X	X	X	
NRS365.180 CPI	$0.0235	X	X	X	
NRS365.180 PPI	$0.0235	X	X	X	
NRS373.030 Base	$0.09				X
NRS373.030 CPI	$0.09				X
NRS373.030 PPI	$0.09				X
PPI State/Federal					X
PPI Special Funds					X

NRS365.192 is distributed based on the share of population in each jurisdiction. As of July 1, 2023, the City Reno accounted for 54.5% of the total Washoe County population, Sparks accounted for 22.4%, and unincorporated Washoe County represented the balance at 23.1%. NRS365.190 is distributed based on property valuations and NRS373.180 is distributed equally based on population, land area, local road miles, and vehicle miles traveled.

The optional $0.09 Washoe County tax (NRS373.030), a portion of NRS365.175, and indexing of the State and Federal Fuel Tax are revenues streams allocated to RTC. Figure 5 demonstrates the separate statutory streams for the Nevada Motor Vehicle Fuel Tax.

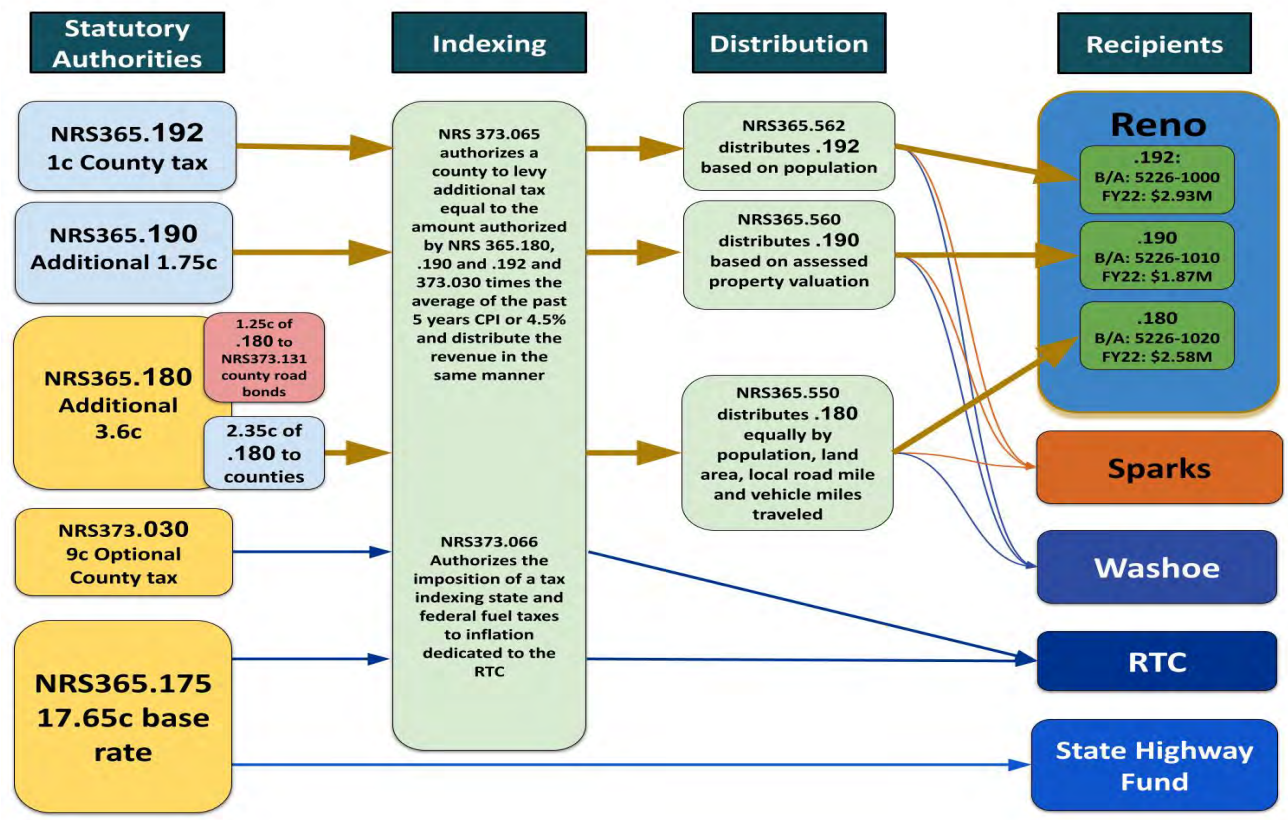


Figure 5. Nevada Motor Vehicle Fuel Tax

Figure 6 demonstrates a summary of the Washoe County taxes paid per gallon of gas. The total tax rate across all statutory authorities is $0.93313 per gallon. The PPI stream comprises 41.2% of the total, the largest share across the authorities, followed by Federal (19.8%) and State (19.7%).

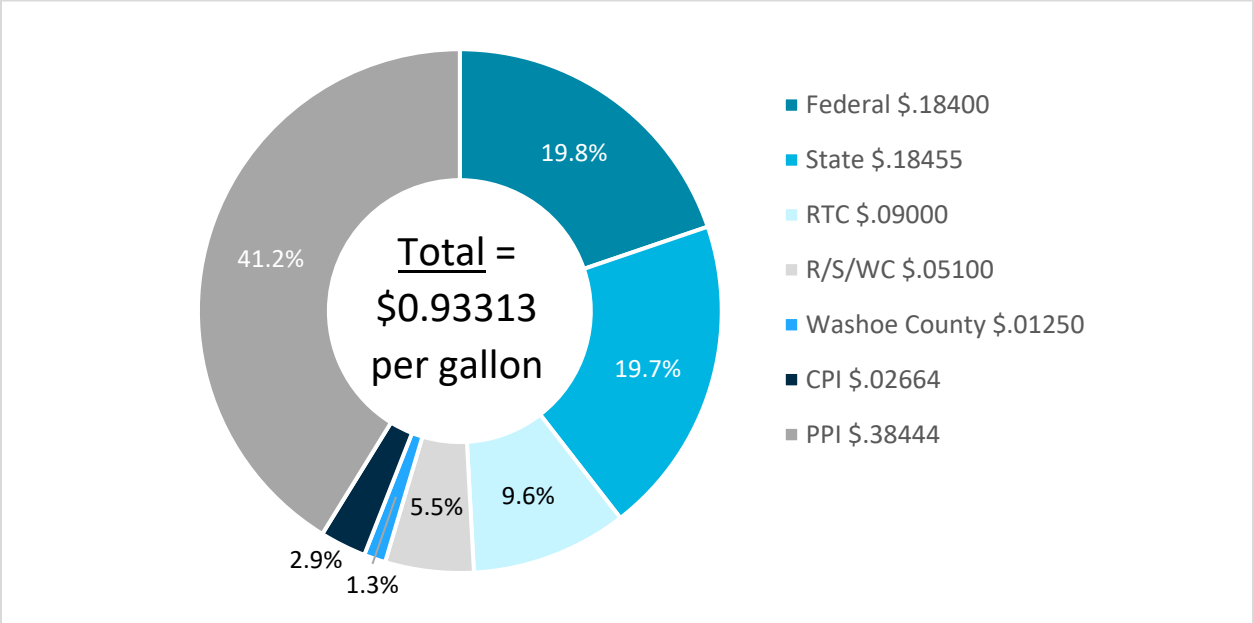


Figure 6. Washoe County Taxes Paid per Gallon of Gas, FY2023-2024

RTC Motor Vehicle Tax Revenue

Motor Vehicle Tax revenue generated to RTC is based on NRS373.030, the optional $0.09 County option, including base, CPI, and PPI. RTC also receives funding from PPI on State/Federal Rates as well as PPI on Special Fuels. The fuel tax revenue allocated to RTC strongly increased year-over-year between FY2014 and FY2019, reaching the largest amount on record in that year. The average annual increase during that time was 13.0%. As a result of reduced vehicle miles traveled during the COVID-19 pandemic, the City's revenue stream from the fuel tax decreased between FY2019 and FY2020 by 1.5%. Recovery occurred through FY2023 averaging an increase of 4.2% per year. RTC's $96.7 million in fuel tax revenue in FY2023, represented more than 80% of the total collected across the four agencies.

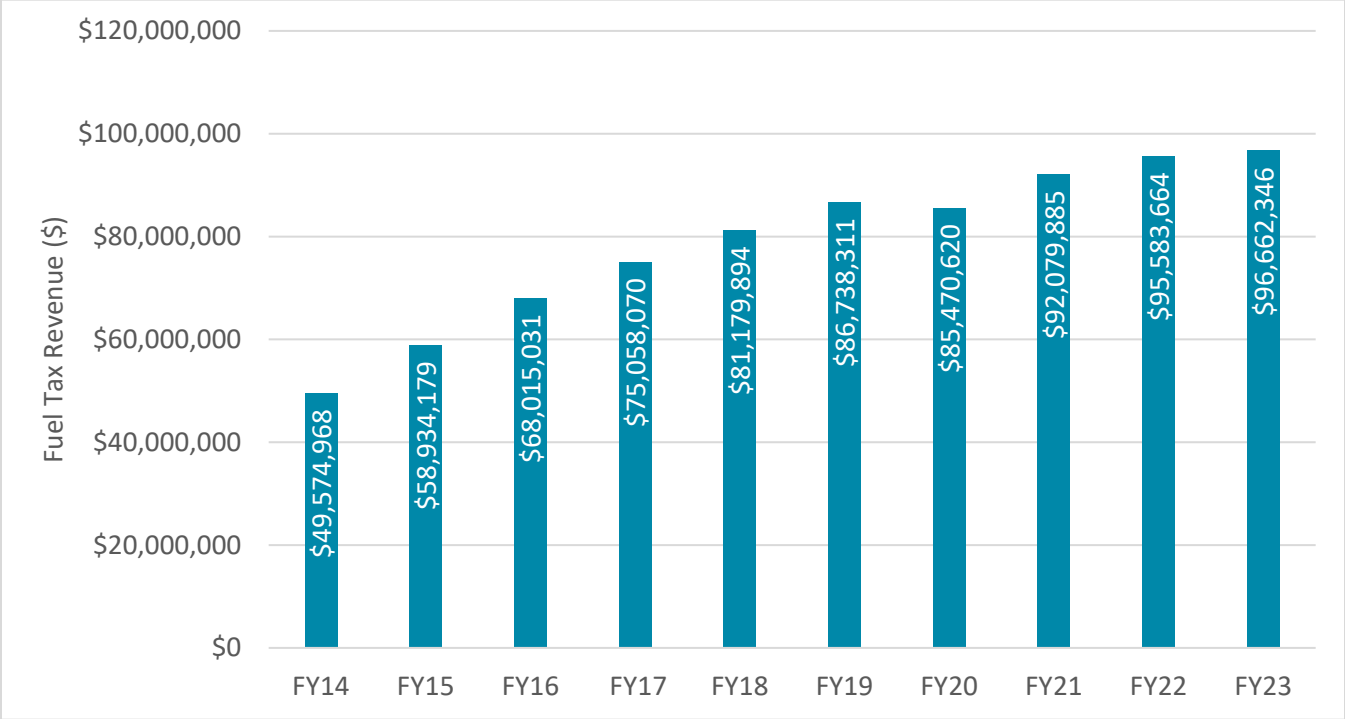


Figure 7. RTC Fuel Tax Revenues, FY 2014-2015 (FY14) to FY 2023-2024 (FY23)

4.2 Other Revenue Sources Dedicated to Street Maintenance and Repair

Sales Tax

Washoe County voters approved a 1/4-% sales tax to help fund fixed-route and paratransit service (RTC RIDE and RTC ACCESS). This was passed in September 1982. In July 2003, an additional 1/8-% sales tax was approved to help fund a combination of transit and roadways. The share of the 1/8-% additional sales tax can be flexible, but typically one-half is dedicated to transit and one-half is dedicated to street maintenance and repair, including pavement preservation. However, during the COVID-19 pandemic, transit ridership drastically declined and more of the 1/8-% sales tax revenue was shifted to supporting transit than in previous years.

RTC's sales tax revenue dedicated to the street and highway program reached $7.3 million in FY2023. This represents a 66.4% increase from $4.4 million in FY2014 (Figure 8). The impact on transit ridership from the

COVID-19 pandemic is apparent in the totals allocated. In FY2020, the street and highway program was allocated $2.8 million from the sales tax revenue as a way to support the struggling transit system.

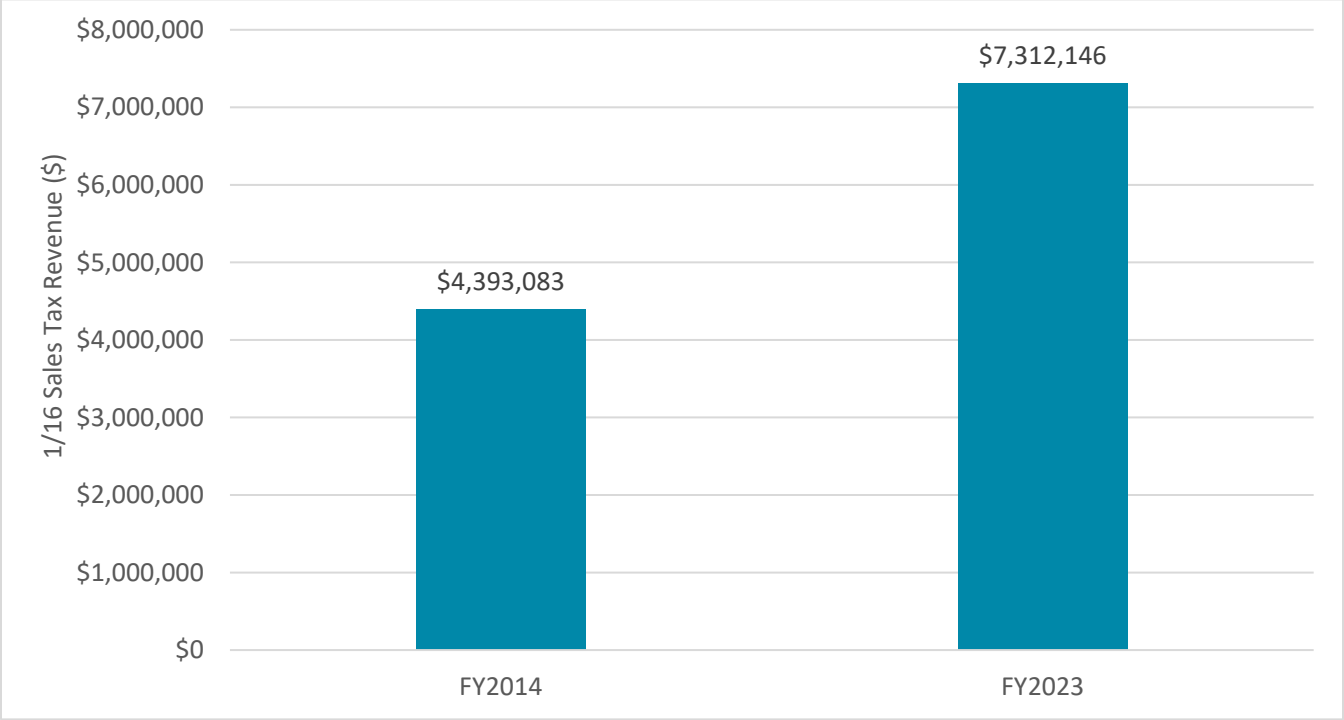


Figure 8. RTC 1/16-% Sales Tax Revenues, FY 2014-2015 (FY2014) to FY-2023-2024 (FY2023)

4.3 Other Revenue Sources Dedicated to General Street and Highway Needs

Regional Impact Fee

Washoe County collects Regional Road Impact Fees (RRIF) on behalf of RTC. Established in 1995, the fees are collected by the Washoe County Building Department following the issuance of a building permit and are based on the adopted impact fee schedule at that time. The purpose of the fees is to help offset the cost of increased demand on critical roadway systems in the county. Impact fees are collected in designated areas in the County and are used to support the construction of capacity improvements, such as new roads and ramps, road widening and intersection improvements, and to preserve right-of-way for future capacity. These funds are not used specifically for street maintenance and repair. In FY2023, RTC collected approximately $8.5 million in RRIF in cash and another $1.7 million in offset agreements.

Investment Income

RTC invests fund balances to generate additional income for the street and highway program. Like the RRIF, these funds are not specifically dedicated to the maintenance and repair of the road network. Fund balances can typically range from $100 to $200 million. In FY2023, the investment income generated revenue for the street and highway program of $2.8 million.

4.4 Summary

RTC received $104.0 million in revenue in FY2023 to support street maintenance and repair, an increase of 92.7% from the total in FY2014 (Figure 9). Motor Vehicle Fuel Tax, including the base, CPI, and PPI, represents

the majority of the total at 93.0%, with the 1/16-% sales tax comprising the balance at 7.0% of the total. RTC does have other revenue streams that support the street and highway program, but those are not dedicated specifically to maintenance and repair. Together, the RRIF and investment income represent the largest components of those other revenue streams and they totaled approximately $13.0 million in FY2023.

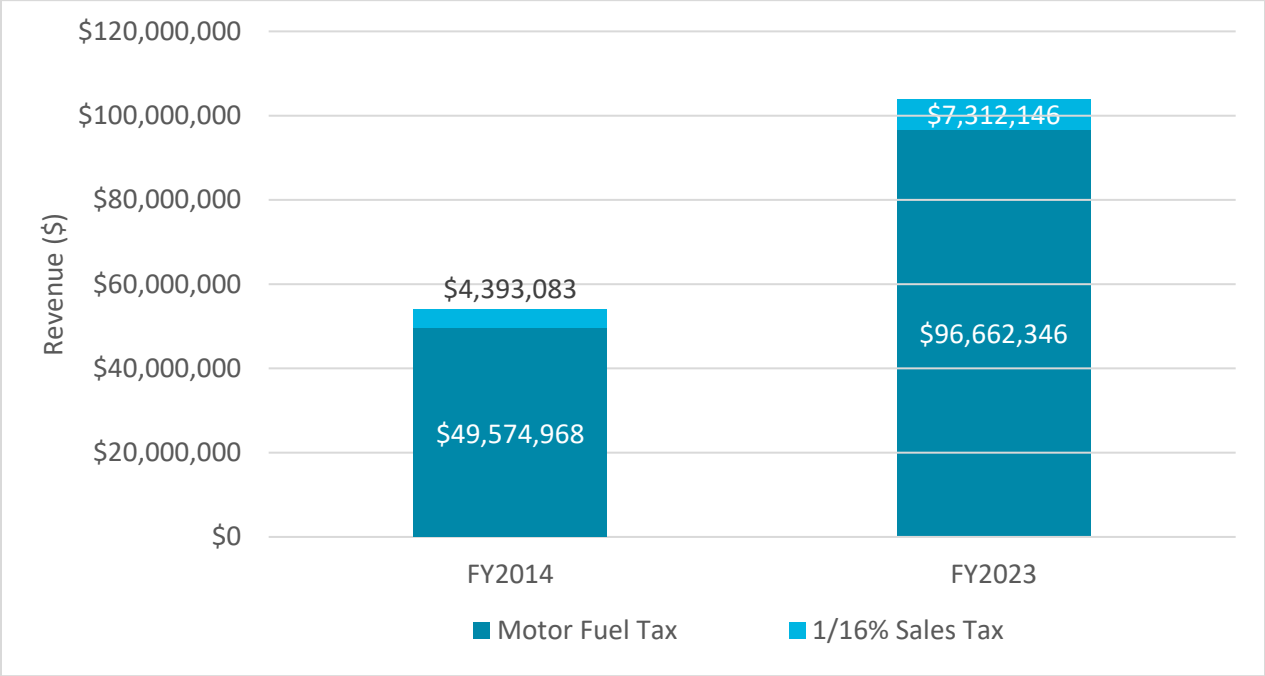


Figure 9. RTC Revenue Available for Street Maintenance and Repair, FY 2014-2015 (FY2014) to FY 2023-2024 (FY2023)

5. Normal Operation and Maintenance

Assets, including striping and markings, streetlights, sidewalks, curb and gutter, roadside ditches, stormwater system, are maintained to provide service to residents. These assets are usually maintained by local agencies. Other normal operations such as snow removal, street sweeping, and landscaping are also performed by local agencies. As a result, there is no asset inventory and management system in place at RTC.

Attachment A

Checklist Responses

RTC – Maintenance Needs Study

Agency: _____RTC_____

Data Collection Checklist: Pavement Maintenance

No.	Item	Agency Response	Comments/Notes
1	What PMS software does your agency use?	Street Saver	
2	How many streets/roads does your agency maintain? (no. of sections and centerline miles by functional class)	445.82 center lane miles, 1,141.32 lane miles, 3.63 square miles of pavement area. 67.7% arterial, 18.3% collector, 12.4% other.	
3	What distress protocol does your agency use? (ASTM D6433 or MTC)	ASTM D6433	
4	Does your agency have GIS shapefile linked to PMS software?	Yes	
5	How often does your agency update pavement inspections?	Entire network never 3 years	
6	How does your agency update pavement condition? (walking, windshield or automated?) (in-house or by contractor)	Via semi-automated data collection	
7	What other condition data do you also collect? (Deflection, ride quality, friction, drainage, core, etc.)	M&R history	
8	What is your current network condition (PCI)? (entire network and by functional class)	Overall network 79, Arterial 79, Collector 78, Other (industrial) 77.	
9	How does your agency setup condition categories in PMS? (ex. PCI 70 to 100 – Very Good)	PCI 70 to-100 Very Good 55 to 70 Good 40 to 55 Poor <40 Very Poor	
10	Does your agency have PCC pavement in your network?	Yes, minor amount, 2.2%	
11	What pavement strategies/ treatments does your agency apply on various conditions of pavement? (treatment by PCI range)	See decision tree in street saver for treatment strategies based on PCI.	

12	What factors/items are included in the treatment costs? (ex. paving materials, labor, concrete repairs, striping, traffic control, etc.)	Treatment costs are based on historical bid costs RTC has received in past years then inflated	
13	How often does your agency update the treatment costs in your PMS?	Every year treatment costs are evaluated and determined if update is necessary.	
14	Does your agency use sustainable pavement practices? (ex. CIR, HIPR, FDR, etc.)	Not as much as I'd like to; however mixes include RAP; and RTC has fairly mature pavement perservation program that includes crack seal, slurry seal, and patching.	
15	If yes, what sustainable pavement practices does your agency utilize? Reclaimed Asphalt Pavement Cold-in-Place Recycling Warm Mix Asphalt Permeable/Porous Pavement Full Depth Reclamation Subgrade Stabilization Rubberized Asphalt Concrete Pavement Preservation (ex. slurry seal, chip seal, fog seal, cape seal)	FDR RAP Warm Mix Preventive Maintenance	We have been doing lots of Ful Depth Reclamation on our reconstruction projects and have done some CIR and Warm Mix in the past. We are researching Warm Mix additives tp allow more RAP in our mixes. Currently the standard has become 15% RAP. Because the vast majority of our streets are in good condition we are in preventive (keeping goods road good) mode and have a mature program that has provided enormous benefit to the network performance life. Also for the RTC, the term "pavement preservation" includes rehab, reconstruction done on existing streets and are programmed that way.
16	How does your agency prioritize streets for maintenance and rehabilitation?	Rehab reconstruct PCI<55, then ranked by ADT. Preventive Maintenance Candidate Streets - PCI>55 (focus is on PCI>70) on 7 year cycle.	

		Corrective Maintenance Candidate Streets- PCI between 40 and 70 – Generally mill and fill candidates to address multiple PM treatments – other tools are cape seals, double Micros as well as full depth patching and crack sealing.	
17	What is the target PCI for your network?	80	
18	What is your current annual paving budget?	Annual budget for rehab reconstruct and pavement preservation is $22.5M ($7.5m pavement preservation, $15m rehab/reconstruct and corrective projects)	
19	What is your pavement needs for the entire network?	RTC has determined through analysis in Street Saver to maintain PCI of 80 on overall network while managing back log of deferred maintenance that an annual budget of $28.5m is necessary for the next 10 years. RTC aims to evaluate this budget amount and decision tree every three years and project forward annual budgetary needs.	
20	What is your emergency repair process? (ex. potholing repairs)	RTC does not perform emergency repairs.	
21	Other related data?		

Data Collection Checklist: ITS Infrastructure

No.	Item	Agency Response	Comments/Notes
1	**O&M Asset Management Records:** Review **Table 1** below and confirm if the device totals traffic signals, traffic cabinets and traffic cameras are still accurate. Please provide updated information if available.	N/A	
2	**Work Order History:** Provide the last two to three years of Work Order history or O&M expenditures related to ITS Infrastructure.	Signal Timing Budgets: FY2021: $443,276.42 FY2022: $336,777.76 FY2023: $261,600.57 FY2024: $303,936.42 FY2025: $420,000 FY2026: $420,000	
3	**Maintenance Schedules/Procedures:** What are existing maintenance schedules and processes for ITS Infrastructure?	N/A	
4	**Planning/Funding Maintenance:** What planning, decision-making, and approval processes do you have when maintaining ITS infrastructure?	N/A	

Data Collection Checklist: Financial/Funding Sources

No.	Item	Agency Response	Comments/Notes
1	Prepare an inventory of existing revenue streams available that are currently used to fund maintenance for your agency/community.	Fuel tax - $0.09 County option base, CPI adjustment, and PPI adjustment Sales tax - 1/16%	
2	Have any new sources been added or removed in the last five years? Have budgets or how the revenue is used changed?	No.	
3	Please provide current budget documents, as well as 3-5 years history.	Provided link to website	
4	Have there been any unexpected changes to revenue streams in the last five years? How did that impact how maintenance needs were met?	Not unexpected, but gas taxes have been flat or in decline and not sufficiently keeping pace with inflation.	
5	Please provide current ACFR documents, as well as 3-5 years history.	Provided link to website	
6	Have any studies been prepared outside this effort that review/summarize funding sources for roadway/ITS maintenance? Can you share these?	No.	
7	Please provide the current CIP.	Provided link to website	
8	What are your biggest concerns about current and future revenue/expenditure differences as it relates to maintenance?	Revenue does not keep pace with maintenance costs.	
9	Are there federal or state sources that provide one-time or reoccurring revenue support for maintenance needs?	None.	
10	Are there grants or other sources that you have utilized? How does the use of sources like this influence your budget planning?	None.	
11	Other related data?		

Data Collection Checklist: Normal Operation and Maintenance

No.	Item	Agency Response	Comments/Notes
1	Does your agency have any asset inventory? What format do you save the inventory? (ex. curb ramps, sidewalk, striping, etc.)		
2	What assets require maintenance in your agency?		
3	What are the total needs for your asset maintenance?		
4	What is your existing annual budget to maintenance these assets?		
5	Does your agency have existing asset maintenance records or work order history?		
6	How does your agency maintain the existing assets? (in-house or by contractor)		
7	What is your regular maintenance schedule or processes?		
8	What are your emergency repairs and maintenance processes?		
9	What is your CIP needs and projects?		
10	What normal operations and maintenance does your agency perform? Crack sealing Patching Sweeping Snow removal Landscaping Roadway striping Concrete repairs (sidewalk, C&G) Strom drain maintenance Guardrail repairs Shoulder maintenance Culvert cleaning Others		
11	How does your agency perform operation or maintenance on the above items? (ex. regular monitor/inspect, repair, or work orders) (in-house or by contractor)		

12	How does your agency track or save operation and maintenance records?		
13	How does your agency prioritize these operation and maintenance activities?		
14	What is your annual budget for operations and maintenance?		
15	Other related data?		

MEMORANDUM

Date:	12/20/2024	Project Number:	173.51.25
To:	City of Reno		
From:	Janice Wang, Becca Regalado, Mei-Hui Lee (NCE), Anabel Hernandez and Jessica Rossi (Kimley-Horn)		
Subject:	Memo of data collection for the City of Reno		

Roadway plays a crucial role in transportation systems and is an essential component of the traveling public's safety. As a part of the Regional Transportation Commission (RTC) of Washoe County's mission to build a better community through quality transportation systems, the RTC has established this study to identify and summarize current roadway maintenance practices, Intelligent Transportation System (ITS) infrastructure, and needs and available funding within the Washoe County Metropolitan Planning Organization boundary. In general, RTC funds and maintains roadways identified in the Regional Road System (referred to as RTP roads in the following sections) and local governments provide preservation services for non-regional roadways (or non-RTP roads) and day-to-day maintenance for all non-state-maintained, publicly owned facilities.

This study will identify roadway maintenance needs in the cities of Reno and Sparks, in Washoe County, and in the region overall, and examine how funding is allocated to those needs at the local and regional levels. The results will allow RTC to continue to plan and deliver roadway projects in a fair, equitable, and fiscally responsible manner.

The NCE team has coordinated with RTC, the cities of Reno and Sparks, and Washoe County to collect available data for:

- **Pavement Maintenance**: Pavement management program, pavement strategies and costs, pavement needs and available funding.
- **ITS Infrastructure**: Existing infrastructure inventory, existing operations and maintenance, planning and approval processes, infrastructure needs and available funding.
- **Financial and Funding Sources**: Motor vehicle fuel tax and other revenue sources for roadway or ITS maintenance.
- **Normal Operation and Maintenance**: Asset management system, asset needs and funding, and other normal operations and maintenance.

This document summarizes the data provided by the City of Reno (City) for each category listed in this study.

1. Data Collection Checklists

The NCE team created data collection checklists for the categories described above. These are presented in Tables 1 through 4 below. Responses from City of Reno are included in Attachment A.

Table 1. Data Collection Checklist: Pavement Maintenance

No.	Item
1	What Pavement Management System (PMS) software does your agency use?
2	How many streets/roads does your agency maintain? (number of sections and centerline miles by functional class)
3	What distress protocol does your agency use? (ASTM D6433[1] or MTC[2])
4	Does your agency have Geographic Information System (GIS) shapefile linked to PMS software?
5	How often does your agency update pavement inspections?
6	How does your agency update pavement condition data? (walking, windshield, or automated?) (in-house or by contractor?)
7	What other condition data do you also collect? (deflection, ride quality, friction, drainage, core, etc.)
8	What is your current network condition (Pavement Condition Index, PCI)? (by entire network and by functional class)
9	How does your agency setup condition categories in PMS? (e.g., PCI 70 to 100 – Very Good)
10	Does your agency have portland cement concrete (PCC) pavement in your network?
11	What pavement strategies/treatments does your agency apply on various conditions of pavement? (treatments by PCI range)
12	What factors/items are included in the treatment costs? (e.g., paving materials, labor, concrete repairs, striping, traffic control, etc.)
13	How often does your agency update the treatment costs in your PMS?
14	Does your agency use sustainable pavement practices? (e.g., Cold-in-Place Recycling [CIR], Hot In-Place Recycling [HIPR], Full Depth Reclamation [FDR], etc.)
15	If yes, what sustainable pavement practices does your agency utilize? Reclaimed Asphalt Pavement Cold-in-Place Recycling (CIR) Warm Mix Asphalt Permeable/Porous Pavement Full Depth Reclamation (FDR) Subgrade Stabilization Rubberized Asphalt Concrete Pavement Preservation (e.g., slurry seal, chip seal, fog seal, cape seal, etc.)
16	How does your agency prioritize streets for maintenance and rehabilitation?
17	What is the target PCI for your network?

[1] *ASTM D6433-23 Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys*. ASTM International. West Conshohocken, PA, 2023, www.astm.org.

[2] *PCI Distress Identification Manuals (flexible pavement 5th Edition March 2022, rigid pavement 4th Edition March 2018)*. Metropolitan Transportation Commission. San Francisco CA.

No.	Item
18	What is your current annual paving budget?
19	What are your pavement needs for the entire network?
20	What is your emergency repair process? (e.g., potholing repairs)
21	Other related data?

Table 2. Data Collection Checklist: ITS Infrastructure

No.	Item
1	**O&M Asset Management Records:** Review **Table 2-1** below and confirm if the device totals traffic signals, traffic cabinets, and traffic cameras are still accurate. Please provide updated information if available.
2	**Work Order History:** Provide the last 2 to 3 years of Work Order history or O&M expenditures related to ITS Infrastructure.
3	**Maintenance Schedules/Procedures:** What are existing maintenance schedules and processes for ITS Infrastructure?
4	**Planning/Funding Maintenance:** What planning, decision-making, and approval processes do you have when maintaining ITS infrastructure?

Table 2-1. Existing ITS Device Inventory

ITS Device	City of Reno	City of Sparks	Washoe County	Nevada Department of Transportation [NDOT]
Traffic Signals	191	73	24	131
Traffic Cabinet	191	73	24	131
Traffic Camera	46	30	-	-

*Note: The numbers have been updated according to the information collected in this study.

Table 3. Data Collection Checklist: Financial/Funding Sources

No.	Item
1	Prepare an inventory of existing revenue streams that are currently used to fund maintenance for your agency/community.
2	Have any new sources been added or removed in the last 5 years? Have budgets or how the revenue is used changed?
3	Please provide current budget documents, as well as 3 – 5 years history.
4	Have there been any unexpected changes to revenue streams in the last 5 years? How did that impact how maintenance needs were met?
5	Please provide current Annual Comprehensive Financial Report [ACFR] documents, as well as 3 – 5 years history.
6	Have any studies been prepared outside this effort that review/summarize funding sources for roadway/ITS maintenance? Can you share these?
7	Please provide the current Capital Improvement Project (CIP).

No.	Item
8	What are your biggest concerns about current and future revenue/expenditure differences as they relate to maintenance?
9	Are there federal or state sources that provide one-time or reoccurring revenue support for maintenance needs?
10	Are there grants or other sources you have utilized? How does the use of sources like this influence your budget planning?
11	Other related data?

Table 4. Data Collection Checklist: Normal Operation and Maintenance

No.	Item
1	Does your agency have any asset inventory? In what format do you save the inventory? (e.g., curb ramps, sidewalk, striping, etc.)
2	What assets require maintenance in your agency?
3	What are the total needs for your asset maintenance?
4	What is your existing annual budget to maintenance these assets?
5	Does your agency have existing asset maintenance records or work order history?
6	How does your agency maintain the existing assets? (in-house or by contractor)
7	What is your regular maintenance schedule or process?
8	What are your emergency repairs and maintenance processes?
9	What is your CIP needs and projects?
10	What normal operations and maintenance does your agency perform? Crack sealing Patching Sweeping Snow removal Landscaping Roadway striping Concrete repairs (sidewalk, curb and gutter, curb ramp, etc.) Strom drain maintenance Guardrail repairs Shoulder maintenance Culvert cleaning Others
11	How does your agency operate or maintain the above items? (ex. regular monitor/inspect, repair, or work orders) (in-house or by contractor?)
12	How does your agency track or save operation and maintenance records?
13	How does your agency prioritize operation and maintenance activities?
14	What is your annual budget for operations and maintenance?
15	Other related data?

2. Pavement Maintenance

Data collected about Pavement Maintenance focused on the existing pavement management program (PMP), pavement strategies, and pavement needs and funding for each agency. The details are stated as follows.

2.1 Pavement Management Program

Pavement networks are often the most valuable asset an agency owns. A current PMP with accurate pavement condition data is an essential tool to maintain and repair roadways to stretch funding allocation. The City began using PAVER as its PMP in the late 1980s for developing roadway inventory, updating inspections and historical records, and establishing GIS shapefiles in the database. PAVER is also a decision-support tool for maintenance and funding allocation for the City.

Pavement inventory is a key component of pavement management. The City's roadway network contains a total of 757.1 centerline miles (Table 5), including 519.8 centerline miles (or 3,715 sections) of non-RTP roads maintained by the City and 237.3 centerlines miles (or 709 sections) of RTP roads maintained by the RTC. Despite this, the City manages the normal operations and maintenance for the entire roadway system. Residential roads make up the largest portion of the non-RTP roads, with approximately 448 centerline miles. Most sections are composed of asphalt concrete (AC), and 40 sections are portland cement concrete (PCC) pavements, including 37 RTP sections and 3 Non-RTP sections (according to the information in PAVER database).

Table 5. Centerline Miles and Sections by Functional Classification and Maintenance Agency

Functional Classification	Centerline Miles (# sections) by Maintenance Resource	
	Non RTP Road	RTP Road
Arterial	0.7(8)	158.8 (411)
Collector	53.2(197)	43.9 (142)
Residential	448.3(3,411)	4.8 (21)
Industrial	16.9(97)	29.8 (135)
Not applicable*	0.7(2)	--
Total	519.8(3,715)	237.3 (709)
	757.1(4,424)	

* Herz Boulevard and Summit Sierra Boulevard are in a commercial district, and no functional classification is assigned on these sections.

Pavement condition data is the "fuel" for any pavement management engine. The City adopts ASTM D6433[1] as the distress protocol for pavement condition inspection. Inspections are carried out by in-house technicians or contractors via walking surveys. One-third of the network is inspected and updated each year; therefore, the entire pavement network is updated every 3 years. Only pavement condition is inspected and updated in the current PMP system, and no other pavement related testing (ex. coring, deflection, friction or profiler) is regularly performed on City maintained non-RTP roads.

Pavement condition is typically quantified using the pavement condition index (PCI), which ranges from from 0 (worst) to 100 (best). Pavement condition is affected by the environment, traffic loads and volumes, construction materials, and age. The City divides the PCI scale into 7 condition categories as shown in Table 6. Pavements in "Very Good" condition have a PCI at or above 86, pavements in "Good" condition have a PCI

between 71 and 85, pavements in “Fair” condition have a PCI between 56 and 70, and finally pavements in “Poor” to “Failed” condition have a PCI at or below 55.

Table 6. City of Reno-Pavement Condition Breakdown

Condition Category	PCI Range
Very Good	86 – 100
Good	71 – 85
Fair	56 – 70
Poor	41 – 55
Very poor	26 – 40
Serious	11 – 25
Failed	0 – 10

The City sets a performance target of 78 for PCI of non-RTP roads. The current (2024) PCI of non-RTP roads is 76.1, and Figure 1 breaks down the current non-RTP road PCI by functional classification. The average PCI for residential roads (77.3) is the highest among arterials, collectors, residentials and industrials. The average PCIs for arterials and collectors are similar (72.9 and 70.3, respectively), followed by industrials, with an average PCI of 66.0. Figure 2 shows current non-RTP road in area percentage by condition category. Approximately 71% of the non-RTP roads have a current PCI greater than 71, placing them in the “Very Good” and “Good” categories, while nearly 17% have a current PCI below 55.

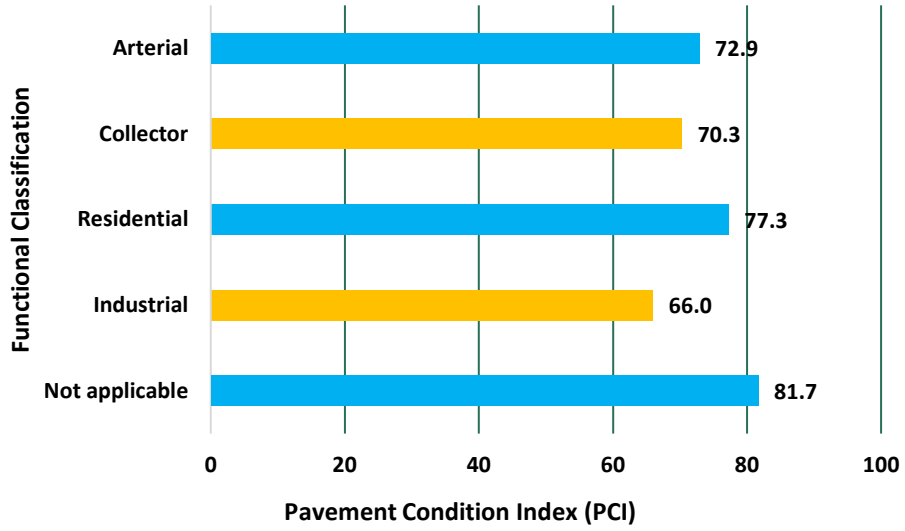


Figure 1. Current PCI by Functional Classification

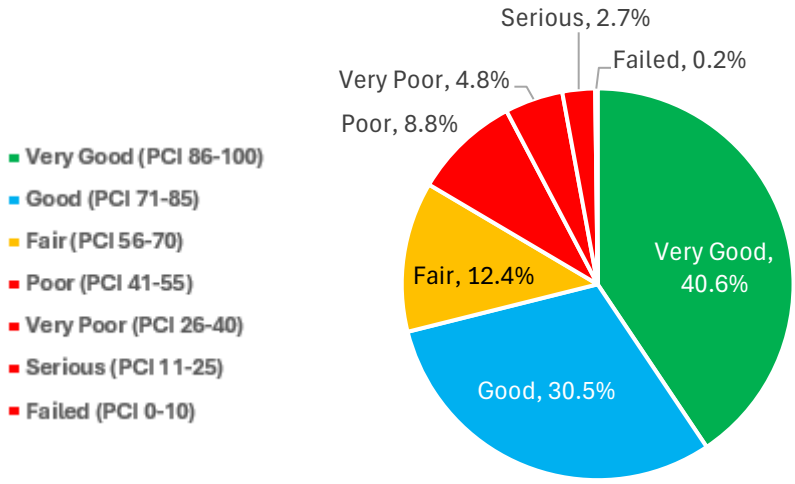


Figure 2. Area Percentage by Condition Category

2.2 Pavement Strategies and Costs

Pavement maintenance strategies include a variety of treatments and practices aimed at addressing pavement deterioration and maintaining pavement in acceptable condition throughout its service life. Maintenance and rehabilitation treatments are selected based on the pavement's condition, and treatment costs are directly influenced by the condition at the time of application. The maintenance cost of pavements in good condition is generally lower than the rehabilitation and reconstruction cost of pavements in poor or very poor condition. Therefore, applying the appropriate treatments at the appropriate time is crucial for effectively utilizing the budget and maintaining pavement quality.

The strategies shown in Table 7 are utilized by the City for roadway maintenance and rehabilitation. In general, slurry seal or microsurfacing will be applied on AC pavement in very good or good condition. Mill and overlay and cape seal will be applied on AC pavement in fair condition. Full section reconstruction will be performed on both AC and PCC pavements with PCIs below 55. Treatment costs for slurry seal, mill and overlay, and full reconstruction are listed in Table 8. These costs include paving materials and non-paving items (e.g., traffic control, striping, utility work, curb and gutter, sidewalk, curb ramp), soft cost (e.g., labor, engineering design), and contingency. Treatment costs are evaluated and calibrated every year with recent projects bid results. According to 2024 bid tabs, the City has performed crack sealing, slurry seal, mill and overlay, full depth reclamation, and reconstruction as pavement maintenance and rehabilitation practices.

Table 7. City of Reno – Pavement Strategies

Surface	Condition Category	Treatment
AC	Very Good PCI 86 – 100	Slurry/microsurfacing
	Good PCI 71 – 85	
	Fair PCI 56 – 70	Mill and overlay/cape seal
	Poor to Failed PCI 0 – 55	Full section reconstruct
PCC	Very Good PCI 86 – 100	Do nothing
		Do nothing
		Do nothing
	Poor to Failed PCI 0 – 55	Full section reconstruct

Table 8. Treatment Costs

PCI Ranges and Treatment	Unit Cost
Slurry seal	$0.38/square foot (SF)
PCI 60 – 75 Mill and overlay	$6.00/SF
PCI 55 – 60 Mill and overlay	Interpolate the unit cost between $6.00/SF and $23.00/SF
PCI < 55 Full reconstruct	$23.00/SF

Sustainability is a global concern and a crucial issue in pavement practices. Many resources are consumed throughout the life cycle of pavement, from construction to maintenance. Adopting sustainable pavement practices can help reduce the environmental impact of pavement-related activities and conserve valuable resources. In recent years, the City has implemented several sustainable pavement practices, including full depth reclamation, roadbed modification, and the use of up to 30% reclaimed asphalt pavement in AC. Additionally, permeable or porous pavement has been installed in a parking lot to improve drainage, and warm mix asphalt has been utilized on various streets since 2009. Pavement preservation such as slurry seal and cape seal also play a vital role in achieving a sustainable pavement system.

With limited paving funding, the agency needs to establish a strategic approach for selecting sections of roadways for treatment. This involves prioritizing areas based on factors such as pavement condition, traffic volume, and maintenance history. The prioritization rules utilized by the City are summarized as follows.

1. The City network is divided into 3 triads (areas) for inspection, preventative maintenance, and reconstruction which rotate on a 3-year cycle.

2. Streets with a PCI higher than 70 are eligible for preventive maintenance, which is conducted on a 6-to-9-year surface seal cycle. Streets with a PCI below 55 are candidates for reconstruction.
3. A list of roads with PCIs lower than 55 within that year's triad will be developed, and roads located in same neighborhood are grouped into units to enable cost-effective construction. These units are ranked by PCI, along with considerations for sewer condition and criticality, to create a priority list for that year's triad. Additional factors, such as utilities placements or proximity to school and healthcare facilities, are also evaluated. The final recommended list of projects is presented to the City Council for approval, and the remaining roads are kept on the list for future consideration.

2.3 Pavement Needs and Funding

The Public Works Department is responsible for pavement maintenance and rehabilitation in the City[3], and has implemented comprehensive pavement maintenance and rehabilitation projects designed to cost-effectively maintain pavement condition. Funding for these efforts is shown in Section 4 "Financial and Funding Sources".

Based on the analysis results from January 1st, 2024 (excluding 2024 inspection data and completed projects) exported from City's PAVER database, the pavement needs for non-RTP roads are $1,866 million over the next 20 years and the unfunded backlog is approximate $360 million in 2024. This number is notably higher compared to other agencies, and the unit cost in PAVER may need to be reviewed. However, the City's annual budget for street preventive maintenance and reconstruction for fiscal year 2025 is only $11.5 million.

2.4 Summary

PAVER has been used as the City of Reno's PMP and decision-support tool for maintenance practices or funding allocation since the late 1980s. The City maintains a total of 519.8 centerline miles (or 3,715 sections) of non-RTP roads and has adopted ASTM D6433[1] as the distress protocol for pavement condition inspections while the City oversees the normal operations and maintenance for the combined total of 757.1 centerline miles roads in the City. These inspections are conducted through walking surveys carried out by in-house technicians or contractors. Each year, one-third of the network is inspected and updated, ensuring that the entire pavement network is updated every 3 years.

The City has set a performance target of 78 for the PCIs of non-RTP roads. The current (2024) PCI of non-RTP roads is 76.1. Recent bid tabs indicate that over the past few years, the City has performed crack sealing, slurry seal, mill and overlay, full depth reclamation, and reconstruction as pavement maintenance and rehabilitation practices. Based on the analysis results from January 1st, 2024 exported from City's PAVER database, the pavement needs for non-RTP roads are $1,866 million over the next 20 years. This number is notably higher compared to other agencies, and the unit cost in PAVER may need to be reviewed. However, the City's annual budget for street preventive maintenance and reconstruction for fiscal year 2025 is $11.5 million.

[3] City of Reno. n.d. "Street Rehabilitation and Maintenance." Accessed October 20, 2024. https://www.reno.gov/government/departments/public-works/capital-projects/street-rehabilitation

3. ITS Infrastructure

Intelligent Transportation System (ITS) infrastructure data was requested from the City to evaluate its current state. This data included:

1. Operation and Maintenance asset management records (i.e., existing ITS inventory)
2. Work order history
3. Maintenance schedules and procedures
4. Planning and funding maintenance

NCE met with the City on July 31, 2024, to provide an overview of the project and request the ITS infrastructure data. The following sections provide a summary of the existing ITS infrastructure inventory, existing ITS operations and maintenance efforts, ITS planning and approval processes, and ITS needs and funding as identified by the City. A summary table of the responses from the City is included in Attachment A.

3.1 Existing ITS Infrastructure Inventory

As of July 31, 2024, the City owns and operates 191 signals. The City also maintains additional signals through interlocal agreements between Washoe County and the Nevada Department of Transportation (NDOT). Through the interlocal agreements, the City maintains 24 signals owned by Washoe County and 87 signals owned by NDOT. The interlocal agreements between Washoe County and NDOT are included in Attachment B. A detailed summary of the City's infrastructure (traffic signals, cabinets, and traffic Pan-Tilt-Zoom [PTZ] cameras) as well as other infrastructure the City maintains for Washoe County and NDOT is provided in Table 9.

Table 9. Existing ITS Device Inventory

ITS Device	City of Reno	Washoe County	NDOT	Total
Traffic signals (# of signalized intersections)	191	24	87	**302**
Traffic cabinet	191	24	87	**302**
Traffic camera (PTZ)	46	-	-	**46**

Note: Signalized intersections owned by Washoe County or NDOT but that are maintained by the City are included here.

3.2 Existing ITS Operations and Maintenance

The City conducts annual preventative maintenance on its traffic signals and cabinets. Updates to the system such as battery and fan replacements are documented during preventative maintenance efforts. The City maintains a total of 302 signalized intersections, some of which are owned by Washoe County and NDOT. The agreement between the City and Washoe County identifies 2 groups of maintenance activities:

- Regular traffic signal maintenance
    - Signal preventative maintenance
    - Cabinet/ground preventative maintenance
    - Safety/conflict monitors
    - General signal maintenance
    - Illuminated street name sign maintenance
- Additional traffic signal services
    - School flasher maintenance
    - Signal response and pedestrian signal repair
    - Bench repair
    - Vehicle detection
    - LED replacement
    - Signal head repair
    - Cabinet rehab/construction
    - New signal inspection
    - Review traffic signal design plans
    - Signal interconnect
    - USA locates
    - Limited street light maintenance

The agreement between the City and NDOT includes:

- Replacement and repairs of signal system equipment due to incidental damages
- Emergency replacement and repairs of signal system equipment

The City provided more than 3 years of maintenance work order history (January 2021 – June 2024). The maintenance work order history data was reviewed and categorized into maintenance activities including preventative maintenance (for signals and cabinets), signal head repair, and inspections. A detailed summary of the maintenance activities is provided in Attachment C. On average, the City spends approximately 6,144 man-hours annually to maintain existing ITS infrastructure. Of the 6,144 man-hours, approximately 8 percent or 474.5 man-hours were spent on preventative maintenance (e.g., routine inspections) while 92 percent or 5,669.5 man-hours were spent on reactive maintenance (e.g., repair or replacement of broken hardware) (Table 10). Additionally, approximately 95 percent of the 6,144 man-hours took place during regular hours, and 5 percent were overtime hours. Based on the fee schedule provided in the agreement between the City and Washoe County (regular hourly pay of $88.57 and overtime pay of $132.85), an estimated annual budget spent on maintenance activities was calculated. Overall, the City spends approximately $557,777 on labor annually to maintain its signals and those under contract with Washoe County and NDOT.

