

Location:



REGIONAL TRANSPORTATION COMMISSION
1105 Terminal Way, 1st Floor Great Room, Reno, NV
Date/Time: 9:00 A.M., Friday, June 20, 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.

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 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 report for May. (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. 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 Department

- 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 the Nevada Public Agency Insurance Pool (POOL) and Public Agency Compensation Trust (PACT). (For Possible Action)

5. Discussion Items and Presentations:

- 5.1. Receive a presentation on the Truckee River Path Inventory Study. (Informational Only)
- 5.2. Acknowledge receipt of a report regarding regional road maintenance needs and available funding to perform roadway maintenance activities. (Informational Only)
- 5.3. Acknowledge receipt of the RTC RIDE 5 Year Vehicle Replacement Strategy. (Informational Only)
- 5.4. Acknowledge receipt of the updated RTC Strategic Roadmap for FY 2025-2027 and provide input and direction regarding next steps. (Informational Only)
- 5.5. Approve the RTC Goals for Fiscal Year (FY) 2026 (July 1, 2025 to June 30, 2026). (For Possible Action)

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: 6/20/2025

Agenda Item: 4.1.1

To: Regional Transportation Commission

From: Michelle Kraus, Clerk of the Board

SUBJECT: Draft Meeting Minutes for 04/18/2025

RECOMMENDED ACTION

Approve the meeting minutes for the 04/18/2025 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

9:00 A.M.

April 18, 2025

PRESENT:

**Alexis Hill, Chair, Washoe County Commissioner
Ed Lawson, Mayor of Sparks
Mariluz Garcia, Washoe County Commissioner
Hillary Schieve, Mayor of Reno (Via Conference Line 9:20 a.m.)
Bill Thomas, RTC Executive Director
Adam Spear, Legal Counsel
Sajid Sulahria, Deputy Director of NDOT (Alternate)**

ABSENT:

**Devon Reese, Vice Chair, Reno City Council
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. 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.

Mac Rossi provided public comment thanking the RTC for its support on two longstanding community projects: the upcoming traffic signal installation at North McCarran and Keystone, and the ADA improvements to the bus stop at 7th Street and North McCarran. He also expressed appreciation to RTC staff member Susie Trinidad for arranging transportation for seniors to attend the Legislature's Senior Day in Carson City.

Item 3 APPROVAL OF AGENDA

On motion of Commissioner Garcia to approve, seconded by Commissioner Lawson, 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 02/21/2025 RTC Board meeting. (For Possible Action)
- 4.1.2 Approve the meeting minutes for the 03/14/2025 RTC Board Workshop 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 Engineering Department

- 4.3.1 Approve a Regional Road Impact Fee (RRIF) Offset Agreement between RTC, Lennar Reno, LLC and the City of Reno for RRIF Waivers for offset-eligible improvements associated with roadway widening, drainage improvements, and dedication of right of way to extend South Meadows Parkway eastward. (For Possible Action)
- 4.3.2 Approve a Regional Road Impact Fee (RRIF) offset agreement between RTC, the City of Sparks, and 5 Ridges Development Company, Inc., for RRIF Waivers for offset-eligible improvements to be made for the widening and intersection modifications along Highland Ranch Parkway between Pyramid Highway and the 5 Ridges Parkway. (For Possible Action)
- 4.3.3 Approve a Regional Road Impact Fee (RRIF) offset agreement between RTC, Sunny Hills Ranchos, and the City of Reno for RRIF Waivers for offset-eligible improvements associated with roadway widening along South Meadows Parkway, associated drainage improvements, dedication of right of way South Meadows Parkway widening; Steamboat Creek culvert improvements; and associated engineering costs for RRIF eligible improvements. (For Possible Action)
- 4.3.4 Approve a qualified list of consultants to provide civil engineering, design, and construction management services for the Street and Highway Program. (For Possible Action)
- 4.3.5 Approve a contract with Lumos and Associates, Inc., to perform design and engineering during construction services related to the 2026 PCCP Preventive Maintenance Project, in an amount not-to-exceed \$298,050. (For Possible Action)
- 4.3.6 Approve Change Order No. 09 to the contract with Granite Construction Company, Inc. for the construction of the Oddie/Wells Corridor Multi-Modal Improvements Project, in the amount of \$142,551.44. (For Possible Action)
- 4.3.7 Approve a Resolution of Condemnation authorizing RTC's legal counsel to commence condemnation proceedings to acquire a public utility easement interest on part of APN 019-360-15 from Center Line Group, LLC-Reno Series, which are needed to construct the Virginia Street Utility Relocation project. (For Possible Action)