Table 10. Estimated Annual Maintenance

Maintenance Type	City of Reno	Washoe County	NDOT	Total
Preventative Maintenance (man-hours)	373.5	47.5	53.5	474.5
Reactive Maintenance (man-hours)	4,712.5	240.5	716.5	5,669.5
Total Maintenance (man-hours)	5,086	288	770	6,144

3.3 ITS Planning and Approval Processes

The planning and decision-making process for funding maintenance of the City's ITS infrastructure is coordinated among the City Traffic Engineering and the Maintenance and Operations teams. This coordination allows the teams to utilize both the team's programmed budget and grant funding to perform preventative maintenance efforts and major rehabilitation projects. In making their scheduling and funding decisions, the 2 teams consider:

- Historical maintenance data
- Manufacturer legacy hardware support
- Changes in traffic volume
- New construction that may require the need for new intersections or significant upgrades to existing intersections
- Funding impacts (primarily considered when grant or other time-limited funding is involved)

3.4 ITS Needs and Funding

The City's ITS maintenance needs are funded by a combination of an annual budget and grant funds. Grants and other time-limited funding are distributed among projects according to "greatest impact" as determined by the Traffic Engineering and Maintenance and Operations teams. The City also receives a maximum of $70,000 annually (unless additional expenses are agreed upon) from Washoe County to maintain all 24 of their traffic signals and cabinets. Under their contract with NDOT, the City is reimbursed for individual maintenance and repair costs that exceed $1,500 at each of NDOT's 87 locations being maintained by the City of Reno. Additionally, NDOT fully reimburses the City of Reno for any emergency repairs and replacements at their intersections. The full agreements can be found in Attachment B.

3.5 Summary

In summary, the City of Reno spends approximately 6,144 man-hours, equating to approximately $557,777 on labor annually to maintain its ITS infrastructure, along with Washoe County's and NDOT's ITS infrastructure. The City is reimbursed by Washoe County and NDOT for the maintenance activities as outlined in each agreement. Apart from reimbursements from Washoe County and NDOT, the City funds its ITS maintenance through a combination of annual budgets and grant funding. The priority of maintenance projects and allocation of funding is determined in a joint effort by the City's Traffic Engineering and Maintenance and Operations teams.

4. Financial and Funding Sources

This section summarizes the findings of a review of revenue streams that are available to support costs associated with pavement and ITS maintenance for the City of Reno. Following an interview with finance and budget staff on August 5th, 2024, a thorough review of annual budget and annual comprehensive financial reports (ACFR) documents was completed by the consultant team. It should be noted that at the time this project began, financial for fiscal year (FY) 2023-2024 was the most recent budget data available. For this reason, data from FY 2023-2024 was utilized throughout this analysis for consistency. FY 2024-2025 was released while the review was already underway.

The City of Reno provided these materials along with a summary of revenues streams associated with the Nevada Motor Vehicle Fuel Tax (MVFT). The Fuel Tax Summary document included revenue trends for Reno, Washoe County, Sparks, and RTC. A summary table of the responses from the City is included in Attachment A.

4.1 Motor Vehicle Fuel Tax

Motor Vehicle Fuel Tax Overview

Although the Motor Vehicle Fuel Tax is the most prominent source of revenue available to fund pavement and ITS maintenance for Washoe County, the Ad Valorem Property Tax Override is the largest source of revenue for the City of Reno. There are several statutory authorities that generate revenue based on all motor vehicle fuel sales across RTC, Washoe County, and the cities of Sparks and Reno, except for aviation fuel. These statutory authorities include:

- **NRS365.192** - $0.01 motor vehicle fuel tax in Washoe County; this funding goes to Washoe County and the cities of Reno and Sparks and is distributed formulaically based on population, lane miles, and land area.
- **NRS365.190** – additional $0.0175 motor vehicle fuel tax in Washoe County; this funding goes to Washoe County and the cities of Reno and Sparks distributed formulaically based on population, lane miles, and land area.
- **NRS365.180** – additional $0.036 motor vehicle fuel tax in Washoe County, broken down further into$0.0125 towards Washoe County Road bonds and $0.0235 to Washoe County; the City of Reno does not receive any revenue from this stream.
- **NRS373.030** – optional $0.09 motor vehicle fuel tax in Washoe County and is distributed to RTC; the City of Reno does not receive any revenue from this stream.
- **NRS365.175** - $0.1765 base rate to the State Highway Fund; the City of Reno does not receive any revenue from this stream.

Nevada's Motor Vehicle Fuel Tax is indexed, meaning its adjusted annually based on a formula that ties it to inflation. It is important to note that all agencies made note of the challenges related to the increasing efficiency of modern motor vehicles, many of which require less fuel to operate. The goal of indexing is to support collection of a revenue stream that is adequate to cover the cost of maintaining and improving transportation infrastructure.

The statutory authorities are indexed in different ways. First NRS 373.065 authorizes Washoe County to levy additional tax equal to amount authorized by NRS 365.180, 365.190, 362.192, and 373.030 multiplied by the average of the past five years Consumer Price Index (CPI) or 4.5%. Secondly, NRS 373.066 provides the authorization to impose a tax indexing for state and federal fuel taxes to inflation; this is indexed by a 10-year rolling average of the Producer Price Index (PPI), which measures the average change in the cost of nonresidential construction. PPI across all applicable sources is capped at 7.8%.

The revenues collected as part of the Motor Vehicle Fuel Tax are then distributed to the cities of Reno and Sparks, Washoe County, and the RTC. Distribution methods vary depending on the statutory authority. Table 11 demonstrates the various tax descriptions, the tax rate, and the jurisdiction or authority that receives the funding stream.

NRS365.192 is distributed based on the share of population in each jurisdiction. As of July 1, 2023, the City Reno accounted for 54.5% of the total Washoe County population, Sparks accounted for 22.4%, and unincorporated Washoe County represented the balance at 23.1%. NRS365.190 is distributed based on property valuations, and NRS373.180 is distributed based on population, land area, local road mile, and vehicle miles traveled. It is important to note that the factors utilized in the calculation result in Washoe County receiving more revenue, primarily due to the land area factor, than the cities of Reno and Sparks combined.

Table 11. Statutory Authorities for Motor Vehicle Fuel Tax and Receiving Agency

Tax Description	Tax Rate	Washoe County	Reno	Sparks	RTC
NRS365.192 Base	$0.01	X	X	X	
NRS365.192 CPI	$0.01	X	X	X	
NRS365.192 PPI	$0.01	X	X	X	
NRS365.190 Base	$0.0175	X	X	X	
NRS365.190 CPI	$0.0175	X	X	X	
NRS365.190 PPI	$0.0175	X	X	X	
NRS365.180 Base	$0.0125	X			
NRS365.180 CPI	$0.0125	X			
NRS365.180 PPI	$0.0125	X			
NRS365.180 Base	$0.0235	X	X	X	
NRS365.180 CPI	$0.0235	X	X	X	
NRS365.180 PPI	$0.0235	X	X	X	
NRS373.030 Base	$0.09				X
NRS373.030 CPI	$0.09				X
NRS373.030 PPI	$0.09				X
PPI State/Federal					X
PPI Special Funds					X

The optional $0.09 Washoe County tax (NRS373.030), a portion of NRS365.175, and indexing of the State and Federal Fuel Tax are revenue streams allocated to RTC. Figure 3 demonstrates the separate statutory streams for the Nevada Motor Vehicle Fuel Tax.

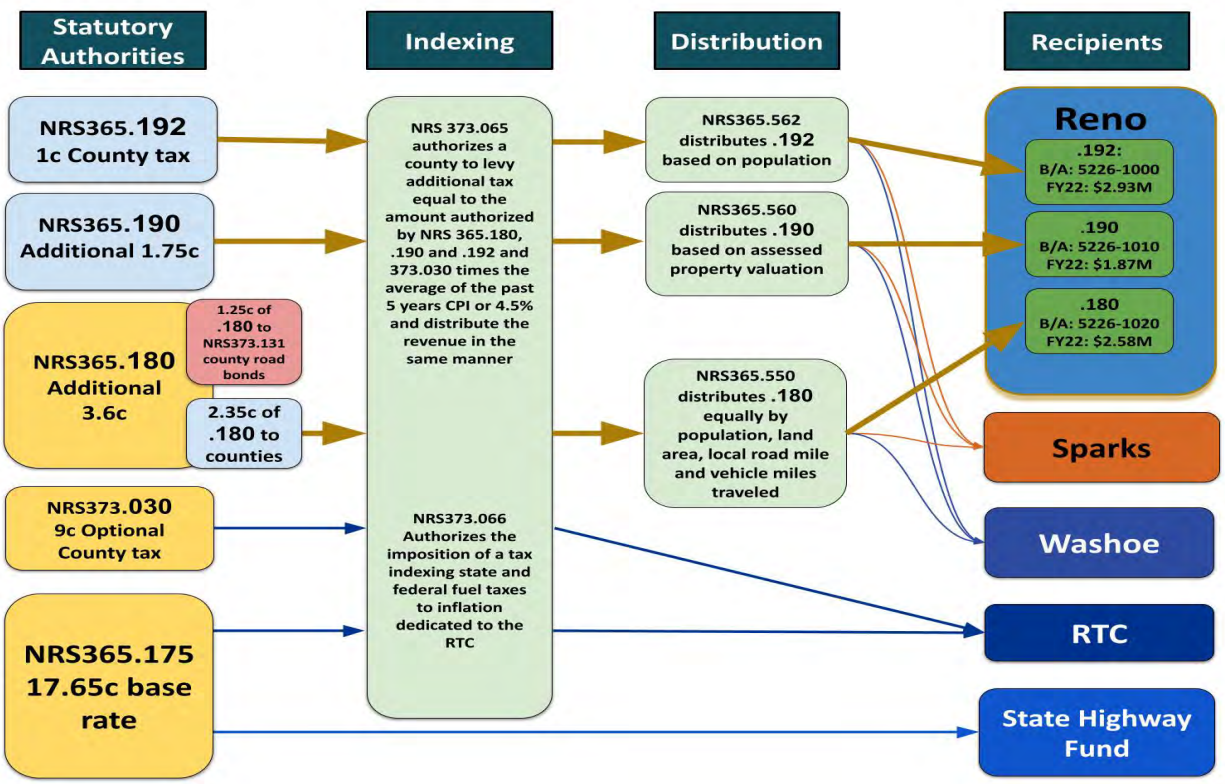


Figure 3. Nevada Motor Vehicle Fuel Tax

Figure 4 demonstrates a summary of the Washoe County taxes paid per gallon of gas. The total tax rate across all statutory authorities is $0.93313 per gallon. The PPI stream comprises 41.2% of the total, the largest share across the authorities, followed by Federal (19.8%) and State (19.7%).

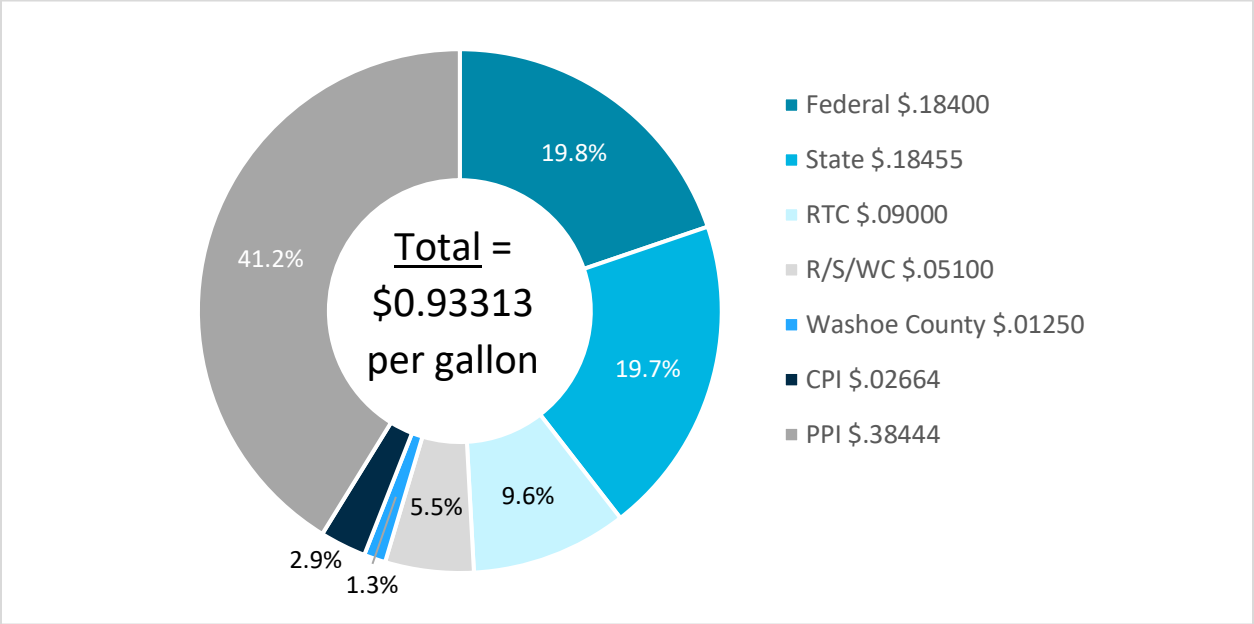


Figure 4. Washoe County Taxes Paid per Gallon of Gas, FY 2023-2024

Figure 5 demonstrates the revenues associated with the Motor Vehicle Fuel tax for Washoe County between fiscal year (FY) 2014 and FY 2023. The graph breaks the revenue streams down between NRS365.192 ($0.01), NRS365.190 ($0.0175), and the county portion of NRS365.180 ($0.0235) and the $0.0125 revenue stream allocated to county road bonds. The graph excludes revenue that goes to RTC from NRS373.030. In total, in FY 2023 Washoe County received more than $10.6M from the Motor Vehicle Fuel Tax. The impact of reduced travel during the COVID-19 pandemic is apparent in the graphic, with a decline in total revenue shown in FY2020. As of FY2023, the total revenue has exceeded the total in FY2019, demonstrating recovery to pre-pandemic levels.

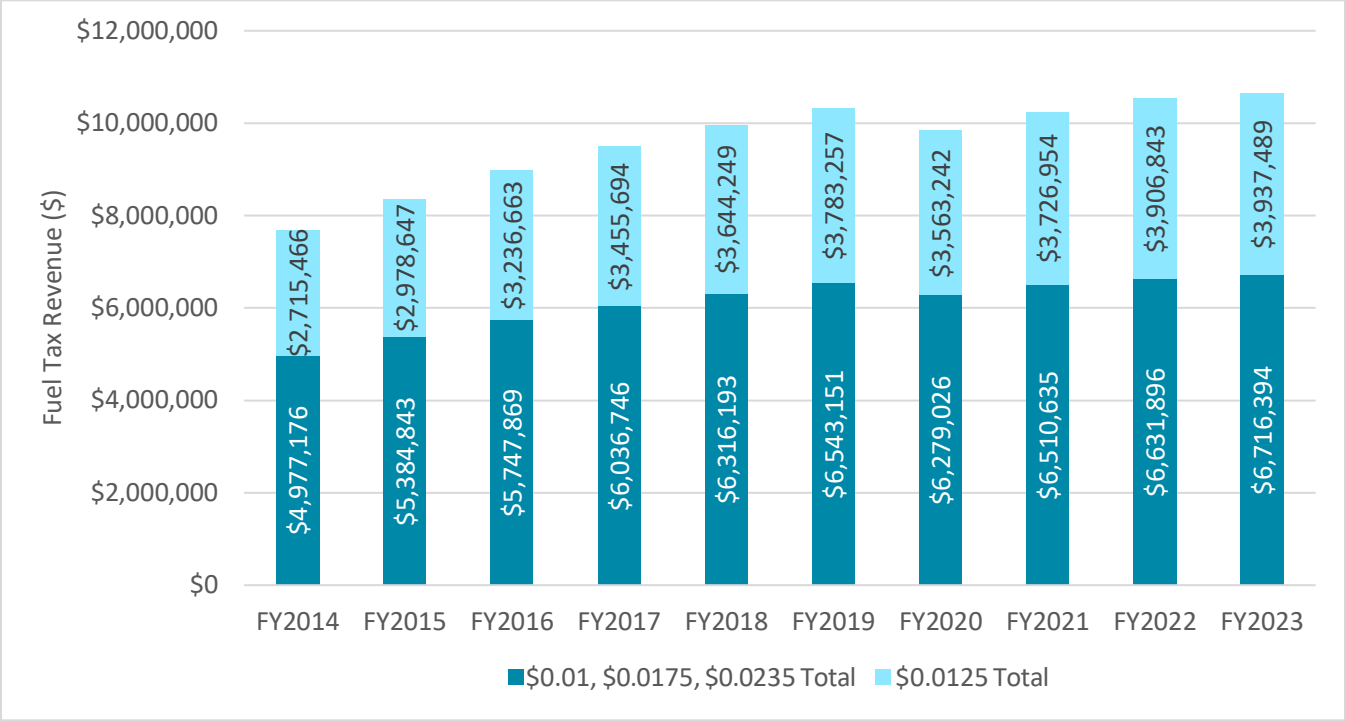


Figure 5. Washoe County Fuel Tax Revenues, FY 2014-2015 (FY2014) to FY 2023-2024 (FY2023)

City of Reno Motor Vehicle Fuel Tax Revenue

In FY2023, the City of Reno received nearly $7.4 million in total fuel tax revenue, an increase of 44.6% over $5.1 million in FY2014 (Figure 6). The fuel tax revenue allocated to the City of Reno increased year-over-year between FY2014 and FY2019, reaching the largest amount on record in FY2019. Between FY2014 and FY2019, the average annual increase in motor vehicle fuel tax increased by an average of 6.9% per year. As a result of reduced vehicle miles traveled during the COVID-10 pandemic, the City's revenue stream from the fuel tax decreased between FY2019 and FY2020 by 5.5%. Recovery occurred through FY2022 averaging an increase of 4.9% per year, however, a modest decline of 0.5% occurred between FY2022 and FY2023. The City's $7.4 million in fuel tax revenue in FY2023, represented 6.3% of the total collected across the four agencies.

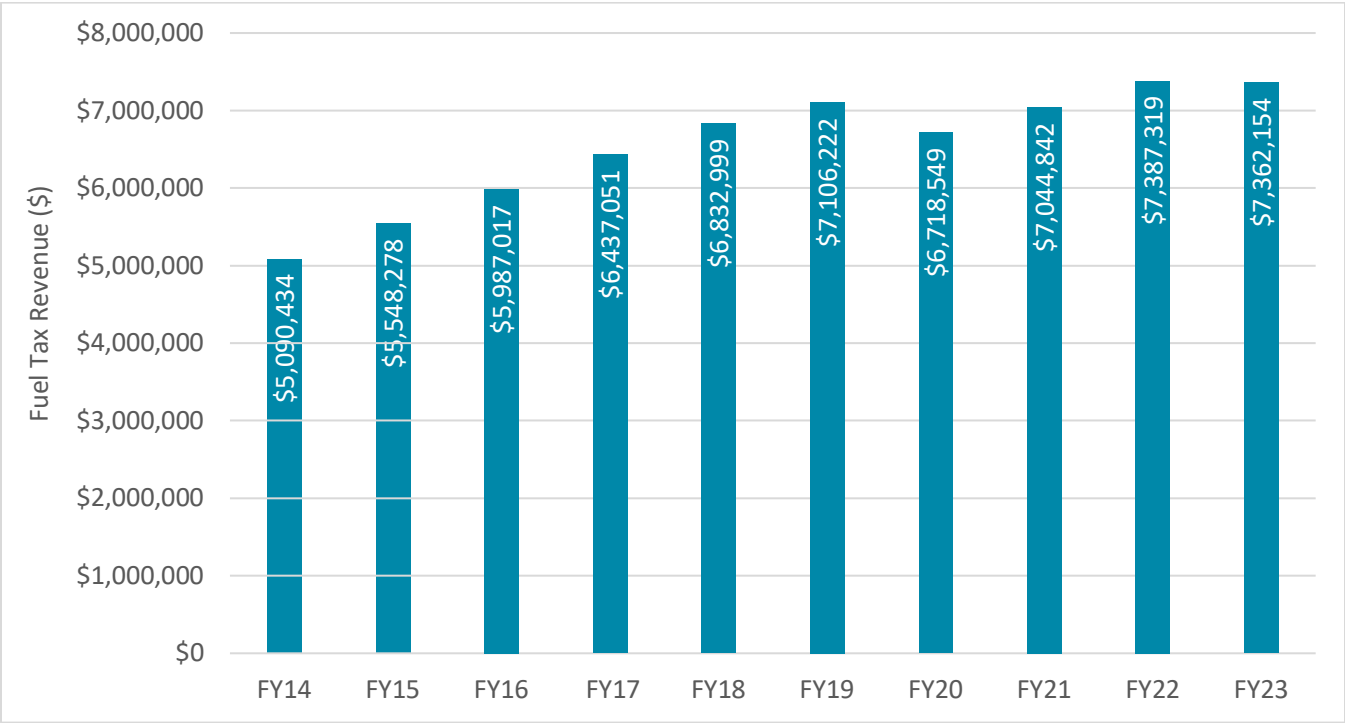


Figure 6. City of Reno Fuel Tax Revenue, FY2014-2015 (FY14) to FY 2023-2024 (FY23)

Table 12 and Figure 7 demonstrate the total fuel tax revenue stream for the City of Reno broken down by statutory authority. Since FY 2014, NRS365.190 has typically comprised about 39%-40% of the total revenue to Reno, followed by .180 averaged at 34.5%, and .192 at approximately 25%.

Table 12. City of Reno Fuel Tax Revenue by Statutory Authority

Fiscal Year	NRS365.192($0.01)	NRS365.190 ($0.0175)	NRS365.180($0.0235)	Total
FY2014	$1,343,842	$2,084,199	$1,662,393	$5,090,434
FY2015	$1,451,836	$2,252,171	$1,844,271	$5,548,278
FY2016	$1,548,840	$2,382,195	$2,055,981	$5,987,017
FY2017	$1,649,543	$2,545,964	$2,241,544	$6,437,051
FY2018	$1,738,151	$2,693,955	$2,400,892	$6,832,999
FY2019	$1,803,807	$2,798,567	$2,503,848	$7,106,222
FY2020	$1,730,377	$2,705,375	$2,282,797	$6,718,549
FY2021	$1,814,272	$2,839,538	$2,391,032	$7,044,842
FY2022	$1,869,798	$2,932,706	$2,584,816	$7,387,319
FY2023	$1,867,099	$2,903,152	$2,591,903	$7,362,154

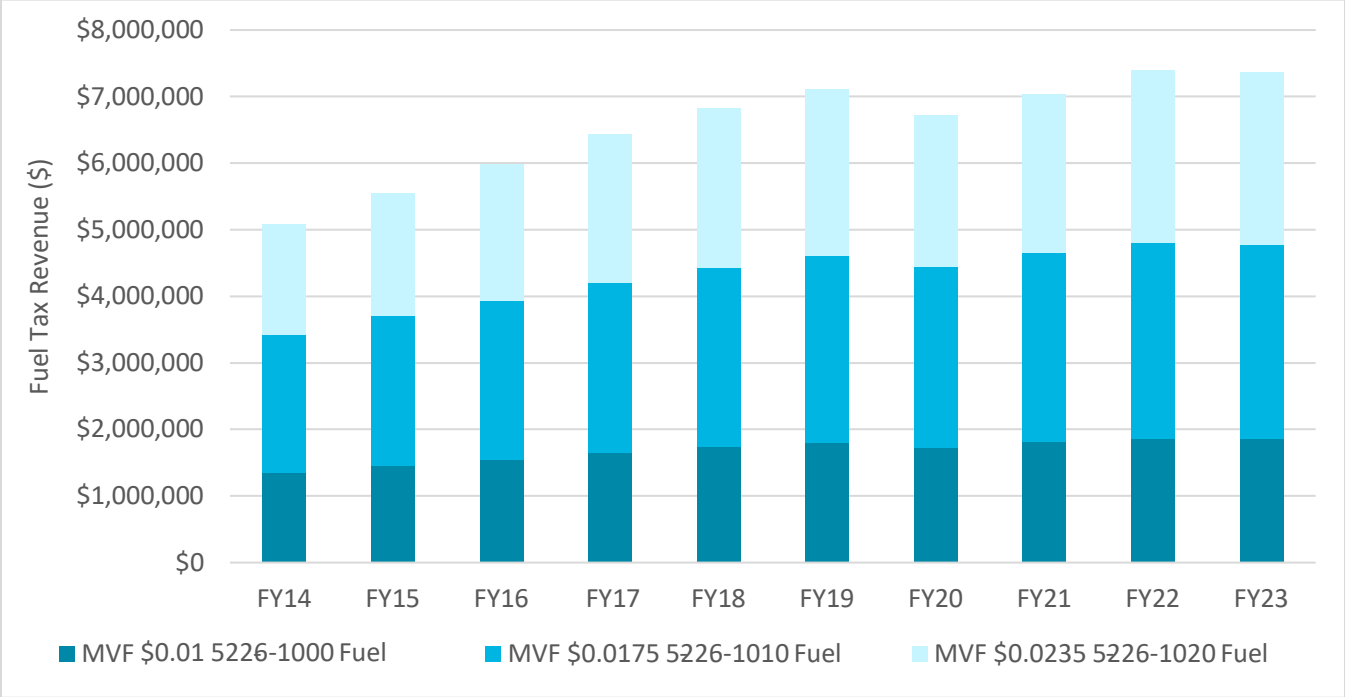


Figure 7. City of Reno Fuel Tax Revenue by Statutory Authority, FY 2014-2015 (FY14) to FY2023-2024 (FY23)

4.2 Other Revenue Sources for City of Reno

The City of Reno also collects revenue that supports ongoing pavement and ITS maintenance from three additional sources beyond motor fuel tax: ad valorem (property tax override), excavation and encroachment permits, and Truckee Meadows Water Authority (TMWA) right-of-way tolls.

- **Ad Valorem (Property Tax Override)**: In 1993, the City of Reno citizens approved via voter referendum that a portion of the ad valorem property tax revenue be allocated specifically to street maintenance and repair (acquiring, constructing, reconstructing, improving, and maintaining city streets).This is the largest source of revenue available to the City of Reno to fund street maintenance, notably higher than the MVFT. The allocation is $0.2298 per $100 in assessed property valuation. In FY2023, the property tax override allocated to street maintenance and repair resulted in revenue generation of $22.2 million. The property tax override is currently approved through 2038. If another voter approval fails to extend the override, the City would lose an important share of financial resources that supports the maintenance and repair of city streets.
- **Excavation and Encroachment Permits:** The City of Reno also allocates revenues generated through applications for excavation and encroachment permits to street maintenance and repair. These permits are focused on work that is performed within the City of Reno right-of-way. In FY2023, the City generated $501,467 in revenue from this source. This source does not entirely fund street maintenance and repair, with some of the revenue dedicated to administration of the Excavation and Encroachment program.
- **TMWA Right-of-Way Tolls**: A third source of additional revenue to support street repair and maintenance is from the TMWA right-of-way tolls, also known as franchise fees. This is a pass-through fee imposed by a local government entity on utility and cable television companies for the right to have

utility infrastructure located with the right-of-way of city streets. The fee is defined as 5% of the water charge. In FY2023, right-of-way tolls generated nearly $3.2 million in revenue for the City of Reno.

Across all three sources, the amount of revenue generated for the City of Reno has increased between FY2014 and FY2023 (Figure 8). Each of the sources highlighted in this section are variable: the Property Tax Override increases by the pace of development and overall valuation of properties in the City of Reno, Excavation and Encroachment Permits can be influenced by the pace of development but also by necessary work performed in the public right-of-way (could include replacement or capacity projects), and TMWA water tolls are influenced by new development and weather patterns. The property tax override increased from $13.3 million in FY2014 to more than $22.2 million in FY2024, a 67.2% increase. Excavation and encroachment permit revenue increased by more than 218.1% during that same time frame and right-of-way tolls increased by 23.4%. Again, it's important to note that Reno's property tax override is set to sunset in 2038. Without reauthorization, the city could lose a substantial portion of their funding for street maintenance and repair.

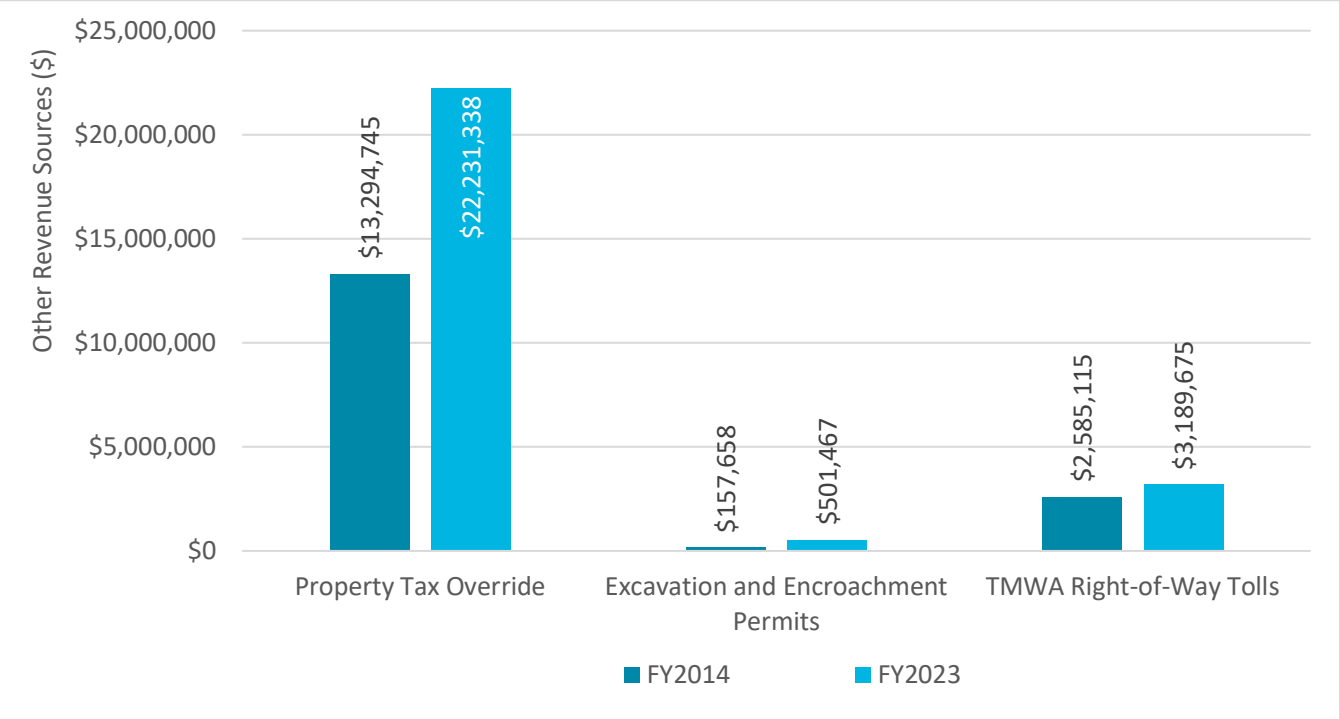


Figure 8. City of Reno Other Revenue Streams, FY-2014-2015 (FY2014) to FY 2023-2024 (FY2023)

4.3 Summary

The City of Reno received $33.3 million in revenue in FY2023 to support street maintenance and repair, an increase of 57.5% from the total in FY2014. Influenced by a variety of factors, including development occurring in the community, overall valuation of City of Reno properties, and weather, the property tax override increased by the largest absolute amount, adding nearly $9.0 million in new revenue since FY2014. This source continues to be the largest stream available to the city for street maintenance and repair. As previously noted, as currently authorized, the property tax override will sunset in 2038. Today, this source represents two-thirds of the total revenue dedicated to street maintenance and repair. This would result in a significant decrease in funding for the City if not reauthorized by the voters. The motor vehicle tax represents another 22.1% of the total revenue stream and has increased by 22.1% since FY2014. The City of Reno noted future concerns about the motor

vehicle fuel tax due to the increasing efficiency of vehicles, which is expected to result in fewer gallons purchased over time. The TMWA right-of-way revenue comprised 9.6% in FY2023, increasing by 23.4% since FY2014. Finally, excavation and encroachment revenues increased by $343,809 between FYs 2014 and 2023, reaching approximately 1.5% of the total available.

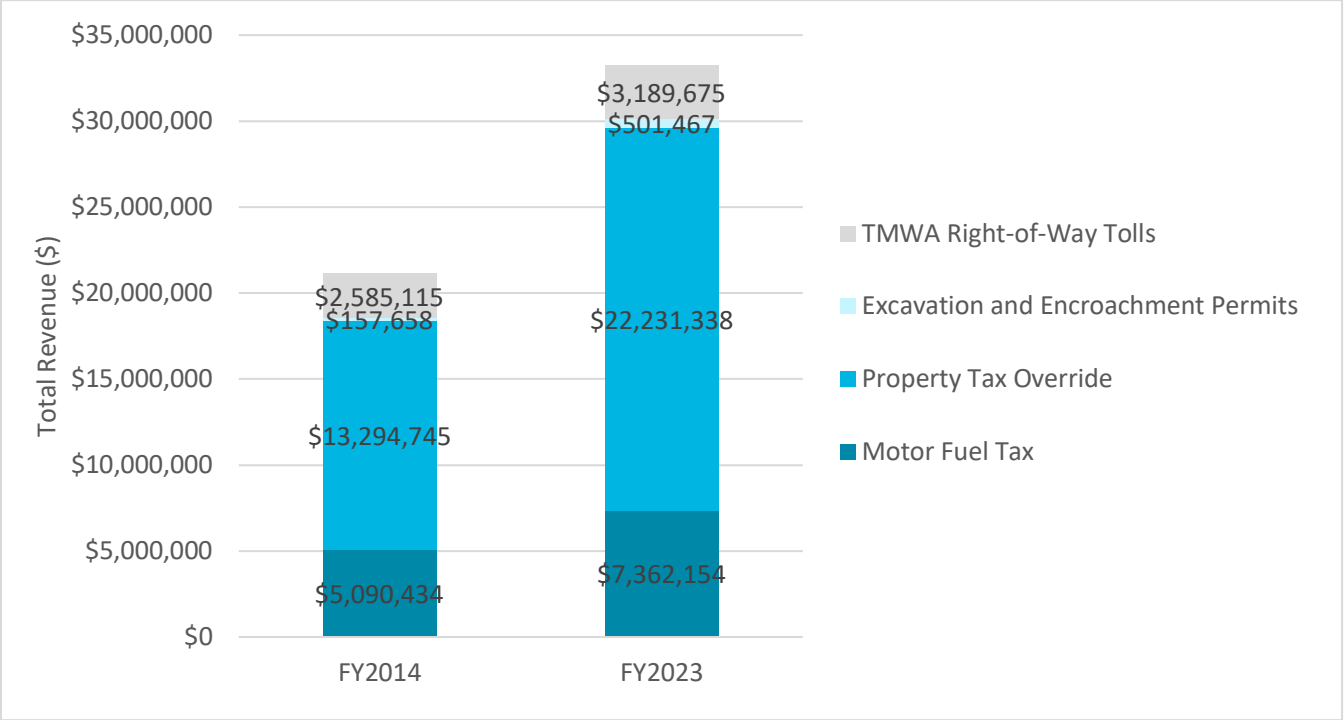


Figure 9. City of Reno Revenue Available for Street Maintenance and Repair, FY 2014-2015 (FY2014) to FY 2023-2024 (FY2023)

5. Normal Operation and Maintenance

Data collection on Normal Operation and Maintenance focuses on existing asset management system, asset needs and funding, and other normal operations and maintenance for each agency. The details are stated as follows.

5.1 Asset Management System

The City maintains various non-pavement assets, including traffic and parking control infrastructure, sidewalks, curb and gutter, medians and right of way, bridges, guard rail and shoulder infrastructure, catch basins, culverts, roadside ditches, stormwater retention basins, and stormwater pipe to provide service to residents. An asset inventory is essential for effective management and planning, significantly contributing to the quality of life for residents. To keep this inventory updated, the City has implemented the asset management system Streetscape to collate pedestrian ramp locations, sidewalk inventory, sidewalks discontinuity points, sidewalk obstruction points, landscaped medians, and parking meters information in GIS format. The City also maintains a CAD file containing traffic striping information.

To preserve asset effectiveness, the City conducts regular operation and maintenance, including crack sealing, patching, sweeping, snow removal, median and right-of-way landscaping, roadway striping, concrete repairs, guardrail repairs, shoulder maintenance, crosswalk thermoplastic marking and painting, sign installation and

maintenance, decorative lighting maintenance and repair, storm drain maintenance, culvert cleaning, and catch basin cleaning. These tasks are organized and monitored under the City's work order history to ensure they are completed effectively. Regular inspections are conducted to assess the condition of the assets. Based on these inspections, work orders are created that include activities, date, location, resources used, total labor hours, equipment time, and work quantities. These work orders are completed by in-house City staff or are compiled and assigned to contractors. Additionally, operation and maintenance records are tracked and saved using the programs listed in Table 13, providing a comprehensive overview of each asset's performance and maintenance history.

Table 13. Operation and Maintenance Management Program

Fiscal Year	Program
FY22 and prior	MaintStar
FY23 and FY24	ServiceNow and MaintStar
FY25	ServiceNow
FY26 and Beyond	Elements XS

The City prioritizes its operation and maintenance activities through annual programming of seasonal work, adapting to changes in temperature and weather. For example, crack sealing is performed in the fall and winter, while wide crack repair, surface sealing, and overlay are scheduled for spring and summer. Additionally, if an employee or citizen reports an issue to the City, it generates a service request that triggers the emergency repair process. Emergency repairs are prioritized based on their potential threat to public safety or property.

5.2 Asset Needs and Funding

The annual budgets for FY2021 to FY2025 are outlined in Table 14. The adopted annual budget for 2025 is $25.3 million that includes 3 main components: the general fund, the street fund, and 35% of the sewer fund. The percentage allocated from the sewer fund is estimated based on historical analyses of the maintenance and operation budget related to stormwater expenses. Note that the budgets presented in Table 14 do not include public works maintenance expenses, such as slurry seal performed by contractors.

Table 14. Annual Budgets for Operations and Maintenance – FY2021 to FY2025

Fiscal Year	Annual Budgets
FY2021 Actual	$15,387,079.40
FY2022 Actual	$16,953,866.70
FY2023 Actual	$20,319,320.20
FY2024 Unaudited Actual	$20,891,138.40
FY2025 Adopted	$25,295,084.40

5.3 Summary

The City maintains various assets to serve its residents and has implemented the asset management system Streetscape to collate asset inventory. To ensure the effectiveness of assets, the City conducts regular operations and maintenance, organizing and monitoring these tasks through its work order history. Maintenance records are tracked and stored using both MaintStar and ServiceNow and will be transferred to

ServiceNow in 2025 and Elements XS in 2026. For the fiscal year 2025, the adopted annual budget for normal operation and maintenance is $25.3 million, which includes the general fund, the street fund, and the sewer fund.

Attachment A

Checklist Responses

RTC – Maintenance Needs Study

Agency: City of Reno

Data Collection Checklist: Pavement Maintenance

<table>
<tr><th>No.</th><th>Item</th><th>Agency Response</th><th>Comments/Notes</th></tr>
<tr><td>1</td><td>What PMS software does your agency use?</td><td>PAVER</td><td></td></tr>
<tr><td>2</td><td>How many streets/roads does your agency maintain?
(no. of sections and centerline miles by functional class)</td><td>
<table>
<tr><td></td><td>mi</td><td># of sect</td></tr>
<tr><td>Alley</td><td>22.01</td><td>422</td></tr>
<tr><td>Utility</td><td>12.51</td><td>69</td></tr>
<tr><td>Arterial</td><td>158.54</td><td>404</td></tr>
<tr><td>Collector</td><td>99.43</td><td>362</td></tr>
<tr><td>Industrial</td><td>46.57</td><td>231</td></tr>
<tr><td>Local</td><td>449.62</td><td>3415</td></tr>
<tr><td>Parking</td><td></td><td>127</td></tr>
</table>
</td><td></td></tr>
<tr><td>3</td><td>What distress protocol does your agency use?
(ASTM D6433 or MTC)</td><td>ASTM D6433</td><td></td></tr>
<tr><td>4</td><td>Does your agency have GIS shapefile linked to PMS software?</td><td>Yes – Contact Greg Johnson
johnsongr@reno.gov</td><td></td></tr>
<tr><td>5</td><td>How often does your agency update pavement inspections?</td><td>Every 3 years, 1/3 of the network each year</td><td></td></tr>
<tr><td>6</td><td>How does your agency update pavement condition?
(walking, windshield or automated?)
(in-house or by contractor)</td><td>Manual - (Local/Alley/Etc) In-house & contractor

Automated - (Regional) contractor</td><td></td></tr>
<tr><td>7</td><td>What other condition data do you also collect?
(Deflection, ride quality, friction, drainage, core, etc.)</td><td>None.</td><td></td></tr>
<tr><td>8</td><td>What is your current network condition (PCI)?
(entire network and by functional class)</td><td>
<table>
<tr><td></td><td>PCI</td></tr>
<tr><td>Network</td><td>75.6</td></tr>
<tr><td>Alley</td><td>38.68</td></tr>
<tr><td>Utility</td><td>60.32</td></tr>
<tr><td>Arterial</td><td>79.22</td></tr>
<tr><td>Collector</td><td>72.77</td></tr>
<tr><td>Industrial</td><td>71.36</td></tr>
<tr><td>Local</td><td>76.75</td></tr>
<tr><td>Parking</td><td>55.17</td></tr>
</table>
</td><td></td></tr>
</table>

<table>
<tr><th>No.</th><th>Item</th><th>Agency Response</th><th>Comments/Notes</th></tr>
<tr><td>9</td><td>How does your agency setup condition categories in PMS?
(ex. PCI 70 to 100 – Very Good)</td><td>Very Good 86-100
Good 71-85
Fair 56-70
Poor 41-55
Very Poor 26-40
Serious 11-25
Failed 0-10</td><td></td></tr>
<tr><td>10</td><td>Does your agency have PCC pavement in your network?</td><td><table><tr><th></th><th>mi</th><th># of sec</th></tr><tr><td>Alley</td><td>17.59</td><td>320</td></tr><tr><td>Utility</td><td>0.02</td><td>1</td></tr><tr><td>Arterial</td><td>4.30</td><td>34</td></tr><tr><td>Collector</td><td>0.35</td><td>4</td></tr><tr><td>Industrial</td><td>0.00</td><td>0</td></tr><tr><td>Local</td><td>0.12</td><td>2</td></tr><tr><td>Parking</td><td></td><td>11</td></tr></table></td><td></td></tr>
<tr><td>11</td><td>What pavement strategies/ treatments does your agency apply on various conditions of pavement?
(treatment by PCI range)</td><td>Slurry/Microsurfacing PCI 70-100
Mill and Overlay PCI 56-70
Cape Seal PCI 56-70
Asphalt Patching PCI Varies
Rehab/Reconstruct <55</td><td>PCI ranges for treatments generally fall within these limits. Treatments also selected by distress type and years between last treatment</td></tr>
<tr><td>12</td><td>What factors/items are included in the treatment costs?
(ex. paving materials, labor, concrete repairs, striping, traffic control, etc.)</td><td>All Construction Activities: Materials, Labor, Striping, Traffic Control</td><td></td></tr>
<tr><td>13</td><td>How often does your agency update the treatment costs in your PMS?</td><td>Annually</td><td></td></tr>
<tr><td>14</td><td>Does your agency use sustainable pavement practices?
(ex. CIR, HIPR, FDR, etc.)</td><td>Yes</td><td></td></tr>
<tr><td>15</td><td>If yes, what sustainable pavement practices does your agency utilize?
Reclaimed Asphalt Pavement
Cold-in-Place Recycling
Warm Mix Asphalt
Permeable/Porous Pavement
Full Depth Reclamation
Subgrade Stabilization
Rubberized Asphalt Concrete
Pavement Preservation (ex. slurry seal, chip seal, fog seal, cape seal)</td><td>Full Depth Reclamation (FDR)/Road Bed Modification (RBM)
RAP in AC up to 30%
Permeable/Porous Pavement (one parking lot)
Warm Mix Asphalt (2009 construction year)
Pavement Preservation: slurry seal, cape seal</td><td></td></tr>
</table>

No.	Item	Agency Response	Comments/Notes
16	How does your agency prioritize streets for maintenance and rehabilitation?	The City is broken into 3 triads for inspection, preventative maintenance, and reconstruction, and we rotate through these triads on a 3-year cycle. Streets with a PCI >70 are candidates for preventative maintenance on a 6-9 year basis. Streets with a PCI <55 are candidates for reconstruction. A list of all neighborhood streets <55 within that year's triad is developed and streets in close proximity are grouped into units for cost-effective construction. These units are ranked by PCI along with sewer condition/criticality. Special considerations are also evaluated such as other utility placements or proximity to schools, healthcare, etc. The final recommended list of projects is presented to City Council for confirmation, and the remaining streets stay on the list for future consideration.	
17	What is the target PCI for your network?	78 for neighborhood streets 80 for regional roads	
18	What is your current annual paving budget?	$11.5M for FY25 which includes preventative maintenance and reconstructions	
19	What is your pavement needs for the entire network?	$482 Million (Local Roads only, 12/29/2023)	
20	What is your emergency repair process? (ex. potholing repairs)	Employee or citizen reports location to Reno Direct, Service Request created.	
21	Other related data?	Current "known" sidewalk needs?	

Data Collection Checklist: ITS Infrastructure

No.	Item	Agency Response	Comments/Notes
1	**O&M Asset Management Records:** Review **Table 1** below and confirm if the device totals traffic signals, traffic cabinets and traffic cameras are still accurate. Please provide updated information if available.	Reno owns & maintains: - 191 traffic signals - 191 traffic cabinets - 46 traffic cameras (PTZ) Reno maintains on behalf of Washoe County: - 23 traffic signals - 23 traffic cabinets Reno maintains on behalf of NDOT: - 87 traffic signals - 87 traffic cabinets	
2	**Work Order History:** Provide the last two to three years of Work Order history or O&M expenditures related to ITS Infrastructure.	See attachment titled Work Order History for O&M expenditures sent with email (Received data summarized in a separate table.)	
3	**Maintenance Schedules/Procedures:** What are existing maintenance schedules and processes for ITS Infrastructure?	Annual signal cabinet preventative maintenance (PM) scheduling and annual traffic signal PM scheduling. PMs are being updated annually to reflect updates in the hardware (for example, battery and fan replacements)	
4	**Planning/Funding Maintenance:** What planning, decision-making, and approval processes do you have when maintaining ITS infrastructure?	Planning and decision-making for funding the maintenance of ITS infrastructure is coordinated between the traffic engineering and maintenance & operations teams to utilize both programmed budget and grant funding to perform PM work and major rehabilitation projects. Some factors that inform this coordinated effort include historical maintenance data, manufacturer legacy hardware support, changes in traffic volume, and new construction that would require new intersections or significant changes in occupancy to existing ones. For grant and time-limited funding, we identify where the funds would have the greatest impact. Two examples of this being: 1. Regional Transportation Commission Spot Project funding program; and 2. Community development block grants (CDBG) for pedestrian crossing upgrades	

No.	Item	Agency Response	Comments/Notes
		(upgrading infrastructure to support visually impaired citizens)	

Table 1: Existing ITS Device Inventory in Washoe County

ITS Device	City of Reno	City of Sparks	Washoe County	NDOT[1]	Total
Traffic Signals[2]	191	71	23[3]	131[4]	**416**
Traffic Cabinet	191	71	23[3]	131[4]	**416**
Traffic Camera (PTZ)	46	16	-	-	**62**

[1] NDOT locations only include those currently associated with the RTC arterial network where NDOT has dedicated the slate fiber optic tube to local transportation networks.
[2] CoR is assuming Traffic Signals to mean signalized intersections.
[3] CoR maintains 23 signalized intersections and traffic cabinets for Washoe County.
[4] CoR maintains 87 NDOT signalized intersections and traffic cabinets.
Source: RTC Washoe ITS Strategic Master Plan (2024)

Data Collection Checklist: Financial/Funding Sources

No.	Item	Agency Response	Comments/Notes
1	Prepare an inventory of existing revenue streams available that are currently used to fund maintenance for your agency/community.	**Fuel tax** – 1.75 cent tax base, 1.75 cent CPI adjustment, 1.75 cent PPI adjustment, 2.35 tax base, 2.35 cent CPI adjustment, 2.35 cent PPI adjustment, 1 cent county maintenance base, 1 cent CPI adjustment, 1 cent PPI adjustment. FY23 COR fuel tax revenues was $7,362,153. **Ad Valorem (Property Tax Override)**: FY23 $22,231,338 **Excavation and encroachment permits**: FY23 $501,467 **TMWA Right of Way Tolls**: FY23 $3,189,675	
2	Have any new sources been added or removed in the last five years? Have budgets or how the revenue is used changed?	No new sources in the last 5 years. Budgets and revenues have not changed but for CPI increases.	
3	Please provide current budget documents, as well as 3-5 years history.	FY25 State Budget Documents: FY25 FINAL STATE DOCUMENT.xls (reno.gov) (budget book not yet available) FY24 Budget Book: 638265584834570000 (reno.gov) FY23 Budget: City Manager's Budget Message | FY23 Budget Book (Locked) (cleargov.com) FY22 Budget: 637969408415900000 (reno.gov)	
4	Have there been any unexpected changes to revenue streams in the last five years? How did that impact how maintenance needs were met?	Due to the COVID pandemic and the decrease in fuel sales, the fuel tax revenues for FY21 were slightly reduced.	
5	Please provide current ACFR documents, as well as 3-5 years history.	FY20 ACFR 637499434841300000 (reno.gov) FY21 ACFR A-010 - Issued Report and Financial Statements (797225 - June 2021 - Audit 797225 [6/30/2021] (In Process)) (reno.gov) FY22 ACFR Microsoft Word - {096AC6CF-923C-4E8F-9B91-F8437604368C}.docx (reno.gov)	

No.	Item	Agency Response	Comments/Notes
		FY23 ACFR Microsoft Word - {5DA021EF-3CF2-417E-9D2E-0B8541E65108}.docx (reno.gov) FY24 ACFR: not available yet	
6	Have any studies been prepared outside this effort that review/summarize funding sources for roadway/ITS maintenance? Can you share these?	See attachment titled "White Paper – Status of Pavement Condition and Funding Needs March 2015" See Fuel Tax PowerPoint	
7	Please provide the current CIP.	FY25 CIP Detail.xlsx	
8	What are your biggest concerns about current and future revenue/expenditure differences as it relates to maintenance?	Our allocation of the fuel tax revenues are not sufficient to meet our current road maintenance needs. The property tax override sunsets in 2038. If this is not renewed, the City will lose $22,231,338 (FY23) in revenues for road maintenance.	
9	Are there federal or state sources that provide one-time or reoccurring revenue support for maintenance needs?	Fuel tax – 1.75cent tax base, 1.75 cent CPI adjustment, 1.75cent PPI adjustment, 2.35 tax base, 2.35 cent CPI adjustment, 2.35 cent PPI adjustment, 1cent county maintenance base, 1 cent CPI adjustment, 1 cent PPI adjustment. FY23 Reno's share of fuel tax revenues was $7,362,153.	
10	Are there grants or other sources that you have utilized? How does the use of sources like this influence your budget planning?	We have not received grants or other sources for street maintenance. The Regional Transportation Commission has been awarded federal funds for bridge replacements within the City of Reno.	
11	Other related data?		

Data Collection Checklist: Normal Operation and Maintenance

No.	Item	Agency Response	Comments/Notes
1	Does your agency have any asset inventory? What format do you save the inventory? (ex. curb ramps, sidewalk, striping, etc.)	Streetscape assets all in GIS format: 1. Ped Ramp Locations 2. Sidewalk Centerlines 3. Sidewalks Discontinuity points 4. Sidewalk Obstruction points 5. Landscaped Medians 6. Parking Meters Traffic Striping CAD file available	
2	What assets require maintenance in your agency?	Streets, traffic and parking control infrastructure, sidewalks/curb and gutter, medians and right of way, bridges, guard rail and shoulder infrastructure, catch basins, culverts, roadside ditches, stormwater retention basins, and stormwater pipe	
3	What are the total needs for your asset maintenance?		Larger Conversation
4	What is your existing annual budget to maintenance these assets?		Larger Conversation
5	Does your agency have existing asset maintenance records or work order history?	Yes	
6	How does your agency maintain the existing assets? (in-house or by contractor)	Both in-house and contractors	
7	What is your regular maintenance schedule or processes?	Weather and temperature dictate which maintenance activities take place (ex. cracksealing is done in the fall and winter, asphalt/widecrack repair spring & summer)	
8	What are your emergency repairs and maintenance processes?	Prioritized by threat to bodily injury or property damage (ex. sinkhole or trip hazard)	
9	What is your CIP needs and projects?		Public Works Question
10	What normal operations and maintenance does your agency perform? Crack sealing Patching Sweeping Snow removal	Cracksealing Patching Sweeping Snow Removal Median & ROW Landscaping Roadway Striping Concrete Repairs	

No.	Item	Agency Response	Comments/Notes
	Landscaping Roadway striping Concrete repairs (sidewalk, C&G) Strom drain maintenance Guardrail repairs Shoulder maintenance Culvert cleaning Others	Guardrail Repairs Shoulder Maintenance Crosswalk Thermo & Painting Sign Installation & Maintenance Decorative Lighting Maint. & Repair Storm Drain Maintenance Culvert Cleaning Catch Basin Cleaning	
11	How does your agency perform operation or maintenance on the above items? (ex. regular monitor/inspect, repair, or work orders) (in-house or by contractor)	A combination of scheduled and monitored work that leads to inspections and the creation of work orders that are completed in-house or are compiled and handed to a contractor to complete.	
12	How does your agency track or save operation and maintenance records?	FY25+ – ServiceNow FY23 and FY24 – ServiceNow and MaintStar FY22 and prior – MaintStar	
13	How does your agency prioritize these operation and maintenance activities?	Annual programming of seasonal work and changes in temperature/weather that dictates what is prioritized for maintenance & repair.	
14	What is your annual budget for operations and maintenance?	FY21 Actual – $15,387,079.36 FY22 Actual – $16,953,866.68 FY23 Actual – $20,319,320.19 FY24 Unaudited Actual – $20,891,138.39 FY25 Adopted– $25,295,084.40	This includes the general fund, street fund, and 35% of the sewer fund from the relevant M&O subdepartments. The sewer fund percent estimate in this is based on previous historical analyses related to the utilization of M&O budget on stormwater expenses. Note that this does not include public works maintenance expenses such as slurry seal contracts.
15	Other related data?		

Attachment B

Signal Agreements

INTERLOCAL TRAFFIC SIGNAL MAINTENANCE AGREEMENT BETWEEN CITY OF RENO AND WASHOE COUNTY

THIS INTERLOCAL TRAFFIC SIGNAL MAINTENANCE AGREEMENT made and entered into this 4th day of DECEMBER 2020, by and between the CITY OF RENO, a municipal corporation, hereinafter called the CITY, and WASHOE COUNTY, a political subdivision organized and existing under and by virtue of the laws of the State of Nevada, hereinafter called the COUNTY;

WITNESSETH:

WHEREAS, NRS 277.180 provides that any one or more public agencies may contract with any one or more other public agencies to perform any governmental service, activity or undertaking which any of the public agencies entering into the contract is authorized by law to perform; and

WHEREAS: the City and the County are each a "public agency" in accordance with NRS 277.100; and

WHEREAS, it is the COUNTY'S desire to have the CITY provide traffic signal maintenance service for Washoe County traffic signals; and

WHEREAS, the CITY has the equipment and personnel to provide said traffic signal maintenance; and

WHEREAS, the parties previously entered into a five-year traffic signal maintenance agreement, dated December 16, 2015; and

Whereas, the fiscal year begins July 1, this agreement will be retroactive to July 1, 2020;

NOW, THEREFORE, the CITY and the COUNTY, in consideration of the mutual covenants hereinafter set forth agree as follows:

The CITY agrees:

1. To provide 'REGULAR SIGNAL MAINTENANCE SERVICE' as determined in Exhibit A and in accordance with the Maintenance Management System Guidelines during normal working hours; provide 'ADDITIONAL TRAFFIC SIGNAL SERVICES' during normal working hours when feasible and overtime hours as needed, to include, but are not limited to items listed in Exhibit A. The Washoe County traffic signals are listed in Exhibit B; signals may be added or deleted by written notification to the Reno Director of Public Works. Services rendered by the CITY shall not exceed a value of $70,000 per contract year, unless otherwise amended through the fee schedule (Exhibit C).

2. To quarterly, on or about the tenth day of each quarter, provide the COUNTY with a quarterly bill intended to cover all 'REGULAR SIGNAL MAINTENANCE SERVICE' and 'ADDITIONAL TRAFFIC SIGNAL SERVICES' for work provided during normal working hours and overtime hours according to the fee schedule (Exhibit C).

   To annually, on or about February 1st of each year, provide the fee schedule (Exhibit C) for the next budget year.

3. To provide monthly documentation of work performed on Washoe County signals, including Maintenance Management records and daily work reports completed by the employee performing work.

The COUNTY agrees:

1. This Agreement operates retroactively to July 1, 2020, the beginning of the fiscal year.

2. This Agreement replaces the traffic-signal-maintenance agreement between the County and City, dated December 16, 2015.

3. To investigate complaints relating to signal maintenance needs before relaying information to the CITY.

4. To make payments to the CITY within thirty (30) days of receipt of any billing provided by the CITY.

5. To order, pay for and provide the CITY with all materials and supplies requested by the CITY or determined necessary by the COUNTY and associated with traffic signal maintenance and repair, as provided for by this Agreement.

6. To notify the CITY of proposed new signal installations and to allow the CITY to review and comment on traffic signal design plans.

Both the CITY and the COUNTY agree:

1. That either party, via the CITY'S City Manager or the COUNTY'S County Manager or through their respective designated representative, may terminate this Agreement by giving written notice, sixty (60) days before such termination, to the other party.

2. That this Agreement shall be in effect for a period of five years, ending on June 30, 2025, unless terminated pursuant to (1) above.

3. To develop, maintain and adjust, as needed, a protocol for call out of personnel including names, telephone numbers, and instructions for County Sheriff personnel and City dispatchers.

4. The County reasonably believes that funds can be obtained sufficiently to make all payments during the term of this Agreement. If the County does not allocate funds to continue the function performed by the Contractor obtained under this Agreement, this Agreement shall be terminated when appropriated funds expire, without penalty, charge or sanction to the County.

5. Subject to the limitations of Chapter 41 of NRS and any other applicable laws, and without waiving its statutory protections, the parties agree that each is responsible for any liability or loss that may be incurred as a result of any claim, demand, cost, or judgment made against that party arising from any negligent act by any of that party's employees, agents, or servants in connection with the performance of this Agreement.

6. If any provision of this Agreement is determined to be illegal, invalid, or unenforceable , the provision shall be deleted and the parties shall, if possible, agree on a legal, valid, and enforceable substitute

provision that is as similar in effect to the deleted provision as possible. The remaining portion of the Agreement not determined to be illegal, invalid, or unenforceable shall, in any event, remain valid and effective for the term remaining unless the provision found illegal, invalid, or unenforceable goes to the essence of this Agreement.

7. This Agreement and the performance of the duties described in the Agreement are governed, interpreted and construed in accordance with Nevada law, without regard to choice of law principles. Each party consents to personal jurisdiction and exclusive venue in the Second Judicial District Court in and for the County of Washoe located in Washoe County, Nevada.

8. The parties further agree to the extent allowed by law pursuant to Nevada Revised Statute chapter 41, to hold harmless, indemnify, and defend each other from any and all losses, liabilities, or expenses of any nature to the person or property of another to which each may be subjected as a result of any claim, demand, action or cause of action arising out of the negligent acts, errors, or omissions on the part of the employees, agents, or servants of the others.

9. That all communications/notices required pursuant to the Agreement shall be given as hereinafter provided, unless written notice of a new designee is sent certified or registered mail, to the other party, as follows:

COUNTY: Dave Solaro, P.E.
Community Services Director
1001 E. Ninth Street
Reno, Nevada 89512
(775) 328-3600

RENO: John Flansberg, P.E.
Public Works Director
P.O. Box 1900
Reno, Nevada 89505
(775) 334-2350

10. This Agreement contains the entire agreement of the parties with respect to the matters addressed herein. This Agreement may not be amended, nor may any of the terms, covenants, representations, warranties or conditions hereof be waived, except by a written instrument executed by the party against which such amendment is to be charged.

11. The only parties who may enforce this Agreement and any of the rights under this Agreement are the parties hereto.

In Witness Thereof, the Parties have executed this Agreement as of the date and year appearing herein.

CITY OF RENO,

Hillary L. Schieve, Mayor

COUNTY OF WASHOE

Bob Lucey, Chair
Board of County Commissioners

ATTEST:

Ashley D. Turney, Reno City Clerk

ATTEST:

Jan Galassini, Washoe County Clerk

Approved as to Form:

Deputy City Attorney

Exhibit A

Traffic Signal Maintenance Services

Regular Traffic Signal Maintenance Services

- Signal Preventative Maintenance
- Cabinet/ground Preventative Maintenance
- Safety/Conflict Monitors
- General Signal Maintenance
- Illuminated Street Name Sign Maintenance

Additional Traffic Signal Services

Including but not limited to the following

- School Flasher Maintenance
- Signal Response Pedestrian Signal Repair
- Bench Repair
- Vehicle Detection
- Bulb Replace
- Signal Head Repair
- Cabinet Rehab/Construction
- New Signal Inspection
- Review Traffic Signal Design Plans
- Signal Interconnect
- USA Locates
- Limited Street Light Maintenance

Exhibit B

Washoe County Traffic Signals

11-06-2020

Location

1. Arrowcreek Pkwy /Zolezzi Lane
2. Mt. Rose Hwy/Galena Fire Station
3. Mt. Rose Hwy/Thomas Creek Rd
4. Mt Rose Hwy/Wedge Pkwy
5. Pyramid Blvd/Eagle Canyon Dr
6. Pyramid/Blvd/Golden View
7. S.R. 28/Country Club Dr
8. S.R. 28/Crystal Bay
9. S.R. 28/Northwood Blvd/Southwood Blvd
10. S.R. 28/Village Blvd
11. Sun Valley Blvd/1st Ave
12. Sun Valley Blvd/2ndt Ave
13. Sun Valley Blvd/4thAve
14. Sun Valley Blvd/5th Ave
15. Sun Valley Blvd/7thAve
16. Sun Valley Blvd/Dandini Blvd
17. Wedge Pkwy/Golden Gate Dr.
18. Pyramid Blvd/W. Calle de la Plata
19. Sun Valley Blvd./Highland Ranch Pkwy
20. Arrowcreek Pkwy/Thomas Creek Dr.
21. El Rancho Dr./Moorpark Ct.
22. Silent Sparrow Dr./W. Calle de la Plata

Exhibit C

Fee Schedule for FY 2021-2022

The charged rate shall be calculated using a 2.1 multiplier and the current wage rate. As of July 1, 2021 the charged rates are as shown below.

Regular time hourly rate for Traffic Signal Mechanic	$88.93
Regular time hourly rate for Traffic Signal Technician	$95.82
Overtime hourly rate for Traffic Signal Mechanic	$133.39
Overtime hourly rate for Traffic Signal Technician	$143.72

Equipment per MaintStar charge rates.

Supplies and materials will be charged at cost

Exhibit D

ACTIVITY GUIDELINE
MAINTENANCE MANAGEMENT SYSTEM
City of Reno
Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	PM T.SIGNAL	CODE	201

DESCRIPTION OF WORK

Inspection and repair of overhead traffic signals following a preventative maintenance check list. Work may include repair or replacement of damaged or defective signal head components, cleaning of all reflectors and lenses, touch-up painting signal heads, inspection of poles, mast arms and associated hardware and relamping signal heads as necessary .

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	8	8	9	9	9	9	9	8	9	8	7	8

Performed annually - following check list. - may be affected by weather.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
Personnel	**Qty**	PRE-DEPARTURE	- Observe traffic flow
TRF SIG MECH	1.25	1. Ready supplies, equipment and perform CDL Inspection check.	- Appropriate personal protective equipment (PPE)
Equipment	**Qty**		- Follow current NV Work Zone Traffic Control Handbook and MUTCD
BOOM TRUCK	1.00	AT WORK SITE	- Move work zone signs/cones.
Materials	**Qty**	2. Perform visual inspection. Record findings	
3S LENS	1.0 EA	3. Set up work zones, signs and cones.	- Complete records
RAGS	2.0 PO	4. Carry out maintenance and repair as per check list.	
HAND HOLE CVR	0.1 EA	5. Clean up - vacate site.	
PULL BX LD 5	1.0 EA		
PULL BOX 5	1.0 EA	END OF SHIFT	
BACKPLATE	1.0 EA	6. Document work, and signal guideline checklist (see attached)	

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
227.00 SIGNALS		

AVERAGE DAILY PRODUCTION	APPROVAL		
1.50 INTSECT			

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	CABINET PM	CODE	202

DESCRIPTION OF WORK

Preventative maintenance for traffic signal cabinet. This includes cleaning of cabinet and its components, checking operation of signal and its components, and making repair as necessary. A detailed check list is followed to allow all components to be properly inspected and maintained.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	8	8	9	8	8	10	8	8	9	8	8	8

Perform semi-annually following checklist and includes one operational observation check to be conducted with at least four months between PM and opeartional check.. May be affected by weather.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG TECH	0.65

Equipment	Qty
PICKUP/UTILITY TRUCK	1.00
SHOP VAC	1.00

Materials	Qty
RAGS	2.0 PO
WIRE	1.0 FO
CLEANING MTL	1.0 CA
MIS NUTS&BOLT	5.0 EA
AIR FILTER	1.0 EA
HAND HOLE CVR	1.0 EA
FLASHER-REG	1.0 EA

WORK METHOD

PRE-DEPARTURE
1. Ready equipment and perform CDL inspection check.

AT WORK SITE
2. Perform visual inspection, record findings per check list.
3. Set up work zone.
4. Carry out maintenance and repair as per check list.
5. Clean up and vacate site.

END OF SHIFT
6. Document work.
7. Refuel Vehicles.

CHECK POINTS

-Observe operation and traffic flow
-Follow current NV Work ZoneTraffic Control Handbook and MUTCD
-Follow Checklist
- Appropriate PPE
-Move work zone signs/cones

-Complete records

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
227.00 SIGNALS		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
6.00 CABINETS		

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	SAFETY MONITOR	CODE	203

DESCRIPTION OF WORK

Remove existing malfunction management unit from cabinet, exchange with a tested unit.
Return removed unit to signal shop test bench and verify correct operation on test equipment.
Download and document test results. Accomplishments include both the test (1) and the replacement (1).

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	10	10	9	8	8	7	7	7	8	8	9	9

ITMS and ITE guidelines require MMUs be tested and results documented at least once a year.
Accomplishment count = both test (1) and replacement (1) for a total of 2.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
Personnel	**Qty**	PRE-DEPARTURE	- Appropriate PPE
TRF SIG TECH	0.85	1. Stock truck with supplies and tested units .	
Equipment	**Qty**		- Observe traffic flow
PICKUP/UTILITY TRUCK	1.00	AT WORK SITE	
Materials	**Qty**	2. Place signal on flash	
/FLICT MONITOR	0.3 EA	3. Remove existing unit	
		4. Exchange program card.	
		5. Ensure copy of test inserted on document pocket	
		6. Return to operation, observe correct operation.	
		7. Set time in monitor and verify correct program card	
		8. Clear existing fault log	
		END OF SHIFT	
		9. Document work.	

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
227.00 MONITORS		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
14.00 MONITORS		

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	SCH FLSH MAINT	CODE	205

DESCRIPTION OF WORK

All work associated with the timing of school flasher signals (as supplied on list by School District) -- setting operation days & times, programming "off" days (school holidays), changing clock batteries, checking signal alignment and testing operation to insure proper timing of signals and control of vehicle speed in school zones.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	22	32	0	0	0	0	0	0	0	0	20	26

Performed twice a year prior to school terms ,or as required due to schedule changes or signal malfunctions.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.25

Equipment	Qty
BOOM TRUCK	0.50
PICKUP/UTILITY TRUCK	0.50

Materials	Qty
9V BATTERIES	7.0 EA
GLASS LENS	7.0 EA
RAGS	1.0 PO
SIGNAL BULBS	17.0 EA
WINDOW CLEANR (TRAI	1.0 GA
USA PAINT	2.0 EA
REFLECTOR	3.0 EA

WORK METHOD

PRE-DEPARTURE
1. Ready equipment and perform CDL inspection check.
2. Determine route

AT WORK SITE
3. Remove battery - kill power.
4. Install new battery.
5. Reset clock and programs.
6. Set current time, day, month and year.
7. Set on/off holiday schedule.
8. Review program.
9. Test override.
10. Set to normal.
11. Cleaning, bulb change

END OF SHIFT
12. Document work.

CHECK POINTS

- Produce schedule list for different zones

- Check for available AC power
- Check fuse
- Traffic Control.
- Appropriate PPE.

- Check operation of flasher and lights.

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
43.00 LOCATION!		

AVERAGE DAILY PRODUCTION	APPROVAL			
1.30 LOCATION!				

ACTIVITY GUIDELINE
MAINTENANCE MANAGEMENT SYSTEM
City of Reno
Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	INTERC CABLE	CODE	206

DESCRIPTION OF WORK

All work associated with maintaining communications on City owned interconnect cables between City Hall Traffic Signal Control computer and 150 traffic signals. Additionally, work includes maintenance and communications over 8 leased telephone/data lines to 30 traffic signals. Includes testing, diagnosis, replacement of cable and verify operation of wireless communication.

PLANNING PERIOD	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/15	01/01 02/28	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	7	7	7	7	7	12	12	8	8	8	8	8

Communications problems are reported and logged by the computer system.
City has 3 cables, 25 pair, 18 pair and 12 pair branching throughout the City.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.50
TRF SIG TECH	0.50

Equipment	Qty
BOOM TRUCK	0.05
PICKUP/UTILITY TRUCK	0.95

Materials	Qty
CABLE	100.0 FO
SPLICE KIT	5.0 EA
TAPE	2.0 RO
TERMINAL LUGS	10.0 EA

WORK METHOD

Pre-Departure
1. Ready equipment and perform CDL inspection as required
2. Determine shop/field fault.
3. Signal/no signal/hum.
4. Connect signal generator to line.
5. Load equipment.

AT WORK SITE
6. Track signal along route.
7. Check signal at destination.
8. Trace line back to source. Break as required to determine fault direction.
9. Find fault.
10. Repair as required/resplice/ replace cable/find spot where contractor dug up and change pair.

END OF SHIFT
12. Document work.

CHECKPOINTS

- Traffic Control
- Appropriate PPE
- Copy of interconnect cable wire plan
- Load test equipment and materials

- Hook up shop test equipment
- Determine repair/replacement complete/clean signal

- Return to shop
- Put intersections back on line
- Complete records

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
50.00 CBL MILE		

AVERAGE DAILY PRODUCTION	APPROVAL				
12.00 LABOR HR					

ACTIVITY GUIDELINE
MAINTENANCE MANAGEMENT SYSTEM
City of Reno
Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	VMS 330 SYSTEM MAINT	CODE	208

DESCRIPTION OF WORK

Enter or modify system paramenters as directed by traffic engineering. Check daily for system problems and traffic signal malfunctions reported by the system. Monitor system for proper operation. Generate monthly operation log report. Generate system reports as required. Reload system software when required, backup system paramenters monthly. Troubleshoot system failures. Check ITMS.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	8	8	9	7	8	9	8	8	9	9	8	9

This work is performed routinely on a daily basis.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG TECH	0.85

WORK METHOD

1. Check system operation by access with monitor or keyboard.
2. Check system alarms and print reports.
3. Enter timing and data for signals with keyboard or monitor.
4. Use tape drive and floppy discs as required to back up system.
5. Change out system components as required, repair, exchange or send for repair of failed components.□ - Consult system manuals.

CHECK POINTS

- Check help files.
- Monitor system reports and displays.
- Monitor system alarms.
- Communicate with Engineer

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
181.00 SIGNALS		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
8.00 LABOR HR		

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	PED SIGNAL REPAIR	CODE	240

DESCRIPTION OF WORK

All work required to maintain, repair, modify and/or replace malfunctioning pedestrian signals, indications and buttons to insure that pedestrian movement is safely controlled and coordinated.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/28	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	8	8	9	8	9	9	7	8	10	10	7	7

Performed as required in response to service requests and/or as needed

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.25
TRF SIG TECH	0.20

Equipment	Qty
VAN	1.00

Materials	Qty
NS CONVERT KT	4.0 EA
FUSES	1.0 EA
MODULE	7.0 EA
LUBRICANT	1.0 CA
WIRE	4.0 FO
PED BUTTON	0.3 EA
PED DIR SIG	0.3 EA

WORK METHOD

PRE-DEPARTURE
1. Ready equipment and perform CDL inspection
2. Receive request
3. Proceed to intersection.

AT WORK SITE
4. Determine which head has problem.
5. Replace or repair module, install conversion kit or repair button.
6. Check sign plates, egg crates, visors & alignment.
7. Check operation.

END OF SHIFT
8. Document work.

CHECK POINTS

- Traffic Control
- Appropriate PPE
- Check for voltage
- Check buttons
- Check fuses and wiring
- Check signal components

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
1758 ~~1616.00~~ EACH		

AVERAGE DAILY PRODUCTION	APPROVAL
7.00 PED SIGNA	

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	BENCH REPAIR	CODE	241

DESCRIPTION OF WORK

All work required to troubleshoot and repair faulty electronic traffic signal components, such as; signal controllers, safety monitors, opticom detectors, vehicle detectors, modems, power supplies and other related components.
Also includes equipment testing, new evaluation and repair.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/28	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	10	10	8	9	8	7	7	7	8	8	9	9

Performed as required.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
Personnel	*Qty*	AT BENCH	- ID tag - Manufacturer's manuals schematics - Determine operating correctly - Check under temp extremes - Sign off - Return to stock
TRF SIG TECH	0.85	1. Determine problem/trouble type. 2. Troubleshoot. 3. Make repairs. 4. Run equipment for extended period. 5. Sign off/log in computer - if applicable. 6. Return warranty items for repair. 7. Document work.	

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
227.00 EACH		

AVERAGE DAILY PRODUCTION	APPROVAL	
9.00 LABOR HR		

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	LOOP/DETECTION MAINT	CODE	242

DESCRIPTION OF WORK

All work required to diagnose maintain and/or repair traffic detector loop malfunctions. Activity is performed to insure proper detection loop operation and safely control traffic movement at intersections.

PLANNING CRITERIA	07/01 - 07/31	08/01 - 08/31	09/01 - 09/30	10/01 - 10/31	11/01 - 11/30	12/01 - 12/31	01/01 - 01/31	02/01 - 02/29	03/01 - 03/31	04/01 - 04/30	05/01 - 05/31	06/01 - 06/30
	0	0	0	0	0	0	0	0	0	0	0	0

Performed as required in response to service requests or as needed.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.60
TRF SIG TECH	0.40

Equipment	Qty
PICKUP/UTILITY TRUCK	1.00

Materials	Qty
AMPLIFIER	0.1 EA
CABLE	4.0 FO
NUTS/LUGS	10.0 EA
SEALING PACS	2.0 EA
WIRE NUTS	5.0 EA

WORK METHOD

PRE-DEPARTURE
1. Ready equipment and perform CDL Inpsection
2. Travel to work site.

AT WORK SITE
3. Determine if there is a detector problem.
4. Test amplifier and controller cabinet or field problem.
5. Remove loop lead and test.
6. Test loop lead in.
7. Check splices.
8. Re-hook good loops and adjust timing.
9. Reset Amp.

END OF SHIFT
10. Document work.

CHECK POINTS

- Traffic Control
- Appropriate PPE
- Check connections
- Check ground or open
- Check street condition for signs of damage or failure
- Observe operation

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
6210.00 LOOPS		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
9.00 LABOR HR		

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	VIDEO MICR DECTECTORS	CODE	243

DESCRIPTION OF WORK

All work required to diagnose, maintain and/or repair video/microwave detectors. Activity is performed to ensure safe operation and safety control traffic movement at intersections.

PLANNING CRITERIA	07/01 07/31	08/01 08/30	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	8	8	8	8	8	8	6	6	10	8	8	8

Performed as required in response to service requests or as needed.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.75
TRF SIG TECH	0.40

Equipment	Qty
BOOM TRUCK	1.00
IPRESSOR	1.00
CONCRETE SAW	1.00
PICKUP/UTILITY TRUCK	1.50

Materials	Qty
LOOP WIRE	500.0 FO
SEALANT (LOOPS)	24.0 PO

WORK METHOD

PRE-DEPARTURE
1. Ready equipment and perform CDL Inspection
2. Travel to work site

AT WORK SITE
3. Connect lap top as required.
4. Connect video monitor as required.
5. Analyze problem and observe operation
6. Check programming
7. Change as needed.

END OF SHIFT
8. Document work.

CHECK POINTS

- Traffic Control
- Appropriate PPE
- Check connections
- Observe operation

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
39.00 INTSECT		

AVERAGE DAILY PRODUCTION	APPROVAL				
10.00 LABOR HR					

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	LED REPLACE	CODE	245

DESCRIPTION OF WORK

All work required to replace LEDs as needed.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	7	8	9	10	9	9	8	8	9	8	8	7

Performed as needed.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
Personnel	**Qty**	PRE-DEPARTURE	- Appropriate PPE
TRF SIG MECH	1.25	1. Ready and perform CDL inspection check.	
Equipment	**Qty**	2. Pick up boom truck.	
BOOM TRUCK	1.00	3. Load LEDs	- Follow current NV Work Zone Traffic Control Handbook and MUTCD
Materials	**Qty**	AT WORK SITE	- Check head alignment and tightness.
,L LAMP LED	11.0 EA	4. Replace LED	- Check backplate for looseness
		END OF SHIFT	
		5. Document work	

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
3000.00 EACH		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
16.00 LEDS		

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	SIGNAL HEAD REPAIR	CODE	247

DESCRIPTION OF WORK

All work required to change lenses, visors, back plates, sockets, internal wires, alignment, frame to assure proper operation of traffic signal.

PLANNING CRITERIA	5 Yr.	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
		8	8	9	8	8	9	7	8	9	8	8	10

Work is performed as needed.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
Personnel	**Qty**	PRE-DEPARTURE	- Appropriate PPE
TRF SIG MECH	1.75	1. Pick up boom truck and perform CDL Inspection	- Follow current NV Work Zone Traffic Control Handbook and MUTCD
Equipment	**Qty**	AT WORK SITE	
BOOM TRUCK	0.75	2. Set up work zone	
PICKUP/UTILITY TRUCK	0.25	3. Perform repair as needed.	
Materials	**Qty**	END OF SHIFT	
DOG HOUSE SIGNAL HE	2.0 EA	4. Document work.	

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
3000.00 SIGNAL HD		

AVERAGE DAILY PRODUCTION	APPROVAL
5.00 SIGNAL HD	

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	ILLUM STR NAME SIGN MAINT	CODE	252

DESCRIPTION OF WORK

Maintenance and repair of illuminated street signs. Work may include replacement of bulbs, ballasts, fuses, wiring, missing or damaged name panels and checking sign mounting hardware. This effort insures proper direction to motorists and pedestrians.

PLANNING CRITERIA	07/01 01/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	8	8	9	8	8	9	8	8	9	8	8	9

Performed in response to service requests or as reported in quarterly street light survey and every 36 months per local standards.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.25
TRF SIG TECH	0.20

Equipment	Qty
BOOM TRUCK	1.00

Materials	Qty
SL BALLAST	2.0 EA
FL BULBS	14.0 EA
FUSES	4.0 EA
SEALING PACS	4.0 EA
SOCKETS	2.0 EA
TAPE	1.0 RO

WORK METHOD

PRE-DEPARTURE

1. Pick up boom truck and perform CDL inspection check.
2. Load materials.
3. Check quarterly list & establish route.
4. Proceed to work location.

AT WORK SITE

5. Setup work zone as needed.
6. Turn on override or cover photo control.
7. Replace bulbs.
8. Check panel thumb screws.
9. Check mounting and hardware.
10. Uncover photo control.

END OF SHIFT

11. Document work.

CHECK POINTS

- Set up route
- Appropriate PPE
- Follow current NV Work Zone Traffic Control Handbook and MUTCD
- Check for incoming voltage
- Check fuses
- Trouble shoot sockets and ballasts
- Replace or repair as needed

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
800.00 SIGNS		

AVERAGE DAILY PRODUCTION	APPROVAL				
7.00 SIGNS					

ACTIVITY GUIDELINE
MAINTENANCE MANAGEMENT SYSTEM
City of Reno
Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	ILLUM STREET SIGNS	CODE	253

DESCRIPTION OF WORK

Maintenance and repair of illuminated street signs. Work may include replacement of bulbs, ballasts, fuses, wiring, missing or damaged name panels and checking sign mounting hardware. This effort insures proper direction to motorists and pedestrians.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	10	10	9	8	8	7	7	7	8	8	9	9

Performed in response to service requests or as reported in street light quarterly survey.
Signs include one way arrows and No left turn signs.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.00
TRF SIG TECH	0.40

Equipment	Qty
BOOM TRUCK	1.00

Materials	Qty
BALLAST	1.0 EA
FLOURES TUBES	20.0 EA
PHOTOCELLS	2.0 EA

WORK METHOD

PRE-DEPARTURE
1. Pick up boom truck and perform CDL Inspection check.
2. Load materials.
3. Check requests & establish route.
4. Proceed to work location.

AT WORK SITE
5. Setup work zone as needed.
6. Turn on override or cover photo control.
7. Replace bulbs.
8. Check panel thumb screws.
9. Check mounting and secureness of hardware.
10. Uncover photo control.

END OF SHIFT
11. Document work.

CHECK POINTS

- Set up route
- Appropriate PPE
- Follow current NV Work Zone Traffic Control Handbook and MUTCD
- Check for incoming voltage
- Check fuses
- Trouble shoot sockets and ballasts
- Replace or repair as needed

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
100.00 SIGNS		

AVERAGE DAILY PRODUCTION	APPROVAL
4.00 SIGNS	

Attachment C

Operation and Maintenance Work History Summary

City of Reno Operation and Maintenance Work History Summary - Labor Hours

Task ID	Task Description	Ownership	Historical Estimate (Hours)				Average Annual Maintenance Time (Hours)	Average Annual Maintenance Time (Hours) Rounded
			2021	2022	2023	2024		
201	Signal Preventative Maintenance	City of Reno	0.00	2.00	6.00	58.50	16.6	17.0
		Washoe County	0.00	34.00	0.00	24.00	14.5	14.5
		NDOT	0.00	0.00	5.00	9.00	3.5	3.5
202	Cabinet Preventative Maintenance	City of Reno	0.00	10.00	17.00	64.50	22.9	23.0
		Washoe County	8.00	25.00	32.00	25.00	22.5	22.5
		NDOT	0.00	0.00	18.00	10.50	7.1	7.5
203	Safety Monitors	City of Reno	4.00	228.00	328.50	379.00	234.9	235.0
		Washoe County	0.00	11.50	18.50	43.50	18.4	18.5
		NDOT	0.00	43.00	48.00	61.50	38.1	38.5
205	School Flasher Maintenance	City of Reno	52.50	214.50	341.00	156.00	191.0	191.0
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	0.00	24.00	4.00	6.00	8.5	8.5
206	Communications	City of Reno	117.00	114.75	68.00	57.50	89.3	89.5
		Washoe County	3.00	3.00	9.00	8.00	5.8	6.0
		NDOT	24.50	24.75	16.00	42.00	26.8	27.0
207	Fiber Optics	City of Reno	72.50	236.00	97.50	10.00	104.0	104.0
		Washoe County	0.00	15.00	2.00	8.00	6.3	6.5
		NDOT	45.50	24.50	4.00	34.00	27.0	27.0
208	ATMS System Maintenance	City of Reno	234.50	448.00	577.50	459.50	429.9	430.0
		Washoe County	9.00	9.00	18.00	0.00	9.0	9.0
		NDOT	18.50	14.50	32.00	3.25	17.1	17.5
230	Signal Response	City of Reno	275.50	751.70	608.50	152.50	447.1	447.5
		Washoe County	26.50	64.50	46.50	30.00	41.9	42.0
		NDOT	164.50	177.00	199.75	70.25	152.9	153.0
240	Ped Signal Repair	City of Reno	125.00	590.00	324.50	244.50	321.0	321.0
		Washoe County	5.00	22.50	39.00	30.00	24.1	24.5
		NDOT	78.50	136.50	191.00	61.50	116.9	117.0
241	Bench Repair	City of Reno	99.50	159.00	42.50	42.00	85.8	86.0
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	0.00	0.00	0.00	0.00	0.0	0.0
242	Loop Detection Maintenance	City of Reno	59.00	166.25	160.75	98.00	121.0	121.0
		Washoe County	1.00	1.00	6.00	4.00	3.0	3.0
		NDOT	30.00	49.50	47.50	43.00	42.5	42.5
243	Video Microwave Detection	City of Reno	174.00	597.00	464.25	285.00	380.1	380.5
		Washoe County	3.00	56.00	38.00	32.00	32.3	32.5
		NDOT	90.50	114.75	117.25	90.50	103.3	103.5
244	Electrical Maintenance & Repair	City of Reno	0.00	0.00	0.00	37.00	9.3	9.5
		Washoe County	0.00	0.00	0.00	2.00	0.5	0.5
		NDOT	0.00	0.00	10.00	4.50	3.6	4.0
245	LED Replacement	City of Reno	116.50	143.00	72.50	21.50	88.4	88.5
		Washoe County	13.00	11.00	16.00	17.00	14.3	14.5
		NDOT	14.50	19.00	20.00	16.00	17.4	17.5
247	Signal Head Repair	City of Reno	16.62	44.00	42.00	37.50	35.0	35.5
		Washoe County	0.00	2.00	6.00	12.00	5.0	5.0
		NDOT	0.00	20.00	21.00	24.00	16.3	16.5
248	Pre-Emption Maintenance & Repair	City of Reno	0.00	0.00	8.00	126.50	33.6	34.0
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	0.00	0.00	0.00	37.00	9.3	9.5
249	BBS Maintenance & Repair	City of Reno	0.00	0.00	9.00	36.00	11.3	11.5
		Washoe County	0.00	0.00	6.00	6.50	3.1	3.5
		NDOT	0.00	0.00	10.00	13.00	5.8	6.0
250	Street Light Maintenance	City of Reno	80.00	303.50	226.50	424.50	258.6	259.0
		Washoe County	2.00	10.50	2.00	2.00	4.1	4.5
		NDOT	18.00	54.50	14.00	23.00	27.4	27.5
251	RRFB-Flashing Beacon	City of Reno	130.50	226.50	244.00	208.50	202.4	202.5
		Washoe County	0.00	0.00	0.00	4.00	1.0	1.0
		NDOT	0.00	3.00	0.00	0.00	0.8	1.0
252	Illuminated Street Name Sign Maintenance	City of Reno	61.00	171.50	90.00	38.00	90.1	90.5
		Washoe County	2.00	6.00	6.00	0.00	3.5	3.5
		NDOT	21.00	33.00	7.00	20.00	20.3	20.5
253	Illuminated Street Sign Maintenance	City of Reno	6.00	4.00	40.00	24.00	18.5	18.5
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	0.00	0.00	12.00	0.00	3.0	3.0
260	Cabinet Rehab & Construction	City of Reno	69.50	184.00	108.00	128.50	122.5	122.5
		Washoe County	0.00	30.50	38.50	74.00	35.8	36.0
		NDOT	25.00	29.50	79.00	62.50	49.0	49.0
261	LED Rehab & Construction	City of Reno	0.00	17.00	4.00	0.00	5.3	5.5
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	0.00	0.00	0.00	0.00	0.0	0.0
262	Pole Rehab & Construction	City of Reno	5.00	22.50	13.50	0.00	10.3	10.5
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	11.00	0.00	16.00	19.00	11.5	11.5

263	Signal Rehab & Construction	City of Reno	0.00	62.00	39.50	55.50	39.3	39.5
		Washoe County	2.00	0.00	35.00	10.50	11.9	12.0
		NDOT	6.00	2.00	6.00	6.00	5.0	5.0
270	Speed Radar Maintenance & Repair	City of Reno	44.00	124.50	172.00	98.00	109.6	110.0
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	0.00	0.00	0.00	0.00	0.0	0.0
280	USA Locates	City of Reno	569.75	1,509.50	1,805.25	1,188.50	1,268.3	1,268.5
		Washoe County	0.00	31.50	38.00	2.00	17.9	18.0
		NDOT	25.50	10.00	3.00	0.00	9.6	10.0
550	Signal Maintentance & Repair	City of Reno	2.00	0.00	0.00	0.00	0.5	0.5
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	0.00	0.00	0.00	0.00	0.0	0.0
552	Sign Installation & Upgrade	City of Reno	0.00	0.00	0.00	2.00	0.5	0.5
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	0.00	4.00	0.00	0.00	1.0	1.0
981	Crew Inspections[1]	City of Reno	0.00	0.00	98.50	380.00	119.6	120.0
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	0.00	0.00	0.00	0.00	0.0	0.0
987	Contract Inspection[2]	City of Reno	99.50	398.00	271.50	85.00	213.5	213.5
		Washoe County	0.00	31.50	2.00	7.00	10.1	10.5
		NDOT	38.50	16.00	49.00	66.50	42.5	42.5
							City of Reno	373.5
							Washoe County	47.5
							NDOT	53.5
							Sub-Total - Preventative Maintenance	**474.5**
							City of Reno	4,712.5
							Washoe County	240.5
							NDOT	716.5
							Sub-Total - Reactive Maintenance	**5,669.5**
							Total Average Annual Hours	**6,144.0**
							Regular Hours (%)	**95.0%**
							Overtime Hours (%)	**5.0%**
							[3]Estimated Hourly Rate (Source: Reno-Washoe Traffic Signal Maintenance Agreement)	**$88.57**
							[3]Estimated Overtime Hourly Rate (Source: Reno-Washoe Traffic Signal Maintenance Agreement)	**$132.85**
							Sub-total Operations and Maintenance Labor Cost (Regular)	**$516,965.38**
							Sub-total Operations and Maintenance Labor Cost (Overtime)	**$40,811.52**
							Total Operations and Maintenance Labor Cost	**$557,776.90**

1: Monthly inspections of the work crew during construction.
2: Inspections of the contractor crews during work on City of Reno owned equipment or intersections.
3: The rates for Reno's Traffic Signal Technicians were used in the analysis to provide a conservative estimate.

MEMORANDUM

Date:	12/20/2024	Project Number:	173.51.25
To:	City of Sparks		
From:	Janice Wang, Becca Regalado, Mei-Hui Lee (NCE), Anabel Hernandez and Jessica Rossi (Kimley-Horn)		
Subject:	Memo of data collection for the City of Sparks		

Roadway plays a crucial role in transportation systems and is an essential component of the traveling public's safety. As a part of the Regional Transportation Commission (RTC) of Washoe County's mission to build a better community through quality transportation systems, the RTC has established this study to identify and summarize current roadway maintenance practices, Intelligent Transportation System (ITS) infrastructure, and needs and available funding within the Washoe County Metropolitan Planning Organization boundary. In general, RTC funds and maintains roadways identified in the Regional Road System (referred to as RTP roads in the following sections) and local governments provide preservation services for non-regional roadways (or non-RTP roads) and day-to-day maintenance for all non-state-maintained, publicly owned facilities.

This study will identify roadway maintenance needs in the cities of Reno and Sparks, in Washoe County, and in the region overall, and examine how funding is allocated to those needs at the local and regional levels. The results will allow RTC to continue to plan and deliver roadway projects in a fair, equitable, and fiscally responsible manner.

The NCE team has coordinated with RTC, the cities of Reno and Sparks, and Washoe County to collect available data for:

- **Pavement Maintenance**: Pavement management program, pavement strategies and costs, pavement needs and available funding.
- **ITS Infrastructure**: Existing infrastructure inventory, existing operations and maintenance, planning and approval processes, infrastructure needs and available funding.
- **Financial and Funding Sources**: Motor vehicle fuel tax and other revenue sources for roadway or ITS maintenance.
- **Normal Operation and Maintenance**: Asset management system, asset needs and funding, and other normal operations and maintenance.

This document summarizes the data provided by the City of Sparks (City) for each category listed in this study.

1. Data Collection Checklists

The NCE team created data collection checklists for the categories described above. These are presented in Tables 1 through 4 below. Responses from City of Sparks are included in Attachment A.

Table 1. Data Collection Checklist: Pavement Maintenance

No.	Item
1	What Pavement Management System (PMS) software does your agency use?
2	How many streets/roads does your agency maintain? (number of sections and centerline miles by functional class)
3	What distress protocol does your agency use? (ASTM D6433[1] or MTC[2])
4	Does your agency have Geographic Information System (GIS) shapefile linked to PMS software?
5	How often does your agency update pavement inspections?
6	How does your agency update pavement condition data? (walking, windshield, or automated?) (in-house or by contractor?)
7	What other condition data do you also collect? (deflection, ride quality, friction, drainage, core, etc.)
8	What is your current network condition (Pavement Condition Index, PCI)? (by entire network and by functional class)
9	How does your agency setup condition categories in PMS? (e.g., PCI 70 to 100 – Very Good)
10	Does your agency have portland cement concrete (PCC) pavement in your network?
11	What pavement strategies/treatments does your agency apply on various conditions of pavement? (treatments by PCI range)
12	What factors/items are included in the treatment costs? (e.g., paving materials, labor, concrete repairs, striping, traffic control, etc.)
13	How often does your agency update the treatment costs in your PMS?
14	Does your agency use sustainable pavement practices? (e.g., Cold-in-Place Recycling [CIR], Hot In-Place Recycling [HIPR], Full Depth Reclamation [FDR], etc.)
15	If yes, what sustainable pavement practices does your agency utilize? Reclaimed Asphalt Pavement Cold-in-Place Recycling (CIR) Warm Mix Asphalt Permeable/Porous Pavement Full Depth Reclamation (FDR) Subgrade Stabilization Rubberized Asphalt Concrete Pavement Preservation (e.g., slurry seal, chip seal, fog seal, cape seal, etc.)
16	How does your agency prioritize streets for maintenance and rehabilitation?
17	What is the target PCI for your network?

[1] *ASTM D6433-23 Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys*. ASTM International. West Conshohocken, PA, 2023, www.astm.org.

[2] *PCI Distress Identification Manuals (flexible pavement 5th Edition March 2022, rigid pavement 4th Edition March 2018)*. Metropolitan Transportation Commission. San Francisco CA.

No.	Item
18	What is your current annual paving budget?
19	What are your pavement needs for the entire network?
20	What is your emergency repair process? (e.g., potholing repairs)
21	Other related data?

Table 2. Data Collection Checklist: ITS Infrastructure

No.	Item
1	**O&M Asset Management Records:** Review **Table 2-1** below and confirm if the device totals traffic signals, traffic cabinets, and traffic cameras are still accurate. Please provide updated information if available.
2	**Work Order History:** Provide the last 2 to 3 years of Work Order history or O&M expenditures related to ITS Infrastructure.
3	**Maintenance Schedules/Procedures:** What are existing maintenance schedules and processes for ITS Infrastructure?
4	**Planning/Funding Maintenance:** What planning, decision-making, and approval processes do you have when maintaining ITS infrastructure?

Table 2-1. Existing ITS Device Inventory

ITS Device	City of Reno	City of Sparks	Washoe County	Nevada Department of Transportation [NDOT]
Traffic Signals	191	73	24	131
Traffic Cabinet	191	73	24	131
Traffic Camera	46	30	-	

Note: The numbers have been updated according to the information collected in this study.

Table 3. Data Collection Checklist: Financial/Funding Sources

No.	Item
1	Prepare an inventory of existing revenue streams that are currently used to fund maintenance for your agency/community.
2	Have any new sources been added or removed in the last 5 years? Have budgets or how the revenue is used changed?
3	Please provide current budget documents, as well as 3 – 5 years history.
4	Have there been any unexpected changes to revenue streams in the last 5 years? How did that impact how maintenance needs were met?
5	Please provide current Annual Comprehensive Financial Report [ACFR] documents, as well as 3 – 5 years history.
6	Have any studies been prepared outside this effort that review/summarize funding sources for roadway/ITS maintenance? Can you share these?
7	Please provide the current Capital Improvement Project (CIP).

No.	Item
8	What are your biggest concerns about current and future revenue/expenditure differences as they relate to maintenance?
9	Are there federal or state sources that provide one-time or reoccurring revenue support for maintenance needs?
10	Are there grants or other sources you have utilized? How does the use of sources like this influence your budget planning?
11	Other related data?

Table 4. Data Collection Checklist: Normal Operation and Maintenance

No.	Item
1	Does your agency have any asset inventory? In what format do you save the inventory? (e.g., curb ramps, sidewalk, striping, etc.)
2	What assets require maintenance in your agency?
3	What are the total needs for your asset maintenance?
4	What is your existing annual budget to maintenance these assets?
5	Does your agency have existing asset maintenance records or work order history?
6	How does your agency maintain the existing assets? (in-house or by contractor)
7	What is your regular maintenance schedule or process?
8	What are your emergency repairs and maintenance processes?
9	What is your CIP needs and projects?
10	What normal operations and maintenance does your agency perform? Crack sealing Patching Sweeping Snow removal Landscaping Roadway striping Concrete repairs (sidewalk, curb and gutter, curb ramp, etc.) Strom drain maintenance Guardrail repairs Shoulder maintenance Culvert cleaning Others
11	How does your agency operate or maintain the above items? (ex. regular monitor/inspect, repair, or work orders) (in-house or by contractor?)
12	How does your agency track or save operation and maintenance records?
13	How does your agency prioritize operation and maintenance activities?
14	What is your annual budget for operations and maintenance?
15	Other related data?

2. Pavement Maintenance

Data collected about Pavement Maintenance focused on the existing pavement management program (PMP), pavement strategies, and pavement needs and funding for each agency. The details are stated as follows.

2.1 Pavement Management Program

Pavement networks are often the most valuable asset an agency owns. A current PMP with accurate pavement condition data is an essential tool to maintain and repair roadways and stretch funding allocation. The City began using PAVER as its PMP in the mid-1980s for developing roadway inventory, updating inspections and historical records, and establishing GIS shapefiles in the database.

Pavement inventory is a key component of pavement management. The City's roadway network contains a total of 395.4 centerline miles (Table 5), including 274.8 centerline miles (or 2,011 sections) of non-RTP roads maintained by the City and 120.6 centerline miles (or 356 sections) of RTP roads maintained by the RTC. Despite this, the City oversees the normal operations and maintenance for the entire roadway system. Collectors make up the largest portion of the non-RTP roads, with approximately 232 centerline miles. City hasn't identified any residential roads in current PMP inventory. Assume residential roads are assigned as collectors in the database. In addition, most sections in current database are asphalt concrete (AC) pavement, and 35 sections are portland cement concrete (PCC) pavements, including 23 RTP sections and 12 Non-RTP sections, with 10 of the non-RTP PCC sections are alleyways.

Table 5. Centerline Miles and Sections by Functional Classifications and Maintenance Agency

Functional Classification	Centerline Miles (# sections) by Maintenance Agency	
	Non RTP Road	RTP Road
Principal	8.3 (33)	--
Arterial	27.4 (118)	70.2 (187)
Collector	231.5 (1,751)	27.9 (81)
Industrial	0.8 (3)	21.0 (81)
Residential	--	1.5 (7)
Alleyways	6.8 (106)	--
Total	274.8 (2,011)	120.6 (356)
	395.4 (2,367)	

Pavement condition data is the "fuel" for any pavement management engine. The City adopts ASTM D6433[1] as the distress protocol for pavement condition inspection, and pavement condition data is collected by contractors annually using walking surveys. One-third of the network is inspected and updated each year; therefore, the entire pavement network condition inventory is updated every 3 years. Only pavement condition is inspected and updated in the PMP software, and no other pavement-related testing (e.g., coring, deflection, friction, or profiler) is regularly performed on non-RTP roads.

Pavement condition is typically quantified using the pavement condition index (PCI), which ranges from 0 (worst) to 100 (best). Pavement condition is affected by the environment, traffic loads and volumes, construction materials, and age. The City divides the PCI scale into 3 condition categories (Table 6). Pavements

in “Very Good” condition have a PCI at or above 65, pavements in “Good/Fair” condition have a PCI between 45 and 64, and pavements in “Poor” condition have a PCI at or below 44.