4.4 Public Transportation/Operations Department

- 4.4.1 Approve the RTC Safety Management System Plan (Safety Management Plan) as required by 49 C.F.R. Part 673. (For Possible Action)

4.5 Executive, Administrative and Finance Departments

- 4.5.1 Acknowledge receipt of the Asset Donation Log for the third quarter of calendar year 2024 through the first quarter of calendar year 2025. (For Possible Action)

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

Item 5 *DISCUSSION ITEMS AND PRESENTATIONS*

5.1 Approve the FY 2026 – FY 2027 Unified Planning Work Program (UPWP). (For Possible Action)

Vanessa Lacer, RTC Planning Director, gave an update and presentation on the UPWP. She explained that the Unified Planning Work Program (UPWP) is a key document for the Metropolitan Planning Organization (MPO), which acts as the planning arm of the Regional Transportation Commission (RTC). Updated every two years, the UPWP outlines planning activities, timelines, and budgets, fulfilling both federal and state requirements and enabling federal funding through quarterly reimbursements from the Nevada Department of Transportation.

The UPWP is divided into six categories. Administration, Development Review, Multimodal Planning and Programming, Street and Highway Planning, Public Transportation Planning and Air Quality Planning.

The projected budget is approximately \$5.9 million over two years, with \$1.2 million in federal grants and \$500,000 in local contributions. The largest portion—65% of the budget or about \$3.8 million—goes to Multimodal Planning and Programming.

Seven corridors and area plans have been identified, including the Truckee River Path Plan to be drafted by 2026. These studies inform quick-build and long-term projects, which feed into the Regional Transportation Improvement Program and are supported by interlocal agreements for construction and budget allocation. Post-construction projects are reviewed to assess their impact.

The document was previously reviewed by RTC Advisory Committees (Citizen Multimodal Advisory Committee and Technical Advisory Committee) with no objections. The UPWP will be submitted to state and federal transportation agencies. Tasks for FY 2026 and FY 2027 are set to begin on July 1st.

Chair Hill gave credit for the great work that was done with our partners at Reno and Sparks. She expressed her disappointment in Washoe County for not submitting any projects but is excited about moving on the Truckee River path.

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

5.2 Receive a presentation on the status of the Central Reno & Central Sparks Neighborhood Network Plans. (Informational Only – No Action Required)

Marquis Williams, Senior Transportation Planner, gave a brief presentation and status on the Neighborhood Network Plans that were started in October of 2024. The Active Transportation Program, approved in September 2024, seeks to boost walking and biking in the region through goals that include improving safety, expanding mode share, sustainable system maintenance and

enhancing community quality. Implementation follows a neighborhood network planning strategy, guided by tools like gap analysis and the Pedestrian Experience Index.

The Active Transportation Technical Advisory Committee (ATTAC) supports coordination with local jurisdictions. The program focuses on neighborhood-level travel, recognizing that most walking and biking trips are local. The region is divided into 12 neighborhoods, aiming to increase comfort and safety through a network of connected corridors.

Marquis Willams shared the following timeline updates:

- Central Reno Plan: presentation in June, approval in July
- Central Sparks Plan: presentation in August, approval in September
- Quick build projects: targeted for 2026 implementation, pending timeline adherence

Chair Hill asked how Commissioners could best support RTC staff in their projects that involve city and county presentations, emphasizing the importance of advocacy and acknowledging the potential for changes on presentation day.