Table 6. City of Sparks-Pavement Condition Breakdown

Condition Category	PCI Range
Very Good	65 – 100
Good/Fair	45 – 64
Poor	0 – 44

The City does not have an official performance target PCI for the maintained network, but the PCI of City roadways is continuously compared with roadways managed by nearby agencies. The current average (2024) PCI of non-RTP roads in the City is 77.5, and Figure 1 breaks down the current non-RTP road PCI by functional classification. The average PCI for principals is 91.9. The average PCIs for arterials, collectors, and industrials are closely grouped, ranging from 75.0 to 81.4. In contrast, the average PCI of alleyways is 41.6, in “Poor” condition category. Figure 2 shows current non-RTP road PCIs in area percentage by condition category. Approximately 80% of the non-RTP roads have a current PCI greater than 65, placing them in the “Very Good” category, while nearly 10% of non-RTP network is in “Poor” condition category.

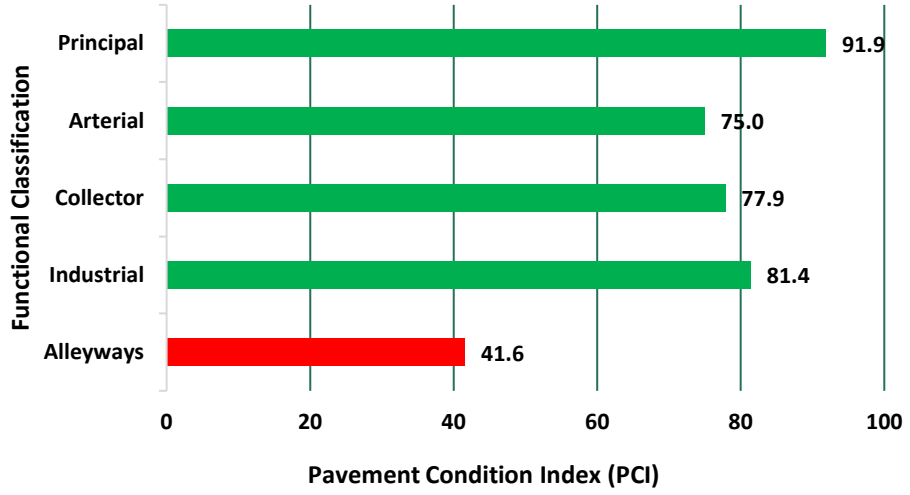


Figure 1. Current PCI by Functional Classification

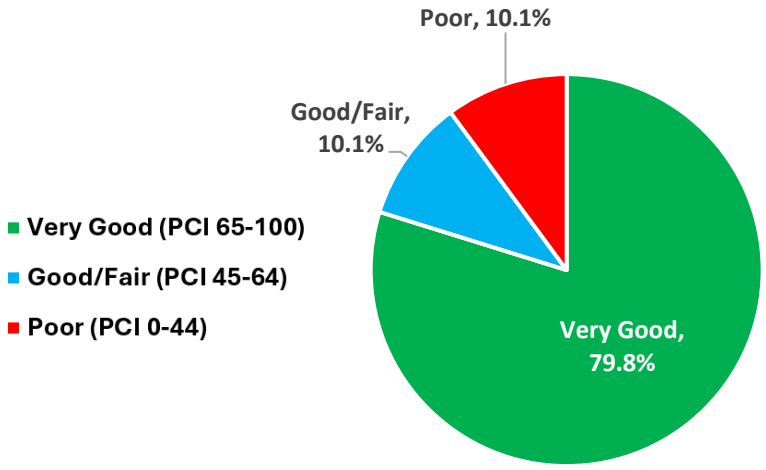


Figure 2. Area Percentage by Condition Category

2.2 Pavement Strategies and Costs

Pavement maintenance strategies include a variety of treatments and practices aimed at addressing pavement deterioration and maintaining pavement in acceptable condition throughout its service life. Maintenance and rehabilitation treatments are selected based on the pavement's condition, and treatment costs are directly influenced by the condition at the time of application. The maintenance cost of pavements in good condition is generally lower than the rehabilitation and reconstruction cost of pavements in poor condition. Therefore, applying the appropriate maintenance and rehabilitation treatment at the appropriate time is crucial for effectively utilizing the budget and maintaining pavement quality.

The strategies shown in Table 7 are utilized by the City for roadway maintenance and rehabilitation. Preventive maintenance strategies such as microsurfacing, crack seal, and patching will be applied on roads in very good condition. For roads with PCIs 51 to 64, indicating a need for corrective maintenance, the City will implement micro-mill, microsurfacing, cape seals, crack seals, and grind and overlay. T-patch and micro-mill have been utilized recently with good performance, and T-patch is specifically used for repairing larger cracks (width greater than 1.5 inches). For roads with PCIs at or below 50, reconstruction methods will be considered to reset the pavement life cycle. Regarding strategies for PCC, the City works with the RTC for proper maintenance of those sections since the most PCC sections are maintained by the RTC in the City. Past treatments have included sealing and joint repairs. The City has provided recent bid tabs for completed projects over the past few years, but treatment strategies and unit costs are not finalized in the decision tree or the City's PAVER database.

Table 7. City of Sparks – Pavement Strategies

Surface	Condition Category	Treatment
AC	Very Good PCI 65 100	Preventive maintenance, including microsurfacing seal, crack seal, patching, T-patch
	Good/Fair PCI 51 64	Corrective maintenance, including micro-mill, microsurfacing, cape seals, crack seals, T-patch, and grind and overlay,
	Poor PCI 0 50	Reconstruction, including roadbed modification, pulverize, 4-inch AC on 6 to 8 inches aggregate base (AB) or treated base

Based on the bid tabs from 2022 to 2024, the City has performed crack sealing, patch, slurry seal, mill and overlay, full depth reclamation, and reconstruction on roads as pavement maintenance and rehabilitation strategies. Further, gap mastic has been utilized recently for repairing potholes and pavements showing delamination.

In selecting sections of roadways for treatment, the City will identify high-priority streets based on pavement condition and will take residents' input into consideration.

2.3 Pavement Needs and Funding

In the City of Sparks, the Road Fund is used for transportation, road improvements, and related road maintenance projects. It comprises two 2 main programs: the Pavement Management Program and the Traffic Program. The Pavement Management Program focuses on street improvements including preventive maintenance, corrective maintenance and rehabilitation, as well as sidewalk, alley, and parking lot rehabilitation. Budgets from the City's 5-Year Capital Improvement Plan from FY2025 to FY2029 are presented in Table 8, and average $4.0 million per year.

Table 8. Budget for Pavement Management Program

Year	Budget Recommendation
FY2025	$4,675,536
FY2026	$3,720,152
FY2027	$3,665,057
FY2028	$3,605,258
FY2029	$4,195,766

Based on the information provided by the City, the pavement maintenance and rehabilitation (M&R) unfunded backlog is approximately $129 million in 2024. The estimation is based on unit costs of $1.00 per SF for preventive maintenance, $3.00 per SF for corrective maintenance, and $13.00 per SF for rehabilitation.

2.4 Summary

The City began using PAVER as its PMP in the mid-1980s. The City maintains a total of 274.8 centerline miles (or 2,011 sections) of non-RTP roads and has adopted ASTM D6433[1] as the distress protocol for pavement condition inspections, while the City oversees the normal operations and maintenance for the combined total of 395.4

centerline miles roadway system. These inspections are conducted by contractors using walking surveys. Each year, one-third of the network is inspected and updated, ensuring that the entire pavement network condition inventory is updated every 3 years. The current average PCI of non-RTP roads is 77.5.

Recent bid tabs indicate that over the last few years, the City performed crack sealing, patch, slurry seal, mill and overlay, full depth reclamation, and reconstruction as pavement maintenance and rehabilitation strategies. The recent adoption of T-patch for larger cracks, micro-mills, and gap mastic on pothole repairs has also proven effective in roadway maintenance. In the 5-Year Capital Improvement Plan for FY2025 to FY2029, an average of $4.0 million per year is available for pavement management program within the City. Based on the information provided by the City, the pavement M&R unfunded backlog is approximately $129 million in 2024.

3. ITS Infrastructure

Intelligent Transportation System (ITS) infrastructure data were requested from the City of Sparks to evaluate its current state. These data included:

1. Operation and Maintenance Asset Management Records (i.e., existing ITS inventory)
2. Work Order History
3. Maintenance Schedules and Procedures
4. Planning and Funding Maintenance

NCE met with the City on August 26, 2024, to provide an overview of the project and request the ITS infrastructure data. The following sections provide a summary of the existing ITS infrastructure inventory, existing ITS Operations and Maintenance efforts, ITS Planning and Approval Processes, and ITS Needs and Funding as identified by the City. A summary table of the responses from the City is included in Attachment A.

3.1 Existing ITS Infrastructure Inventory

As of August 26, 2024, the City of Sparks owns and operates 73 signals. The City also maintains additional signals through interlocal agreements with the Nevada Department of Transportation (NDOT). Through the interlocal agreements, the City fully maintains 43 signals owned by NDOT as well as the signal timing at one additional NDOT-owned signal, which is otherwise maintained by the City of Reno. The interlocal agreement between the City of Sparks and NDOT is included in Attachment B. A detailed summary of the City's infrastructure (traffic signals, cabinets, and traffic Pan-Tilt-Zoom [PTZ] cameras) and infrastructure the City of Sparks maintains for Washoe County and NDOT is provided in Table 9.

Table 9. Existing ITS Device Inventory

ITS Device	City of Sparks	NDOT	Total
Traffic Signals (# of Signalized Intersections)	73	44	117
Traffic Cabinet	73	44	117
Traffic Camera (PTZ)	30	-	30

Note: One signalized intersection is owned by NDOT but is maintained by the City of Reno

3.2 Existing ITS Operations and Maintenance

The City allocates approximately $50,000 annually for maintaining its ITS infrastructure. Maintenance teams conduct both routine maintenance as well as repair issues and equipment failures. This maintenance includes replacing, repairing, and upgrading switches, cameras, controllers, and other hardware. As stated in Section 3.1, the City maintains a total of 117 signalized intersections some of which are NDOT-owned signals. No other work history was provided. The agreement between the City and NDOT includes (Attachment B):

- Replacement and repairs of signal system equipment due to incidental damage.
- Emergency replacement and repairs of signal system equipment.

3.3 ITS Planning and Approval Processes

The City of Sparks performs routine maintenance at all signal locations under its jurisdiction, but handles repairs, replacements, and improvements on a reactive basis, addressing issues as they arise rather than following a schedule. The City coordinates with its maintenance teams to identify and recommend replacements or upgrades, especially at locations that experience frequent issues/failures or those that receive public concerns/complaints. In general, upgrades to signals vary from year to year depending on the need and available budgets.

3.4 ITS Needs and Funding

The City funds its ITS needs through a designated annual budget. A substantial portion of this funding is allocated for purchasing hardware necessary for repairs and upgrades throughout the year. Under their contract with NDOT, the City is reimbursed for individual maintenance and repair costs for each of the 43 NDOT locations being maintained by the City. Additionally, NDOT fully reimburses the City for any emergency repairs and replacements at their intersections. The full agreement can be found in Attachment B.

3.5 Summary

In summary, the City of Sparks allocates approximately $50,000 annually on improvements, replacements, and routine maintenance for its own, and NDOT's ITS infrastructure system. The City is reimbursed by NDOT for maintenance activities as outlined in the agreement. Apart from these reimbursements, the City funds ITS maintenance needs using a set annual budget. The priority of maintenance projects and allocation of funding is determined based on when problems occur, when specific updates are necessary, and public concerns and complaints.

4. Financial and Funding Sources

This section summarizes the findings of a review of revenue streams that are available to support costs associated with pavement and ITS maintenance for the City of Sparks. Following an interview with finance and budget staff on September 4th, 2024, a thorough review of annual budget and annual comprehensive financial reports (ACRF) documents was completed by the consultant team. It should be noted that at the time this project began, financial data for fiscal year (FY) 2023-2024 was the most recent budget data available. For this reason, data from FY 2023-2024 was utilized throughout this analysis for consistency. FY 2024-2025 information was released while the review was already underway. A summary table of the responses from the City is included in Attachment A.

4.1 Motor Vehicle Fuel Tax

This section provides an overview of the motor vehicle fuel tax followed by details of the City's revenue from this funding stream.

Motor Vehicle Fuel Tax Overview

The Motor Vehicle Fuel Tax is the most prominent source of revenue available to fund pavement and ITS maintenance for the City of Sparks. There are several statutory authorities that generate revenue based on all motor vehicle fuel sales, except for aviation fuel. These statutory authorities include:

- **NRS365.192** - $0.01 motor vehicle fuel tax in Washoe County; this funding goes to Washoe County and the cities of Reno and Sparks and is distributed formulaically based on population, lane miles, and land area.
- **NRS365.190** – additional $0.0175 motor vehicle fuel tax in Washoe County; this funding goes to Washoe County and the cities of Reno and Sparks and is distributed formulaically based on population, lane miles, and land area.
- **NRS365.180** – additional $0.036 motor vehicle fuel tax in Washoe County, broken down further into $0.0125 towards Washoe County Road bonds and $0.0235 to Washoe County; the City of Sparks does not receive any revenue from this stream.
- **NRS373.030** – optional $0.09 motor vehicle fuel tax in Washoe County and is distributed to RTC; the City of Sparks does not receive any revenue from this stream.
- **NRS365.175** - $0.1765 base rate to the State Highway Fund; the City of Sparks does not receive any revenue from this stream.

Nevada's Motor Vehicle Fuel Tax is indexed, meaning its adjusted annually based on a formula that ties it to inflation. It is important to note that all agencies made note of the challenges related to the increasing efficiency of modern motor vehicles, many of which require less fuel to operate. The goal of indexing is to support the collection of a revenue stream that is adequate to cover the cost of maintaining and improving transportation infrastructure.

The statutory authorities are indexed in different ways. First NRS 373.065 authorizes Washoe County to levy an additional tax equal to the amount authorized by NRS 365.180, 365.190, 362.192, and 373.030 multiplied by the average of the past five years Consumer Price Index (CPI) or 4.5%. Secondly, NRS 373.066 provides the authorization to impose a tax indexing for state and federal fuel taxes to inflation; this is indexed by a 10-year rolling average of the Producer Price Index (PPI), which measures the average change in the cost of nonresidential construction. PPI across all applicable sources is capped at 7.8%.

The revenues collected as part of the Motor Vehicle Fuel Tax are then distributed to the cities of Reno and Sparks, Washoe County, and the RTC. Distribution methods vary depending on the statutory authority. Table 10 demonstrates the various tax descriptions, the tax rate, and the jurisdiction or authority that receives the funding stream.

Table 10. Statutory Authorities for Motor Vehicle Fuel Tax and Receiving Agency

Tax Description	Tax Rate	Washoe County	Reno	Sparks	RTC
NRS365.192 Base	$0.01	X	X	X	
NRS365.192 CPI	$0.01	X	X	X	
NRS365.192 PPI	$0.01	X	X	X	
NRS365.190 Base	$0.0175	X	X	X	
NRS365.190 CPI	$0.0175	X	X	X	
NRS365.190 PPI	$0.0175	X	X	X	
NRS365.180 Base	$0.0125	X			
NRS365.180 CPI	$0.0125	X			
NRS365.180 PPI	$0.0125	X			
NRS365.180 Base	$0.0235	X	X	X	
NRS365.180 CPI	$0.0235	X	X	X	
NRS365.180 PPI	$0.0235	X	X	X	
NRS373.030 Base	$0.09				X
NRS373.030 CPI	$0.09				X
NRS373.030 PPI	$0.09				X
PPI State/Federal					X
PPI Special Funds					X

NRS365.192 is distributed based on the share of population in each jurisdiction. As of July 1, 2023, the City Reno accounted for 54.5% of the total Washoe County population, Sparks accounted for 22.4%, and unincorporated Washoe County represented the balance at 23.1%. NRS365.190 is distributed based on property valuations and NRS373.180 is distributed equally based on population, land area, local road mile, and vehicle miles traveled. It is important to note that the factors utilized in the calculation result in Washoe County receiving more revenue, primarily due to the land area factor, than the cities of Reno and Sparks combined.

The optional $0.09 Washoe County tax (NRS373.030) and a portion of NRS365.175 are allocated to RTC. Figure 3 demonstrates the separate statutory streams for the Nevada Motor Vehicle Fuel Tax.

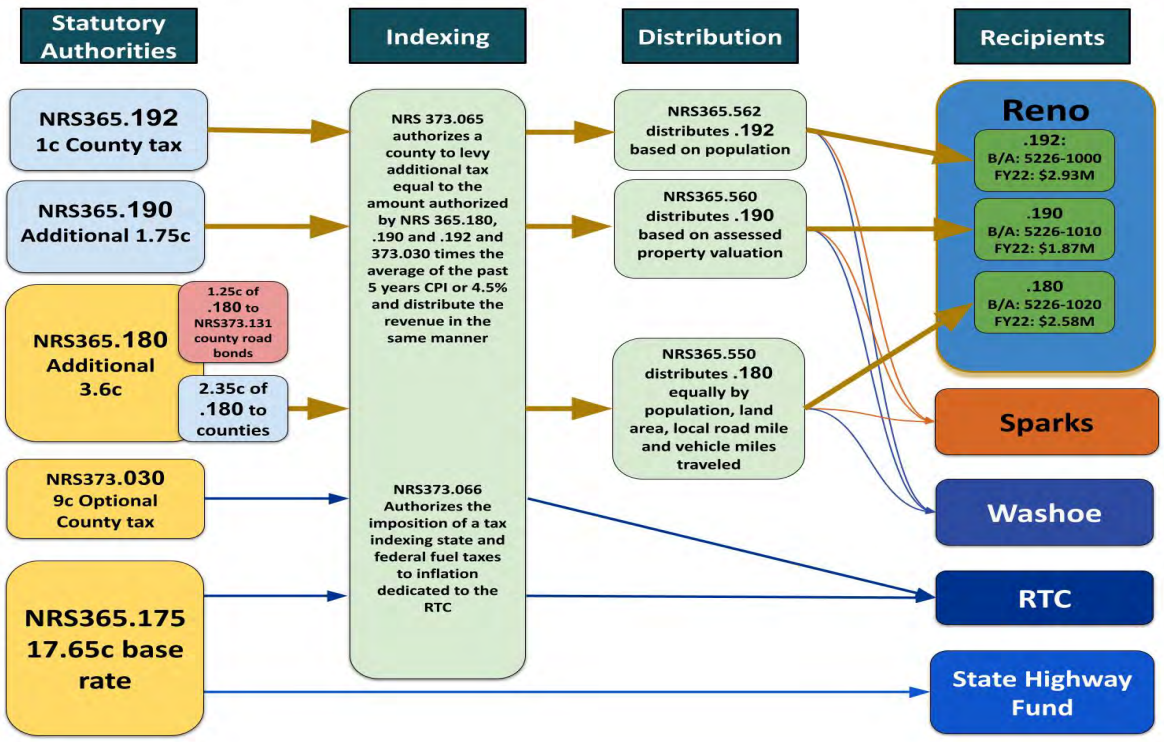


Figure 3. Nevada Motor Vehicle Fuel Tax

Figure 4 demonstrates a summary of the Washoe County taxes paid per gallon of gas. The total tax rate across all statutory authorities is $0.93313 per gallon. The PPI stream comprises 41.2% of the total, the largest share across the authorities, followed by Federal (19.8%) and State (19.7%).

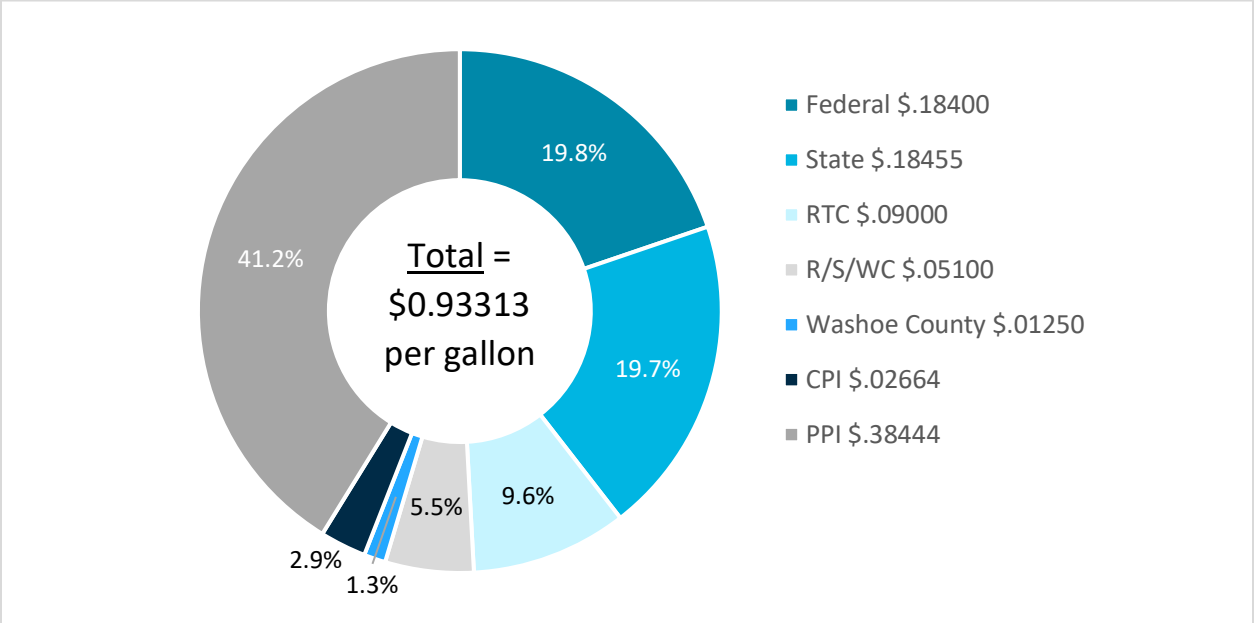


Figure 4. Washoe County Taxes Paid per Gallon of Gas, FY 2023-2024

City of Sparks Motor Vehicle Fuel Tax

In FY2023, the City of Sparks received over $2.9 million in total fuel tax revenue, an increase of 58.4% over $1.9 million in FY2014 (Figure 5). The fuel tax revenue allocated to the City of Sparks increased year-over-year between FY2014 and FY2019, reaching the largest amount on record in that year. Between FY2014 and FY2019, the average annual increase in motor vehicle fuel tax increased by an average of 7.1% per year. As a result of reduced vehicle miles traveled during the COVID-19 pandemic, the City's revenue stream from the fuel tax decreased between FY2019 and FY2020 by 4.4%. Since FY2020, the City's fuel tax revenue has been more sporadic, with an increase between FY2020 and FY2021, followed by a decline in FY2022. It should be noted that between FY2022 and FY2023, the city experienced a strong increase of 18.0%.

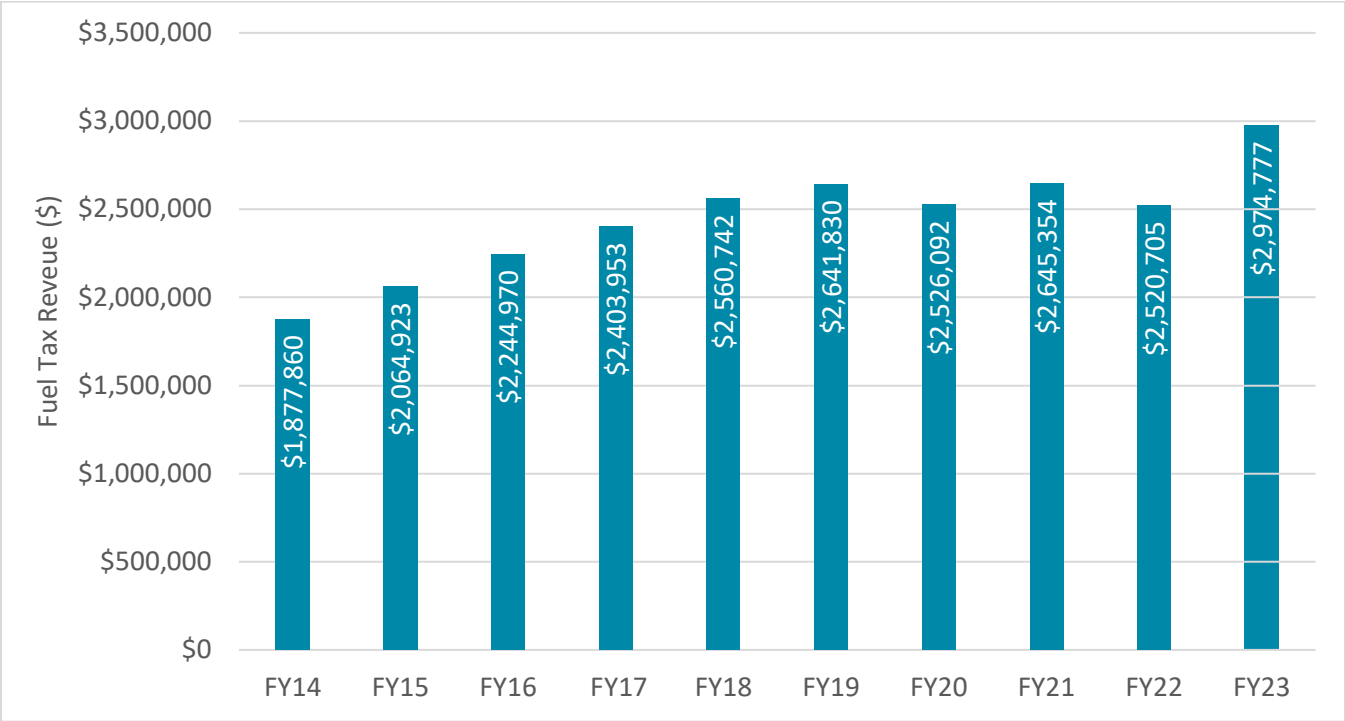


Figure 5. City of Sparks Fuel Tax Revenue, FY 2014-2015 (FY14) to FY 2023-2024 (FY23)

Figure 6 demonstrates the breakdown in Motor Vehicle Fuel Tax by statutory authority for FY2023-2024. The three statutory authorities are relatively balanced, each providing between 27.7% and 36.5% of the total.

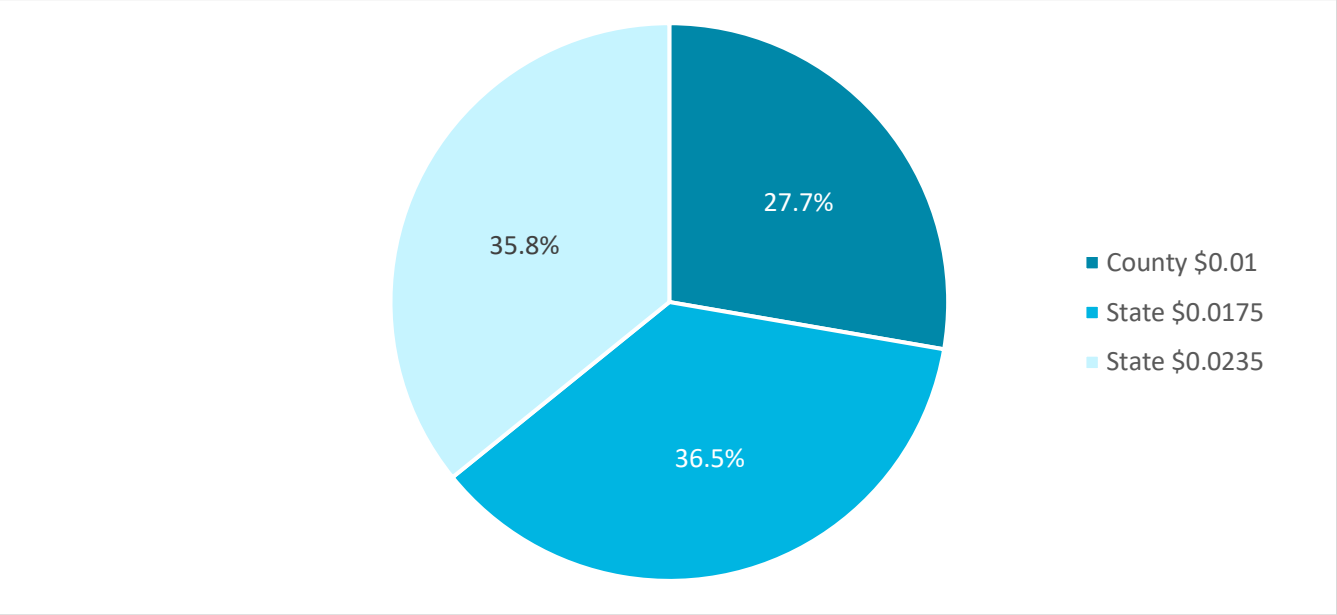


Figure 6. City of Sparks Fuel Tax Revenue Breakdown, FY 2023-2024

4.2 Other Revenue Sources

The City of Sparks also collects revenue that supports ongoing pavement and ITS maintenance from three additional sources beyond motor fuel tax: Truckee Meadows Water Authority (TMWA) right-of-way tolls, NV Energy-Electric, and NV Energy-Natural Gas, all franchise fees.

- **TMWA Right-of-Way Tolls**: The City of Sparks collects additional revenue to support street repair and maintenance is from the TMWA right-of-way tolls, also known as franchise fees. This is a pass-through fee imposed by a local government entity on utility and cable television companies for the right to have utility infrastructure located with the right-of-way of city streets. The fee is defined as 5% of the water charge. In FY2023, Sparks collected $511,425 in TMWA right-of-way tolls.
- **NV Energy-Electric and Natural Gas:** Revenue from electric and natural gas franchise fees are dedicated to street maintenance and operations by the City of Sparks. In FY2023, the City collected $3.3 million across the two franchise fee types, with electric representing nearly three-quarters of the total. It should be noted that franchise fees can be redirected at the direction of Sparks City Council. Not all of this stream is automatically dedicated to street, pavement, and ITS repairs and maintenance. As an example, in 2017 the Council redirected this stream for one annual period to achieve goals for the parks system.

Across both sources, the amount of revenue generated for the City of Sparks has increased between FY2014 and FY2023 (Figure 7). Both of these sources, which can be used for street maintenance and repair, are notably influenced by the pace of development in the community. The TMWA Right-of-Way tolls declined slightly between FY2014 and FY2023, from $690,000 to $511,425. However, offsetting that decrease, the two franchise fees associated with NV Energy (Electric and Gas) increased by 57.4% during the same time period. The two sources had a combined total revenue of $3.8 million for the City of Sparks.

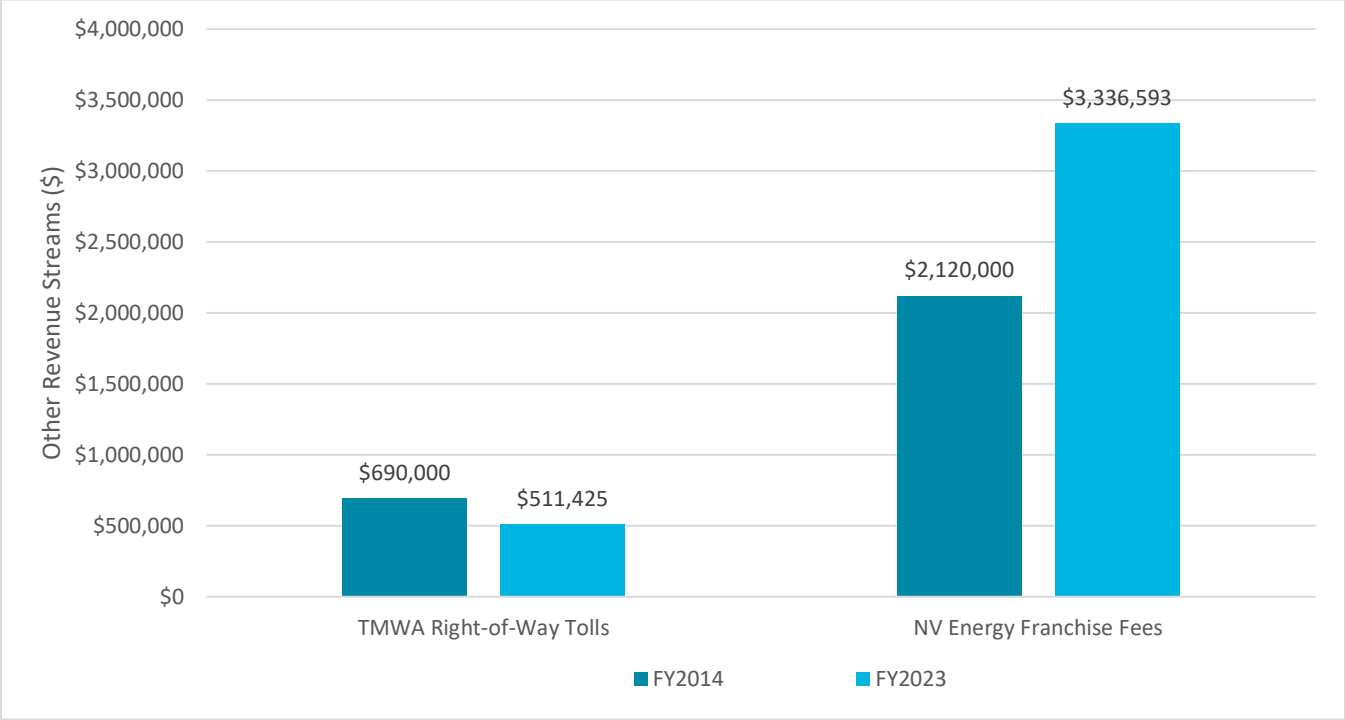


Figure 7. City of Sparks Other Revenue Streams, FY 2014-2015 (FY2014) to FY 2023-2024 (FY2023)

4.3 Summary

The City of Sparks received $6.8 million in revenue in FY2023 to support street maintenance and repair, an increase of 45.5% from the total in FY2014 (Figure 8). The NV Energy franchise fees make up the largest share of the revenue dedicated to street repair and maintenance at 48.9%, followed by the motor vehicle fuel tax at 43.6%. TMWA right-of-way made up only 7.5% of the total in FY2023. The City of Sparks noted future concerns about the motor vehicle fuel tax due to the increasing efficiency of vehicles, which is expected to result in fewer gallons purchased over time. While the motor vehicle fuel tax and the NV Energy franchise revenue increased by 57%-58% from FY2014 to FY2023, the TMWA right-of-way tolls declined slightly.

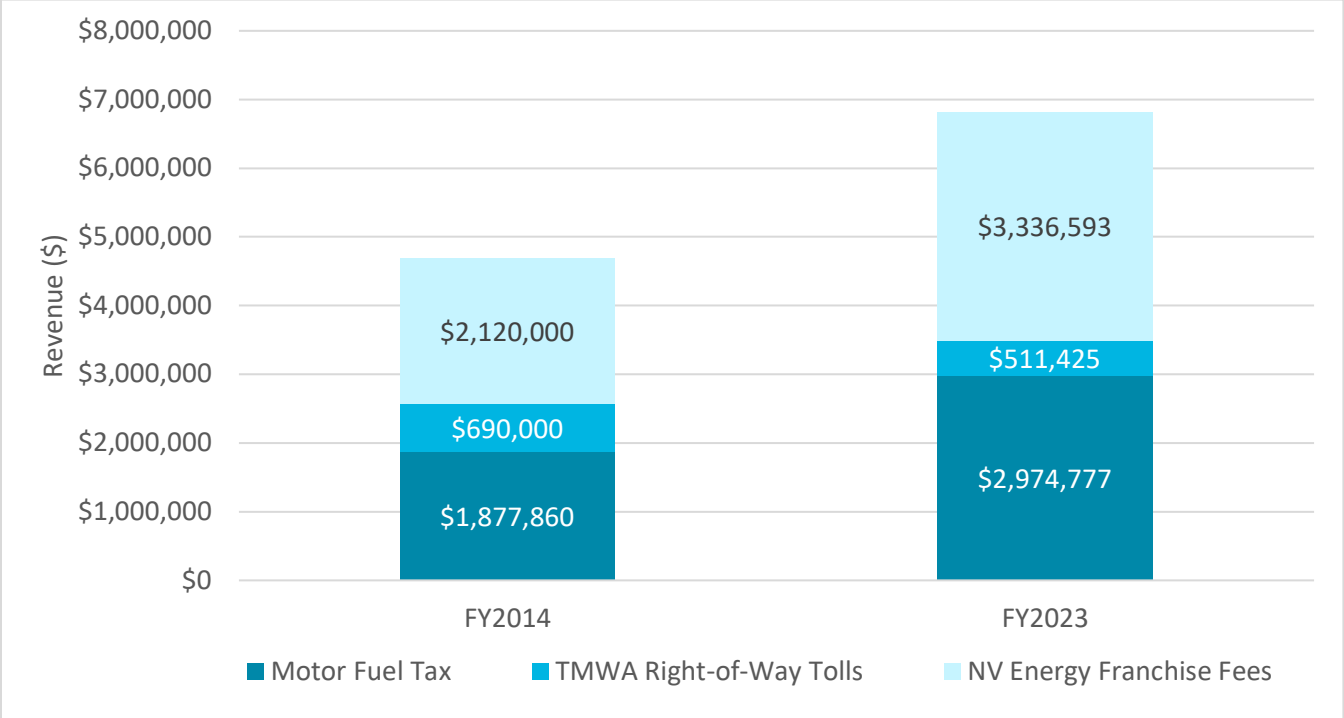


Figure 8. City of Sparks Revenue Available for Street Maintenance and Repair, FY 2014-2015 (FY2014) to FY 2023-2024 (FY2023)

5. Normal Operation and Maintenance

Data collection on Normal Operation and Maintenance focuses on the existing asset management system, asset needs and funding, and other normal operations and maintenance for each agency. The details are stated as follows.

5.1 Asset Management System

The City provides services to residents by maintaining non-pavement assets including curb and gutter, sidewalk, striping and markings, roadway lighting, traffic signals, signs, and medians. Normal operations and maintenance performed by the City include crack sealing, patching, street sweeping and debris removal, snow removal, right-of-way landscaping and weed abatement, roadway striping, concrete repairs (sidewalk, curb and gutter), storm drain maintenance, guardrail repairs, shoulder maintenance, culvert cleaning, etc. In areas where staffing levels are sufficient, the City performs inspection-based plans to ensure that maintenance efforts are effectively targeted. Maintenance is usually carried out by both City staff and contractors and is documented through work orders to facilitate effective tracking and management. The Maintenance Management System MaintStar is used to save asset inventory and track operation and maintenance records. However, only partial of existing asset maintenance records and inventory was saved in the City's MaintStar database. The City is currently looking for updating their system to asset inventory and maintenance.

The City prioritizes operation and maintenance activities based on several critical factors, including hazard, public safety, known maintenance issues, and regular maintenance practice. In areas where there is adequate staffing, the City performs inspection-based plans and prioritizes operation and maintenance activities based on

inspection findings. Asset maintenance in assigned areas may take 1 to 5 years to complete, depending on the availability of funding and City staff.

5.2 Asset Needs and Funding

Regular asset inspection and maintenance are not included in regular operation and maintenance. As a result, asset maintenance needs are not identified and there is no annual budget information associated with this item.

5.3 Summary

The City maintains various assets to provide service to residents and conducts regular operations and maintenance through in-house City staff and contractors. To track operation and maintenance records, the City has implemented MaintStar as its asset management database and is currently seeking to upgrade the system. When staffing is sufficient, the City uses inspections to prioritize operation and maintenance activities. Asset maintenance may take 1 to 5 years to complete, depending on funding and staff availability.

Attachment A

Checklist Responses

RTC – Maintenance Needs Study

Agency: _____Sparks_____

Data Collection Checklist: Pavement Maintenance

No.	Item	Agency Response	Comments/Notes
1	What PMS software does your agency use?	PAVER	
2	How many streets/roads does your agency maintain? (no. of sections and centerline miles by functional class)	A-Principle = 33 B-Arterial = 118 C-Collector = 1,751 D-Industrial = 3 N-Alleyways = 106	
3	What distress protocol does your agency use? (ASTM D6433 or MTC)	ASTM D6433	
4	Does your agency have GIS shapefile linked to PMS software?	Yes	
5	How often does your agency update pavement inspections?	1/3 of the network every 3 years	
6	How does your agency update pavement condition? (walking, windshield or automated?) (in-house or by contractor)	Non-RTP sections walking surveys	
7	What other condition data do you also collect? (Deflection, ride quality, friction, drainage, core, etc.)	none	
8	What is your current network condition (PCI)? (entire network and by functional class)	Overall = 79.6 Non-RTP = 77.5 Non-RTP A = 91.9 Non-RTP B = 75.0 Non-RTP C = 77.9 Non-RTP D = 81.4 Non-RTP N = 41.6	
9	How does your agency setup condition categories in PMS? (ex. PCI 70 to 100 – Very Good)	PCI 100-65 – Very Good PCI 64-45 – Good/Fair PCI 44-0 - Poor	
10	Does your agency have PCC pavement in your network?	Yes – RTP & Non-RTP	

11	What pavement strategies/ treatments does your agency apply on various conditions of pavement? (treatment by PCI range)	PCI 100-65 (Preventive), micro surfacing seal, crack seal, Minor patching, T-patch PCI 64-45 (Corrective), micro-mill, Micro surfacing, cap seals, crack seals, grind/overlay, T-patch PCI 44-0 – Reconstruction (Roadbed modification, pulverize, 4"AC on 6-8" AB or treated base	Starting using T-patch 2 years ago for the larger cracks (greater than 1-1/2") with good success. Also utilizing micro-mills the last couple of years with good success
12	What factors/items are included in the treatment costs? (ex. paving materials, labor, concrete repairs, striping, traffic control, etc.)	Traffic control, labor, striping, utility work, curb & gutter, sidewalk, curb ramp, structural sections	
13	How often does your agency update the treatment costs in your PMS?	Not updated	
14	Does your agency use sustainable pavement practices? (ex. CIR, HIPR, FDR, etc.)	Yes	
15	If yes, what sustainable pavement practices does your agency utilize? Reclaimed Asphalt Pavement Cold-in-Place Recycling Warm Mix Asphalt Permeable/Porous Pavement Full Depth Reclamation Subgrade Stabilization Rubberized Asphalt Concrete Pavement Preservation (ex. slurry seal, chip seal, fog seal, cape seal)	Roadbed Modification Pavement Preservation	
16	How does your agency prioritize streets for maintenance and rehabilitation?	PCI and complaints	
17	What is the target PCI for your network?	Nothing established officially but constantly compared to other agencies in the area and based on received complaints to elected officials.	
18	What is your current annual paving budget?	Annual average roadway budgets are between $3-5M. This is not just paving. It is also preventative maintenance, sidewalks, signs, striping, safety, signals and anything else related to transportation.	
19	What is your pavement needs for the entire network?	Not sure how to answer this expect to say MORE. We are not keeping current with annual preventative	

		maintenance cycles and other maintenance type work. We have a significant backlog on roadways needing rehabilitation. We also have a backlog in signal maintenance, neighborhood traffic calming requests, just to name a few.	
20	What is your emergency repair process? (ex. potholing repairs)	Notify maintenance – place cold mix, hot mix or Gap Mastic	Gap mastic is a recent tool used for pot holes and pavements that have delamination
21	Other related data?		

Data Collection Checklist: ITS Infrastructure

No.	Item	Agency Response	Comments/Notes
1	**O&M Asset Management Records:** Review **Table 1** below and confirm if the device totals traffic signals, traffic cabinets and traffic cameras are still accurate. Please provide updated information if available.	Sparks own & maintains: - 73 traffic signals - 73 traffic cabinets - 30 traffic cameras (PTZ) Sparks maintains on behalf of NDOT: - 43 traffic signals - 43 traffic cabinets There is one (1) NDOT owned signal that is primarily maintained by Reno, but the timing is maintained by Sparks.	
2	**Work Order History:** Provide the last two to three years of Work Order history or O&M expenditures related to ITS Infrastructure.	We are unable to provide log of work order history. We roughly spend 50k a year replacing/updating switches, cameras, controllers, etc.	
3	**Maintenance Schedules/Procedures:** What are existing maintenance schedules and processes for ITS Infrastructure?	There isn't a set schedule, when a problem occurs, we address it and replace It or, if possible, upgrade it.	
4	**Planning/Funding Maintenance:** What planning, decision-making, and approval processes do you have when maintaining ITS infrastructure?	We are allocated a certain budget a year for ITS equipment. We purchase existing or new equipment to ensure adequate inventory for replacing out dated equipment and/or emergency repairs.	

Data Collection Checklist: Financial/Funding Sources

No.	Item	Agency Response	Comments/Notes
1	Prepare an inventory of existing revenue streams available that are currently used to fund maintenance for your agency/community.	Revenue streams for the City's Road Fund include gasoline taxes, electric and gas franchise fees, and right of way fees.	
2	Have any new sources been added or removed in the last five years? Have budgets or how the revenue is used changed?	No.	
3	Please provide current budget documents, as well as 3-5 years history.	All budget documents (past and current) can be found on the City's website. Provided link to website	
4	Have there been any unexpected changes to revenue streams in the last five years? How did that impact how maintenance needs were met?	Not unexpected, but gas taxes have been flat or in decline and not sufficiently keeping pace with inflation.	
5	Please provide current ACFR documents, as well as 3-5 years history.	All ACFR's through FY23 can be found on the City's website. The FY24 ACFR is scheduled to be presented to City Council in December 2024. Provided link to website	
6	Have any studies been prepared outside this effort that review/summarize funding sources for roadway/ITS maintenance? Can you share these?	No.	
7	Please provide the current CIP.	The CIP for FY25 (and prior years if desired) can be found on the City's website. Provided link to website	
8	What are your biggest concerns about current and future revenue/expenditure differences as it relates to maintenance?	hat gas taxes as currently allowed by Nevada law will be insufficient to meet the City's needs.	
9	Are there federal or state sources that provide one-time or reoccurring revenue support for maintenance needs?	Unknown.	
10	Are there grants or other sources that you have utilized? How does the use of sources like this influence your budget planning?	If grants become available, those would typically be considered one-time and used for one-time projects, but actual usage would be determined based upon the terms of the grant award.	
11	Other related data?		

Data Collection Checklist: Normal Operation and Maintenance

No.	Item	Agency Response	Comments/Notes
1	Does your agency have any asset inventory? What format do you save the inventory? (ex. curb ramps, sidewalk, striping, etc.)	Partial in our MMS system, Maintstar	
2	What assets require maintenance in your agency?	All - Curb, gutter, sidewalk, road striping and markings, pavement, roadway lighting, traffic signals, signs, medians, right of way landscaping and weed abatement, street sweeping and debris removal, and more	
3	What are the total needs for your asset maintenance?	Need more information to answer this.	
4	What is your existing annual budget to maintenance these assets?	Need more information to answer this, include fully loaded staff costs, service and supply, CIP?	
5	Does your agency have existing asset maintenance records or work order history?	Existing asset maintenance records and some sections have a work order system in operation. Currently, looking to upgrade our system.	
6	How does your agency maintain the existing assets? (in-house or by contractor)	in-house and by contractor	
7	What is your regular maintenance schedule or processes?	Size and scope of maintenance items are larger than budget and staffing levels. We work through assigned areas until complete. May take a year may take 5 years.	
8	What are your emergency repairs and maintenance processes?	Need more information to answer this	
9	What is your CIP needs and projects?	Needs and projects vary and are continuous. Priority given to what mostly benefits the public and staff	
10	What normal operations and maintenance does your agency perform? Crack sealing Patching Sweeping Snow removal Landscaping Roadway striping	Crack sealing Patching Sweeping Snow removal Landscaping Roadway striping Concrete repairs (sidewalk, C&G) Strom drain maintenance Guardrail repairs	

	Concrete repairs (sidewalk, C&G) Strom drain maintenance Guardrail repairs Shoulder maintenance Culvert cleaning Others	Shoulder maintenance Culvert cleaning Plus much more	
	How does your agency perform operation or maintenance on the above items? (ex. regular monitor/inspect, repair, or work orders) (in-house or by contractor)	Monitor and repair with work orders for known maintenance issues. In house and on contract	
12	How does your agency track or save operation and maintenance records?	MMS in Maintstar	
13	How does your agency prioritize these operation and maintenance activities?	Hazard, public safety, known maintenance issues, regular maintenance. In areas with adequate staffing, we perform inspection-based plans.	
14	What is your annual budget for operations and maintenance?	Need more information to answer this, include fully loaded staff costs, service and supply, CIP?	
15	Other related data?		

Attachment B

Signal Agreements

INTERLOCAL AGREEMENT

This AGREEMENT, made and entered into on , by and between the State of Nevada, acting by and through its Department of Transportation, hereinafter called the "DEPARTMENT", and the City of Sparks, 431 Prater Way Sparks, NV 89432, hereinafter called the "AGENCY". Individually they are each a "Party" and collectively they are the "Parties."

WITNESSETH:

WHEREAS, an Interlocal AGREEMENT is defined as an AGREEMENT by public agencies to "obtain a service" from another public agency; and

WHEREAS, pursuant to the provisions contained in Chapter 408 of the Nevada Revised Statutes, the Director of the DEPARTMENT may enter into agreements necessary to carry out the provisions of the Chapter; and

WHEREAS, NRS 277.180 authorizes any one or more public agencies to contract with any one or more other public agencies to perform any governmental service, activity, or undertaking which any of the public agencies entering into the agreements is authorized by law to perform and refers to such as an interlocal contract; and

WHEREAS, the purpose of this Agreement is to establish roles and responsibilities for ownership, maintenance, operation, and repair of the traffic signal systems as listed by intersection according to Article III, Paragraph 4., hereinafter called SIGNAL SYSTEMS; and

WHEREAS, This Agreement supersedes and replaces any other existing Agreement or Agreement language pertaining to the SIGNAL SYSTEMS that govern traffic movements along the DEPARTMENT's State Maintained Highways and Routes. Portions of these SIGNAL SYSTEMS may also be located within the AGENCY's jurisdictional boundaries or may be included entirely by virtue of prior maintenance responsibilities; and

WHEREAS, the SIGNAL SYSTEM services of the AGENCY will be of benefit to the DEPARTMENT, the AGENCY, and to the people of the State of Nevada; and

WHEREAS, the SIGNAL SYSTEMS consist of pole foundations, signal lights, supporting arms and poles, luminaire arms and luminaires attached to signal poles, signal controller, controller cabinet and internal components, power service, battery back-up, conductors, detection system, intersection and interconnect cabling, advance flashers, and all related equipment to make the traffic signals fully functional at each intersection; and

WHEREAS, maintenance is defined as actions performed on a regularly scheduled basis to preserve the intended working condition of the SIGNAL SYSTEMS up to and including full service life replacement. Also, minor actions to correct a recurring problem, accommodate changes in prevailing traffic, or to update equipment to the current state of the practice; and

WHEREAS, capital improvement is defined as a major modification to the physical configuration and/or operational parameter of the SIGNAL SYSTEMS; and

WHEREAS, capital improvements are not included in this Agreement and shall be initiated by a permit application submitted to the District Permit Office; and

WHEREAS, the Parties hereto are willing and able to perform the services described herein.