Bill Thomas, RTC Executive Director, stated that he believes that putting emphasis on the importance of public outreach during project discussions and also suggested involving board members from outside the jurisdiction to highlight regional value would be helpful.

Commissioner Lawson stated there is a need for better access to the river for Sparks residents. With the current reliance on Sparks Boulevard and the dangers of McCarran due to heavy truck traffic, we need to find a safer route across I-80 to reach the river.

5.3 Approve the classification plan and compensation schedule for Fiscal Year 2026, including a revised Pay for Performance program. (For Possible Action)

Laura Freed, Director of Administrative Services, discussed the classification and compensation study initiated over a year ago. The consultant's report was presented in November, and in February, the Board approved market adjustments for nine positions, resolving supervisory compaction issues and correcting Fair Labor Standards Act designations for two positions.

Laura Freed stated that this item approves a new classification plan with refreshed job descriptions, reducing the total by eliminating old and duplicative titles. The process involved collaboration among the executive director, department directors, and staff. Additionally, a compensation plan is proposed, adding 18% to the top end of pay scales for FY 26 to support salary growth. The policy for cost of living adjustments and pay for performance will be based on Western CPI data and annual recommendations. The costs are already included in the budgeted salary and fringe.

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

5.4 Review a report from the RTC's Director of Finance regarding the Fiscal Year 2026 increase in the indexed fuel taxes in Washoe County that will become effective on July 1, 2025, as required by NRS 373.067 and WCC § 20.43416. (Informational Only – No Action Required)

Christian Schonlau, RTC Director of Finance/CFO presented the annual indexing process to the public and the Board. He reminded everyone that there is no decision-making by RTC in the rates that come out of this process. There are statutory formulas based on a rolling average of ten years of PPI data from the Western states and we just apply them to current rates. This method helps avoid rate shocks, with recent inflationary impacts smoothed to maintain indexing around 4%.

The 3.45 cents per gallon increase helps to offset inflationary costs in fuel tax in our region. There are other forces that negatively affect fuel tax revenue to the RTC and all the local jurisdictions, specifically electric vehicles and other high efficiency vehicles that do not pay the same taxes. There is a flattening in gallons sold across Washoe County and an expected decline in gallons. The entire workup of calculations is in the Board agenda packet.

5.5 Acknowledge receipt of the Fiscal Year 2026 RTC Tentative Budget. (For Possible Action)

Christian Schonlau, RTC Director of Finance/CFO, gave a presentation and discussion on the FY26 Tentative Budget. The presentation focused on the annual capital and operating budget for the RTC. The tentative budget incorporates key recommendations from both the Board and Director retreats. Additionally, one full-time position for a management analyst was added, bringing the total staff to 76 FTEs.

The preliminary budget was submitted to the Department of Taxation on April 15, with final approval scheduled for May 29 and implementation beginning July 1.

Approximately 90% of the budget is allocated to capital projects. Major capital projects for the upcoming fiscal year include \$30 million for Arlington Avenue Bridges, \$15 million for Mill Street, and \$30 million for Sparks Boulevard. Transit investments include the construction of a permanent hydrogen fueling station, the arrival of six additional hydrogen buses, and the replacement of 10 aging vehicles with hybrids. The Virginia Street BRT expansion is progressing with repurposed FTA funds, and planning continues on the TRIC rail connector and Safe Streets for All study. The RTC is also advancing its Neighborhood and Active Transportation Plans.

The budget is balanced, as required, and follows a flat operating strategy due to expected declines in sales tax revenue. Personnel and other controllable costs were held steady, while regional trends such as population growth and low unemployment remain positive.

Commissioner Garcia asked whether any of the federal funding is at risk of being pulled back, paused or terminated, especially in the context of ongoing planning for construction.

Christian Schonlau responded by acknowledging some uncertainty at the federal level but clarified that most of the funding consists of formula funds already received by RTC and available for immediate use. In the event that anticipated federal funds are not received, RTC could backfill with

other revenue sources, which may reduce the number of future projects but would not impact current operations or projects underway.

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

Item 6 *REPORTS (Informational Only)*

6.1 RTC Executive Director Report

Bill Thomas, RTC Executive Director, reported on the following items:

- Terminal building office hours.
- All fixed route buses now have protective barriers for drivers.
- The RTC is expanding its partnership with the Washoe County Libraries.
- Good news was received on the air quality and ozone challenge in the Intermountain West.
- The RTC, NCE, and Granite Construction won the Transportation Project of the Year Award from the ASCE Truckee Meadows Branch for the Oddie Wells Project.
- The Sparks Intelligent Corridors won the Transportation Achievement Award in the TSMO Category in the ITE Mountain District in partnership with Kimley-Horn and UNR.
- RTC is very proud to have sponsored Latino Lobby Day at the Nevada Legislature.
- RTC provided transportation to and from Carson City for Senior Day at the Legislature.
- RTC will provide shuttle service to the Earth Day celebration at Idlewild Park tomorrow.
- Congratulations to our Assistant Transit Planner, Alex Cruz who graduated at the APTA Mobility Conference and International Bus Roadeo earlier this month.
- I'm happy to introduce you to our newest team member, Rick Parton, who started as RTC's Finance Manager on April 7th.
- Congratulations to Omar Casildo, Accounting Specialist on his one year RTC anniversary.
- The MTM Employees of the Month for February and March are Monika Ramirez and Andy Briswalter.
- The Keolis Drivers of the Month for March and April are Robert Wendt and Earl Ray Grant.

6.2 RTC Federal Report

Paul Nelson, RTC Government Affairs Officer, reported that RTC submitted \$6 million in federal funding requests for three regional projects with full support from Nevada's congressional delegation. He noted a federal review of past grant awards focused on DEI, climate, EVs, and bike projects, which may impact any grants not yet obligated. RTC is also preparing input for upcoming federal transit law reforms and the 2026 transportation reauthorization bill, with suggestions due to Congress and NDOT by early May.

6.3 NDOT Director Report

NDOT Deputy Director Sajid Sulahria gave a presentation and a summary on the following topics:

- Pyramid Highway – Final Construction Season Launches
- Driver's Edge Program
- Work Zone Safety Awareness Week April 21 - 25
- State Route 28 Multi-Agency Open House April 30
- Freeway Service Patrol – Mitigations and Clearance Times

Item 7 COMMISSIONER ANNOUNCEMENTS AND UPDATES

The Board congratulated Bill Thomas's five-year anniversary as Executive Director of the RTC. Bill Thomas thanked the Board for their support and trust, emphasizing that the organization's success is due to the collective efforts of the Board, executive leadership, and staff.

Item 8 PUBLIC COMMENT

Chair Hill opened the public comment period.

Carlos Elizondo, Local Resident, provided public comment regarding fare payment inconsistencies on RTC buses and concerns about enforcement and fairness in rider payment practices.

Item 9 ADJOURNMENT

The meeting was adjourned at 10:22 a.m.

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: 6/20/2025

Agenda Item: 4.1.2

To: Regional Transportation Commission

From: Michelle Kraus, Clerk of the Board

SUBJECT: Draft Meeting Minutes for 05/16/2025

RECOMMENDED ACTION

Approve the meeting minuted for the 05/16/2025 RTC Board meeting.

BACKGROUND AND DISCUSSION

See attached for Background and Discussion.

FISCAL IMPACT

There is no fiscal impact related to this item.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

**REGIONAL TRANSPORTATION COMMISSION
WASHOE COUNTY, NEVADA**

FRIDAY

9:00 A.M.

May 16, 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
Sondra Rosenberg, 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. 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.

Adam Searcy, CFO, Washoe County School District, expressed strong support for Item 4.3.1, concerning a proposed MOU with RTC. He emphasized the importance of improving student access to schools, extracurricular activities, and healthy community programs. He conveyed the district's commitment to actively market, manage, and support the pilot initiative, highlighting the strength of interagency collaboration and appreciation for RTC staff, particularly Mr. Thomas and Jim Gee.