NOW, THEREFORE, in consideration of the premises and of the mutual covenants herein contained, it is agreed as follows:

ARTICLE I – AGENCY AGREES

1. To operate, maintain, repair, and provide necessary labor and electrical power for all SIGNAL SYSTEMS and all related ancillary components required to safely operate and maintain the SIGNAL SYSTEMS. Maintenance, repair, and operational standards and practices shall be consistent with applicable state and national standards and guidelines.

2. To invoice the DEPARTMENT for one hundred percent (100%) of the replacement/repair cost for all SIGNAL SYSTEMS equipment replaced or repaired due to incidental damages, provided replacement/repair costs exceed One Thousand Five Hundred and No/100 Dollars ($1,500.00) per intersection and are unrecoverable by insurance or other means.

3. To invoice the DEPARTMENT for one hundred percent (100%) of emergency replacement or repair costs without prior written agreed upon costs associated to the SIGNAL SYSTEMS. All invoices submitted for emergency costs (unrecoverable by insurance) shall contain documentation that fully describes the emergency situation and justification for the claim.

4. To notify the DEPARTMENT in writing and obtain written approval from the DEPARTMENT for unforeseen work (not otherwise explained in this Agreement) any SIGNAL SYSTEM in which the AGENCY is wanting to be reimbursed by the DEPARTMENT.

5. To invoice the DEPARTMENT after maintenance, repairs, or replacement of the agreed upon work has been successfully completed by the AGENCY.

6. To submit to the DEPARTMENT any as-built plans or documentation of work performed on SIGNAL SYSTEMS. The documentation submitted shall reference this Agreement number on the first page of each submittal.

7. To provide the DEPARTMENT District Engineer a list of anticipated SIGNAL SYSTEM maintenance, or repairs exceeding One Thousand Five Hundred and No/100 Dollars ($1,500.00) each along with an estimated annual cost for which the AGENCY will request reimbursement. This list shall be delivered to the DEPARTMENT District Engineer within thirty (30) calendar days of initial excecution of this Agreement and by the 31st day of January of each year thereafter to enable budgeting of necessary funds. Available funding may impact approval of work requiring reimbursement.

8. To perform routine maintenance and coordinate with the DEPARTMENT Permit Office, at (775) 834-8330, two (2) working days prior to performing scheduled maintenance activities and provide information regarding the nature of the activity and planned traffic control information. The Permit Office will prepare required highway restriction reports and coordinate with affected DEPARTMENT operations. A DEPARTMENT encroachment permit is not needed for maintenance or repair work performed on SIGNAL SYSTEMS.

9. To notify DEPARTMENT with as much notice as possible if emergency repair activities cause significant impact to traffic, require lane closures, or require excavation through improved surfaces of the roadway. For emergencies during business hours, notify the DEPARTMENT Permit Office at (775) 834-8330 and during non-business hours the Utilities 24/7 Hotline, at (775) 834-8488.

ARTICLE II - DEPARTMENT AGREES

1. To fund one hundred percent (100%) of the replacement/repair costs for SIGNAL SYSTEMS equipment replaced or repaired due to incidental damages, provided replacement/repair costs exceed One Thousand Five Hundred and No/100 Dollars ($1,500.00) and are unrecoverable by insurance or other means.

2. To fund one hundred percent (100%) of emergency replacement or repair costs without prior written agreed upon costs (unrecoverable by insurance) associated with the SIGNAL SYSTEMS.

3. To fund one hundred percent (100%) of cost for approved unforeseen work on the SIGNAL SYSTEMS.

4. To fund one hundred percent (100%) of the costs for the anticipated SIGNAL SYSTEM maintenance or repairs exceeding One Thousand Five Hundred and No/100 Dollars ($1,500.00) each provided that the list is received by the DEPARTMENT District Engineer on time (as noted in Article I, Paragraph 7) and the budget for reimbursement is approved.

5. To process each of the AGENCY's invoices upon validation of costs and within thirty (30) calendar days upon receipt.

ARTICLE III - IT IS MUTUALLY AGREED

1. The term of this Agreement shall be from the date first written above through and including two years from date above. This Agreement shall be automatically renewed for an additional two-year period on the last day of each two-year term unless a Party notifies the other Party in writing within thirty (30) calendar days prior to the automatic renewal of this Agreement of its intention that this Agreement expire at the completion of the two-year term then in effect.

2. This Agreement shall not become effective until and unless approved by appropriate official action of the governing body of each Party.

3. The DEPARTMENT retains ownership of all SIGNAL SYSTEMS that govern traffic movements along the DEPARTMENT's State Maintained Highways/Routes within the DEPARTMENT's right-of-way. Portions of these SIGNAL SYSTEMS may be located within the AGENCY's jurisdictional boundaries or may be included entirely by virtue of prior maintenance responsibilities.

4. A listing of SIGNAL SYSTEMS shall be mutually agreed upon and signed by both Parties upon execution of this Agreement. As SIGNAL SYSTEMS are added and subtracted from the listing due to new construction, relinquishment of roadways or other occurrences, the DEPARTEMENT District Engineer and the AGENCY City Engineer will agree upon any revisions and sign and date an updated listing. The updated list will replace each succeeded list and be available in each Party's records office with a copy sent by the DEPARTMENT District Engineer to the Signals, Lighting and ITS Manager 1 in the DEPARTMENT's Traffic Operations Division.

5. The AGENCY is exempt from being required to obtain a formal permit from the DEPARTMENT for routine maintenance work on the SIGNAL SYSTEMS. The required coordination with the Department Permit Office is set forth in Article I, Paragraph 8.

6. If the AGENCY annexes areas with SIGNAL SYSTEMS within DEPARTMENT rights-of-way, then this Agreement shall supersede any previous agreements for these devices.

7. This Agreement may be terminated by either Party prior to the date set forth above, provided that a termination shall not be effective until thirty (30) calendar days after a Party has served written notice upon the other Party. This Agreement may be terminated by mutual consent of both Parties or unilaterally by either Party without cause. The Parties expressly agree that this Agreement shall be terminated immediately if for any reason federal and/or State Legislature funding ability to satisfy this Agreement is withdrawn, limited, or impaired.

8. All notices or other communications required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been duly given if delivered personally in hand, by facsimile with simultaneous regular mail, or by certified mail, return receipt requested, postage prepaid on the date posted, and addressed to the other Party at the address set forth below:

FOR DEPARTMENT:

Kristina L. Swallow, P.E., Director
Attn.: Kevin Maxwell, P.E., SLI Manager
Nevada DEPARTMENT of Transportation
Division: Traffic Operations
1263 South Stewart Street
Carson City, Nevada 89712
Phone: (775) 888-7087
E-mail: kmaxwell@dot.nv.gov

FOR AGENCY:

Neil C. Krutz, ICMA-CM, City Manager
Attn: Amber Sosa, P.E., Transportation Manager
City of Sparks
431 Prater Way
Sparks, NV 89431
Phone: (775) 353-7863
E-mail: asosa@cityofsparks.us

9. Each Party agrees to keep and maintain under generally accepted accounting principles full, true, and complete records and documents (written, electronic, computer related, or otherwise) pertaining to this Agreement and present, at any reasonable time, such information for inspection, examination, review, audit, and copying at any office where such records and documentation are maintained. Such records and documentation shall be retained for three (3) years after final payment is made.

10. Failure of either Party to perform any of its obligation under this Agreement shall be deemed a breach. Except as otherwise provided for by law or this Agreement, the rights and remedies of the Parties shall not be exclusive and are in addition to any other rights and remedies provided by law or equity, including, but not limited to, the recovery of actual damages and the prevailing Party's reasonable attorney's fees and costs.

11. The Parties do not waive and intend to assert available NRS Chapter 41 liability limitations in all cases. Agreement liability of both Parties shall not be subject to punitive damages. Actual damages for any DEPARTMENT breach shall never exceed the amount of funds which have been appropriated for payment under this Agreement, but not yet paid, for the fiscal year budget in existence at the time of the breach.

12. Neither Party shall be deemed to be in violation of this Agreement if it is prevented from performing any of its obligations hereunder due to strikes, failure of public transportation, civil or military authority, act of public enemy, accidents, fires, explosions, or acts of God, including, without limitations, earthquakes, floods, winds, or storms. In such an event the

intervening cause must not be through the fault of the Party asserting such an excuse, and the excused Party is obligated to promptly perform in accordance with the terms of the Agreement after the intervening cause ceases.

13. To the fullest extent of NRS Chapter 41 liability limitations, each Party shall indemnify, hold harmless, and defend, not excluding the other's right to participate, the other from and against all liability, claims, actions, damages, losses, and expenses, including but not limited to reasonable attorney's fees and costs, arising out of any alleged negligent or willful acts or omissions of the Party, its officers, employees, and agents. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity, which would otherwise exist as to any Party or person, described herein. This indemnification obligation is conditioned upon service of written notice to the other Party within thirty (30) calendar days of the indemnified Party's notice of actual or pending claim or cause of action. The indemnifying Party shall not be liable for reimbursement of any attorney's fees and costs incurred by the indemnified Party due to said Party exercising its right to participate with legal counsel.

14. The Parties are associated with each other only for the purposes and to the extent set forth in this Agreement. Each Party is and shall be a public agency separate and distinct from the other Party and shall have the right to supervise, manage, operate, control, and direct performance of the details incident to its duties under this Agreement. Nothing contained in this Agreement shall be deemed or construed to create a partnership or joint venture, to create relationships of an employer-employee or principal-agent, or to otherwise create any liability for one agency whatsoever with respect to the indebtedness, liabilities, and obligations of the other agency or any other party.

15. Failure to declare a breach or the actual waiver of any particular breach of this Agreement or its material or nonmaterial terms by either Party shall not operate as a waiver by such Party of any of its rights or remedies as to any other breach.

16. The illegality or invalidity of any provision or portion of this Agreement shall not affect the validity of the remainder of this Agreement and this Agreement shall be construed as if such provision did not exist. The unenforceability of such provision or provisions shall not be held to render any other provision or provisions of this Agreement unenforceable.

17. Neither Party shall assign, transfer, or delegate any rights, obligations, or duties under this Agreement without the prior written consent of the other Party.

18. Except as otherwise provided by this Agreement, all or any property presently owned by either Party shall remain in such ownership upon termination of this Agreement, and there shall be no transfer of property between the Parties during the course of this Agreement.

19. Pursuant to NRS Chapter 239, information or documents may be open to public inspection and copying. The Parties will have the duty to disclose unless a particular record is confidential by law or a common law balancing of interests.

20. Each Party shall keep confidential all information, in whatever form, produced, prepared, observed, or received by that Party to the extent that such information is confidential by law or otherwise required by this Agreement.

21. The Parties hereto represent and warrant that the person executing this Agreement on behalf of each Party has full power and authority to enter into this Agreement and that the Parties are authorized by law to perform the services set forth herein.

22. This Agreement and the rights and obligations of the Parties hereto shall be governed by, and construed according to, the laws of the State of Nevada. The Parties consent to the exclusive jurisdiction of the Nevada state district courts for enforcement of this Agreement.

23. It is specifically agreed between the Parties executing this Agreement that it is not intended by any of the provisions of any part of this Agreement to create in the public or any member thereof a third party beneficiary status hereunder, or to authorize anyone not a party to this Agreement to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of this Agreement.

24. This Agreement constitutes the entire Agreement of the Parties and such is intended as a complete and exclusive statement of the promises, representations, negotiations, discussions, and other Agreements that may have been made in connection with the subject matter hereof. Unless an integrated attachment to this Agreement specifically displays a mutual intent to amend a particular part of this Agreement, general conflicts in language between any such attachment and this Agreement shall be construed consistent with the terms of this Agreement. Unless otherwise expressly authorized by the terms of this Agreement, no modification or amendment to this Agreement shall be binding upon the Parties unless the same is in writing and signed by the respective Parties hereto and approved by the Attorney General.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the day and year first above written.

City of Sparks

Ronald E. Smith
Name (Print)

Mayor
Title (Print)

Lisa Hunderman
Name (Print)

Acting City Clerk
Title (Print)

Approved as to Form:

Attorney

State of Nevada, acting by and through its DEPARTMENT OF TRANSPORTATION

DocuSigned by:
Kristina L. Swallow
Director

Approved as to Legality & Form:

DocuSigned by:
Shane Chesney
Deputy Attorney General

City of Sparks List of Signal Systems

Intersections along SR 445 Pyramid Way

Nugget Avenue
I 80/Victorian Avenue (entire SPUI)
C Street
Prater Way
Oddie Boulevard/I Street
Greenbrae Drive
York Way
Roberta Lane
Queen Way
Disc Drive
Los Altos Parkway
Sparks Boulevard
Lazy Five Parkway

Intersections along SR 659 N. McCarran Boulevard

E. Gregg Street
Nugget Avenue/I 80 Eastbound Ramps
Victorian Avenue/I 80 Westbound Ramps
Nichols Boulevard
E. Lincoln Way
Prater Way
Greenbrae Drive
E. York Way
Baring Boulevard
Probasco Way
4th Street
Pyramid Way
Rock Boulevard
Sullivan Lane
El Rancho

Intersections along SR 648 Glendale Avenue

Galletti Way
S. 21st Street
S. Rock Boulevard
Industrial Way
McCarran Boulevard

Intersections along SR 647 Prater Way/4th Street

I 80 Eastbound Ramps
I 80 Westbound Ramps

Intersections along SR_668 Rock Boulevard

I 80 Eastbound Ramps
I 80 Westbound Ramps

Intersections along Sparks Boulevard

I 80 Eastbound Ramps
I 80 Westbound Ramps

Intersections along Vista Boulevard

I 80 Eastbound Ramps
I 80 Westbound Ramps

Intersections along N. Kietzke Ln

Galletti Way
Victorian Avenue

District 2 Engineer	Date	City of Sparks City Engineer	7/8/19 Date

MEMORANDUM

Date:	12/20/2024	Project Number:	173.51.25
To:	Washoe County		
From:	Janice Wang, Becca Regalado, Mei-Hui Lee (NCE), Anabel Hernandez and Jessica Rossi (Kimley-Horn)		
Subject:	Memo of data collection for Washoe County		

Roadway plays a crucial role in transportation systems and is an essential component of the traveling public's safety. As a part of the Regional Transportation Commission (RTC) of Washoe County's mission to build a better community through quality transportation systems, the RTC has established this study to identify and summarize current roadway maintenance practices, Intelligent Transportation System (ITS) infrastructure, and needs and available funding within the Washoe County Metropolitan Planning Organization boundary. In general, RTC funds and maintains roadways identified in the Regional Road System (referred to as RTP roads in the following sections) and local governments provide preservation services for non-regional roadways (or non-RTP roads) and day-to-day maintenance for all non-state-maintained, publicly owned facilities.

This study will identify roadway maintenance needs in the cities of Reno and Sparks, in Washoe County, and in the region overall, and examine how funding is allocated to those needs at the local and regional levels. The results will allow RTC to continue to plan and deliver roadway projects in a fair, equitable, and fiscally responsible manner.

The NCE team has coordinated with RTC, the cities of Reno and Sparks, and Washoe County to collect available data for:

- **Pavement Maintenance**: Pavement management program, pavement strategies and costs, pavement needs and available funding.
- **ITS Infrastructure**: Existing infrastructure inventory, existing operations and maintenance, planning and approval processes, infrastructure needs and available funding.
- **Financial and Funding Sources**: Motor vehicle fuel tax and other revenue sources for roadway or ITS maintenance.
- **Normal Operation and Maintenance**: Asset management system, asset needs and funding, and other normal operations and maintenance.

This document summarizes the data provided by the Washoe County (County) for each category listed in this study.

1. Data Collection Checklists

The NCE team created data collection checklists for the categories described above. These are presented in Tables 1 through 4 below. Responses from Washoe County are included in Attachment A.

Table 1. Data Collection Checklist: Pavement Maintenance

No.	Item
1	What Pavement Management System (PMS) software does your agency use?
2	How many streets/roads does your agency maintain? (number of sections and centerline miles by functional class)
3	What distress protocol does your agency use? (ASTM D6433[1] or MTC[2])
4	Does your agency have Geographic Information System (GIS) shapefile linked to PMS software?
5	How often does your agency update pavement inspections?
6	How does your agency update pavement condition data? (walking, windshield, or automated?) (in-house or by contractor?)
7	What other condition data do you also collect? (deflection, ride quality, friction, drainage, core, etc.)
8	What is your current network condition (Pavement Condition Index, PCI)? (by entire network and by functional class)
9	How does your agency setup condition categories in PMS? (e.g., PCI 70 to 100 – Very Good)
10	Does your agency have portland cement concrete (PCC) pavement in your network?
11	What pavement strategies/treatments does your agency apply on various conditions of pavement? (treatments by PCI range)
12	What factors/items are included in the treatment costs? (e.g., paving materials, labor, concrete repairs, striping, traffic control, etc.)
13	How often does your agency update the treatment costs in your PMS?
14	Does your agency use sustainable pavement practices? (e.g., Cold-in-Place Recycling [CIR], Hot In-Place Recycling [HIPR], Full Depth Reclamation [FDR], etc.)
15	If yes, what sustainable pavement practices does your agency utilize? Reclaimed Asphalt Pavement Cold-in-Place Recycling (CIR) Warm Mix Asphalt Permeable/Porous Pavement Full Depth Reclamation (FDR) Subgrade Stabilization Rubberized Asphalt Concrete Pavement Preservation (e.g., slurry seal, chip seal, fog seal, cape seal, etc.)
16	How does your agency prioritize streets for maintenance and rehabilitation?
17	What is the target PCI for your network?

[1] *ASTM D6433-23 Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys*. ASTM International. West Conshohocken, PA, 2023, www.astm.org.

[2] *PCI Distress Identification Manuals (flexible pavement 5th Edition March 2022, rigid pavement 4th Edition March 2018)*. Metropolitan Transportation Commission. San Francisco CA.

No.	Item
18	What is your current annual paving budget?
19	What are your pavement needs for the entire network?
20	What is your emergency repair process? (e.g., potholing repairs)
21	Other related data?

Table 2. Data Collection Checklist: ITS Infrastructure

No.	Item
1	**O&M Asset Management Records:** Review **Table 2-1** below and confirm if the device totals traffic signals, traffic cabinets, and traffic cameras are still accurate. Please provide updated information if available.
2	**Work Order History:** Provide the last 2 to 3 years of Work Order history or O&M expenditures related to ITS Infrastructure.
3	**Maintenance Schedules/Procedures:** What are existing maintenance schedules and processes for ITS Infrastructure?
4	**Planning/Funding Maintenance:** What planning, decision-making, and approval processes do you have when maintaining ITS infrastructure?

Table 2-1. Existing ITS Device Inventory

ITS Device	City of Reno	City of Sparks	Washoe County	Nevada Department of Transportation [NDOT]
Traffic Signals	191	73	24	131
Traffic Cabinet	191	73	24	131
Traffic Camera	46	30	-	

*Note: The numbers have been updated according to the information collected in this study.

Table 3. Data Collection Checklist: Financial/Funding Sources

No.	Item
1	Prepare an inventory of existing revenue streams that are currently used to fund maintenance for your agency/community.
2	Have any new sources been added or removed in the last 5 years? Have budgets or how the revenue is used changed?
3	Please provide current budget documents, as well as 3 – 5 years history.
4	Have there been any unexpected changes to revenue streams in the last 5 years? How did that impact how maintenance needs were met?
5	Please provide current Annual Comprehensive Financial Report [ACFR] documents, as well as 3 – 5 years history.
6	Have any studies been prepared outside this effort that review/summarize funding sources for roadway/ITS maintenance? Can you share these?
7	Please provide the current Capital Improvement Project (CIP).

No.	Item
8	What are your biggest concerns about current and future revenue/expenditure differences as they relate to maintenance?
9	Are there federal or state sources that provide one-time or reoccurring revenue support for maintenance needs?
10	Are there grants or other sources you have utilized? How does the use of sources like this influence your budget planning?
11	Other related data?

Table 4. Data Collection Checklist: Normal Operation and Maintenance

No.	Item
1	Does your agency have any asset inventory? In what format do you save the inventory? (e.g., curb ramps, sidewalk, striping, etc.)
2	What assets require maintenance in your agency?
3	What are the total needs for your asset maintenance?
4	What is your existing annual budget to maintenance these assets?
5	Does your agency have existing asset maintenance records or work order history?
6	How does your agency maintain the existing assets? (in-house or by contractor)
7	What is your regular maintenance schedule or process?
8	What are your emergency repairs and maintenance processes?
9	What is your CIP needs and projects?
10	What normal operations and maintenance does your agency perform? Crack sealing Patching Sweeping Snow removal Landscaping Roadway striping Concrete repairs (sidewalk, curb and gutter, curb ramp, etc.) Strom drain maintenance Guardrail repairs Shoulder maintenance Culvert cleaning Others
11	How does your agency operate or maintain the above items? (ex. regular monitor/inspect, repair, or work orders) (in-house or by contractor?)
12	How does your agency track or save operation and maintenance records?
13	How does your agency prioritize operation and maintenance activities?
14	What is your annual budget for operations and maintenance?
15	Other related data?

2. Pavement Maintenance

Data collected about Pavement Maintenance focused on the existing pavement management program (PMP), pavement strategies, and pavement needs and funding for each agency. The details are stated as follows.

2.1 Pavement Management Program

Pavement networks are often the most valuable asset an agency owns. A current PMP with accurate pavement condition data is an essential tool to maintain and repair roadways and stretch funding allocation. The County began using PAVER as its PMP in the late 1980's for developing roadway inventory, updating inspections and historical records, and establishing Geographic Information System (GIS) shapefiles in the database.

Pavement inventory is a key component of pavement management. The County's roadway network contains a total of 740.9 centerline miles (Table 5), including 652.8 centerline miles (or 2,962 sections) of non-RTP roads maintained by the County and 88.1 centerline miles (or 134 sections) of RTP roads maintained by the RTC. However, the County oversees the normal operations and maintenance for the entire roadway system. Residential roads make up the largest portion of the non-RTP roads, with approximately 519 centerline miles (Table 5). All sections are composed of asphalt concrete (AC) pavement.

Table 5. Centerline Miles and Sections by Functional Classifications and Maintenance Agency

Functional Classification	Centerline Miles (# sections) by Maintenance Agency	
	Non RTP Road	RTP Road
Arterial	11.6 (8)	54.7 (57)
Collector	39.6 (88)	25.8 (57)
Residential	519.4 (2,819)	2.0 (7)
Industrial	7.0 (9)	5.6 (13)
Rural Highway	75.2 (38)	--
Total	652.8 (2,962)	88.1 (134)
	740.9 (3,096)	

Pavement condition data is the "fuel" for any pavement management engine. The County adopts ASTM D6433[1] as the distress protocol for pavement condition inspection, and pavement condition data is collected by contractors using walking surveys. One-third of the network is inspected and updated each year; therefore, the entire pavement network condition is updated every 3 years. In addition to pavement condition inspections, the County has collected core samples for an overlay project in the last 5 years. No other pavement testing (ex. deflection, friction, or profiler) was performed in the County.

Pavement condition is typically quantified using the pavement condition index (PCI), which ranges from 0 (worst to 100 (best). Pavement condition is affected by the environment, traffic loads and volumes, construction materials, and age. The County divides the PCI scale into 4 condition categories (Table 6).

Table 6. Washoe County Pavement Condition Breakdown

Condition Category	PCI Range
Very Good	86 – 100
Good	76 – 85
Fair	31 – 75
Poor	0 – 30

Pavements in "Very Good" condition have a PCI at or above 86, pavements in "Good" condition have a PCI between 76 and 85, pavements in "Fair" condition have a PCI between 31 and 75, and pavements in "Poor" condition have a PCI at or below 30.

The County aims to maintain the roads at PCI 73. The current average PCI of non-RTP roads (or all County maintained roads) is 70.8. Figure 1 shows the average PCIs of non-RTP roads by function classification. The average PCI for collectors is highest, with a value of 76.2. The average PCIs for arterials and residentials are similar, at 70.4 and 71.5, respectively, followed by rural highways, with an average PCI of 63.2. The average PCI of industrials is the lowest, at 43.9. Figure 2 shows current non-RTP road PCIs in area percentage by condition category. Approximately 62% of the non-RTP roads fall within the "Fair" category, corresponding to a PCI range of 31 to 75.

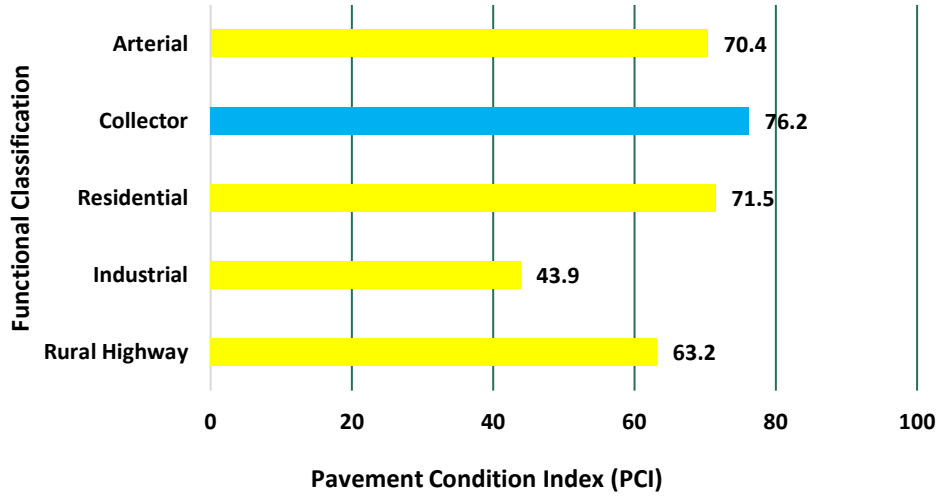


Figure 1. Current Average PCI by Functional Category

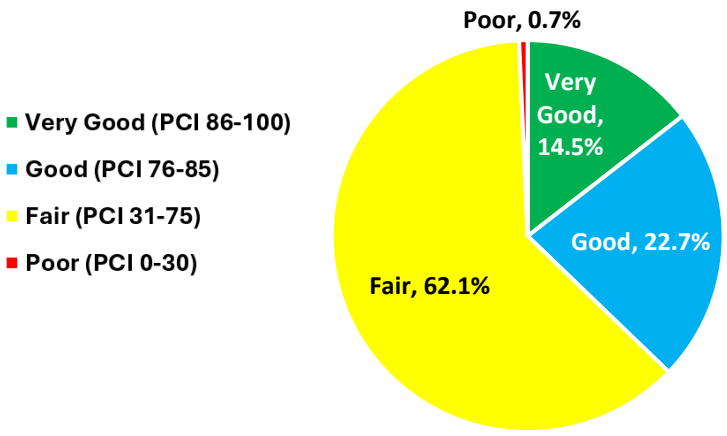


Figure 2. Area Percentage by Condition Category

There are also 154 parking lot sections listed in the County's database (separate from roadway's database), with an average PCI of 62.8. However, parking lot maintenance is not funded through the annual paving budget but instead depends on other funding sources (by General Fund).

2.2 Pavement Strategies and Costs

Pavement maintenance strategies include a variety of treatments and practices aimed at addressing pavement deterioration and maintaining pavement in acceptable condition throughout its service life. Maintenance and rehabilitation treatments are selected based on the pavement's condition, and treatment costs are directly influenced by the condition at the time of application. The maintenance cost of pavements in good condition is generally lower than the rehabilitation and reconstruction cost of pavements in poor condition. Therefore, applying the appropriate treatments at the appropriate time is crucial for effectively utilizing the budget and maintaining pavement quality. Generally, the County applies microsurfacing on roads with a PCI higher than 80, cape seals on roads with PCIs between 30 and 80, and rehabilitation or reconstruction on roads with PCIs less than 30. Treatment costs for microsurfacing, cape seal, and mill and overlay provided by the County are listed in Table 7. These costs include paving materials, non-paving items and soft costs including engineering, administration and construction management costs.

Table 7. Treatment Costs

PCI Ranges and Treatment	Unit Cost
Microsurfacing	$0.55/square foot (SF)
Cape seal	$0.83/SF
2" Mill and overlay	$4.44/SF
3" – 4" Mill and Overlay	$5.33/SF

Bid tabs from 2022 to 2024 and historical maintenance and rehabilitation (M&R) records reveal that the County performed surface seal between 2022 to 2024 and AC overlay in 2020, 2021 and 2023.Further, the County utilizes PAVER to gather the latest maintenance and rehabilitation data and PCI information and selects streets by neighborhood to ensure an equitable distribution of resources across its 5 supervisor districts. Special attention is given to areas with higher traffic volumes and lower PCI ratings, allowing the County to prioritize maintenance efforts where they are most needed.

2.3 Pavement Needs and Funding

Motor vehicle fuel tax revenue is part of the Roads Fund and used by the County for roadway maintenance and reconstruction. Detailed information is shown in Section 4 “Financial and Funding Sources”.

County’s existing annual budget for maintaining pavement is $5.1 million, allocated as follows: $2.1 million is designated for preventive maintenance contracts and potential mill and overlay, while approximate 25% of $3.0 million is allocated for concrete repair or dig out for surface seal and pavement projects. Based on the analysis results from January 1st, 2024 (excluding 2024 inspection data and completed projects) exported from County’s PAVER database, the pavement needs for non-RTP roads are $176 million over the next 20 years and the unfunded backlog is approximate $28 million in 2024.

2.4 Summary

The County began using PAVER as its PMP in the late 1980’s. The County maintains a total of 652.8 centerline miles (or 2,962 sections) of non-RTP roads and has adopted ASTM D6433[1] as the distress protocol for pavement condition inspections, while the County oversees the normal operations and maintenance for the combined total of 740.9 centerline miles roadway system. Pavement condition data is collected annually by contractors using walking surveys. Each year, one-third of the network is inspected and updated, ensuring that the entire pavement network is updated every 3 years. The current average PCI of all non-RTP roads in the County is 70.8. Bid tabs from 2022 to 2024 and historical M&R records reveal that the County performed surface seal between 2022 to 2024 and AC overlay in 2020, 2021 and 2023. Based on the analysis results from January 1st, 2024, exported from City’s PAVER database, the pavement needs for non-RTP roads are $176 million over the next 20 years. However, County’s existing annual budget for maintaining pavement is $5.1 million, including $2.1 million for preventive maintenance contracts and approximate 25% of $3.0 million allocated for concrete repair or dig out for surface seal and pavement projects.

3. ITS Infrastructure

Intelligent Transportation System (ITS) infrastructure data were requested from Washoe County to evaluate its current state. These data included:

1. Operation and Maintenance Asset Management Records (i.e., existing ITS inventory)
2. Work Order History
3. Maintenance Schedules and Procedures
4. Planning and Funding Maintenance

NCE met with the County on August 26, 2024, to provide an overview of the project and request the ITS infrastructure data. The following sections provide a summary of the existing ITS infrastructure inventory, existing ITS Operations and Maintenance efforts, ITS Planning and Approval Processes, and ITS Needs and

Funding as identified by the County. A summary table of the responses from the County is included in Attachment A.

3.1 Existing ITS Infrastructure Inventory

The existing ITS inventory considered in this study includes traffic signals, traffic cabinets, and traffic Pan-Tilt-Zoom (PTZ) cameras. Washoe County owns and operates 24 traffic signals and 24 traffic cabinets in total. All maintenance on these signals is performed by the City of Reno per the interlocal agreement between the 2 agencies. See Attachment B for the agreement.

3.2 Existing ITS Operations and Maintenance

The agreement between Washoe County and the City of Reno identifies 2 groups of maintenance activities, including regular traffic signal maintenance services and additional traffic signal services, as follows:

- Regular Traffic Signal Maintenance
    - Signal Preventative Maintenance
    - Cabinet/ground Preventative Maintenance
    - Safety/Conflict Monitors
    - General Signal Maintenance
    - Illuminated Street Name Sign Maintenance
- Additional Traffic Signal Services
    - School Flasher Maintenance
    - Signal Response Pedestrian Signal Repair
    - Bench Repair
    - Vehicle Detection
    - Bulb Replacement
    - Signal Head Repair
    - Cabinet Rehab/Construction
    - New Signal Inspection
    - Review Traffic Signal Design Plans
    - Signal Interconnect
    - USA Locates
    - Limited Street Light Maintenance

3.3 ITS Planning and Approval Processes

This information was not provided by Washoe County.

3.4 ITS Needs and Funding

Per the Washoe County and the City of Reno agreement (see Attachment B), the County reimburses the City of Reno for maintenance costs up to $70,000 per year. Any exceptions to this budget must be agreed upon yearly.

3.5 Summary

In summary, Washoe County owns and operates 24 traffic signals and 24 traffic cabinets which are maintained by the City of Reno for a total of up to $70,000 in maintenance costs per year.

4. Financial and Funding Sources

This section summarizes the findings of a review of revenue streams that are available to support costs associated with pavement and ITS maintenance for Washoe County. An interview was hosted with finance and budget staff on September 10th, 2024. It should be noted that at the time this project began, financial data for fiscal year (FY) 2023-2024 was the most recent budget data available. For this reason, data from FY 2023-2024 was utilized throughout this analysis for consistency. FY 2024-2025 information was released while the review was already underway. A summary table of the responses from the County is included in Attachment A.

4.1 Motor Vehicle Fuel Tax

This section provides an overview of the motor vehicle fuel tax followed by details of Washoe County's revenue from this funding stream.

Motor Vehicle Fuel Tax Overview

The Motor Vehicle Fuel Tax is the most prominent source of revenue available to fund pavement and ITS maintenance for Washoe County. There are several statutory authorities that generate revenue based on all motor vehicle fuel sales, except for aviation fuel. These statutory authorities include:

- **NRS365.192** - $0.01 motor vehicle fuel tax in Washoe County; this funding goes to Washoe County and the cities of Reno and Sparks and is distributed formulaically based on population, lane miles, and land area.
- **NRS365.190** – additional $0.0175 motor vehicle fuel tax in Washoe County; this funding goes to Washoe County and the cities of Reno and Sparks and is distributed formulaically based on population, lane miles, and land area.
- **NRS365.180** – additional $0.036 motor vehicle fuel tax in Washoe County, broken down further into $0.0125 towards Washoe County Road bonds and $0.0235 to Washoe County.
- **NRS373.030** – optional $0.09 motor vehicle fuel tax in Washoe County and is distributed to RTC; Washoe County does not receive any revenue from this stream.
- **NRS365.175** – $0.1765 base rate to the State Highway Fund; Washoe County does not receive any revenue from this stream.

Nevada's Motor Vehicle Fuel Tax is indexed, meaning it is adjusted annually based on a formula that ties it to inflation. All agencies made note of the challenges related to the increasing efficiency of modern motor vehicles, many of which require less fuel to operate. The goal of indexing is to support collection of a revenue stream that is adequate to cover the cost of maintaining and improving transportation infrastructure.

The statutory authorities are indexed in different ways. First NRS 373.065 authorizes Washoe County to levy additional tax equal to the amount authorized by NRS 365.180, 365.190, 362.192, and 373.030 multiplied by the average of the past five years Consumer Price Index (CPI) or 4.5%. Secondly, NRS 373.066 provides the authorization to impose a tax indexing for state and federal fuel taxes to inflation; this is indexed by a 10-year rolling average of the Producer Price Index (PPI), which measures the average change in the cost of nonresidential construction. PPI across all applicable sources is capped at 7.8%.

The revenues collected as part of the Motor Vehicle Fuel Tax are then distributed to the cities of Reno and Sparks, Washoe County, and the RTC. Distribution methods vary depending on the statutory authority. Table 8 demonstrates the various tax descriptions, the tax rate, and the jurisdiction or authority that receives the funding stream.

Table 8. Statutory Authorities for Motor Vehicle Fuel Tax and Receiving Agency

Tax Description	Tax Rate	Washoe County	Reno	Sparks	RTC
NRS365.192 Base	$0.01	X	X	X	
NRS365.192 CPI	$0.01	X	X	X	
NRS365.192 PPI	$0.01	X	X	X	
NRS365.190 Base	$0.0175	X	X	X	
NRS365.190 CPI	$0.0175	X	X	X	
NRS365.190 PPI	$0.0175	X	X	X	
NRS365.180 Base	$0.0125	X			
NRS365.180 CPI	$0.0125	X			
NRS365.180 PPI	$0.0125	X			
NRS365.180 Base	$0.0235	X	X	X	
NRS365.180 CPI	$0.0235	X	X	X	
NRS365.180 PPI	$0.0235	X	X	X	
NRS373.030 Base	$0.09				X
NRS373.030 CPI	$0.09				X
NRS373.030 PPI	$0.09				X
PPI State/Federal					X
PPI Special Funds					X

NRS365.192 is distributed based on the share of population in each jurisdiction. As of July 1, 2023, the City of Reno accounted for 54.5% of the total Washoe County population, Sparks accounted for 22.4%, and unincorporated Washoe County represented the balance at 23.1%. NRS365.190 is distributed based on property valuations and NRS373.180 is distributed equally based on population, land area, local road mile, and vehicle miles traveled. It is important to note that the factors utilized in the calculation result in Washoe County receiving more revenue, primarily due to the land area factor, than the cities of Reno and Sparks combined.

The optional $0.09 Washoe County tax (NRS373.030), a portion of NRS365.175, and indexing of the State and Federal Fuel Tax are revenue streams allocated to RTC. Figure 3 demonstrates the separate statutory streams for the Nevada Motor Vehicle Fuel Tax.

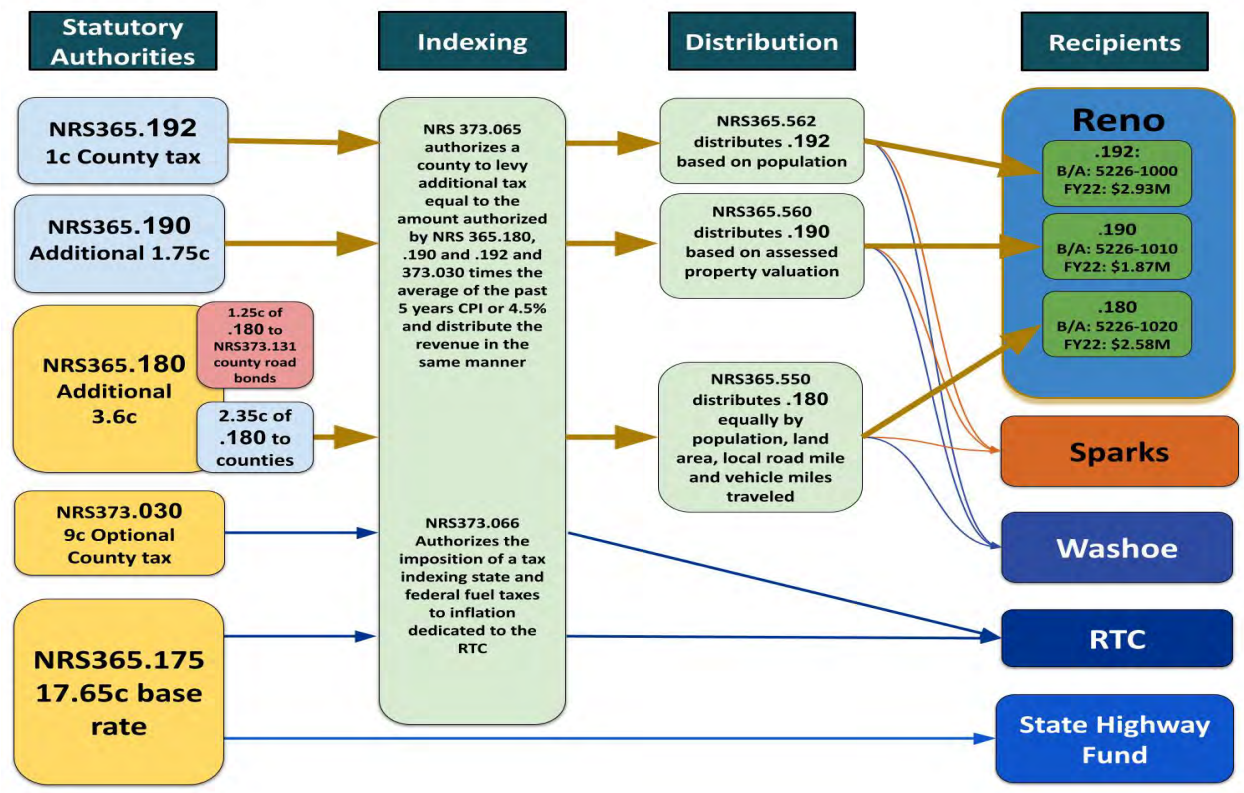


Figure 3. Nevada Motor Vehicle Fuel Tax

Figure 4 demonstrates a summary of the Washoe County taxes paid per gallon of gas. The total tax rate across all statutory authorities is $0.93313 per gallon. The PPI stream comprises 41.2% of the total, the largest share across the authorities, followed by Federal (19.8%) and State (19.7%).

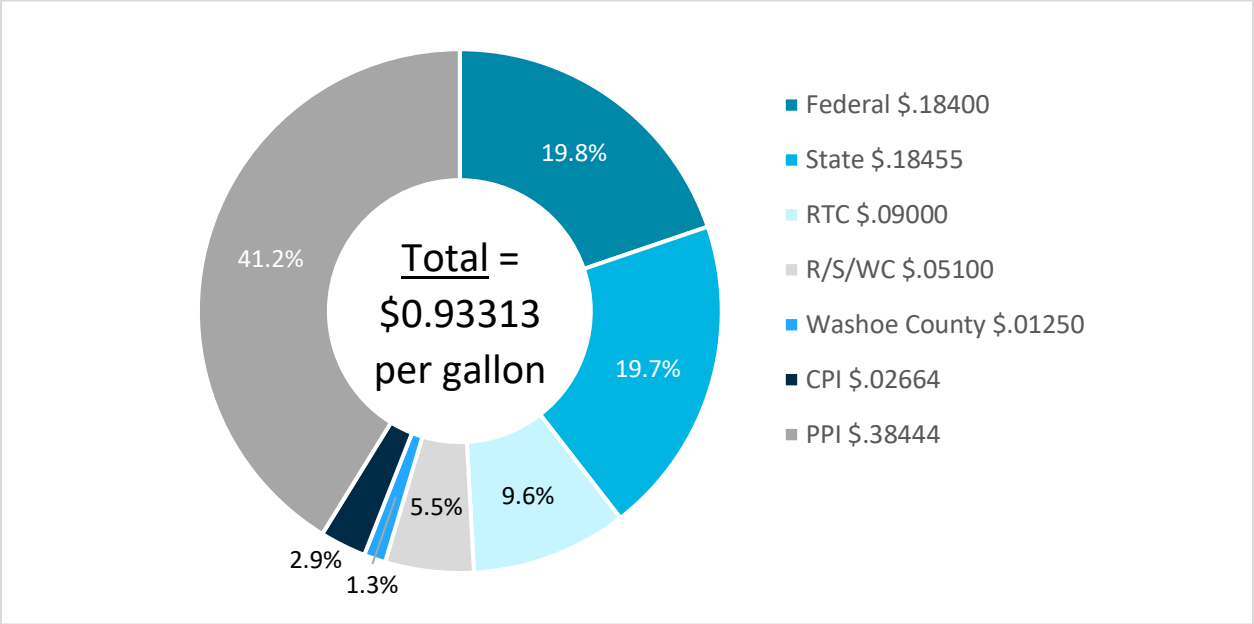


Figure 4. Washoe County Taxes Paid per Gallon of Gas, FY 2023-2024

Washoe County Motor Vehicle Fuel Tax Revenue

Figure 5 demonstrates the revenues associated with the Motor Vehicle Fuel tax for Washoe County between fiscal year (FY) 2014 and FY 2023. The graph breaks the revenue streams down between NRS365.192 ($0.01), NRS365.190 ($0.0175), and the county portion of NRS365.180 ($0.0235), and the $0.0125 revenue stream allocated to county road bonds. In total, in FY 2023 Washoe County received more than $10.6M from the Motor Vehicle Fuel Tax. The impact of reduced travel during the COVID-19 pandemic is apparent in the graphic, with a decline in total revenue shown in FY2020. As of FY2023, the total revenue has exceeded the total in FY2019, demonstrating recovery to pre-pandemic levels.

Washoe County uses a portion of the Motor Vehicle Fuel Tax for stormwater maintenance and repair, signage, striping, and snow removal. This generally represents about 25% of the road team professional's workload. While the cities of Reno and Sparks collect stormwater fees to pay for the maintenance of the system, Washoe County does not. This reduces the amount of funding and resources available directly for pavement, street, and ITS repair and maintenance

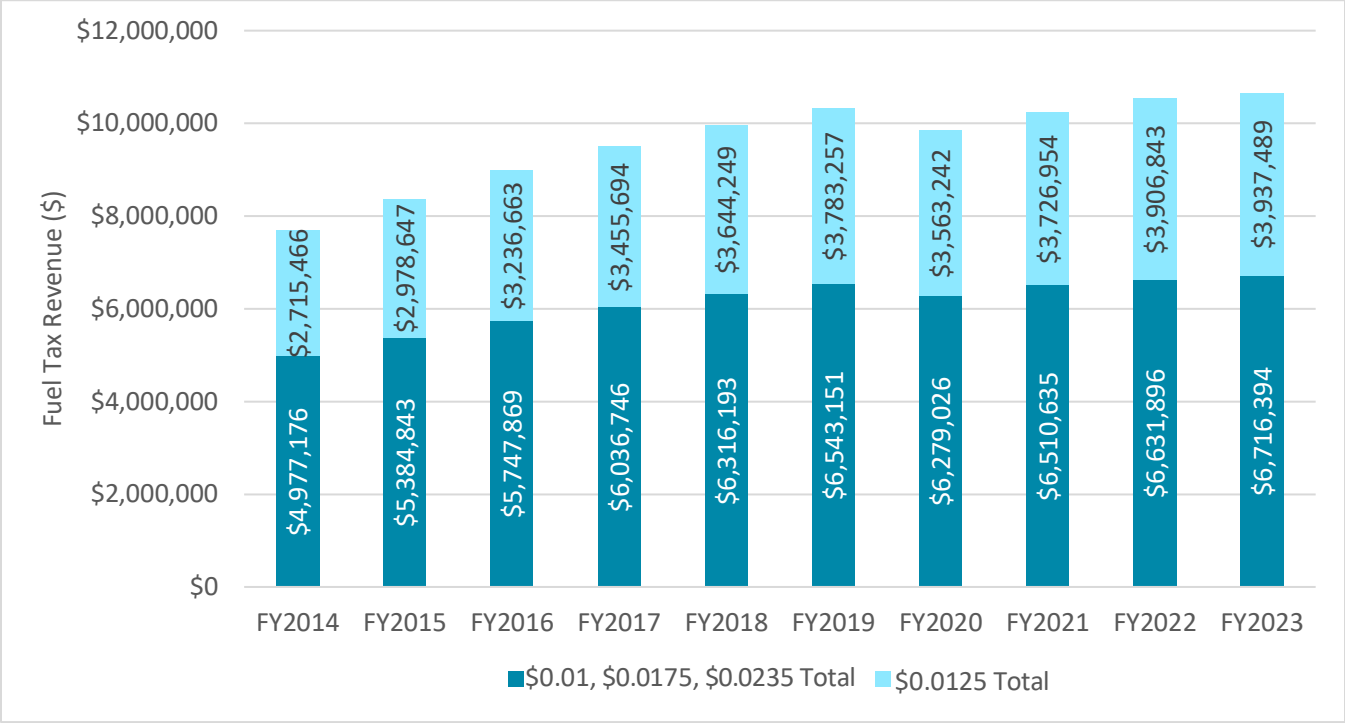


Figure 5. Washoe County Fuel Tax Revenues, FY 2014-2015 (FY2014) to FY 2023-2024 (FY2023)

Table 9 demonstrates the total fuel tax revenue stream for Washoe County broken down by statutory authority since FY2021. The breakdown of all roads fund revenue streams and expenditures is included in Attachment C. Since FY2021, NRS365.180 has typically comprised about 57.0-58.0% of the total revenue to Washoe County, followed by NRS365.190 averaged at 30.6%, and NRS365.192 at approximately 12.2%. These totals do not include the portion of NRS365.180 that is dedicated to county bonds. It should be noted that Washoe County provided data through FY2024, whereas the other three agencies were only available through FY2023. FY2024 is included in the table below.

Table 9. Washoe County Fuel Tax Revenue by Statutory Authority, FY2021-2022(FY2021) to FY2024-2025(FY2024)

Fiscal Year	NRS365.192($0.01)	NRS365.190 ($0.0175)	NRS365.180($0.0235)	Total
FY2021	$805,300	$1,999,983	$3,705,322	$6,510,635
FY2022	$821,314	$2,028,779	$3,781,803	$6,631,896
FY2023	$809,950	$2,081,475	$3,824,969	$6,716,394
FY2024	$822,731	$2,061,102	$3,957,015	$6,840,848

4.2 Other Revenue Sources

Washoe County has two additional revenue streams that are utilized to maintain and repair the street network: street, curb, and gutter cuts and allocations (transfers in) from the General Fund and the Capital Facilities Fund.

- **Street, Curb, and Gutter Cuts**: Washoe County collects fees from street, curb, and gutter cuts and allocates that revenue to street repair and maintenance. In FY2023, Washoe County collected $481,813 from this revenue source. This represents a slight decline from $660,396 in FY2014.
- **General Fund and Capital Facilities Fund Allocations**: The elected officials for Washoe County allocate a portion of the General Fund and the Capital Facilities Fund to support the repair and maintenance of streets and ITS infrastructure. These funds, while generally consistent year-over-year, are discretionary and are considered by elected officials annually. In FY2023, Washoe County allocated $1.2 million from the General Fund and $1.9 million from Capital Facilities.

Combining all three sources of additional revenue for street and ITS maintenance and repair, the total amount of revenue generated for Washoe County has decreased between FY2014 and FY2023 (Figure 6 and Table 10).

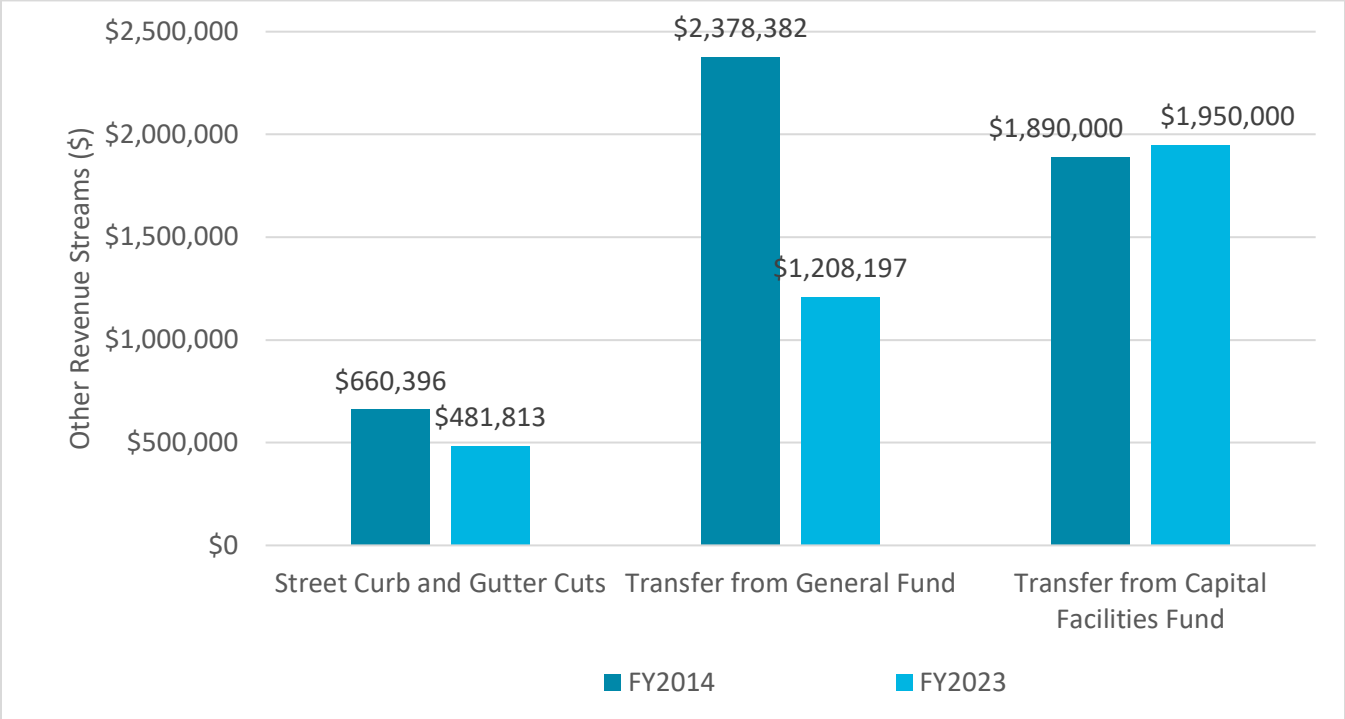


Figure 6. Washoe County Other Revenue Streams, FY 2014-2015 (FY2014) to FY 2023-2024 (FY2023)

Table 10. Washoe County Other Revenue Streams, FY 2021-2022 (FY2021) to FY 2024-2025 (FY 2024)

Fiscal Year	Street Curb and Gutter Cuts	General Fund	Capital Facilities Fund
FY2021	$572,625	$1,073,620	$1,950,000
FY2022	$429,902	$2,879,305	$1,950,000
FY2023	$481,813	$1,208,197	$1,950,000
FY2024	$808,854	$2,496,267	$1,950,000

Revenue associated with street, curb, and gutter cut fees decreased by 27.0% from FY2014 to FY202. Revenue allocated from the General Fund also declined that same time period. It should be noted that revenue allocated from the General Fund is related to needs communicated as part of the Capital Improvement Plan. Since FY2021, revenue in this stream ranged from $1.1 million in FY2021 to $2.9 million in FY2022. The FY2024 allocated amount was nearly $2.5 million. The transfer from the Capital Facilities Fund remains more consistent, demonstrating a modest increase from FY2014. Between FY2021 and FY2024 the allocation has remained the same.

4.3 Summary

Washoe County received $10.6 million in revenue in FY2023 to support street maintenance and repair, an increase of 5.8% from the total in FY2014 (Figure 7). Recall that a portion of this funding is used to support needs outside street, pavement, and ITS repair and maintenance (stormwater, signage, stripping, and snow removal). The total Motor Vehicle Fuel Tax, including the base, CPI, and PPI, represents the majority of the total revenue at 65.3%. Street, curb, and gutter cut permit revenue comprises 4.6% of the total revenue. The two allocations are discretionary based on needs identified in the Capital Improvement Plan annually. In FY2023, those two sources represented 30.1% of the total revenue available to fund street and ITS maintenance and repair.

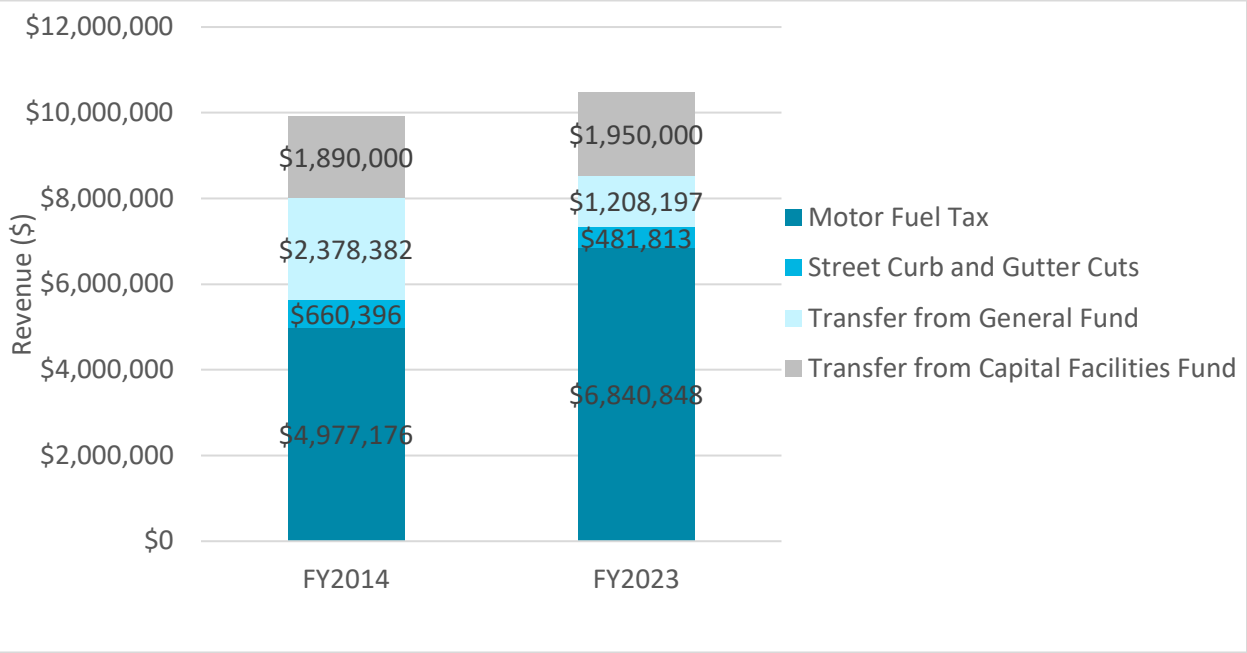


Figure 7. Washoe County Revenue Available for Street Maintenance and Repair, FY 2014-2015 (FY2014) to FY 2023-2024 (FY2023)

5. Normal Operation and Maintenance

Data collection on Normal Operation and Maintenance focuses on the existing asset management system, asset needs and funding, and other normal operations and maintenance for each agency. The details are stated as follows.

5.1 Asset Management System

The County maintains non-pavement assets including curb, ditch, drainage structure, lighting, manhole, storm water, pipe, road striping, and signs to provide services to residents. An asset inventory is essential for effective management and planning, significantly contributing to the quality of life for residents. The County uses GIS to keep inventory up to date. Data for non-pavement assets are shown in Table 11. Additionally, operation and maintenance records are tracked and saved using Computerized Maintenance Management System (CMMS) Asset Essentials.

Table 11. Asset Inventory Data

Asset	Attributes in GIS
Curb	Type, material, status, source, agency, direction, location, project, installation date; total 11,717 records
Ditch	Type, material, width, height, agency, status, source, location, project, inspection frequency, maintenance frequency, maintenance hours; total 19,277 records
Drainage structure	Agency, type, length, width, height, status, source, location project, installation date, inspection frequency, maintenance frequency, maintenance hours; total 4,752 records
Lighting	Location, type, address, maintaining agency, comment, status, source, agency, observer, power source; total 81 records
Manhole	Status, source, agency, type, location, note, installation date, project; total 3,029 records
Pipe	Agency, type, length, elevation, width, height, diameter, status, source, location, project, installation date, material, inspection frequency, maintenance frequency, maintenance hours; total 24,245 records
Road striping	Type, style, length, width, area, comment, date, agency, status, source; total 673 records
Signs	Material, agency, status, source, location, created date, type, marker, sign text, note, source, sign length, sign width; total 11,993 records

Currently, the County only has scheduled maintenance for drainage assets (typically on a 5- or 10-year basis), and maintenance for other assets is conducted based on best practices. Additionally, the emergency repair process primarily focuses on flood damage repairs, which is managed by contractors, while the in-house crew regularly addresses pothole repairs.

The County prioritizes its operation and maintenance activities using risk calculations evaluated by supervisor districts. The distribution of resources varies on demand and based on the number of assets in each district.

5.2 Asset Needs and Funding

Construction projects related to public works are outlined in Washoe County's FY2025 Capital Improvement Plan. For example, the expenditures associated with the 911 Parr Parking Lot Rehabilitation Phase II Project are listed as $12 million in FY2025 and the expenditures associated with the Cold Springs Community Center Parking Lot Reconstruction are listed as $0.7 million in FY2026. Additionally, the County focuses on the maintenance of

ditches, drainage structures, and pipes that are essential for stormwater management. The existing annual budget for the above assets is $875,000, and the CIP needs are $5.2 million.

5.3 Summary

The County maintains various non-pavement assets and uses GIS to keep inventory up to date. The emergency repair process primarily focuses on flood damage repairs, which is managed by contractors, while the in-house crew regularly addresses pothole repairs. The existing annual budget for the maintenance of ditches, drainage structures, and pipes is $875,000, and the CIP needs are $5.2 million.

Attachment A

Checklist Responses

RTC – Maintenance Needs Study

Agency: _Washoe County_____

Data Collection Checklist: Pavement Maintenance

No.	Item	Agency Response	Comments/Notes
1	What PMS software does your agency use?	PAVER	
2	How many streets/roads does your agency maintain? (no. of sections and centerline miles by functional class)	**# of Sections (Total 3,096)** Non-RTP = 2,962 RTP = 134 **# of Sections By FC (Non-RTP)** A-Arterial = 8 B-Collector = 88 C-Residential = 2,819 D-Industrial = 9 E-Rural Highway = 38 **Centerline Miles by FC (Non-RTP)** A-Arterial = 11.62 B-Collector = 39.63 C-Residential = 519.39 D-Industrial = 7.04 E-Rural Highway = 75.23	
3	What distress protocol does your agency use? (ASTM D6433 or MTC)	ASTM D6433	
4	Does your agency have GIS shapefile linked to PMS software?	Yes	
5	How often does your agency update pavement inspections?	1/3 of the network every 3 years	
6	How does your agency update pavement condition? (walking, windshield or automated?) (in-house or by contractor)	Non-RTP sections walking surveys	
7	What other condition data do you also collect? (Deflection, ride quality, friction, drainage, core, etc.)	County has limited core information. Only performed one overlay project over the past 5 years.	

8	What is your current network condition (PCI)? (entire network and by functional class)	Overall All = 71.8 Overall Non-RTP = 70.8 Non-RTP A-Arterial = 70.4 Non-RTP B-Collector = 76.2 Non-RTP C-Residential = 71.5 Non-RTP D-Industrial = 43.9 Non-RTP E-Rural Highway = 63.2	
9	How does your agency setup condition categories in PMS? (ex. PCI 70 to 100 – Very Good)	See PAVER database	
10	Does your agency have PCC pavement in your network?	No, RTP No, Non-RTP	
11	What pavement strategies/ treatments does your agency apply on various conditions of pavement? (treatment by PCI range)	Generally cape seals on PCI's from 30-80. Microseals on pavement with PCI > 80. Rehab/Reconstruct PCI < 20.	
12	What factors/items are included in the treatment costs? (ex. paving materials, labor, concrete repairs, striping, traffic control, etc.)	County to provide bid tabs, including contractors' projects and in-house projects	
13	How often does your agency update the treatment costs in your PMS?	Rarely.	
14	Does your agency use sustainable pavement practices? (ex. CIR, HIPR, FDR, etc.)	No	
15	If yes, what sustainable pavement practices does your agency utilize? Reclaimed Asphalt Pavement Cold-in-Place Recycling Warm Mix Asphalt Permeable/Porous Pavement Full Depth Reclamation Subgrade Stabilization Rubberized Asphalt Concrete Pavement Preservation (ex. slurry seal, chip seal, fog seal, cape seal)	No	
16	How does your agency prioritize streets for maintenance and rehabilitation?	Select streets by neighborhoods; even distribution via 5 supervisor districts; use PAVER to get last M&R, PCI and focus on higher traffic volume area (sometimes with worse PCI sections first) County only does cape seal project and fewer microsurfacing on higher PCI sections	

17	What is the target PCI for your network?	73	
18	What is your current annual paving budget?	$3M; not including in-house crack sealing and base repairs	
19	What is your pavement needs for the entire network?	Would like to get entire network on a 7-10year slurry cycle, reconstruct/rehab PCI's less than 20, perform all stop-gap work.	
20	What is your emergency repair process? (ex. potholing repairs)	Only on flood damage repairs via contractor In-house crew does potholing repair regularly	
21	Other related data?	154 parking lot sections. Overall weighted avg PCI for parking lots 62.8. Different funding sources for parking lots maintenance (by general fund)	

Data Collection Checklist: ITS Infrastructure

No.	Item	Agency Response	Comments/Notes
1	**O&M Asset Management Records:** Review **Table 1** below and confirm if the device totals traffic signals, traffic cabinets and traffic cameras are still accurate. Please provide updated information if available.	Washoe County owns: - 24 traffic signals - 24 traffic cabinets Signals are maintained by City of Reno, per traffic signal maintenance agreement.	
2	**Work Order History:** Provide the last two to three years of Work Order history or O&M expenditures related to ITS Infrastructure.	The County has a $70,000/year traffic signal maintenance agreement with the City of Reno.	
3	**Maintenance Schedules/Procedures:** What are existing maintenance schedules and processes for ITS Infrastructure?	The County follows the City of Reno's traffic signal maintenance schedule.	
4	**Planning/Funding Maintenance:** What planning, decision-making, and approval processes do you have when maintaining ITS infrastructure?	We have a 5-year maintenance agreement with the City of Reno for County traffic signals.	

Data Collection Checklist: Financial/Funding Sources

No.	Item	Agency Response	Comments/Notes
1	Prepare an inventory of existing revenue streams available that are currently used to fund maintenance for your agency/community.	Fuel tax - $0.09 County option base, CPI adjustment, and PPI adjustment Sales tax - 1/16%	
2	Have any new sources been added or removed in the last five years? Have budgets or how the revenue is used changed?	No.	
3	Please provide current budget documents, as well as 3-5 years history.	Provided link to website	
4	Have there been any unexpected changes to revenue streams in the last five years? How did that impact how maintenance needs were met?	Not unexpected, but gas taxes have been flat or in decline and not sufficiently keeping pace with inflation.	
5	Please provide current ACFR documents, as well as 3-5 years history.	No.	
6	Have any studies been prepared outside this effort that review/summarize funding sources for roadway/ITS maintenance? Can you share these?	Provided link to website	
7	Please provide the current CIP.	Provided link to website	
8	What are your biggest concerns about current and future revenue/expenditure differences as it relates to maintenance?	Revenue does not keep pace with maintenance costs.	
9	Are there federal or state sources that provide one-time or reoccurring revenue support for maintenance needs?	None.	
10	Are there grants or other sources that you have utilized? How does the use of sources like this influence your budget planning?	None.	
11	Other related data?		

Data Collection Checklist: Normal Operation and Maintenance

No.	Item	Agency Response	Comments/Notes
1	Does your agency have any asset inventory? What format do you save the inventory? (ex. curb ramps, sidewalk, striping, etc.)	County to provide GIS shapefile of existing asset inventory	
2	What assets require maintenance in your agency?	Pavement, storm water	
3	What are the total needs for your asset maintenance?	Pavement: $13.7M Stormwater: $2M	
4	What is your existing annual budget to maintenance these assets?	Pavement: $5.1M Stormwater: $875K	
5	Does your agency have existing asset maintenance records or work order history?	Only has maintenance schedule of drainage asset (5 year/10 year) Other asset maintenance based on best practice	
6	How does your agency maintain the existing assets? (in-house or by contractor)	Sewer – in house crew? CIP project on parking lot only, not for roads	
7	What is your regular maintenance schedule or processes?	Prioritize using condition assessments and criticality	
8	What are your emergency repairs and maintenance processes?	Address as needed	
9	What is your CIP needs and projects?	Pavement: $10.5M Stormwater: $5.2M	
10	What normal operations and maintenance does your agency perform? Crack sealing Patching Sweeping Snow removal Landscaping Roadway striping Concrete repairs (sidewalk, C&G) Strom drain maintenance Guardrail repairs Shoulder maintenance Culvert cleaning Others	Major in house and County has internal tracking system; County to provide records in table/spreadsheet?	
11	How does your agency perform operation or maintenance on the above items?	In House	

	(ex. regular monitor/inspect, repair, or work orders) (in-house or by contractor)		
12	How does your agency track or save operation and maintenance records?	CMMS Asset Essentials	
13	How does your agency prioritize these operation and maintenance activities?	By risk calculation evaluated by supervisor districts (risk management) ; not even distributed by district annually, depends on needs; by amounts of asset in the areas	
14	What is your annual budget for operations and maintenance?	County to provide $$ information	
15	Other related data?		

Attachment B

Signal Agreements

INTERLOCAL TRAFFIC SIGNAL MAINTENANCE AGREEMENT BETWEEN CITY OF RENO AND WASHOE COUNTY

THIS INTERLOCAL TRAFFIC SIGNAL MAINTENANCE AGREEMENT made and entered into this 4th day of DECEMBER 2020, by and between the CITY OF RENO, a municipal corporation, hereinafter called the CITY, and WASHOE COUNTY, a political subdivision organized and existing under and by virtue of the laws of the State of Nevada, hereinafter called the COUNTY;

WITNESSETH:

WHEREAS, NRS 277.180 provides that any one or more public agencies may contract with any one or more other public agencies to perform any governmental service, activity or undertaking which any of the public agencies entering into the contract is authorized by law to perform; and

WHEREAS: the City and the County are each a "public agency" in accordance with NRS 277.100; and

WHEREAS, it is the COUNTY'S desire to have the CITY provide traffic signal maintenance service for Washoe County traffic signals; and

WHEREAS, the CITY has the equipment and personnel to provide said traffic signal maintenance; and

WHEREAS, the parties previously entered into a five-year traffic signal maintenance agreement, dated December 16, 2015; and

Whereas, the fiscal year begins July 1, this agreement will be retroactive to July 1, 2020;

NOW, THEREFORE, the CITY and the COUNTY, in consideration of the mutual covenants hereinafter set forth agree as follows:

The CITY agrees:

1. To provide 'REGULAR SIGNAL MAINTENANCE SERVICE' as determined in Exhibit A and in accordance with the Maintenance Management System Guidelines during normal working hours; provide 'ADDITIONAL TRAFFIC SIGNAL SERVICES' during normal working hours when feasible and overtime hours as needed, to include, but are not limited to items listed in Exhibit A. The Washoe County traffic signals are listed in Exhibit B; signals may be added or deleted by written notification to the Reno Director of Public Works. Services rendered by the CITY shall not exceed a value of $70,000 per contract year, unless otherwise amended through the fee schedule (Exhibit C).

2. To quarterly, on or about the tenth day of each quarter, provide the COUNTY with a quarterly bill intended to cover all 'REGULAR SIGNAL MAINTENANCE SERVICE' and 'ADDITIONAL TRAFFIC SIGNAL SERVICES' for work provided during normal working hours and overtime hours according to the fee schedule (Exhibit C).

   To annually, on or about February 1st of each year, provide the fee schedule (Exhibit C) for the next budget year.

3. To provide monthly documentation of work performed on Washoe County signals, including Maintenance Management records and daily work reports completed by the employee performing work.

The COUNTY agrees:

1. This Agreement operates retroactively to July 1, 2020, the beginning of the fiscal year.

2. This Agreement replaces the traffic-signal-maintenance agreement between the County and City, dated December 16, 2015.

3. To investigate complaints relating to signal maintenance needs before relaying information to the CITY.

4. To make payments to the CITY within thirty (30) days of receipt of any billing provided by the CITY.

5. To order, pay for and provide the CITY with all materials and supplies requested by the CITY or determined necessary by the COUNTY and associated with traffic signal maintenance and repair, as provided for by this Agreement.

6. To notify the CITY of proposed new signal installations and to allow the CITY to review and comment on traffic signal design plans.

Both the CITY and the COUNTY agree:

1. That either party, via the CITY'S City Manager or the COUNTY'S County Manager or through their respective designated representative, may terminate this Agreement by giving written notice, sixty (60) days before such termination, to the other party.

2. That this Agreement shall be in effect for a period of five years, ending on June 30, 2025, unless terminated pursuant to (1) above.

3. To develop, maintain and adjust, as needed, a protocol for call out of personnel including names, telephone numbers, and instructions for County Sheriff personnel and City dispatchers.

4. The County reasonably believes that funds can be obtained sufficiently to make all payments during the term of this Agreement. If the County does not allocate funds to continue the function performed by the Contractor obtained under this Agreement, this Agreement shall be terminated when appropriated funds expire, without penalty, charge or sanction to the County.

5. Subject to the limitations of Chapter 41 of NRS and any other applicable laws, and without waiving its statutory protections, the parties agree that each is responsible for any liability or loss that may be incurred as a result of any claim, demand, cost, or judgment made against that party arising from any negligent act by any of that party's employees, agents, or servants in connection with the performance of this Agreement.

6. If any provision of this Agreement is determined to be illegal, invalid, or unenforceable , the provision shall be deleted and the parties shall, if possible, agree on a legal, valid, and enforceable substitute

provision that is as similar in effect to the deleted provision as possible. The remaining portion of the Agreement not determined to be illegal, invalid, or unenforceable shall, in any event, remain valid and effective for the term remaining unless the provision found illegal, invalid, or unenforceable goes to the essence of this Agreement.

7. This Agreement and the performance of the duties described in the Agreement are governed, interpreted and construed in accordance with Nevada law, without regard to choice of law principles. Each party consents to personal jurisdiction and exclusive venue in the Second Judicial District Court in and for the County of Washoe located in Washoe County, Nevada.

8. The parties further agree to the extent allowed by law pursuant to Nevada Revised Statute chapter 41, to hold harmless, indemnify, and defend each other from any and all losses, liabilities, or expenses of any nature to the person or property of another to which each may be subjected as a result of any claim, demand, action or cause of action arising out of the negligent acts, errors, or omissions on the part of the employees, agents, or servants of the others.

9. That all communications/notices required pursuant to the Agreement shall be given as hereinafter provided, unless written notice of a new designee is sent certified or registered mail, to the other party, as follows:

COUNTY: Dave Solaro, P.E.
Community Services Director
1001 E. Ninth Street
Reno, Nevada 89512
(775) 328-3600

RENO: John Flansberg, P.E.
Public Works Director
P.O. Box 1900
Reno, Nevada 89505
(775) 334-2350

10. This Agreement contains the entire agreement of the parties with respect to the matters addressed herein. This Agreement may not be amended, nor may any of the terms, covenants, representations, warranties or conditions hereof be waived, except by a written instrument executed by the party against which such amendment is to be charged.

11. The only parties who may enforce this Agreement and any of the rights under this Agreement are the parties hereto.

In Witness Thereof, the Parties have executed this Agreement as of the date and year appearing herein.

CITY OF RENO,

Hillary L. Schieve, Mayor

COUNTY OF WASHOE

Bob Lucey, Chair
Board of County Commissioners

ATTEST:

Ashley D. Turney, Reno City Clerk

ATTEST:

Jan Galassini, Washoe County Clerk

Approved as to Form:

Deputy City Attorney

Exhibit A

Traffic Signal Maintenance Services

Regular Traffic Signal Maintenance Services

- Signal Preventative Maintenance
- Cabinet/ground Preventative Maintenance
- Safety/Conflict Monitors
- General Signal Maintenance
- Illuminated Street Name Sign Maintenance

Additional Traffic Signal Services

Including but not limited to the following

- School Flasher Maintenance
- Signal Response Pedestrian Signal Repair
- Bench Repair
- Vehicle Detection
- Bulb Replace
- Signal Head Repair
- Cabinet Rehab/Construction
- New Signal Inspection
- Review Traffic Signal Design Plans
- Signal Interconnect
- USA Locates
- Limited Street Light Maintenance

Exhibit B

Washoe County Traffic Signals

Updated: 03-06-2023

Location

1. Arrowcreek Pkwy/Zolezzi Lane
2. Mt. Rose Hwy/Galena Fire Station
3. Mt. Rose Hwy/Thomas Creek Rd
4. Mt Rose Hwy/Wedge Pkwy
5. Pyramid Way/Eagle Canyon Dr
6. Pyramid Way/Golden View Dr
7. S.R. 28/Country Club Dr
8. S.R. 28/Crystal Bay
9. S.R. 28/Northwood Blvd/Southwood Blvd
10. S.R. 28/Village Blvd
11. Sun Valley Blvd/1st Ave
12. Sun Valley Blvd/2nd[t] Ave
13. Sun Valley Blvd/4thAve
14. Sun Valley Blvd/5th Ave
15. Sun Valley Blvd/7thAve
16. Sun Valley Blvd/Dandini Blvd
17. Wedge Pkwy/Golden Gate Dr
18. Pyramid Way/W. Calle de la Plata
19. Sun Valley Blvd/Highland Ranch Pkwy
20. Arrowcreek Pkwy/Thomas Creek Dr
21. El Rancho Dr./Moorpark Ct
22. Silent Sparrow Dr/W. Calle de la Plata
23. Pyramid Way/Egyptian Dr

Exhibit C

Fee Schedule for FY 2023-2024

The charged rate shall be calculated using a 2.1 multiplier and the current wage rate. As of July 1, 2023 the charged rates are as shown below.

Regular time hourly rate for Traffic Signal Mechanic	$82.37
Regular time hourly rate for Traffic Signal Technician	$88.57
Regular time hourly rate for Associate Civil Engineer	$133.16
Regular time hourly rate for Traffic Engineer	$183.07
Overtime hourly rate for Traffic Signal Mechanic	$123.55
Overtime hourly rate for Traffic Signal Technician	$132.85
Overtime hourly rate for Associate Civil Engineer	$199.74
Overtime hourly rate for Traffic Engineer	$274.61

Equipment per MaintStar charge rates.

Supplies and materials will be charged at cost

Exhibit D

ACTIVITY GUIDELINE
MAINTENANCE MANAGEMENT SYSTEM
City of Reno
Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	PM T.SIGNAL	CODE	201

DESCRIPTION OF WORK

Inspection and repair of overhead traffic signals following a preventative maintenance check list. Work may include repair or replacement of damaged or defective signal head components, cleaning of all reflectors and lenses, touch-up painting signal heads, inspection of poles, mast arms and associated hardware and relamping signal heads as necessary .

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	8	8	9	9	9	9	9	8	9	8	7	8

Performed annually - following check list. - may be affected by weather.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.25

Equipment	Qty
BOOM TRUCK	1.00

Materials	Qty
3S LENS	1.0 EA
RAGS	2.0 PO
HAND HOLE CVR	0.1 EA
PULL BX LD 5	1.0 EA
PULL BOX 5	1.0 EA
BACKPLATE	1.0 EA

WORK METHOD

PRE-DEPARTURE
1. Ready supplies, equipment and perform CDL Inspection check.

AT WORK SITE
2. Perform visual Inspection. Record findings
3. Set up work zones, signs and cones.
4. Carry out maintenance and repair as per check list.
5. Clean up - vacate site.

END OF SHIFT
6. Document work, and signal guideline checklist (see attached)

CHECK POINTS

- Observe traffic flow
- Appropriate personal protective equipment (PPE)
- Follow current NV Work Zone Traffic Control Handbook and MUTCD
- Move work zone signs/cones.

- Complete records

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
227.00 SIGNALS		

AVERAGE DAILY PRODUCTION	APPROVAL	
1.50 INTSECT		

ACTIVITY GUIDELINE
MAINTENANCE MANAGEMENT SYSTEM
City of Reno
Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	CABINET PM	CODE	202

DESCRIPTION OF WORK

Preventative maintenance for traffic signal cabinet. This includes cleaning of cabinet and its components, checking operation of signal and its components, and making repair as necessary. A detailed check list is followed to allow all components to be properly inspected and maintained.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	8	8	9	8	8	10	8	8	9	8	8	8

Perform semi-annually following checklist and includes one operational observation check to be conducted with at least four months between PM and opeartional check.. May be effected by weather.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG TECH	0.65

Equipment	Qty
PICKUP/UTILITY TRUCK	1.00
SHOP VAC	1.00

Materials	Qty
RAGS	2.0 PO
WIRE	1.0 FO
CLEANING MTL	1.0 CA
MIS NUTS&BOLT	5.0 EA
AIR FILTER	1.0 EA
HAND HOLE CVR	1.0 EA
FLASHER-REG	1.0 EA

WORK METHOD

PRE-DEPARTURE
1. Ready equipment and perform CDL inspection check.

AT WORK SITE
2. Perform visual inspection, record findings per check list.
3. Set up work zone.
4. Carry out maintenance and repair as per check list.
5. Clean up and vacate site.

END OF SHIFT
6. Document work.
7. Refuel Vehicles.

CHECK POINTS

-Observe operation and traffic flow
-Follow current NV Work ZoneTraffic Control Handbook and MUTCD
-Follow Checklist
- Appropriate PPE
-Move work zone signs/cones

-Complete records

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
227.00 SIGNALS		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
6.00 CABINETS		

ACTIVITY GUIDELINE
MAINTENANCE MANAGEMENT SYSTEM
City of Reno
Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	SAFETY MONITOR	CODE	203

DESCRIPTION OF WORK

Remove existing malfunction management unit from cabinet, exchange with a tested unit.
Return removed unit to signal shop test bench and verify correct operation on test equipment.
Download and document test results. Accomplishments include both the test (1) and the replacement (1).

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	10	10	9	8	8	7	7	7	8	8	9	9

ITMS and ITE guidelines require MMUs be tested and results documented at least once a year.
Accomplishment count = both test (1) and replacement (1) for a total of 2.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
Personnel	*Qty*	PRE-DEPARTURE	- Appropriate PPE
TRF SIG TECH	0.85	1. Stock truck with supplies and tested units .	
Equipment	*Qty*		- Observe traffic flow
PICKUP/UTILITY TRUCK	1.00	AT WORK SITE	
Materials	*Qty*	2. Place signal on flash	
/FLICT MONITOR	0.3 EA	3. Remove existing unit	
		4. Exchange program card.	
		5. Ensure copy of test inserted on document pocket	
		6. Return to operation, observe correct operation.	
		7. Set time in monitor and verify correct program card	
		8. Clear existing fault log	
		END OF SHIFT	
		9. Document work.	

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
227.00 MONITORS		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
14.00 MONITORS		

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	SCH FLSH MAINT	CODE	205

DESCRIPTION OF WORK

All work associated with the timing of school flasher signals (as supplied on list by School District) -- setting operation days & times, programming "off" days (school holidays), changing clock batteries, checking signal alignment and testing operation to insure proper timing of signals and control of vehicle speed in school zones.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	22	32	0	0	0	0	0	0	0	0	20	26

Performed twice a year prior to school terms ,or as required due to schedule changes or signal malfunctions.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.25

Equipment	Qty
BOOM TRUCK	0.50
PICKUP/UTILITY TRUCK	0.50

Materials	Qty
9V BATTERIES	7.0 EA
GLASS LENS	7.0 EA
RAGS	1.0 PO
SIGNAL BULBS	17.0 EA
WINDOW CLEANR (TRAI	1.0 GA
USA PAINT	2.0 EA
REFLECTOR	3.0 EA

WORK METHOD

PRE-DEPARTURE
1. Ready equipment and perform CDL inspection check.
2. Determine route

AT WORK SITE
3. Remove battery - kill power.
4. Install new battery.
5. Reset clock and programs.
6. Set current time, day, month and year.
7. Set on/off holiday schedule.
8. Review program.
9. Test override.
10. Set to normal.
11. Cleaning, bulb change

END OF SHIFT
12. Document work.

CHECK POINTS

- Produce schedule list for different zones

- Check for available AC power
- Check fuse
- Traffic Control.
- Appropriate PPE.

- Check operation of flasher and lights.

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
43.00 LOCATION!		

AVERAGE DAILY PRODUCTION	APPROVAL			
1.30 LOCATION!				

ACTIVITY GUIDELINE
MAINTENANCE MANAGEMENT SYSTEM
City of Reno
Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	INTERC CABLE	CODE	206

DESCRIPTION OF WORK

All work associated with maintaining communications on City owned interconnect cables between City Hall Traffic Signal Control computer and 150 traffic signals. Additionally, work includes maintenance and communications over 8 leased telephone/data lines to 30 traffic signals. Includes testing, diagnosis, replacement of cable and verify operation of wireless communication.

PLANNING PERIOD	01/01 - 01/31	02/01 - 02/28	03/01 - 03/30	04/01 - 04/30	05/01 - 05/31	06/01 - 06/30	07/01 - 07/15	07/01 - 07/31	08/01 - 08/31	09/01 - 09/30	10/01 - 10/31	11/01 - 11/30
	7	7	7	7	7	12	12	8	8	8	8	8

Communications problems are reported and logged by the computer system.
City has 3 cables, 25 pair, 18 pair and 12 pair branching throughout the City.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.50
TRF SIG TECH	0.50

Equipment	Qty
BOOM TRUCK	0.05
PICKUP/UTILITY TRUCK	0.95

Materials	Qty
CABLE	100.0 FO
SPLICE KIT	5.0 EA
TAPE	2.0 RO
TERMINAL LUGS	10.0 EA

WORK METHOD

Pre-Departure
1. Ready equipment and perform CDL inspection as required
2. Determine shop/field fault.
3. Signal/no signal/hum.
4. Connect signal generator to line.
5. Load equipment.

AT WORK SITE
6. Track signal along route.
7. Check signal at destination.
8. Trace line back to source. Break as required to determine fault direction.
9. Find fault.
10. Repair as required/resplice/ replace cable/find spot where contractor dug up and change pair.

END OF SHIFT
12. Document work.

CHECKPOINTS

- Traffic Control
- Appropriate PPE
- Copy of interconnect cable wire plan
- Load test equipment and materials

- Hook up shop test equipment
- Determine repair/replacement complete/clean signal

- Return to shop
- Put intersections back on line
- Complete records

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
50.00 CBL MILE		

AVERAGE DAILY PRODUCTION	APPROVAL				
12.00 LABOR HR					

ACTIVITY GUIDELINE
MAINTENANCE MANAGEMENT SYSTEM
City of Reno
Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	VMS 330 SYSTEM MAINT	CODE	208

DESCRIPTION OF WORK

Enter or modify system paramenters as directed by traffic engineering. Check daily for system problems and traffic signal malfunctions reported by the system. Monitor system for proper operation. Generate monthly operation log report. Generate system reports as required. Reload system software when required, backup system paramenters monthly. Troubleshoot system failures. Check ITMS.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	8	8	9	7	8	9	8	8	9	9	8	9

This work is performed routinely on a daily basis.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
Personnel	*Qty*	1. Check system operation by access with monitor or keyboard. 2. Check system alarms and print reports. 3. Enter timing and data for signals with keyboard or monitor. 4. Use tape drive and floppy discs as required to back up system. 5. Change out system components as required, repair, exchange or send for repair of failed components.□ - Consult system manuals.	- Check help files. - Monitor system reports and displays. - Monitor system alarms. - Communicate with Engineer
TRF SIG TECH	0.85		

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
181.00 SIGNALS		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
8.00 LABOR HR		

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	PED SIGNAL REPAIR	CODE	240

DESCRIPTION OF WORK

All work required to maintain, repair, modify and/or replace malfunctioning pedestrian signals, indications and buttons to insure that pedestrian movement is safely controlled and coordinated.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/28	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	8	8	9	8	9	9	7	8	10	10	7	7

Performed as required in response to service requests and/or as needed

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.25
TRF SIG TECH	0.20

Equipment	Qty
VAN	1.00

Materials	Qty
NS CONVERT KT	4.0 EA
FUSES	1.0 EA
MODULE	7.0 EA
LUBRICANT	1.0 CA
WIRE	4.0 FO
PED BUTTON	0.3 EA
PED DIR SIG	0.3 EA

WORK METHOD

PRE-DEPARTURE
1. Ready equipment and perform CDL inspection
2. Receive request
3. Proceed to intersection.

AT WORK SITE
4. Determine which head has problem.
5. Replace or repair module, install conversion kit or repair button.
6. Check sign plates, egg crates, visors & alignment.
7. Check operation.

END OF SHIFT
8. Document work.

CHECK POINTS

- Traffic Control
- Appropriate PPE
- Check for voltage
- Check buttons
- Check fuses and wiring
- Check signal components

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
1758 ~~1616.00~~ EACH		

AVERAGE DAILY PRODUCTION	APPROVAL
7.00 PED SIGNA	

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	BENCH REPAIR	CODE	241

DESCRIPTION OF WORK

All work required to troubleshoot and repair faulty electronic traffic signal components, such as; signal controllers, safety monitors, opticom detectors, vehicle detectors, modems, power supplies and other related components.
Also includes equipment testing, new evaluation and repair.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/28	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	10	10	8	9	8	7	7	7	8	8	9	9

Performed as required.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
Personnel	Qty	AT BENCH	- ID tag
TRF SIG TECH	0.85	1. Determine problem/trouble type. 2. Troubleshoot. 3. Make repairs. 4. Run equipment for extended period. 5. Sign off/log in computer - if applicable. 6. Return warranty items for repair. 7. Document work.	- Manufacturer's manuals schematics - Determine operating correctly - Check under temp extremes - Sign off - Return to stock

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
227.00 EACH		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
9.00 LABOR HR		

ACTIVITY GUIDELINE
MAINTENANCE MANAGEMENT SYSTEM
City of Reno
Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	LOOP/DETECTION MAINT	CODE	242

DESCRIPTION OF WORK

All work required to diagnose maintain and/or repair traffic detector loop malfunctions. Activity is performed to insure proper detection loop operation and safely control traffic movement at intersections.

PLANNING CRITERIA	07/01 - 07/31	08/01 - 08/31	09/01 - 09/30	10/01 - 10/31	11/01 - 11/30	12/01 - 12/31	01/01 - 01/31	02/01 - 02/29	03/01 - 03/31	04/01 - 04/30	05/01 - 05/31	06/01 - 06/30
	0	0	0	0	0	0	0	0	0	0	0	0

Performed as required in response to service requests or as needed.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.60
TRF SIG TECH	0.40

Equipment	Qty
PICKUP/UTILITY TRUCK	1.00

Materials	Qty
AMPLIFIER	0.1 EA
CABLE	4.0 FO
NUTS/LUGS	10.0 EA
SEALING PACS	2.0 EA
WIRE NUTS	5.0 EA

WORK METHOD

PRE-DEPARTURE
1. Ready equipment and perform CDL Inpsection
2. Travel to work site.

AT WORK SITE
3. Determine if there is a detector problem.
4. Test amplifier and controller cabinet or field problem.
5. Remove loop lead and test.
6. Test loop lead in.
7. Check splices.
8. Re-hook good loops and adjust timing.
9. Reset Amp.

END OF SHIFT
10. Document work.

CHECK POINTS

- Traffic Control
- Appropriate PPE
- Check connections
- Check ground or open
- Check street condition for signs of damage or failure
- Observe operation

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
6210.00 LOOPS		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
9.00 LABOR HR		

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	VIDEO MICR DECTECTORS	CODE	243

DESCRIPTION OF WORK

All work required to diagnose, maintain and/or repair video/microwave detectors. Activity is performed to ensure safe operation and safety control traffic movement at intersections.

PLANNING CRITERIA	07/01 07/31	08/01 08/30	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	8	8	8	8	8	8	6	6	10	8	8	8

Performed as required in response to service requests or as needed.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.75
TRF SIG TECH	0.40

Equipment	Qty
BOOM TRUCK	1.00
IPRESSOR	1.00
CONCRETE SAW	1.00
PICKUP/UTILITY TRUCK	1.50

Materials	Qty
LOOP WIRE	500.0 FO
SEALANT (LOOPS)	24.0 PO

WORK METHOD

PRE-DEPARTURE
1. Ready equipment and perform CDL inspection
2. Travel to work site

AT WORK SITE
3. Connect lap top as required.
4. Connect video monitor as required.
5. Analyze problem and observe operation
6. Check programming
7. Change as needed.

END OF SHIFT
8. Document work.

CHECK POINTS

- Traffic Control
- Appropriate PPE
- Check connections
- Observe operation

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
39.00 INTSECT		

AVERAGE DAILY PRODUCTION	APPROVAL				
10.00 LABOR HR					

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	LED REPLACE	CODE	245

DESCRIPTION OF WORK

All work required to replace LEDs as needed.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	7	8	9	10	9	9	8	8	9	8	8	7

Performed as needed.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
Personnel	*Qty*	PRE-DEPARTURE	- Appropriate PPE
TRF SIG MECH	1.25	1. Ready and perform CDL inspection check. 2. Pick up boom truck. 3. Load LEDs	
Equipment	*Qty*		- Follow current NV Work Zone Traffic Control Handbook and MUTCD - Check head alignment and tightness. - Check backplate for looseness
BOOM TRUCK	1.00	AT WORK SITE 4. Replace LED	
Materials	*Qty*		
‹L LAMP LED	11.0 EA	END OF SHIFT 5. Document work	

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
3000.00 EACH		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
15.00 LEDS		

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	SIGNAL HEAD REPAIR	CODE	247

DESCRIPTION OF WORK

All work required to change lenses, visors, back plates, sockets, internal wires, alignment, frame to assure proper operation of traffic signal.

PLANNING CRITERIA	5 Yr.	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
		8	8	9	8	8	9	7	8	9	8	8	10

Work is performed as needed.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
Personnel	**Qty**	PRE-DEPARTURE	- Appropriate PPE
TRF SIG MECH	1.75	1. Pick up boom truck and perform CDL Inspection	- Follow current NV Work Zone Traffic Control Handbook and MUTCD
Equipment	**Qty**	AT WORK SITE	
BOOM TRUCK	0.75	2. Set up work zone	
PICKUP/UTILITY TRUCK	0.25	3. Perform repair as needed.	
Materials	**Qty**	END OF SHIFT	
DOG HOUSE SIGNAL HE	2.0 EA	4. Document work.	

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
3000.00 SIGNAL HD		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
5.00 SIGNAL HD		

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	ILLUM STR NAME SIGN MAINT	CODE	252

DESCRIPTION OF WORK

Maintenance and repair of illuminated street signs. Work may include replacement of bulbs, ballasts, fuses, wiring, missing or damaged name panels and checking sign mounting hardware. This effort insures proper direction to motorists and pedestrians.

PLANNING CRITERIA	07/01 01/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	8	8	9	8	8	9	8	8	9	8	8	9

Performed in response to service requests or as reported in quarterly street light survey and every 36 months per local standards.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.25
TRF SIG TECH	0.20

Equipment	Qty
BOOM TRUCK	1.00

Materials	Qty
SL BALLAST	2.0 EA
FL BULBS	14.0 EA
FUSES	4.0 EA
SEALING PACS	4.0 EA
SOCKETS	2.0 EA
TAPE	1.0 RO

WORK METHOD

PRE-DEPARTURE
1. Pick up boom truck and perform CDL inspection check.
2. Load materials.
3. Check quarterly list & establish route.
4. Proceed to work location.

AT WORK SITE
5. Setup work zone as needed.

6. Turn on override or cover photo control.
7. Replace bulbs.
8. Check panel thumb screws.
9. Check mounting and hardware.
10. Uncover photo control.

END OF SHIFT
11. Document work.

CHECK POINTS

- Set up route
- Appropriate PPE
- Follow current NV Work Zone Traffic Control Handbook and MUTCD
- Check for incoming voltage
- Check fuses
- Trouble shoot sockets and ballasts
- Replace or repair as needed

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
800.00 SIGNS		

AVERAGE DAILY PRODUCTION	APPROVAL				
7.00 SIGNS					

ACTIVITY GUIDELINE
MAINTENANCE MANAGEMENT SYSTEM
City of Reno
Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	ILLUM STREET SIGNS	CODE	253

DESCRIPTION OF WORK

Maintenance and repair of illuminated street signs. Work may include replacement of bulbs, ballasts, fuses, wiring, missing or damaged name panels and checking sign mounting hardware. This effort insures proper direction to motorists and pedestrians.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	10	10	9	8	8	7	7	7	8	8	9	9

Performed in response to service requests or as reported in street light quarterly survey.
Signs include one way arrows and No left turn signs.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
Personnel	**Qty**	PRE-DEPARTURE	- Set up route
TRF SIG MECH	1.00	1. Pick up boom truck and perform CDL Inspection check.	- Appropriate PPE
TRF SIG TECH	0.40	2. Load materials.	
Equipment	**Qty**	3. Check requests & establish route.	- Follow current NV Work Zone Traffic Control Handbook and MUTCD
BOOM TRUCK	1.00	4. Proceed to work location.	- Check for incoming voltage
Materials	**Qty**	AT WORK SITE	- Check fuses
BALLAST	1.0 EA	5. Setup work zone as needed.	- Trouble shoot sockets and ballasts
FLOURES TUBES	20.0 EA	6. Turn on override or cover photo control.	- Replace or repair as needed
PHOTOCELLS	2.0 EA	7. Replace bulbs.	
		8. Check panel thumb screws.	
		9. Check mounting and secureness of hardware.	
		10. Uncover photo control.	
		END OF SHIFT	
		11. Document work.	

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
100.00 SIGNS		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
4.00 SIGNS		

Attachment C

Roads Fund 216 Budget Summary FY2021-FY2025

Roads Fund 216 Budget Summary FY 21-FY25

		2021	2022	2023	2024	2025*
431100	Federal Grants	-$17,277.34	-$22,514.97	-$347,444.22	-$18,161.48	$0.00
432210	Motor Vehicle Fuel Tax 1.25 NRS 365.180	-$3,726,954.18	-$3,906,842.83	-$3,937,489.07	-$4,094,645.55	-$4,137,000.00
432220	Motor Vehicle Fuel Tax 1.75 NRS 365.190	-$1,999,983.11	-$2,028,778.94	-$2,081,475.25	-$2,061,101.56	-$2,088,000.00
432230	Motor Vehicle Fuel Tax 2.35 NRS 365.180	-$3,705,322.16	-$3,781,803.21	-$3,824,969.22	-$3,957,015.40	-$3,818,509.00
432240	County Option Motor Vehicle Fuel Tax 1.0	-$805,329.74	-$821,313.83	-$809,950.36	-$822,731.06	-$996,491.00
433310	Local Govt Grant	$0.00	$0.00	-$155,979.00	-$210,809.86	$0.00
460160	Other General Government	-$16,902.00	$0.00	$0.00	$0.00	$0.00
460161	Intragovernmental Sales	-$6,957.94	$0.00	-$7,576.98	$0.00	$0.00
460401	Street Curb and Gutter Cuts	-$572,624.65	-$429,902.41	-$481,812.50	-$808,854.10	-$700,000.00
481000	Interest on Pooled Investment	-$92,348.80	-$59,485.39	-$97,330.85	-$94,071.59	-$88,580.00
482100	Realized Gain/(Loss) on Pooled Investmen	-$28,466.33	-$11,932.23	-$24,081.41	-$25,450.38	$0.00
482200	Unrealized Gain/(Loss) on Pooled Investm	$100,341.62	$382,574.58	$11,375.73	$1,481.00	$0.00
484000	Donations,Contributions	$0.00	-$38,780.00	-$20,000.00	$0.00	$0.00
484195	Non-Govt'l Grants	$0.00	$0.00	$0.00	$0.00	$0.00
485100	Reimbursements	-$2,789.36	-$15,670.24	-$718.20	-$97.50	$0.00
485192	Surplus Equipment Sales	$0.00	$0.00	$0.00	-$20,786.00	$0.00
491080	Inspections	-$127,995.20	-$100,460.14	-$60,728.72	-$126,285.55	-$100,000.00
491215	Contract Revenue	$0.00	-$5,884.00	$0.00	$0.00	$0.00
491330	Washoe County TRPA	$0.00	-$35,000.00	$0.00	$0.00	$0.00
491406	Insurance Claim Reciepts	$0.00	$0.00	$0.00	-$124.78	$0.00
TRANSFERS IN						
621001	Transfer From General	-$1,073,620.00	-$2,879,305.00	-$1,208,197.00	-$2,496,267.00	-$1,325,253.00
624089	Transfer From Capital Facilities	-$1,950,000.00	-$1,950,000.00	-$1,950,000.00	-$1,950,000.00	-$5,175,000.00
TOTAL REVENUE		$14,026,229.19	$15,705,098.61	$14,996,377.05	$16,684,920.81	$18,428,833.00
EXPENDITURE BUDGET						
Salary/Benefits		$5,847,663.64	$5,776,743.45	$6,278,718.92	$7,040,300.59	$7,434,827.14
Services/Supplies		$5,643,959.58	$6,218,708.94	$6,826,699.32	$7,635,804.55	$7,989,684.88
Equipment/Construction Contracts		$2,827,696.80	$3,479,157.83	$4,493,643.09	$3,458,460.35	$4,306,000.00
TOTAL EXPENDITURES		**$14,319,320.02**	**$15,474,610.22**	**$17,599,061.33**	**$18,134,565.49**	**$19,730,512.02**

*2025 Expected revenues and expenditures

Appendix F

Signal Agreements

INTERLOCAL TRAFFIC SIGNAL MAINTENANCE AGREEMENT BETWEEN CITY OF RENO AND WASHOE COUNTY

THIS INTERLOCAL TRAFFIC SIGNAL MAINTENANCE AGREEMENT made and entered into this 4th day of DECEMBER 2020, by and between the CITY OF RENO, a municipal corporation, hereinafter called the CITY, and WASHOE COUNTY, a political subdivision organized and existing under and by virtue of the laws of the State of Nevada, hereinafter called the COUNTY;

WITNESSETH:

WHEREAS, NRS 277.180 provides that any one or more public agencies may contract with any one or more other public agencies to perform any governmental service, activity or undertaking which any of the public agencies entering into the contract is authorized by law to perform; and

WHEREAS: the City and the County are each a "public agency" in accordance with NRS 277.100; and

WHEREAS, it is the COUNTY'S desire to have the CITY provide traffic signal maintenance service for Washoe County traffic signals; and

WHEREAS, the CITY has the equipment and personnel to provide said traffic signal maintenance; and

WHEREAS, the parties previously entered into a five-year traffic signal maintenance agreement, dated December 16, 2015; and

Whereas, the fiscal year begins July 1, this agreement will be retroactive to July 1, 2020;

NOW, THEREFORE, the CITY and the COUNTY, in consideration of the mutual covenants hereinafter set forth agree as follows:

The CITY agrees:

1. To provide 'REGULAR SIGNAL MAINTENANCE SERVICE' as determined in Exhibit A and in accordance with the Maintenance Management System Guidelines during normal working hours; provide 'ADDITIONAL TRAFFIC SIGNAL SERVICES' during normal working hours when feasible and overtime hours as needed, to include, but are not limited to items listed in Exhibit A. The Washoe County traffic signals are listed in Exhibit B; signals may be added or deleted by written notification to the Reno Director of Public Works. Services rendered by the CITY shall not exceed a value of $70,000 per contract year, unless otherwise amended through the fee schedule (Exhibit C).

2. To quarterly, on or about the tenth day of each quarter, provide the COUNTY with a quarterly bill intended to cover all 'REGULAR SIGNAL MAINTENANCE SERVICE' and 'ADDITIONAL TRAFFIC SIGNAL SERVICES' for work provided during normal working hours and overtime hours according to the fee schedule (Exhibit C).

   To annually, on or about February 1st of each year, provide the fee schedule (Exhibit C) for the next budget year.

3. To provide monthly documentation of work performed on Washoe County signals, including Maintenance Management records and daily work reports completed by the employee performing work.

The COUNTY agrees:

1. This Agreement operates retroactively to July 1, 2020, the beginning of the fiscal year.

2. This Agreement replaces the traffic-signal-maintenance agreement between the County and City, dated December 16, 2015.

3. To investigate complaints relating to signal maintenance needs before relaying information to the CITY.

4. To make payments to the CITY within thirty (30) days of receipt of any billing provided by the CITY.

5. To order, pay for and provide the CITY with all materials and supplies requested by the CITY or determined necessary by the COUNTY and associated with traffic signal maintenance and repair, as provided for by this Agreement.

6. To notify the CITY of proposed new signal installations and to allow the CITY to review and comment on traffic signal design plans.

Both the CITY and the COUNTY agree:

1. That either party, via the CITY'S City Manager or the COUNTY'S County Manager or through their respective designated representative, may terminate this Agreement by giving written notice, sixty (60) days before such termination, to the other party.

2. That this Agreement shall be in effect for a period of five years, ending on June 30, 2025, unless terminated pursuant to (1) above.

3. To develop, maintain and adjust, as needed, a protocol for call out of personnel including names, telephone numbers, and instructions for County Sheriff personnel and City dispatchers.

4. The County reasonably believes that funds can be obtained sufficiently to make all payments during the term of this Agreement. If the County does not allocate funds to continue the function performed by the Contractor obtained under this Agreement, this Agreement shall be terminated when appropriated funds expire, without penalty, charge or sanction to the County.

5. Subject to the limitations of Chapter 41 of NRS and any other applicable laws, and without waiving its statutory protections, the parties agree that each is responsible for any liability or loss that may be incurred as a result of any claim, demand, cost, or judgment made against that party arising from any negligent act by any of that party's employees, agents, or servants in connection with the performance of this Agreement.

6. If any provision of this Agreement is determined to be illegal, invalid, or unenforceable , the provision shall be deleted and the parties shall, if possible, agree on a legal, valid, and enforceable substitute

provision that is as similar in effect to the deleted provision as possible. The remaining portion of the Agreement not determined to be illegal, invalid, or unenforceable shall, in any event, remain valid and effective for the term remaining unless the provision found illegal, invalid, or unenforceable goes to the essence of this Agreement.

7. This Agreement and the performance of the duties described in the Agreement are governed, interpreted and construed in accordance with Nevada law, without regard to choice of law principles. Each party consents to personal jurisdiction and exclusive venue in the Second Judicial District Court in and for the County of Washoe located in Washoe County, Nevada.

8. The parties further agree to the extent allowed by law pursuant to Nevada Revised Statute chapter 41, to hold harmless, indemnify, and defend each other from any and all losses, liabilities, or expenses of any nature to the person or property of another to which each may be subjected as a result of any claim, demand, action or cause of action arising out of the negligent acts, errors, or omissions on the part of the employees, agents, or servants of the others.

9. That all communications/notices required pursuant to the Agreement shall be given as hereinafter provided, unless written notice of a new designee is sent certified or registered mail, to the other party, as follows:

COUNTY: Dave Solaro, P.E.
Community Services Director
1001 E. Ninth Street
Reno, Nevada 89512
(775) 328-3600

RENO: John Flansberg, P.E.
Public Works Director
P.O. Box 1900
Reno, Nevada 89505
(775) 334-2350

10. This Agreement contains the entire agreement of the parties with respect to the matters addressed herein. This Agreement may not be amended, nor may any of the terms, covenants, representations, warranties or conditions hereof be waived, except by a written instrument executed by the party against which such amendment is to be charged.

11. The only parties who may enforce this Agreement and any of the rights under this Agreement are the parties hereto.

In Witness Thereof, the Parties have executed this Agreement as of the date and year appearing herein.

CITY OF RENO,

Hillary L. Schieve, Mayor

COUNTY OF WASHOE

Bob Lucey, Chair
Board of County Commissioners

ATTEST:

Ashley D. Turney, Reno City Clerk

ATTEST:

Jan Galassini, Washoe County Clerk

Approved as to Form:

Deputy City Attorney

Exhibit A

Traffic Signal Maintenance Services

Regular Traffic Signal Maintenance Services

- Signal Preventative Maintenance
- Cabinet/ground Preventative Maintenance
- Safety/Conflict Monitors
- General Signal Maintenance
- Illuminated Street Name Sign Maintenance

Additional Traffic Signal Services

Including but not limited to the following

- School Flasher Maintenance
- Signal Response Pedestrian Signal Repair
- Bench Repair
- Vehicle Detection
- Bulb Replace
- Signal Head Repair
- Cabinet Rehab/Construction
- New Signal Inspection
- Review Traffic Signal Design Plans
- Signal Interconnect
- USA Locates
- Limited Street Light Maintenance

Exhibit B

Washoe County Traffic Signals

Updated: 03-06-2023

Location

1. Arrowcreek Pkwy/Zolezzi Lane
2. Mt. Rose Hwy/Galena Fire Station
3. Mt. Rose Hwy/Thomas Creek Rd
4. Mt Rose Hwy/Wedge Pkwy
5. Pyramid Way/Eagle Canyon Dr
6. Pyramid Way/Golden View Dr
7. S.R. 28/Country Club Dr
8. S.R. 28/Crystal Bay
9. S.R. 28/Northwood Blvd/Southwood Blvd
10. S.R. 28/Village Blvd
11. Sun Valley Blvd/1st Ave
12. Sun Valley Blvd/2ndt Ave
13. Sun Valley Blvd/4thAve
14. Sun Valley Blvd/5th Ave
15. Sun Valley Blvd/7thAve
16. Sun Valley Blvd/Dandini Blvd
17. Wedge Pkwy/Golden Gate Dr
18. Pyramid Way/W. Calle de la Plata
19. Sun Valley Blvd/Highland Ranch Pkwy
20. Arrowcreek Pkwy/Thomas Creek Dr
21. El Rancho Dr./Moorpark Ct
22. Silent Sparrow Dr/W. Calle de la Plata
23. Pyramid Way/Egyptian Dr

Exhibit C

Fee Schedule for FY 2023-2024

The charged rate shall be calculated using a 2.1 multiplier and the current wage rate. As of July 1, 2023 the charged rates are as shown below.

Regular time hourly rate for Traffic Signal Mechanic	$82.37
Regular time hourly rate for Traffic Signal Technician	$88.57
Regular time hourly rate for Associate Civil Engineer	$133.16
Regular time hourly rate for Traffic Engineer	$183.07
Overtime hourly rate for Traffic Signal Mechanic	$123.55
Overtime hourly rate for Traffic Signal Technician	$132.85
Overtime hourly rate for Associate Civil Engineer	$199.74
Overtime hourly rate for Traffic Engineer	$274.61

Equipment per MaintStar charge rates.

Supplies and materials will be charged at cost

Exhibit D

ACTIVITY GUIDELINE
MAINTENANCE MANAGEMENT SYSTEM
City of Reno
Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	PM T.SIGNAL	CODE	201

DESCRIPTION OF WORK

Inspection and repair of overhead traffic signals following a preventative maintenance check list. Work may include repair or replacement of damaged or defective signal head components, cleaning of all reflectors and lenses, touch-up painting signal heads, inspection of poles, mast arms and associated hardware and relamping signal heads as necessary .

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	8	8	9	9	9	9	9	8	9	8	7	8

Performed annually - following check list. - may be affected by weather.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.25

Equipment	Qty
BOOM TRUCK	1.00

Materials	Qty
3S LENS	1.0 EA
RAGS	2.0 PO
HAND HOLE CVR	0.1 EA
PULL BX LD 5	1.0 EA
PULL BOX 5	1.0 EA
BACKPLATE	1.0 EA

WORK METHOD

PRE-DEPARTURE
1. Ready supplies, equipment and perform CDL Inspection check.

AT WORK SITE
2. Perform visual Inspection. Record findings
3. Set up work zones, signs and cones.
4. Carry out maintenance and repair as per check list.
5. Clean up - vacate site.

END OF SHIFT
6. Document work, and signal guideline checklist (see attached)

CHECK POINTS

- Observe traffic flow
- Appropriate personal protective equipment (PPE)
- Follow current NV Work Zone Traffic Control Handbook and MUTCD
- Move work zone signs/cones.

- Complete records

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
227.00 SIGNALS		

AVERAGE DAILY PRODUCTION	APPROVAL	
1.50 INTSECT		

ACTIVITY GUIDELINE
MAINTENANCE MANAGEMENT SYSTEM
City of Reno
Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	CABINET PM	CODE	202

DESCRIPTION OF WORK

Preventative maintenance for traffic signal cabinet. This includes cleaning of cabinet and its components, checking operation of signal and its components, and making repair as necessary. A detailed check list is followed to allow all components to be properly inspected and maintained.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	8	8	9	8	8	10	8	8	9	8	8	8

Perform semi-annually following checklist and includes one operational observation check to be conducted with at least four months between PM and opeartional check.. May be effected by weather.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG TECH	0.65

Equipment	Qty
PICKUP/UTILITY TRUCK	1.00
SHOP VAC	1.00

Materials	Qty
RAGS	2.0 PO
WIRE	1.0 FO
CLEANING MTL	1.0 CA
MIS NUTS&BOLT	5.0 EA
AIR FILTER	1.0 EA
HAND HOLE CVR	1.0 EA
FLASHER-REG	1.0 EA

WORK METHOD

PRE-DEPARTURE
1. Ready equipment and perform CDL inspection check.

AT WORK SITE
2. Perform visual inspection, record findings per check list.
3. Set up work zone.
4. Carry out maintenance and repair as per check list.
5. Clean up and vacate site.

END OF SHIFT
6. Document work.
7. Refuel Vehicles.

CHECK POINTS

-Observe operation and traffic flow
-Follow current NV Work ZoneTraffic Control Handbook and MUTCD
-Follow Checklist
- Appropriate PPE
-Move work zone signs/cones

-Complete records

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
227.00 SIGNALS		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
6.00 CABINETS		

ACTIVITY GUIDELINE
MAINTENANCE MANAGEMENT SYSTEM
City of Reno
Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	SAFETY MONITOR	CODE	203

DESCRIPTION OF WORK

Remove existing malfunction management unit from cabinet, exchange with a tested unit.
Return removed unit to signal shop test bench and verify correct operation on test equipment.
Download and document test results. Accomplishments include both the test (1) and the replacement (1).

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	10	10	9	8	8	7	7	7	8	8	9	9

ITMS and ITE guidelines require MMUs be tested and results documented at least once a year.
Accomplishment count = both test (1) and replacement (1) for a total of 2.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
Personnel	*Qty*	PRE-DEPARTURE	- Appropriate PPE
TRF SIG TECH	0.85	1. Stock truck with supplies and tested units .	
Equipment	*Qty*		- Observe traffic flow
PICKUP/UTILITY TRUCK	1.00	AT WORK SITE	
Materials	*Qty*	2. Place signal on flash	
/FLICT MONITOR	0.3 EA	3. Remove existing unit	
		4. Exchange program card.	
		5. Ensure copy of test inserted on document pocket	
		6. Return to operation, observe correct operation.	
		7. Set time in monitor and verify correct program card	
		8. Clear existing fault log	
		END OF SHIFT	
		9. Document work.	

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
227.00 MONITORS		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
14.00 MONITORS		

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	SCH FLSH MAINT	CODE	205

DESCRIPTION OF WORK

All work associated with the timing of school flasher signals (as supplied on list by School District) -- setting operation days & times, programming "off" days (school holidays), changing clock batteries, checking signal alignment and testing operation to insure proper timing of signals and control of vehicle speed in school zones.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	22	32	0	0	0	0	0	0	0	0	20	26

Performed twice a year prior to school terms ,or as required due to schedule changes or signal malfunctions.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.25

Equipment	Qty
BOOM TRUCK	0.50
PICKUP/UTILITY TRUCK	0.50

Materials	Qty
9V BATTERIES	7.0 EA
GLASS LENS	7.0 EA
RAGS	1.0 PO
SIGNAL BULBS	17.0 EA
WINDOW CLEANR (TRAI	1.0 GA
USA PAINT	2.0 EA
REFLECTOR	3.0 EA

WORK METHOD

PRE-DEPARTURE
1. Ready equipment and perform CDL inspection check.
2. Determine route

AT WORK SITE
3. Remove battery - kill power.
4. Install new battery.
5. Reset clock and programs.
6. Set current time, day, month and year.
7. Set on/off holiday schedule.
8. Review program.
9. Test override.
10. Set to normal.
11. Cleaning, bulb change

END OF SHIFT
12. Document work.

CHECK POINTS

- Produce schedule list for different zones

- Check for available AC power
- Check fuse
- Traffic Control.
- Appropriate PPE.

- Check operation of flasher and lights.

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
43.00 LOCATION!		

AVERAGE DAILY PRODUCTION	APPROVAL			
1.30 LOCATION!				

ACTIVITY GUIDELINE
MAINTENANCE MANAGEMENT SYSTEM
City of Reno
Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	INTERC CABLE	CODE	206

DESCRIPTION OF WORK

All work associated with maintaining communications on City owned interconnect cables between City Hall Traffic Signal Control computer and 150 traffic signals. Additionally, work includes maintenance and communications over 8 leased telephone/data lines to 30 traffic signals. Includes testing, diagnosis, replacement of cable and verify operation of wireless communication.

PLANNING PERIOD	01/01 - 01/31	02/01 - 02/28	03/01 - 03/30	04/01 - 04/30	05/01 - 05/31	06/01 - 06/30	07/01 - 07/15	07/01 - 07/31	08/01 - 08/31	09/01 - 09/30	10/01 - 10/31	11/01 - 11/30
	7	7	7	7	7	12	12	8	8	8	8	8

Communications problems are reported and logged by the computer system.
City has 3 cables, 25 pair, 18 pair and 12 pair branching throughout the City.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.50
TRF SIG TECH	0.50

Equipment	Qty
BOOM TRUCK	0.05
PICKUP/UTILITY TRUCK	0.95

Materials	Qty
CABLE	100.0 FO
SPLICE KIT	5.0 EA
TAPE	2.0 RO
TERMINAL LUGS	10.0 EA

WORK METHOD

Pre-Departure
1. Ready equipment and perform CDL inspection as required
2. Determine shop/field fault.
3. Signal/no signal/hum.
4. Connect signal generator to line.
5. Load equipment.

AT WORK SITE
6. Track signal along route.
7. Check signal at destination.
8. Trace line back to source. Break as required to determine fault direction.
9. Find fault.
10. Repair as required/resplice/ replace cable/find spot where contractor dug up and change pair.

END OF SHIFT
12. Document work.

CHECKPOINTS

- Traffic Control
- Appropriate PPE
- Copy of interconnect cable wire plan
- Load test equipment and materials

- Hook up shop test equipment
- Determine repair/replacement complete/clean signal

- Return to shop
- Put intersections back on line
- Complete records

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
50.00 CBL MILE		

AVERAGE DAILY PRODUCTION	APPROVAL				
12.00 LABOR HR					

ACTIVITY GUIDELINE
MAINTENANCE MANAGEMENT SYSTEM
City of Reno
Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	VMS 330 SYSTEM MAINT	CODE	208

DESCRIPTION OF WORK

Enter or modify system paramenters as directed by traffic engineering. Check daily for system problems and traffic signal malfunctions reported by the system. Monitor system for proper operation. Generate monthly operation log report. Generate system reports as required. Reload system software when required, backup system paramenters monthly. Troubleshoot system failures. Check ITMS.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	8	8	9	7	8	9	8	8	9	9	8	9

This work is performed routinely on a daily basis.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
Personnel	*Qty*	1. Check system operation by access with monitor or keyboard. 2. Check system alarms and print reports. 3. Enter timing and data for signals with keyboard or monitor. 4. Use tape drive and floppy discs as required to back up system. 5. Change out system components as required, repair, exchange or send for repair of failed components.□ - Consult system manuals.	- Check help files. - Monitor system reports and displays. - Monitor system alarms. - Communicate with Engineer
TRF SIG TECH	0.85		

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
181.00 SIGNALS		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
8.00 LABOR HR		

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	PED SIGNAL REPAIR	CODE	240

DESCRIPTION OF WORK

All work required to maintain, repair, modify and/or replace malfunctioning pedestrian signals, indications and buttons to insure that pedestrian movement is safely controlled and coordinated.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/28	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	8	8	9	8	9	9	7	8	10	10	7	7

Performed as required in response to service requests and/or as needed

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.25
TRF SIG TECH	0.20

Equipment	Qty
VAN	1.00

Materials	Qty
NS CONVERT KT	4.0 EA
FUSES	1.0 EA
MODULE	7.0 EA
LUBRICANT	1.0 CA
WIRE	4.0 FO
PED BUTTON	0.3 EA
PED DIR SIG	0.3 EA

WORK METHOD

PRE-DEPARTURE
1. Ready equipment and perform CDL inspection
2. Receive request
3. Proceed to intersection.

AT WORK SITE
4. Determine which head has problem.
5. Replace or repair module, install conversion kit or repair button.
6. Check sign plates, egg crates, visors & alignment.
7. Check operation.

END OF SHIFT
8. Document work.

CHECK POINTS

- Traffic Control
- Appropriate PPE
- Check for voltage
- Check buttons
- Check fuses and wiring
- Check signal components

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
1758 ~~1616.00~~ EACH		

AVERAGE DAILY PRODUCTION	APPROVAL
7.00 PED SIGNA	

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	BENCH REPAIR	CODE	241

DESCRIPTION OF WORK

All work required to troubleshoot and repair faulty electronic traffic signal components, such as; signal controllers, safety monitors, opticom detectors, vehicle detectors, modems, power supplies and other related components.
Also includes equipment testing, new evaluation and repair.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/28	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	10	10	8	9	8	7	7	7	8	8	9	9

Performed as required.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
Personnel	Qty	AT BENCH	- ID tag
TRF SIG TECH	0.85	1. Determine problem/trouble type. 2. Troubleshoot. 3. Make repairs. 4. Run equipment for extended period. 5. Sign off/log in computer - if applicable. 6. Return warranty items for repair. 7. Document work.	- Manufacturer's manuals schematics - Determine operating correctly - Check under temp extremes - Sign off - Return to stock

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
227.00 EACH		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
9.00 LABOR HR		

ACTIVITY GUIDELINE
MAINTENANCE MANAGEMENT SYSTEM
City of Reno
Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	LOOP/DETECTION MAINT	CODE	242

DESCRIPTION OF WORK

All work required to diagnose maintain and/or repair traffic detector loop malfunctions. Activity is performed to insure proper detection loop operation and safely control traffic movement at intersections.

PLANNING CRITERIA	07/01 - 07/31	08/01 - 08/31	09/01 - 09/30	10/01 - 10/31	11/01 - 11/30	12/01 - 12/31	01/01 - 01/31	02/01 - 02/29	03/01 - 03/31	04/01 - 04/30	05/01 - 05/31	06/01 - 06/30
	0	0	0	0	0	0	0	0	0	0	0	0

Performed as required in response to service requests or as needed.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.60
TRF SIG TECH	0.40

Equipment	Qty
PICKUP/UTILITY TRUCK	1.00

Materials	Qty
AMPLIFIER	0.1 EA
CABLE	4.0 FO
NUTS/LUGS	10.0 EA
SEALING PACS	2.0 EA
WIRE NUTS	5.0 EA

WORK METHOD

PRE-DEPARTURE
1. Ready equipment and perform CDL Inpsection
2. Travel to work site.

AT WORK SITE
3. Determine if there is a detector problem.
4. Test amplifier and controller cabinet or field problem.
5. Remove loop lead and test.
6. Test loop lead in.
7. Check splices.
8. Re-hook good loops and adjust timing.
9. Reset Amp.

END OF SHIFT
10. Document work.

CHECK POINTS

- Traffic Control
- Appropriate PPE
- Check connections
- Check ground or open
- Check street condition for signs of damage or failure
- Observe operation

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
6210.00 LOOPS		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
9.00 LABOR HR		

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	VIDEO MICR DECTECTORS	CODE	243

DESCRIPTION OF WORK

All work required to diagnose, maintain and/or repair video/microwave detectors. Activity is performed to ensure safe operation and safety control traffic movement at intersections.

PLANNING CRITERIA	07/01 07/31	08/01 08/30	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	8	8	8	8	8	8	6	6	10	8	8	8

Performed as required in response to service requests or as needed.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.75
TRF SIG TECH	0.40

Equipment	Qty
BOOM TRUCK	1.00
IPRESSOR	1.00
CONCRETE SAW	1.00
PICKUP/UTILITY TRUCK	1.50

Materials	Qty
LOOP WIRE	500.0 FO
SEALANT (LOOPS)	24.0 PO

WORK METHOD

PRE-DEPARTURE
1. Ready equipment and perform CDL inspection
2. Travel to work site

AT WORK SITE
3. Connect lap top as required.
4. Connect video monitor as required.
5. Analyze problem and observe operation
6. Check programming
7. Change as needed.

END OF SHIFT
8. Document work.

CHECK POINTS

- Traffic Control
- Appropriate PPE
- Check connections
- Observe operation

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
39.00 INTSECT		

AVERAGE DAILY PRODUCTION	APPROVAL				
10.00 LABOR HR					

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	LED REPLACE	CODE	245

DESCRIPTION OF WORK

All work required to replace LEDs as needed.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	7	8	9	10	9	9	8	8	9	8	8	7

Performed as needed.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
Personnel	*Qty*	PRE-DEPARTURE	- Appropriate PPE
TRF SIG MECH	1.25	1. Ready and perform CDL inspection check. 2. Pick up boom truck. 3. Load LEDs	
Equipment	*Qty*		- Follow current NV Work Zone Traffic Control Handbook and MUTCD - Check head alignment and tightness. - Check backplate for looseness
BOOM TRUCK	1.00	AT WORK SITE 4. Replace LED	
Materials	*Qty*		
‹L LAMP LED	11.0 EA	END OF SHIFT 5. Document work	

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
3000.00 EACH		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
15.00 LEDS		

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	SIGNAL HEAD REPAIR	CODE	247

DESCRIPTION OF WORK

All work required to change lenses, visors, back plates, sockets, internal wires, alignment, frame to assure proper operation of traffic signal.

PLANNING CRITERIA	5 Yr.	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
		8	8	9	8	8	9	7	8	9	8	8	10

Work is performed as needed.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
Personnel	**Qty**	PRE-DEPARTURE	- Appropriate PPE
TRF SIG MECH	1.75	1. Pick up boom truck and perform CDL Inspection	- Follow current NV Work Zone Traffic Control Handbook and MUTCD
Equipment	**Qty**	AT WORK SITE	
BOOM TRUCK	0.75	2. Set up work zone	
PICKUP/UTILITY TRUCK	0.25	3. Perform repair as needed.	
Materials	**Qty**	END OF SHIFT	
DOG HOUSE SIGNAL HE	2.0 EA	4. Document work.	

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
3000.00 SIGNAL HD		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
5.00 SIGNAL HD		

ACTIVITY GUIDELINE

MAINTENANCE MANAGEMENT SYSTEM

City of Reno

Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	ILLUM STR NAME SIGN MAINT	CODE	252

DESCRIPTION OF WORK

Maintenance and repair of illuminated street signs. Work may include replacement of bulbs, ballasts, fuses, wiring, missing or damaged name panels and checking sign mounting hardware. This effort insures proper direction to motorists and pedestrians.

PLANNING CRITERIA	07/01 01/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	8	8	9	8	8	9	8	8	9	8	8	9

Performed in response to service requests or as reported in quarterly street light survey and every 36 months per local standards.

RESOURCE REQUIREMENTS

Personnel	Qty
TRF SIG MECH	1.25
TRF SIG TECH	0.20

Equipment	Qty
BOOM TRUCK	1.00

Materials	Qty
SL BALLAST	2.0 EA
FL BULBS	14.0 EA
FUSES	4.0 EA
SEALING PACS	4.0 EA
SOCKETS	2.0 EA
TAPE	1.0 RO

WORK METHOD

PRE-DEPARTURE
1. Pick up boom truck and perform CDL inspection check.
2. Load materials.
3. Check quarterly list & establish route.
4. Proceed to work location.

AT WORK SITE
5. Setup work zone as needed.

6. Turn on override or cover photo control.
7. Replace bulbs.
8. Check panel thumb screws.
9. Check mounting and hardware.
10. Uncover photo control.

END OF SHIFT
11. Document work.

CHECK POINTS

- Set up route
- Appropriate PPE
- Follow current NV Work Zone Traffic Control Handbook and MUTCD
- Check for incoming voltage
- Check fuses
- Trouble shoot sockets and ballasts
- Replace or repair as needed

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
800.00 SIGNS		

AVERAGE DAILY PRODUCTION	APPROVAL				
7.00 SIGNS					

ACTIVITY GUIDELINE
MAINTENANCE MANAGEMENT SYSTEM
City of Reno
Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	ILLUM STREET SIGNS	CODE	253

DESCRIPTION OF WORK

Maintenance and repair of illuminated street signs. Work may include replacement of bulbs, ballasts, fuses, wiring, missing or damaged name panels and checking sign mounting hardware. This effort insures proper direction to motorists and pedestrians.

PLANNING CRITERIA	07/01 07/31	08/01 08/31	09/01 09/30	10/01 10/31	11/01 11/30	12/01 12/31	01/01 01/31	02/01 02/29	03/01 03/31	04/01 04/30	05/01 05/31	06/01 06/30
	10	10	9	8	8	7	7	7	8	8	9	9

Performed in response to service requests or as reported in street light quarterly survey.
Signs include one way arrows and No left turn signs.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
Personnel	**Qty**	PRE-DEPARTURE	- Set up route
TRF SIG MECH	1.00	1. Pick up boom truck and perform CDL Inspection check.	- Appropriate PPE
TRF SIG TECH	0.40	2. Load materials.	
Equipment	**Qty**	3. Check requests & establish route.	- Follow current NV Work Zone Traffic Control Handbook and MUTCD
BOOM TRUCK	1.00	4. Proceed to work location.	- Check for incoming voltage
Materials	**Qty**	AT WORK SITE	- Check fuses
BALLAST	1.0 EA	5. Setup work zone as needed.	- Trouble shoot sockets and ballasts
FLOURES TUBES	20.0 EA	6. Turn on override or cover photo control.	- Replace or repair as needed
PHOTOCELLS	2.0 EA	7. Replace bulbs.	
		8. Check panel thumb screws.	
		9. Check mounting and secureness of hardware.	
		10. Uncover photo control.	
		END OF SHIFT	
		11. Document work.	

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
100.00 SIGNS		
AVERAGE DAILY PRODUCTION	**APPROVAL**	
4.00 SIGNS		

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INTERLOCAL AGREEMENT

This AGREEMENT, made and entered into on 07/30/2019, by and between the State of Nevada, acting by and through its Department of Transportation, hereinafter called the "DEPARTMENT", and the City of Reno, 1 E. First St., Reno, NV 89505, hereinafter called the "AGENCY". Individually they are each a "Party" and collectively they are the "Parties."

WITNESSETH:

WHEREAS, an Interlocal AGREEMENT is defined as an AGREEMENT by public agencies to "obtain a service" from another public agency; and

WHEREAS, pursuant to the provisions contained in Chapter 408 of the Nevada Revised Statutes (NRS), the Director of the DEPARTMENT may enter into those agreements necessary to carry out the provisions of the Chapter; and

WHEREAS, NRS 277.180 authorizes any one or more public agencies to contract with any one or more other public agencies to perform any governmental service, activity, or undertaking which any of the public agencies entering into the agreements is authorized by law to perform and refers to such as an interlocal contract; and

WHEREAS, the purpose of this Agreement is to establish roles and responsibilities for ownership, maintenance, operation, and repair of the traffic signal systems as listed by intersection according to Article III, Paragraph 4, hereinafter called "SIGNAL SYSTEMS"; and

WHEREAS, This Agreement supersedes and replaces any other existing Agreement or Agreement language pertaining to the SIGNAL SYSTEMS that govern traffic movements along the DEPARTMENT's State Maintained Highways and Routes. Portions of these SIGNAL SYSTEMS may also be located within the AGENCY's jurisdictional boundaries or may be included entirely by virtue of prior maintenance responsibilities ; and

WHEREAS, the SIGNAL SYSTEM services of the AGENCY will be of benefit to the DEPARTMENT, the AGENCY, and to the people of the State of Nevada; and

WHEREAS, the SIGNAL SYSTEMS consist of pole foundations, signal lights, supporting arms and poles, luminaire arms and luminaires attached to signal poles, signal controller, controller cabinet and internal components, power service, battery back-up, conductors, detection system, intersection and interconnect cabling, advance flashers, and all related equipment to make the traffic signals fully functional at each intersection; and

WHEREAS, maintenance is defined as actions performed on a regularly scheduled basis to preserve the intended working condition of the SIGNAL SYSTEMS up to and including full service life replacement. Also, minor actions to correct a recurring problem, accommodate changes in prevailing traffic, or to update equipment to the current state of the practice; and

WHEREAS, capital improvement is defined as a major modification to the physical configuration and/or operational parameter of the SIGNAL SYSTEMS; and

WHEREAS, capital improvements are not included in this Agreement and shall be initiated by a permit application submitted to the District Permit Office; and

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WHEREAS, the Parties hereto are willing and able to perform the services described herein.

NOW, THEREFORE, in consideration of the premises and of the mutual covenants herein contained, it is agreed as follows:

ARTICLE I – AGENCY AGREES

1. To operate, maintain, repair, and provide necessary labor and electrical power for all SIGNAL SYSTEMS and all related ancillary components required to safely operate and maintain the SIGNAL SYSTEMS. Maintenance, repair, and operational standards and practices shall be consistent with applicable state and national standards and guidelines.

2. To invoice the DEPARTMENT for one hundred percent (100%) of the replacement/repair cost for all SIGNAL SYSTEMS equipment replaced or repaired due to incidental damages, provided replacement/repair costs exceed One Thousand Five Hundred and No/100 Dollars ($1,500.00) and are unrecoverable by insurance or other means.

3. To invoice the DEPARTMENT for one hundred percent (100%) of emergency replacement or repair costs without prior written agreed upon costs associated to the SIGNAL SYSTEMS. All invoices submitted for emergency costs (unrecoverable by insurance) shall contain documentation that fully describes the emergency situation and justification for the claim.

4. To notify the DEPARTMENT in writing and obtain written approval from the DEPARTMENT for unforeseen work (not otherwise explained in this Agreement) any SIGNAL SYSTEM for which the AGENCY is wanting to be reimbursed by the DEPARTMENT.

5. To invoice the DEPARTMENT after maintenance, repairs, or replacement of the agreed upon work has been successfully completed by the AGENCY.

6. To submit to the DEPARTMENT any as-built plans or documentation of work performed on SIGNAL SYSTEMS. The documentation submitted shall reference this Agreement number on the first page of each submittal.

7. To provide the DEPARTMENT District Engineer with a list of anticipated SIGNAL SYSTEM maintenance or repairs exceeding One Thousand Five Hundred and No/100 Dollars ($1,500.00), each list to include an estimated annual cost for which the AGENCY will request reimbursement. This list shall be delivered to the DEPARTMENT District Engineer within thirty (30) calendar days of initial excecution of this Agreement and by the 31^{sl} day of January of each year thereafter to enable budgeting of necessary funds. Available funding may impact approval of work requiring reimbursement.

8. To perform routine maintenance and coordinate with the DEPARTMENT Permit Office, at (775) 834-8330, at least two (2) working days prior to performing scheduled maintenance activities and provide information regarding the nature of the activity and planned traffic control information. The Permit Office will prepare all required highway restriction reports and coordinate with affected DEPARTMENT operations. A DEPARTMENT encroachment permit is not needed for maintenance or repair work performed on SIGNAL SYSTEMS.

9. To notify DEPARTMENT with as much notice as possible if emergency repair activities cause significant impact to traffic, require lane closures, or require excavation through improved surfaces of the roadway. For emergencies during business hours, notify the DEPARTMENT Permit Office at (775) 834-8330 and during non-business hours the Utilities 24/7 Hotline, at (775) 834-8488.

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ARTICLE II - DEPARTMENT AGREES

1. To fund one hundred percent (100%) of the replacement/repair costs for SIGNAL SYSTEMS equipment replaced or repaired due to incidental damages, provided replacement/repair costs exceed One Thousand Five Hundred and No/100 Dollars ($1,500.00) and are unrecoverable by insurance or other means.

2. To fund one hundred percent (100%) of emergency replacement or repair costs without prior written agreed upon costs (unrecoverable by insurance) associated with the SIGNAL SYSTEMS.

3. To fund one hundred percent (100%) of cost for approved unforeseen work on the SIGNAL SYSTEMS.

4. To fund one hundred percent (100%) of the costs for the anticipated SIGNAL SYSTEM maintenance or repairs exceeding One Thousand Five Hundred and No/100 Dollars ($1,500.00) each provided that the list is received by the DEPARTMENT District Engineer on time (as noted in Article I, Paragraph 7) and the budget for reimbursement is approved.

5. To process each of the AGENCY's invoices upon validation of costs and within thirty (30) calendar days upon receipt.

ARTICLE III - IT IS MUTUALLY AGREED

1. The term of this Agreement shall be from the date first written above through and including two (2) years from date above. This Agreement shall be automatically renewed for an additional two-year period on the last day of each two-year term unless a Party notifies the other Party in writing within thirty (30) calendar days prior to the automatic renewal of this Agreement of its intention that this Agreement expire at the completion of the two-year term then in effect.

2. This Agreement shall not become effective until and unless approved by appropriate official action of the governing body of each Party.

3. The DEPARTMENT retains ownership of all SIGNAL SYSTEMS that govern traffic movements along the DEPARTMENT's State-Maintained Highways/Routes within the DEPARTMENT's right-of-way. Portions of these SIGNAL SYSTEMS may be located within the AGENCY's jurisdictional boundaries or may be included solely by virtue of the AGENCY's prior maintenance responsibilities.

4. A listing of SIGNAL SYSTEMS shall be mutually agreed upon and signed by both Parties upon execution of this Agreement. As SIGNAL SYSTEMS are added and subtracted from the listing due to new construction, relinquishement of roadways or other occurrences, the DEPARTEMENT District Engineer and the AGENCY Public Works Director will agree upon any revisions and sign and date the revised list. The updated list will replace each succeeded list and be available in each Party's records office with a copy sent by the DEPARTMENT District Engineer to the Signals, Lighting and ITS Manager 1 in the DEPARTMENT'S Traffic Operations Division.

5. The AGENCY is exempt from being required to obtain a formal permit from the DEPARTMENT for routine maintenance work on the SIGNAL SYSTEMS. The required coordination with the Department Permit Office is set forth in Article I, Paragraph 8.

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6. If the AGENCY annexes areas with SIGNAL SYSTEMS within DEPARTMENT rights-of-way, then this Agreement shall supersede any previous agreements for those devices.

7. This Agreement may be terminated by either Party prior to the date set forth above, provided that a termination shall not be effective until thirty (30) calendar days after a Party has served written notice upon the other Party. This Agreement may be terminated by mutual consent of both Parties or unilaterally by either Party without cause. The Parties expressly agree that this Agreement shall be terminated immediately if for any reason federal and/or State Legislature funding ability to satisfy this Agreement is withdrawn, limited, or impaired.

8. All notices or other communications required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been duly given if delivered personally in hand, by facsimile with simultaneous regular mail, or by certified mail, return receipt requested, postage prepaid on the date posted, and addressed to the other Party at the address set forth below:

FOR DEPARTMENT:

Kristina L. Swallow, P.E., Director
Attn.: Kevin Maxwell, P.E., SLI Manager
Nevada Department of Transportation
Division: Traffic Operations
1263 South Stewart Street
Carson City, Nevada 89712
Phone: (775) 888-7087
E-mail: kmaxwell@dot.nv.gov

FOR AGENCY:

John L. Flansberg, P.E., Director of Public Works
Attn.: Kurt M. Dietrich, P.E., Traffic Engineer
City of Reno
1 E. First St.
Reno, NV 89505
Phone: (775) 334-3334
E-mail: dietrichk@reno.gov

9. Each Party agrees to keep and maintain under generally accepted accounting principles full, true, and complete records and documents (written, electronic, computer-related, or otherwise) pertaining to this Agreement and present, at any reasonable time, such information for inspection, examination, review, audit, and copying at any office where such records and documentation are maintained. Such records and documentation shall be retained for three (3) years after final payment under this Agreement is made.

10. Failure of either Party to perform any of its obligations under this Agreement shall be deemed a breach. Except as otherwise provided for by law or this Agreement, the rights and remedies of the Parties shall not be exclusive and are in addition to any other rights and remedies provided by law or equity, including, but not limited to, the recovery of actual damages and the prevailing Party's reasonable attorney's fees and costs.

11. The Parties do not waive and intend to assert available NRS Chapter 41 liability limitations in all cases. Agreement liability of both Parties shall not be subject to punitive damages. Actual damages for any DEPARTMENT breach shall never exceed the amount of funds which have been appropriated for payment under this Agreement, but not yet paid, for the fiscal year budget in existence at the time of the breach.

12. Neither Party shall be deemed to be in violation of this Agreement if it is prevented from performing any of its obligations hereunder due to strikes, failure of public transportation,

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civil or military authority, act of public enemy, accidents, fires, explosions, or acts of God, including, without limitations, earthquakes, floods, winds, or storms. In such an event the intervening cause must not be through the fault of the Party asserting such an excuse, and the excused Party is obligated to promptly perform in accordance with the terms of the Agreement after the intervening cause ceases.

13. To the fullest extent of NRS Chapter 41 liability limitations, each Party shall indemnify, hold harmless, and defend, not excluding the other's right to participate, the other from and against all liability, claims, actions, damages, losses, and expenses, including, but not limited to, reasonable attorney's fees and costs, arising out of any alleged negligent or willful acts or omissions of the Party, its officers, employees, and/or agents. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity, which would otherwise exist as to any Party or person, described herein. This indemnification obligation is conditioned upon service of written notice to the other Party within thirty (30) calendar days of the indemnified Party's notice of an actual or pending claim or cause of action. The indemnifying Party shall not be liable for reimbursement of any attorney's fees and costs incurred by the indemnified Party due to said Party exercising its right to participate with legal counsel.

14. The Parties are associated with each other only for the purposes and to the extent set forth in this Agreement. Each Party is and shall be a public agency separate and distinct from the other Party and shall have the right to supervise, manage, operate, control, and direct performance of the details incident to its duties under this Agreement. Nothing contained in this Agreement shall be deemed or construed to create a partnership or joint venture, to create relationships of an employer-employee or principal-agent, or to otherwise create any liability for one agency whatsoever with respect to the indebtedness, liabilities, and obligations of the other agency or any other party.

15. Failure to declare a breach or the actual waiver of any particular breach of this Agreement or its material or nonmaterial terms by either Party shall not operate as a waiver by such Party of any of its rights or remedies as to any other breach.

16. The illegality or invalidity of any provision or portion of this Agreement shall not affect the validity of the remainder of this Agreement, and this Agreement shall be construed as if such provision did not exist. The unenforceability of such provision or provisions shall not be held to render any other provision or provisions of this Agreement unenforceable.

17. Neither Party shall assign, transfer, or delegate any rights, obligations, or duties under this Agreement without the prior written consent of the other Party.

18. Except as otherwise provided by this Agreement, all or any property presently owned by either Party shall remain in such ownership upon termination of this Agreement, and there shall be no transfer of property between the Parties during the course of this Agreement.

19. Pursuant to NRS Chapter 239, information or documents may be open to public inspection and copying. The Parties will have the duty to disclose unless a particular record is confidential by law or a common law balancing of interests.

20. Each Party shall keep confidential all information, in whatever form, produced, prepared, observed, or received by that Party to the extent that such information is confidential by law or otherwise required by this Agreement.

21. The Parties hereto represent and warrant that the person executing this Agreement on behalf of each Party has full power and authority to enter into this Agreement and that the Parties are authorized by law to perform the services set forth herein.

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22. This Agreement and the rights and obligations of the Parties hereto shall be governed by, and construed according to, the laws of the State of Nevada. The Parties consent to the exclusive jurisdiction of the Nevada state district courts for enforcement of this Agreement.

23. It is specifically agreed between the Parties executing this Agreement that it is not intended by any of the provisions of any part of this Agreement to create in the public or any member thereof a third party beneficiary status hereunder, or to authorize anyone not a Party to this Agreement to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of this Agreement.

24. This Agreement constitutes the entire Agreement of the Parties and such is intended as a complete and exclusive statement of the promises, representations, negotiations, discussions, and other Agreements that may have been made in connection with the subject matter hereof. Unless an integrated attachment to this Agreement specifically displays a mutual intent to amend a particular part of this Agreement, general conflicts in language between any such attachment and this Agreement shall be construed consistent with the terms of this Agreement. Unless otherwise expressly authorized by the terms of this Agreement, no modification or amendment to this Agreement shall be binding upon the Parties unless the same is in writing and signed by the respective Parties hereto and approved by the Attorney General.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the day and year first above written.

City of Reno

Hillary L. Schieve, Mayor

Attest:

Ashley D. Turney, City Clerk

Approved as to Form:

Deputy City Attorney

State of Nevada, acting by and through its DEPARTMENT OF TRANSPORTATION

DocuSigned by:
Kristina L. Swallow
C4B612H022C1E4FB...
Kristina L. Swallow, Director

Approved as to Legality & Form:

DocuSigned by:
Shane Chesney
B051b2A5B24B2415...
Deputy Attorney General

DocuSign Envelope ID: 86AA22FC-94C5-47E5-97CE-45482BDA61BF

City of Reno List of Signal Systems

Intersections along I580 – Martin Luther King Jr Memorial Highway

Moana Lane
Mill Street (NB Ramp)
Mill Street (SB Ramp)
Meadowood Mall Way

Intersections along FRWA24 – Maple Street

Center Street
Sierra Street

Intersections along FRWA25 – Eighth Street

Center Street
Sierra Street

Intersections along FRWA44 – Neil Road

IR580 NB
IR580 SB

Intersections along FRWA49 – Damonte Ranch Parkway

IR580 NB
IR580 SB

Intersections along FWA50 – Durham Road

Villanova Drive

Intersections along FWA51 – Matley Lane

Villanova Drive

Intersections along FRWA52 – Lemmon Drive

US395 NB
US395 SB

Intersections along FRWA54 – Wells Avenue

IR80 WB
IR80 EB

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Intersections along FRWA55 – Keystone Avenue

IR80

Intersections along FRWA58 – Oddie Boulevard

US395 NB
US395 SB

Intersections along SR426 - South Meadows Parkway

IR580 NB
IR580 SB

Intersections along SR431 – Mt Rose Highway

Hertz Boulevard
IR580 SB

Intersections along SR341 – Virginia City Road

Toll Road

Intersections along SR443 – Clear Acre Lane

Scottsdale Road
Selmi Drive
US395

Intersections along SR648 – Second Street

Grand Sierra Resort Driveway
IR580 NB
IR580 SB

Intersections along SR653 - Plumb Lane

Harvard Way
Terminal Way
IR580

Intersections along SR659 - McCarran Boulevard

Airway Drive
Cashill Boulevard / Caughlin Parkway
Clear Acre Lane
Fourth Street
Greensboro Drive

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IR80 WB (Exit 10)
IR80 EB (Exit 10)
Keystone Avenue / Leadership Parkway
Kings Row
Lakeside Drive
Las Brisas Boulevard
Longley Lane
Mae Anne Avenue
Mayberry Drive
Mill Street
Mira Loma Drive
Neil Road
Northtowne Lane
Pembroke Drive / Rock Boulevard
Plumas Drive
Plumb Lane / Caughlin Parkway
Rio Poco Road
Seventh Street
Sierra Highlands Drive
Skyline Boulevard
Smithridge Drive
Socrates Drive / Evans Avenue
Sutro Street
Talbot Lane
US395 NB
US395 SB

Intersections along SR667 – Kietzke Lane

Gentry Way
Grove Street
McCarran Boulevard
Mill Street
Moana Lane
Peckham Lane
Plumb Lane
Second Street
Vassar Street

Intersections along US395A - Virginia Street

Damonte Ranch Parkway / Arrowcreek Parkway
Eighth Street
Foothill Road / South Meadows Parkway
Golden Valley Road
IR580 SB (Exit 63)
IR580 SB (Exit 61)

DocuSign Envelope ID: 86AA22FC-94C5-47E5-97CE-45482BDA61BF

Kietzke Lane
Maple Street
McCabe Drive
McCarran Boulevard (North)
McCarran Boulevard (South)
Mt Rose Highway / Virginia City Road
Panther Drive
Parr Boulevard / Vista Rafael Parkway
South Meadows Marketplace Drive
Wall Street / Bailey Drive

DocuSigned by:
Bhupinder Sandhu 12/19/2023
66A6A8C027DC445...

District 2 Engineer Date
Nevada Department of Transportation

Jerrie Joski 12/7/2023

Director Date
City of Reno Public Works Department

INTERLOCAL AGREEMENT

This AGREEMENT, made and entered into on , by and between the State of Nevada, acting by and through its Department of Transportation, hereinafter called the "DEPARTMENT", and the City of Sparks, 431 Prater Way Sparks, NV 89432, hereinafter called the "AGENCY". Individually they are each a "Party" and collectively they are the "Parties."

WITNESSETH:

WHEREAS, an Interlocal AGREEMENT is defined as an AGREEMENT by public agencies to "obtain a service" from another public agency; and

WHEREAS, pursuant to the provisions contained in Chapter 408 of the Nevada Revised Statutes, the Director of the DEPARTMENT may enter into agreements necessary to carry out the provisions of the Chapter; and

WHEREAS, NRS 277.180 authorizes any one or more public agencies to contract with any one or more other public agencies to perform any governmental service, activity, or undertaking which any of the public agencies entering into the agreements is authorized by law to perform and refers to such as an interlocal contract; and

WHEREAS, the purpose of this Agreement is to establish roles and responsibilities for ownership, maintenance, operation, and repair of the traffic signal systems as listed by intersection according to Article III, Paragraph 4., hereinafter called SIGNAL SYSTEMS; and

WHEREAS, This Agreement supersedes and replaces any other existing Agreement or Agreement language pertaining to the SIGNAL SYSTEMS that govern traffic movements along the DEPARTMENT's State Maintained Highways and Routes. Portions of these SIGNAL SYSTEMS may also be located within the AGENCY's jurisdictional boundaries or may be included entirely by virtue of prior maintenance responsibilities; and

WHEREAS, the SIGNAL SYSTEM services of the AGENCY will be of benefit to the DEPARTMENT, the AGENCY, and to the people of the State of Nevada; and

WHEREAS, the SIGNAL SYSTEMS consist of pole foundations, signal lights, supporting arms and poles, luminaire arms and luminaires attached to signal poles, signal controller, controller cabinet and internal components, power service, battery back-up, conductors, detection system, intersection and interconnect cabling, advance flashers, and all related equipment to make the traffic signals fully functional at each intersection; and

WHEREAS, maintenance is defined as actions performed on a regularly scheduled basis to preserve the intended working condition of the SIGNAL SYSTEMS up to and including full service life replacement. Also, minor actions to correct a recurring problem, accommodate changes in prevailing traffic, or to update equipment to the current state of the practice; and

WHEREAS, capital improvement is defined as a major modification to the physical configuration and/or operational parameter of the SIGNAL SYSTEMS; and

WHEREAS, capital improvements are not included in this Agreement and shall be initiated by a permit application submitted to the District Permit Office; and

WHEREAS, the Parties hereto are willing and able to perform the services described herein.

NOW, THEREFORE, in consideration of the premises and of the mutual covenants herein contained, it is agreed as follows:

ARTICLE I – AGENCY AGREES

1. To operate, maintain, repair, and provide necessary labor and electrical power for all SIGNAL SYSTEMS and all related ancillary components required to safely operate and maintain the SIGNAL SYSTEMS. Maintenance, repair, and operational standards and practices shall be consistent with applicable state and national standards and guidelines.

2. To invoice the DEPARTMENT for one hundred percent (100%) of the replacement/repair cost for all SIGNAL SYSTEMS equipment replaced or repaired due to incidental damages, provided replacement/repair costs exceed One Thousand Five Hundred and No/100 Dollars ($1,500.00) per intersection and are unrecoverable by insurance or other means.

3. To invoice the DEPARTMENT for one hundred percent (100%) of emergency replacement or repair costs without prior written agreed upon costs associated to the SIGNAL SYSTEMS. All invoices submitted for emergency costs (unrecoverable by insurance) shall contain documentation that fully describes the emergency situation and justification for the claim.

4. To notify the DEPARTMENT in writing and obtain written approval from the DEPARTMENT for unforeseen work (not otherwise explained in this Agreement) any SIGNAL SYSTEM in which the AGENCY is wanting to be reimbursed by the DEPARTMENT.

5. To invoice the DEPARTMENT after maintenance, repairs, or replacement of the agreed upon work has been successfully completed by the AGENCY.

6. To submit to the DEPARTMENT any as-built plans or documentation of work performed on SIGNAL SYSTEMS. The documentation submitted shall reference this Agreement number on the first page of each submittal.

7. To provide the DEPARTMENT District Engineer a list of anticipated SIGNAL SYSTEM maintenance, or repairs exceeding One Thousand Five Hundred and No/100 Dollars ($1,500.00) each along with an estimated annual cost for which the AGENCY will request reimbursement. This list shall be delivered to the DEPARTMENT District Engineer within thirty (30) calendar days of initial excecution of this Agreement and by the 31st day of January of each year thereafter to enable budgeting of necessary funds. Available funding may impact approval of work requiring reimbursement.

8. To perform routine maintenance and coordinate with the DEPARTMENT Permit Office, at (775) 834-8330, two (2) working days prior to performing scheduled maintenance activities and provide information regarding the nature of the activity and planned traffic control information. The Permit Office will prepare required highway restriction reports and coordinate with affected DEPARTMENT operations. A DEPARTMENT encroachment permit is not needed for maintenance or repair work performed on SIGNAL SYSTEMS.

9. To notify DEPARTMENT with as much notice as possible if emergency repair activities cause significant impact to traffic, require lane closures, or require excavation through improved surfaces of the roadway. For emergencies during business hours, notify the DEPARTMENT Permit Office at (775) 834-8330 and during non-business hours the Utilities 24/7 Hotline, at (775) 834-8488.

ARTICLE II - DEPARTMENT AGREES

1. To fund one hundred percent (100%) of the replacement/repair costs for SIGNAL SYSTEMS equipment replaced or repaired due to incidental damages, provided replacement/repair costs exceed One Thousand Five Hundred and No/100 Dollars ($1,500.00) and are unrecoverable by insurance or other means.

2. To fund one hundred percent (100%) of emergency replacement or repair costs without prior written agreed upon costs (unrecoverable by insurance) associated with the SIGNAL SYSTEMS.

3. To fund one hundred percent (100%) of cost for approved unforeseen work on the SIGNAL SYSTEMS.

4. To fund one hundred percent (100%) of the costs for the anticipated SIGNAL SYSTEM maintenance or repairs exceeding One Thousand Five Hundred and No/100 Dollars ($1,500.00) each provided that the list is received by the DEPARTMENT District Engineer on time (as noted in Article I, Paragraph 7) and the budget for reimbursement is approved.

5. To process each of the AGENCY's invoices upon validation of costs and within thirty (30) calendar days upon receipt.

ARTICLE III - IT IS MUTUALLY AGREED

1. The term of this Agreement shall be from the date first written above through and including two years from date above. This Agreement shall be automatically renewed for an additional two-year period on the last day of each two-year term unless a Party notifies the other Party in writing within thirty (30) calendar days prior to the automatic renewal of this Agreement of its intention that this Agreement expire at the completion of the two-year term then in effect.

2. This Agreement shall not become effective until and unless approved by appropriate official action of the governing body of each Party.

3. The DEPARTMENT retains ownership of all SIGNAL SYSTEMS that govern traffic movements along the DEPARTMENT's State Maintained Highways/Routes within the DEPARTMENT's right-of-way. Portions of these SIGNAL SYSTEMS may be located within the AGENCY's jurisdictional boundaries or may be included entirely by virtue of prior maintenance responsibilities.

4. A listing of SIGNAL SYSTEMS shall be mutually agreed upon and signed by both Parties upon execution of this Agreement. As SIGNAL SYSTEMS are added and subtracted from the listing due to new construction, relinquishment of roadways or other occurrences, the DEPARTEMENT District Engineer and the AGENCY City Engineer will agree upon any revisions and sign and date an updated listing. The updated list will replace each succeeded list and be available in each Party's records office with a copy sent by the DEPARTMENT District Engineer to the Signals, Lighting and ITS Manager 1 in the DEPARTMENT's Traffic Operations Division.

5. The AGENCY is exempt from being required to obtain a formal permit from the DEPARTMENT for routine maintenance work on the SIGNAL SYSTEMS. The required coordination with the Department Permit Office is set forth in Article I, Paragraph 8.

6. If the AGENCY annexes areas with SIGNAL SYSTEMS within DEPARTMENT rights-of-way, then this Agreement shall supersede any previous agreements for these devices.

7. This Agreement may be terminated by either Party prior to the date set forth above, provided that a termination shall not be effective until thirty (30) calendar days after a Party has served written notice upon the other Party. This Agreement may be terminated by mutual consent of both Parties or unilaterally by either Party without cause. The Parties expressly agree that this Agreement shall be terminated immediately if for any reason federal and/or State Legislature funding ability to satisfy this Agreement is withdrawn, limited, or impaired.

8. All notices or other communications required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been duly given if delivered personally in hand, by facsimile with simultaneous regular mail, or by certified mail, return receipt requested, postage prepaid on the date posted, and addressed to the other Party at the address set forth below:

FOR DEPARTMENT:

Kristina L. Swallow, P.E., Director
Attn.: Kevin Maxwell, P.E., SLI Manager
Nevada DEPARTMENT of Transportation
Division: Traffic Operations
1263 South Stewart Street
Carson City, Nevada 89712
Phone: (775) 888-7087
E-mail: kmaxwell@dot.nv.gov

FOR AGENCY:

Neil C. Krutz, ICMA-CM, City Manager
Attn: Amber Sosa, P.E., Transportation Manager
City of Sparks
431 Prater Way
Sparks, NV 89431
Phone: (775) 353-7863
E-mail: asosa@cityofsparks.us

9. Each Party agrees to keep and maintain under generally accepted accounting principles full, true, and complete records and documents (written, electronic, computer related, or otherwise) pertaining to this Agreement and present, at any reasonable time, such information for inspection, examination, review, audit, and copying at any office where such records and documentation are maintained. Such records and documentation shall be retained for three (3) years after final payment is made.

10. Failure of either Party to perform any of its obligation under this Agreement shall be deemed a breach. Except as otherwise provided for by law or this Agreement, the rights and remedies of the Parties shall not be exclusive and are in addition to any other rights and remedies provided by law or equity, including, but not limited to, the recovery of actual damages and the prevailing Party's reasonable attorney's fees and costs.

11. The Parties do not waive and intend to assert available NRS Chapter 41 liability limitations in all cases. Agreement liability of both Parties shall not be subject to punitive damages. Actual damages for any DEPARTMENT breach shall never exceed the amount of funds which have been appropriated for payment under this Agreement, but not yet paid, for the fiscal year budget in existence at the time of the breach.

12. Neither Party shall be deemed to be in violation of this Agreement if it is prevented from performing any of its obligations hereunder due to strikes, failure of public transportation, civil or military authority, act of public enemy, accidents, fires, explosions, or acts of God, including, without limitations, earthquakes, floods, winds, or storms. In such an event the

intervening cause must not be through the fault of the Party asserting such an excuse, and the excused Party is obligated to promptly perform in accordance with the terms of the Agreement after the intervening cause ceases.

13. To the fullest extent of NRS Chapter 41 liability limitations, each Party shall indemnify, hold harmless, and defend, not excluding the other's right to participate, the other from and against all liability, claims, actions, damages, losses, and expenses, including but not limited to reasonable attorney's fees and costs, arising out of any alleged negligent or willful acts or omissions of the Party, its officers, employees, and agents. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity, which would otherwise exist as to any Party or person, described herein. This indemnification obligation is conditioned upon service of written notice to the other Party within thirty (30) calendar days of the indemnified Party's notice of actual or pending claim or cause of action. The indemnifying Party shall not be liable for reimbursement of any attorney's fees and costs incurred by the indemnified Party due to said Party exercising its right to participate with legal counsel.

14. The Parties are associated with each other only for the purposes and to the extent set forth in this Agreement. Each Party is and shall be a public agency separate and distinct from the other Party and shall have the right to supervise, manage, operate, control, and direct performance of the details incident to its duties under this Agreement. Nothing contained in this Agreement shall be deemed or construed to create a partnership or joint venture, to create relationships of an employer-employee or principal-agent, or to otherwise create any liability for one agency whatsoever with respect to the indebtedness, liabilities, and obligations of the other agency or any other party.

15. Failure to declare a breach or the actual waiver of any particular breach of this Agreement or its material or nonmaterial terms by either Party shall not operate as a waiver by such Party of any of its rights or remedies as to any other breach.

16. The illegality or invalidity of any provision or portion of this Agreement shall not affect the validity of the remainder of this Agreement and this Agreement shall be construed as if such provision did not exist. The unenforceability of such provision or provisions shall not be held to render any other provision or provisions of this Agreement unenforceable.

17. Neither Party shall assign, transfer, or delegate any rights, obligations, or duties under this Agreement without the prior written consent of the other Party.

18. Except as otherwise provided by this Agreement, all or any property presently owned by either Party shall remain in such ownership upon termination of this Agreement, and there shall be no transfer of property between the Parties during the course of this Agreement.

19. Pursuant to NRS Chapter 239, information or documents may be open to public inspection and copying. The Parties will have the duty to disclose unless a particular record is confidential by law or a common law balancing of interests.

20. Each Party shall keep confidential all information, in whatever form, produced, prepared, observed, or received by that Party to the extent that such information is confidential by law or otherwise required by this Agreement.

21. The Parties hereto represent and warrant that the person executing this Agreement on behalf of each Party has full power and authority to enter into this Agreement and that the Parties are authorized by law to perform the services set forth herein.

22. This Agreement and the rights and obligations of the Parties hereto shall be governed by, and construed according to, the laws of the State of Nevada. The Parties consent to the exclusive jurisdiction of the Nevada state district courts for enforcement of this Agreement.

23. It is specifically agreed between the Parties executing this Agreement that it is not intended by any of the provisions of any part of this Agreement to create in the public or any member thereof a third party beneficiary status hereunder, or to authorize anyone not a party to this Agreement to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of this Agreement.

24. This Agreement constitutes the entire Agreement of the Parties and such is intended as a complete and exclusive statement of the promises, representations, negotiations, discussions, and other Agreements that may have been made in connection with the subject matter hereof. Unless an integrated attachment to this Agreement specifically displays a mutual intent to amend a particular part of this Agreement, general conflicts in language between any such attachment and this Agreement shall be construed consistent with the terms of this Agreement. Unless otherwise expressly authorized by the terms of this Agreement, no modification or amendment to this Agreement shall be binding upon the Parties unless the same is in writing and signed by the respective Parties hereto and approved by the Attorney General.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the day and year first above written.

City of Sparks

Ronald E. Smith
Name (Print)

Mayor
Title (Print)

Lisa Hunderman
Name (Print)

Acting City Clerk
Title (Print)

Approved as to Form:

Attorney

State of Nevada, acting by and through its DEPARTMENT OF TRANSPORTATION

DocuSigned by:
Kristina L. Swallow
Director

Approved as to Legality & Form:

DocuSigned by:
Shane Chesney
Deputy Attorney General

City of Sparks List of Signal Systems

Intersections along SR 445 Pyramid Way

Nugget Avenue
I 80/Victorian Avenue (entire SPUI)
C Street
Prater Way
Oddie Boulevard/I Street
Greenbrae Drive
York Way
Roberta Lane
Queen Way
Disc Drive
Los Altos Parkway
Sparks Boulevard
Lazy Five Parkway

Intersections along SR 659 N. McCarran Boulevard

E. Gregg Street
Nugget Avenue/I 80 Eastbound Ramps
Victorian Avenue/I 80 Westbound Ramps
Nichols Boulevard
E. Lincoln Way
Prater Way
Greenbrae Drive
E. York Way
Baring Boulevard
Probasco Way
4th Street
Pyramid Way
Rock Boulevard
Sullivan Lane
El Rancho

Intersections along SR 648 Glendale Avenue

Galletti Way
S. 21st Street
S. Rock Boulevard
Industrial Way
McCarran Boulevard

Intersections along SR 647 Prater Way/4th Street

I 80 Eastbound Ramps
I 80 Westbound Ramps

Intersections along SR_668 Rock Boulevard

I 80 Eastbound Ramps
I 80 Westbound Ramps

Intersections along Sparks Boulevard

I 80 Eastbound Ramps
I 80 Westbound Ramps

Intersections along Vista Boulevard

I 80 Eastbound Ramps
I 80 Westbound Ramps

Intersections along N. Kietzke Ln

Galletti Way
Victorian Avenue

District 2 Engineer	Date	City of Sparks City Engineer	7/8/19 Date

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NEVADA DEPARTMENT OF TRANSPORTATION
AGREEMENT SUMMARY SHEET

DS JP

Agreement No. P643-21-201 Amendment No. _____ Task Order No. _____ Task Order Amendment No. _____

Start Date: 01/06/2022 End Date: Open Amendment Date: _____ Procured by: _____

Agreement Type: Interlocal Agreement Sub-Type: Signal Procurement No.: _____

Advantage Contact: Identify which contact should be entered into Advantage

☑ Contact Person: Alex Wolfson Phone No.: (775) 834-8304 Email: awolfson @dot.nv.gov

☐ Project Manager: Kevin Maxwell Phone No.: (775) 888-7087 Email: kmaxwell @dot.nv.gov

Purpose of Agreement/Amendment/Task Order and General Project Description/Overview:

To establish roles and responsibilities for ownership, maintenance, operation, and repair of traffic signal systems.

County(ies) where work is to be performed: Washoe

Does the Project include Highway Construction? Yes ☐ No ☑ DBE Goal: Yes ☐ No ☑ Percent: _____

Second Party Information

Contact: Mitchell Fink Email: mfink@washoecounty.us Phone No.: (775) 328-2050

Agreement Signer: Dwayne E. Smith, P.E. Email: desmith@washoecounty.gov Phone No.: (775) 328-2845

Company Name: Washoe County NV Business License No.: exempt

Primary Address: 1001 E. 9th Street, Bldg. A, Reno, NV 89512 Business Lic. Exp. _____

Invoice Remit To Address: 1001 E. 9th Street, Reno, NV, 89512 Foreign: ☐ Domestic: ☐

Form 2A Budget Approval must be attached Business License Search

Total Cost of Agreement: _____ Org Responsible for Billing: C201 Funding Percentage:

Payable Amount: _____ Fixed Fee %: _____ Payment Code: Payable Federal %: _____

Receivable Amount: _____ Overhead %: _____ Payment Cycle: Not Applicable State %: _____

Amendment Amount: _____ Retention %: _____ Security Deposit: Yes ☐ No ☐ Local %: _____

Fed Participation: Yes ☐ No ☑ In-Kind Services: Yes ☐ No ☑ Deposit Amount: _____

Appr Unit: _____ Activity: _____ Object: _____ Job/Project: _____

Project Identification Number(s): include Project ID, EA, Contract or Other ID for cross reference

PID: _____ EA: _____ Contract: _____ Other: _____

Review Approval:

Asst. Director DS JK 01/05/2022

Dist./Div. Head DocuSigned by: Rodney Schilling

Legal DS LMS 3456... 1/05/2022

Proj. Accting. _____

Required docs to start process:
(to be completed by Admin Services)

Summary Sheet (signed by Div. Head): X

Completed Form 2A:

Electronic Draft of Agreement: X

Agree Services 12-28-2021 MD

Scope of Services Includes Elements of:

☐ Environmental _____

☐ IT _____

☐ Right of Way _____

Execution:
(to be completed by Admin Services)

___ Federal Debarrment

___ NV Board of Engineers

___ AGMM X ANOT

X AGMT X AGML

___ Notice of Award Sent

___ Tracking Log Updated

___ Insurance Log Updated

Date/Initials 01-10-2022 MD

Verified 01/10/22 DG

NEVADA DEPARTMENT OF TRANSPORTATION
AGREEMENT SUMMARY SHEET - Page 2

Agreement No. P643-21-201 Amendment No. _____ Task Order No. _____ Task Order Amendment No. _____

Board Approval

Is Board approval required? Yes ☐ No ☑ If yes, answer the following questions.

Transportation Board - Service Provider and University Agreements or Amendments whose authority is greater than $300,000.00, or Amendments that increase the original Agreement s authority to greater than $300,000.00 must be approved by the Transportation Board.

Board of Examiners (BOE) - Cooperative and Interlocal Agreements for services related to NDOT's planning efforts in aviation, railways, and transit, and administrative or support services that include airport, railway, transit programs, and NDOT-wide administrative services.

Meeting Date: _____ Approved Date: _____ Agenda Item No.: _____ BOE Contract No.: _____

Explain what conditions require this work to be performed:

Explain why NDOT or other State employees are not able to perform this work:

Is the Second Party Currently involved in litigation with the State? Yes ☐ No ☐

If Yes, identify which State Agency is affected, a short description of the case, and provide the current status of the case:

Does the firm employ current or former State employees who have left State employment in the past two years? Yes ☐ No ☐
If yes, provide employee name, agency they worked for, and retirement date.

Has the employee been approved by the Board of Examiners? Yes ☐ No ☐ Meeting Date: _____

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Agreement Number P643-21-201

TRAFFIC SIGNAL MAINTENANCE INTERLOCAL AGREEMENT

This Agreement, made and entered into on 01/06/2022, by and between the State of Nevada, acting by and through its Department of Transportation, hereinafter called the DEPARTMENT, and Washoe County, 1001 East 9th Street, Building A, Reno, Nevada 89512, hereinafter called the AGENCY.

WITNESSETH:

WHEREAS, an Interlocal Agreement is defined as an agreement by public agencies to obtain a service from another public agency; and

WHEREAS, pursuant to the provisions contained in Chapter 408 of the Nevada Revised Statutes, the Director of the DEPARTMENT may enter into agreements necessary to carry out the provisions of the Chapter; and

WHEREAS, NRS 277.180 authorizes any one or more public agencies to contract with any one or more other public agencies to perform any governmental service, activity or undertaking which any of the public agencies entering into the agreement is authorized by law to perform and refers to such as an Interlocal Contract, hereinafter called an Agreement; and

WHEREAS, the purpose of this Agreement is to establish roles and responsibilities for ownership, maintenance, operation, and repair of all traffic signal systems on all DEPARTMENT roadways within the AGENCY boundaries, hereinafter called SIGNAL SYSTEMS; and

WHEREAS, the SIGNAL SYSTEMS consist of pole foundations, signal lights, supporting arms and poles, luminaire arms and luminaires attached to signal poles, signal controller, controller cabinet and internal components, power service, battery back-up, conductors, detection system, intersection and interconnect cabling, advance flashers tied to the signal, and all related equipment to make the traffic signals fully functional. All other traffic devices and flashing beacons not connected to the SIGNAL SYSTEMS are not included; and

WHEREAS, maintenance is defined as actions performed on a regularly scheduled basis to preserve the intended working condition of the SIGNAL SYSTEM. This also includes minor actions to inspect and correct recurring problems; and

WHEREAS, “capital improvement” is defined as a major modification to the physical configuration and/or operational parameter and life cycle replacement of the SIGNAL SYSTEMS; and

WHEREAS, life cycle replacements may be reimbursed through this agreement. Other capital improvements are not included in this Agreement and shall be initiated by a permit application submitted to the District Permit Office or included in another DEPARTMENT project; and

WHEREAS, this Agreement supersedes and replaces any other existing Agreement or Agreement language pertaining to the SIGNAL SYSTEMS that govern traffic movements along the DEPARTMENT’s roadways within the AGENCY boundaries; and

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WHEREAS, the SIGNAL SYSTEMS and their continued functioning will be of benefit to the DEPARTMENT, the AGENCY, the people of the State of Nevada, and the traveling public; and

WHEREAS, the parties hereto are willing and able to perform the services described herein.

NOW, THEREFORE, in consideration of the premises and of the mutual covenants herein contained, it is agreed as follows:

ARTICLE I - AGENCY AGREES

1. To operate, maintain, repair, and provide necessary labor, materials and electrical power for all SIGNAL SYSTEMS and all related ancillary components required to safely operate and maintain the SIGNAL SYSTEMS. Maintenance, repair, and operational standards and practices shall be undertaken in a manner conforming to accepted industry standards and practices.

2. To invoice the DEPARTMENT for one hundred percent (100%) of the labor and materials required for emergency replacement or repair costs without prior written agreed upon costs associated with the SIGNAL SYSTEMS, provided replacement/repair costs exceed One Thousand Five Hundred and No/100 Dollars ($1,500.00). All invoices submitted for emergency costs shall contain documentation that fully describes the emergency situation and justification for the claim. “Emergency work” is defined as posing potential imminent threat to life, limb, or property that will be addressed as appropriate for the event.

3. To invoice the DEPARTMENT for one hundred percent (100%) of the labor and materials required for urgently needed and approved replacement/repair cost for all SIGNAL SYSTEMS equipment replaced or repaired due to incidental damages, provided replacement/repair costs exceed One Thousand Five Hundred and No/100 Dollars ($1,500.00). “Urgent work” is defined as work that needs to occur within one (1) year and must be approved by the DEPARTMENT in advance.

4. To request routine priority maintenance work and lifecycle replacement reimbursement exceeding One Thousand Five Hundred and No/100 Dollars ($1,500.00) for the required labor and materials. “Routine priority” is defined as projects that should be considered within two (2) or three (3) years.

5. To request low priority maintenance work and lifecycle replacement reimbursement exceeding One Thousand Five Hundred and No/100 Dollars ($1,500.00) for the required labor and materials. “Low priority” is defined as projects that should be considered when there are open gaps in budget and time to administer the work.

6. To invoice the DEPARTMENT after maintenance, repairs, or replacement of the agreed upon work has been successfully completed by the AGENCY.

7. To provide the DEPARTMENT a list of requested reimbursement for low priority and routine priority major SIGNAL SYSTEM maintenance, life cycle replacement, or repairs exceeding One Thousand Five Hundred and No/100 Dollars ($1,500.00) each, along with an estimated annual cost for which the AGENCY will request reimbursement. This list shall be delivered to the DEPARTMENT District Engineer within thirty (30) calendar days of initial

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execution of this Agreement and by the 1st day of October of each year thereafter to enable budgeting of necessary funds. Available funding may impact approval of work requiring reimbursement.

8. To perform scheduled maintenance, coordinate with the DEPARTMENT Permit Office, at (775) 834-8330, at least two (2) working days prior to performing scheduled maintenance activities, and provide information regarding the nature of the activity and planned traffic control information. The Permit Office will prepare required highway restriction reports and coordinate with affected DEPARTMENT operations. A DEPARTMENT encroachment permit is not needed for maintenance or repair work performed on SIGNAL SYSTEMS.

9. To notify DEPARTMENT with as much notice as possible if emergency repair activities cause significant impact to traffic, require lane closures, or require excavation through improved surfaces of the roadway. For emergencies during business hours, notify the DEPARTMENT Permit Office at (775) 834-8330, and during non-business hours notify the Utilities 24/7 Hotline, at (775) 834-8488.

10. All requests for reimbursement should be written on AGENCY letterhead signed by a person authorized to represent the AGENCY and should be submitted with the following information:

a. Reference to this Agreement that contemplates DEPARTMENT reimbursement for the work performed

b. Invoices with supporting data such as:
   i. List of materials provided and related costs
   ii. List of people performing work along with hours worked and related costs

c. As-built documentation for work performed

d. Any other information required by this Agreement

ARTICLE II - DEPARTMENT AGREES

1. To fund one hundred percent (100%) of the labor and materials required for emergency replacement or repair costs without prior written agreed upon costs associated with the SIGNAL SYSTEMS.

2. To fund one hundred percent (100%) of the labor and materials required for the replacement/repair costs for urgent SIGNAL SYSTEMS equipment replaced or repaired, provided replacement/repair costs exceed One Thousand Five Hundred and No/100 Dollars ($1,500.00).

3. To fund one hundred percent (100%) of the labor and materials required for the approved routine priority SIGNAL SYSTEM maintenance or repairs exceeding One Thousand Five Hundred and No/100 Dollars ($1,500.00) each, provided that the list is received by the DEPARTMENT on time (as noted in Article I, Paragraph 8) and the budget for reimbursement is established and available.

4. To fund one hundred percent (100%) of the labor and materials required for the approved low priority SIGNAL SYSTEM maintenance or repairs exceeding One Thousand Five

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Hundred and No/100 Dollars ($1,500.00) each, provided that the list is received by the DEPARTMENT on time (as noted in Article I, Paragraph 8) and the budget for reimbursement is established and available.

5. To process each of the AGENCY's invoices upon validation of costs and within thirty (30) working days upon receipt.

ARTICLE III - IT IS MUTUALLY AGREED

1. This Agreement shall not become effective until and unless approved by appropriate official action of the governing body of each party.

2. The term of this Agreement shall be from the date first written above and continue in perpetuity for the operation and maintenance as specified herein.

3. The SIGNAL SYSTEMS shall be and remain the sole and exclusive property of the DEPARTMENT.

4. A listing of SIGNAL SYSTEMS shall be mutually agreed upon and signed by both parties upon execution of this Agreement. As SIGNAL SYSTEMS are added and subtracted from the listing due to new construction, annexation, de-annexation, and relinquishment of roadways or other occurrences, the DEPARTMENT and the AGENCY will agree upon any revisions and sign and date an updated list. At a minimum, the list will be reviewed and updated each year by the 1st of October and available in each party's records office.

5. This Agreement may be terminated by either party, provided that a termination shall not be effective until thirty (30) calendar days after a party has served written notice upon the other party. This Agreement may be terminated by mutual consent of both parties or unilaterally by either party without cause. The parties expressly agree that this Agreement shall be terminated immediately if for any reason federal and/or State Legislature funding ability to satisfy this Agreement is withdrawn, limited, or impaired.

6. This Agreement shall be construed and interpreted according to the laws of the State of Nevada.

7. This Agreement shall inure and be binding upon the respective successors and assignees of the parties hereto.

8. This Agreement constitutes the entire agreement between the parties and shall not be modified unless in writing and signed by the parties.

9. All notices or other communications required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been duly given if delivered personally in hand, by telephonic facsimile with simultaneous regular mail, or mailed certified mail, return receipt requested, postage prepaid on the date posted, and addressed to the other party at the address set forth below:

FOR DEPARTMENT: Kristina L. Swallow, P.E., Director
Attn.: Alex Wolfson, P.E., PTOE,
Engineering Manager

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Nevada Department of Transportation
District 2
310 Galletti Way
Sparks, Nevada 89431
Phone: (775) 834-8304
E-mail: awolfson@dot.nv.gov

FOR AGENCY: Dwayne E. Smith, P.E
Director of Engineering and Capital Projects
Washoe County
1001 East 9th Street, Building A
Reno, Nevada 89512-2845
Phone: (775) 328-2845
Email: desmith@washoecounty.gov

10. Each party agrees to keep and maintain under generally accepted accounting principles, full, true, and complete records and documents (written, electronic, computer related, or otherwise) pertaining to this Agreement and present, at any reasonable time, such information for inspection, examination, review, audit, and copying at any office where such records and documentation are maintained. Such records and documentation shall be retained for three (3) years after final payment is made.

11. Failure of either party to perform any obligation of this Agreement shall be deemed a breach. Except as otherwise provided for by law or this Agreement, the rights and remedies of the parties shall not be exclusive and are in addition to any other rights and remedies provided by law or equity, including but not limited to actual damages, and to a prevailing party's reasonable attorney's fees and costs.

12. The parties do not waive and intend to assert available NRS Chapter 41 liability limitations in all cases. Agreement liability of both parties shall not be subject to punitive damages. Actual damages for any State breach shall never exceed the amount of funds which have been appropriated for payment under this Agreement, but not yet paid, for the fiscal year budget in existence at the time of the breach.

13. Neither party shall be deemed to be in violation of this Agreement if it is prevented from performing any of its obligations hereunder due to strikes, failure of public transportation, civil or military authority, act of public enemy, accidents, fires, explosions, or acts of God, including without limitations, earthquakes, floods, winds, or storms. In such an event the intervening cause must not be through the fault of the party asserting such an excuse, and the excused party is obligated to promptly perform in accordance with the terms of the Agreement after the intervening cause ceases.

14. To the fullest extent of NRS Chapter 41 liability limitations, each party shall indemnify, hold harmless and defend, not excluding the other's right to participate, the other from and against all liability, claims, actions, damages, losses, and expenses, including but not limited to reasonable attorney's fees and costs, arising out of any alleged negligent or willful acts or omissions of the party, its officers, employees and agents. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity, which would otherwise exist as to any party or person, described herein. This indemnification obligation is conditioned upon service of written notice to the other party within thirty (30) days of the indemnified party's notice of actual or pending claim or cause of action. The indemnifying party

shall not be liable for reimbursement of any attorney's fees and costs incurred by the indemnified party due to said party exercising its right to participate with legal counsel.

15. The parties are associated with each other only for the purposes and to the extent set forth in this Agreement. Each party is and shall be a public agency separate and distinct from the other party and shall have the right to supervise, manage, operate, control, and direct performance of the details incident to its duties under this Agreement. Nothing contained in this Agreement shall be deemed or construed to create a partnership or joint venture, to create relationships of an employer-employee or principal-agent, or to otherwise create any liability for one agency whatsoever with respect to the indebtedness, liabilities, and obligations of the other agency or any other party.

16. Failure to declare a breach or the actual waiver of any particular breach of the Agreement or its material or nonmaterial terms by either party shall not operate as a waiver by such party of any of its rights or remedies as to any other breach.

17. The illegality or invalidity of any provision or portion of this Agreement shall not affect the validity of the remainder of the Agreement and this Agreement shall be construed as if such provision did not exist. The unenforceability of such provision or provisions shall not be held to render any other provision or provisions of this Agreement unenforceable.

18. Neither party shall assign, transfer, or delegate any rights, obligations, or duties under this Agreement without the prior written consent of the other party.

19. All or any property presently owned by either party shall remain in such ownership upon termination of this Agreement, and there shall be no transfer of property between the parties during the course of this Agreement.

20. Pursuant to NRS 239.010, information or documents may be open to public inspection and copying. The parties will have the duty to disclose unless a particular record is confidential by law or a common law balancing of interests.

21. Each party shall keep confidential all information, in whatever form, produced, prepared, observed, or received by that party to the extent that such information is confidential by law or otherwise required by this Agreement.

22. The parties hereto represent and warrant that the person executing this Agreement on behalf of each party has full power and authority to enter into this Agreement, and that the parties are authorized by law to perform the services set forth herein.

23. This Agreement and the rights and obligations of the parties hereto shall be governed by, and construed according to, the laws of the State of Nevada. The parties' consent to the exclusive jurisdiction of the Nevada district courts for enforcement of this Agreement.

24. It is specifically agreed between the parties executing this Agreement that it is not intended by any of the provisions of any part of this Agreement to create in the public or any member thereof a third party beneficiary status hereunder, or to authorize anyone not a party to this Agreement to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of this Agreement.

25. This Agreement constitutes the entire agreement of the parties and such is intended as a complete and exclusive statement of the promises, representations, negotiations, discussions, and other agreements that may have been made in connection with the subject matter hereof. Unless an integrated attachment to this Agreement specifically displays a mutual intent to amend a particular part of this Agreement, general conflicts in language between any such attachment and this Agreement shall be construed consistent with the terms of this Agreement. Unless otherwise expressly authorized by the terms of this Agreement, no modification or amendment to this Agreement shall be binding upon the parties unless the same is in writing and signed by the respective parties hereto and approved by the Attorney General.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year first above written.

Washoe County

DocuSigned by:
Dwayne E. Smith
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Dwayne E. Smith, P.E,
Director of Engineering and Capital Projects

State of Nevada, acting by and through its DEPARTMENT OF TRANSPORTATION

DocuSigned by:
kristina Swallow
C4B612FC2C1E4FB...
Director

Approved as to Legality and Form:

DocuSigned by:
Lori M Story
59F1B2732A51494...
Deputy Attorney General

Exhibit B

Washoe County Traffic Signals

Location

1. Arrowcreek Pkwy /Zolezzi Lane
2. Mt. Rose Hwy/Galena Fire Station
3. Mt. Rose Hwy/Thomas Creek Rd
4. Mt Rose Hwy/Wedge Pkwy
5. Pyramid Blvd/Eagle Canyon Dr
6. Pyramid/Blvd/Golden View
7. S.R. 28/Country Club Dr
8. S.R. 28/Crystal Bay
9. S.R. 28/Northwood Blvd/Southwood Blvd
10. S.R. 28/Village Blvd
11. Sun Valley Blvd/1st Ave
12. Sun Valley Blvd/2ndt Ave
13. Sun Valley Blvd/4thAve
14. Sun Valley Blvd/5th Ave
15. Sun Valley Blvd/7thAve
16. Sun Valley Blvd/Dandini Blvd
17. Wedge Pkwy/Golden Gate Dr.

Appendix G

City of Reno Operation and Maintenance Work Order History Summary

City of Reno Operation and Maintenance Work History Summary - Labor Hours

Task ID	Task Description	Ownership	Historical Estimate (Hours)				Average Annual Maintenance Time (Hours)	Average Annual Maintenance Time (Hours) Rounded
			2021	2022	2023	2024		
201	Signal Preventative Maintenance	City of Reno	0.00	2.00	6.00	58.50	16.6	17.0
		Washoe County	0.00	34.00	0.00	24.00	14.5	14.5
		NDOT	0.00	0.00	5.00	9.00	3.5	3.5
202	Cabinet Preventative Maintenance	City of Reno	0.00	10.00	17.00	64.50	22.9	23.0
		Washoe County	8.00	25.00	32.00	25.00	22.5	22.5
		NDOT	0.00	0.00	18.00	10.50	7.1	7.5
203	Safety Monitors	City of Reno	4.00	228.00	328.50	379.00	234.9	235.0
		Washoe County	0.00	11.50	18.50	43.50	18.4	18.5
		NDOT	0.00	43.00	48.00	61.50	38.1	38.5
205	School Flasher Maintenance	City of Reno	52.50	214.50	341.00	156.00	191.0	191.0
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	0.00	24.00	4.00	6.00	8.5	8.5
206	Communications	City of Reno	117.00	114.75	68.00	57.50	89.3	89.5
		Washoe County	3.00	3.00	9.00	8.00	5.8	6.0
		NDOT	24.50	24.75	16.00	42.00	26.8	27.0
207	Fiber Optics	City of Reno	72.50	236.00	97.50	10.00	104.0	104.0
		Washoe County	0.00	15.00	2.00	8.00	6.3	6.5
		NDOT	45.50	24.50	4.00	34.00	27.0	27.0
208	ATMS System Maintenance	City of Reno	234.50	448.00	577.50	459.50	429.9	430.0
		Washoe County	9.00	9.00	18.00	0.00	9.0	9.0
		NDOT	18.50	14.50	32.00	3.25	17.1	17.5
230	Signal Response	City of Reno	275.50	751.70	608.50	152.50	447.1	447.5
		Washoe County	26.50	64.50	46.50	30.00	41.9	42.0
		NDOT	164.50	177.00	199.75	70.25	152.9	153.0
240	Ped Signal Repair	City of Reno	125.00	590.00	324.50	244.50	321.0	321.0
		Washoe County	5.00	22.50	39.00	30.00	24.1	24.5
		NDOT	78.50	136.50	191.00	61.50	116.9	117.0
241	Bench Repair	City of Reno	99.50	159.00	42.50	42.00	85.8	86.0
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	0.00	0.00	0.00	0.00	0.0	0.0
242	Loop Detection Maintenance	City of Reno	59.00	166.25	160.75	98.00	121.0	121.0
		Washoe County	1.00	1.00	6.00	4.00	3.0	3.0
		NDOT	30.00	49.50	47.50	43.00	42.5	42.5
243	Video Microwave Detection	City of Reno	174.00	597.00	464.25	285.00	380.1	380.5
		Washoe County	3.00	56.00	38.00	32.00	32.3	32.5
		NDOT	90.50	114.75	117.25	90.50	103.3	103.5
244	Electrical Maintenance & Repair	City of Reno	0.00	0.00	0.00	37.00	9.3	9.5
		Washoe County	0.00	0.00	0.00	2.00	0.5	0.5
		NDOT	0.00	0.00	10.00	4.50	3.6	4.0
245	LED Replacement	City of Reno	116.50	143.00	72.50	21.50	88.4	88.5
		Washoe County	13.00	11.00	16.00	17.00	14.3	14.5
		NDOT	14.50	19.00	20.00	16.00	17.4	17.5
247	Signal Head Repair	City of Reno	16.62	44.00	42.00	37.50	35.0	35.5
		Washoe County	0.00	2.00	6.00	12.00	5.0	5.0
		NDOT	0.00	20.00	21.00	24.00	16.3	16.5
248	Pre-Emption Maintenance & Repair	City of Reno	0.00	0.00	8.00	126.50	33.6	34.0
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	0.00	0.00	0.00	37.00	9.3	9.5
249	BBS Maintenance & Repair	City of Reno	0.00	0.00	9.00	36.00	11.3	11.5
		Washoe County	0.00	0.00	6.00	6.50	3.1	3.5
		NDOT	0.00	0.00	10.00	13.00	5.8	6.0
250	Street Light Maintenance	City of Reno	80.00	303.50	226.50	424.50	258.6	259.0
		Washoe County	2.00	10.50	2.00	2.00	4.1	4.5
		NDOT	18.00	54.50	14.00	23.00	27.4	27.5
251	RRFB-Flashing Beacon	City of Reno	130.50	226.50	244.00	208.50	202.4	202.5
		Washoe County	0.00	0.00	0.00	4.00	1.0	1.0
		NDOT	0.00	3.00	0.00	0.00	0.8	1.0
252	Illuminated Street Name Sign Maintenance	City of Reno	61.00	171.50	90.00	38.00	90.1	90.5
		Washoe County	2.00	6.00	6.00	0.00	3.5	3.5
		NDOT	21.00	33.00	7.00	20.00	20.3	20.5
253	Illuminated Street Sign Maintenance	City of Reno	6.00	4.00	40.00	24.00	18.5	18.5
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	0.00	0.00	12.00	0.00	3.0	3.0
260	Cabinet Rehab & Construction	City of Reno	69.50	184.00	108.00	128.50	122.5	122.5
		Washoe County	0.00	30.50	38.50	74.00	35.8	36.0
		NDOT	25.00	29.50	79.00	62.50	49.0	49.0
261	LED Rehab & Construction	City of Reno	0.00	17.00	4.00	0.00	5.3	5.5
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	0.00	0.00	0.00	0.00	0.0	0.0
262	Pole Rehab & Construction	City of Reno	5.00	22.50	13.50	0.00	10.3	10.5
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	11.00	0.00	16.00	19.00	11.5	11.5
263	Signal Rehab & Construction	City of Reno	0.00	62.00	39.50	55.50	39.3	39.5
		Washoe County	2.00	0.00	35.00	10.50	11.9	12.0
		NDOT	6.00	2.00	6.00	6.00	5.0	5.0

Task ID	Task Description	Ownership	Historical Estimate (Hours)				Average Annual Maintenance Time (Hours)	Average Annual Maintenance Time (Hours) Rounded
			2021	2022	2023	2024		
270	Speed Radar Maintenance & Repair	City of Reno	44.00	124.50	172.00	98.00	109.6	110.0
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	0.00	0.00	0.00	0.00	0.0	0.0
280	USA Locates	City of Reno	569.75	1,509.50	1,805.25	1,188.50	1,268.3	1,268.5
		Washoe County	0.00	31.50	38.00	2.00	17.9	18.0
		NDOT	25.50	10.00	3.00	0.00	9.6	10.0
550	Signal Maintentance & Repair	City of Reno	2.00	0.00	0.00	0.00	0.5	0.5
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	0.00	0.00	0.00	0.00	0.0	0.0
552	Sign Installation & Upgrade	City of Reno	0.00	0.00	0.00	2.00	0.5	0.5
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	0.00	4.00	0.00	0.00	1.0	1.0
981	Crew Inspections[1]	City of Reno	0.00	0.00	98.50	380.00	119.6	120.0
		Washoe County	0.00	0.00	0.00	0.00	0.0	0.0
		NDOT	0.00	0.00	0.00	0.00	0.0	0.0
987	Contract Inspection[2]	City of Reno	99.50	398.00	271.50	85.00	213.5	213.5
		Washoe County	0.00	31.50	2.00	7.00	10.1	10.5
		NDOT	38.50	16.00	49.00	66.50	42.5	42.5
							City of Reno	373.5
							Washoe County	47.5
							NDOT	53.5
							Sub-Total - Preventative Maintenance	**474.5**
							City of Reno	4,712.5
							Washoe County	240.5
							NDOT	716.5
							Sub-Total - Reactive Maintenance	**5,669.5**
							Total Average Annual Hours	**6,144.0**
							Regular Hours (%)	**95%**
							Overtime Hours (%)	**5%**
							Regular Hours	**5,813.2**
							Overtime Hours	**330.8**
							[3]Estimated Hourly Rate (Source: Reno-Washoe Traffic Signal Maintenance Agreement)	**$88.57**
							[3]Estimated Overtime Hourly Rate (Source: Reno-Washoe Traffic Signal Maintenance Agreement)	**$132.85**
							Sub-total Operations and Maintenance Labor Cost (Regular)	**$514,875**
							Sub-total Operations and Maintenance Labor Cost (Overtime)	**$43,948**
							Total Operations and Maintenance Labor Cost	**$558,822**

1: Monthly inspections of the work crew during construction.
2: Inspections of the contractor crews during work on City of Reno owned equipment or intersections.
3: The rates for Reno's Traffic Signal Technicians were used in the analysis to provide a conservative estimate.

Appendix H

Roads Fund FY2021-FY2025 Budget Summary

Roads Fund 216 Budget Summary FY 21-FY25

		2021	2022	2023	2024	2025*
431100	Federal Grants	-$17,277.34	-$22,514.97	-$347,444.22	-$18,161.48	$0.00
432210	Motor Vehicle Fuel Tax 1.25 NRS 365.180	-$3,726,954.18	-$3,906,842.83	-$3,937,489.07	-$4,094,645.55	-$4,137,000.00
432220	Motor Vehicle Fuel Tax 1.75 NRS 365.190	-$1,999,983.11	-$2,028,778.94	-$2,081,475.25	-$2,061,101.56	-$2,088,000.00
432230	Motor Vehicle Fuel Tax 2.35 NRS 365.180	-$3,705,322.16	-$3,781,803.21	-$3,824,969.22	-$3,957,015.40	-$3,818,509.00
432240	County Option Motor Vehicle Fuel Tax 1.0	-$805,329.74	-$821,313.83	-$809,950.36	-$822,731.06	-$996,491.00
433310	Local Govt Grant	$0.00	$0.00	-$155,979.00	-$210,809.86	$0.00
460160	Other General Government	-$16,902.00	$0.00	$0.00	$0.00	$0.00
460161	Intragovernmental Sales	-$6,957.94	$0.00	-$7,576.98	$0.00	$0.00
460401	Street Curb and Gutter Cuts	-$572,624.65	-$429,902.41	-$481,812.50	-$808,854.10	-$700,000.00
481000	Interest on Pooled Investment	-$92,348.80	-$59,485.39	-$97,330.85	-$94,071.59	-$88,580.00
482100	Realized Gain/(Loss) on Pooled Investmen	-$28,466.33	-$11,932.23	-$24,081.41	-$25,450.38	$0.00
482200	Unrealized Gain/(Loss) on Pooled Investm	$100,341.62	$382,574.58	$11,375.73	$1,481.00	$0.00
484000	Donations,Contributions	$0.00	-$38,780.00	-$20,000.00	$0.00	$0.00
484195	Non-Govt'l Grants	$0.00	$0.00	$0.00	$0.00	$0.00
485100	Reimbursements	-$2,789.36	-$15,670.24	-$718.20	-$97.50	$0.00
485192	Surplus Equipment Sales	$0.00	$0.00	$0.00	-$20,786.00	$0.00
491080	Inspections	-$127,995.20	-$100,460.14	-$60,728.72	-$126,285.55	-$100,000.00
491215	Contract Revenue	$0.00	-$5,884.00	$0.00	$0.00	$0.00
491330	Washoe County TRPA	$0.00	-$35,000.00	$0.00	$0.00	$0.00
491406	Insurance Claim Reciepts	$0.00	$0.00	$0.00	-$124.78	$0.00
TRANSFERS IN						
621001	Transfer From General	-$1,073,620.00	-$2,879,305.00	-$1,208,197.00	-$2,496,267.00	-$1,325,253.00
624089	Transfer From Capital Facilities	-$1,950,000.00	-$1,950,000.00	-$1,950,000.00	-$1,950,000.00	-$5,175,000.00
TOTAL REVENUE		$14,026,229.19	$15,705,098.61	$14,996,377.05	$16,684,920.81	$18,428,833.00
EXPENDITURE BUDGET						
Salary/Benefits		$5,847,663.64	$5,776,743.45	$6,278,718.92	$7,040,300.59	$7,434,827.14
Services/Supplies		$5,643,959.58	$6,218,708.94	$6,826,699.32	$7,635,804.55	$7,989,684.88
Equipment/Construction Contracts		$2,827,696.80	$3,479,157.83	$4,493,643.09	$3,458,460.35	$4,306,000.00
TOTAL EXPENDITURES		**$14,319,320.02**	**$15,474,610.22**	**$17,599,061.33**	**$18,134,565.49**	**$19,730,512.02**

*2025 Expected revenues and expenditures

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 5.6.**

To: Regional Transportation Commission

From: Bill Thomas, AICP, Executive Director

SUBJECT: Exploring Regional Interconnectedness with Adjacent Counties

RECOMMENDED ACTION

Receive a presentation regarding the need for multi-county transportation planning and cooperation and provide input and direction regarding options for pursuing a formal organizational structure in partnership with adjacent counties and other agencies. (Informational Only)

BACKGROUND AND DISCUSSION

The RTC Metropolitan Planning Organization (MPO) boundary encompasses the urbanized areas of Washoe County. However, transportation demands and regional influences increasingly originate outside this boundary. Notable examples include:

- Tahoe Reno Industrial Center (TRIC) in Storey County, a 107,000-acre industrial park with over 15,000 current jobs and projections for 35,000–50,000 jobs by 2040, resulting in ~40,000 daily trips by 2050. Roughly 80% of these trips originate in Reno/Sparks, heavily impacting I-80 congestion and safety.
- City of Fernley, whose ongoing development, including the Victory Logistics Center and new rail connections, has been supported by federal investments and contributes to regional traffic patterns.
- Tahoe Truckee Area Regional Transit (TART) and the US 395 Coalition, which represent additional cross-jurisdictional transit and freight demands.

The RTC has participated in a variety of efforts to work collaboratively with these areas, along with representatives from Storey County, Fernley, TRPA, TTD, and others. These engagements have provided critical input into the Regional Transportation Plan and feasibility studies, including the I-80 Corridor Study, South Meadows Parkway extension, La Posada Drive-TRIC connection, and the TRIC commuter rail study.

While informal cooperation has yielded benefits, the scale and complexity of cross-county raise the issue of need for more formalized multi-county transportation planning structure. Options include:

- Municipal Planning Organizations (MPOs): Expanding the existing MPO or establishing a new one that includes regional partners.
- Interlocal Agreements (NRS 277.180): Contract between agencies to jointly plan and implement transportation projects.
- Council of Governments (COG): A regional planning body for intergovernmental coordination and funding alignment.
- Regional Advisory Committee: A standing advisory group with representatives from each affected jurisdiction and agency.

Staff is seeking to facilitate Board discussion on the need and options for formalizing multi-county transportation planning with adjacent counties and agencies, in light of significant influences outside the RTC MPO boundary, and how the Board would like more formalized regional planning to be structured. If the Board feels the timing is right for a more formalized transportation structure, it is recommended that we start with creation of a Multi-County Transportation Advisory Committee. RTC would lead the effort by committing staff time and minimal funding.

This item supports Strategic Roadmap Goal #4, " Proactively manage congestion" and FY 2025 RTC Goal, "Define options for formally integrating TRIC into transportation planning".

FISCAL IMPACT

This is no immediate fiscal impact related to this action. Any funding to advance a Board policy decision would come from existing budgeted resources within the Executive Department budget.

PREVIOUS BOARD ACTION

6/21/2024 - Discussed transportation issues and needs in relation to the Tahoe-Reno Industrial Center as requested by Chair Lawson, and provide input and direction to the Executive Director.

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 6.1.**

To: Regional Transportation Commission

From: Bill Thomas, Executive Director

SUBJECT: Executive Director Report

RECOMMENDED ACTION

Monthly verbal update/messages from RTC Executive Director Bill Thomas - no action taken.

FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

Regional Transportation
Commission of
Southern Nevada

600 S. Grand Central Pkwy., Suite 350, Las Vegas, NV 89106-4512

July 7, 2025

Chairwoman Alexis Hill
Regional Transportation Commission of Washoe County, Nevada
1105 Terminal Way, Suite 217
Reno, NV 89502

Dear Chairwoman Hill and Members of the Regional Transportation Commission (RTC) Washoe Board,

On behalf of the RTC of Southern Nevada, thank you for your support of AB530, bipartisan legislation to authorize the Clark County Board of Commissioners to continue indexing fuel revenue to inflation.

Your endorsement—and the critical support from Bill Thomas, Paul Nelson, and Mike Hillerby—was instrumental in advancing this legislation through the Nevada Legislature and securing Governor Lombardo's signature.

Fuel revenue indexing (FRI) is a critical source of Southern Nevada's roadway funding, supporting more than 700 projects, 20,400 jobs, nearly 80 local small businesses, and generating $3 billion in transportation investments aimed at reducing congestion and improving safety. Without preserving this revenue stream, the RTC of Southern Nevada would have faced a severe funding shortfall, jeopardizing infrastructure essential to supporting the region's economic growth.

With AB530 now enacted, the RTC of Southern Nevada is working closely with the Clark County Commission to begin the process of adopting the FRI ordinance, which would enable the continuation of this critical program for another decade.

Thank you again for your partnership during the legislative session. We value our strong relationship with the RTC of Washoe County and look forward to continued collaboration to connect and strengthen communities across Nevada.

Sincerely,



MJ Maynard-Carey
Chief Executive Officer
Regional Transportation Commission of Southern Nevada

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 6.2.**

To: Regional Transportation Commission

From: Paul Nelson, Government Affairs Officer

SUBJECT: Federal Report Discussion

RECOMMENDED ACTION

Monthly verbal update/messages from Paul Nelson, RTC Government Affairs Officer on federal matters related to the RTC - no action will be taken.

FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

REGIONAL TRANSPORTATION COMMISSION
Metropolitan Planning • Public Transportation & Operations • Engineering & Construction
Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 7/18/2025 **Agenda Item: 6.3.**

To: Regional Transportation Commission

From: Tracy Larkin Thomason, NDOT Director

SUBJECT: NDOT Report

RECOMMENDED ACTION

Monthly verbal update/messages from NDOT Director Tracy Larkin Thomason or designated NDOT Deputy Director - no action will be taken.

FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.