Colleen Westlake, Trustee for the Washoe County School District, shared her gratitude for RTC's support of students and families. She praised the positive community impact of the proposed program and expressed heartfelt thanks on behalf of the trustees and the district.

Chair Hill pointed out that kids will ride free with this program and expressed her excitement and gratitude for all involved.

Vice Chair Reese thanked Mr. Gee, Commissioner Garcia, and Chair Hill for their leadership in supporting the school district project. He emphasized appreciation for the commissioners' strong advocacy for students and in the program's rollout and ensuring it reaches as many students as possible.

Item 3 APPROVAL OF AGENDA

Bill Thomas, RTC Executive Director, moved to remove Items 7.1 and 7.2 in consideration of time.

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

Items 4 CONSENT ITEMS

4.1. Reports

- 4.1.1 Acknowledge receipt of the monthly Procurement Activity Report. (For Possible Action)
- 4.1.2 Acknowledge receipt of the monthly Planning Activity Report. (For Possible Action)
- 4.1.3 Acknowledge receipt of the monthly Engineering Activity Report. (For Possible Action)
- 4.1.4 Acknowledge receipt of the monthly Public Transportation and Operations Activity Report. (For Possible Action)
- 4.1.5 Acknowledge receipt of the monthly Outreach Report from the Communications staff. (For Possible Action)
- 4.1.6 Acknowledge receipt of the monthly summary report for the Technical, Citizens Multimodal, and Regional Road Impact Fee Advisory Committees. (For Possible Action)

4.2 Engineering Department

- 4.2.1 Approve Amendment No. 1 to the contract with Wood Rodgers, Inc., for additional design and engineering during construction services needed in connection with extending the project limits and the contract performance period for the Virginia Line BRT Improvements Project, in the amount of \$189,740, for a new total not-to-exceed amount of \$2,621,715. (For Possible Action)
- 4.2.2 Approve a contract with Nichols Consulting Engineers, CHTD for design and engineering during construction services for the Galletti Way Rehabilitation Project, in an amount not-to-exceed \$212,035.50. (For Possible Action)
- 4.2.3 Approve Amendment No. 1 to the contract with Nichols Consulting Engineers, CHTD, for additional design and engineering during construction services needed in connection with the Sun Valley Boulevard Corridor Improvements Project, in the amount of \$4,342,410, for a new total not-to-exceed amount of \$5,573,485. (For Possible Action)

4.3 Public Transportation/Operations Department

- 4.3.1 Approve a Memorandum of Understanding with the Washoe County School District (WCSD) for a one-year pilot program to provide free transit passes to students in the 2025-2026 school year. (For Possible Action)
- 4.3.2 Acknowledge receipt of this quarterly Construction/Maintenance update on Transit Stops as presented to the Citizens Multimodal Advisory Committee on May 7, 2025. (For Possible Action)
- 4.3.3 Approve an Interlocal Contract Agreement with Storey County to contribute funding toward the RTC's Rail Service Planning Study, in an amount not to exceed \$100,000. (For Possible Action)

4.4 Executive, Administrative and Finance Departments

- 4.4.1 Approve Resolution 25-09 to augment the FY 2024-2025 Budget of the Regional Transportation Commission of Washoe County as it relates to the Metropolitan Planning Fund. (For Possible Action)

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

Item 5 PUBLIC HEARING

- 5.1 Conduct a public hearing regarding approval of Amendment No. 6 to the FFY 2023-2027 Regional Transportation Improvement Program (RTIP); adopt a resolution approving Amendment No. 6 to the FFY 2023-2027 Regional Transportation Improvement Program (RTIP). (For Possible Action)**
- a. Staff Presentation**
 - b. Public Hearing**
 - c. Action**

Graham Dollarhide, RTC Planning Manager, provided an overview of the TIP process and summarized changes under the amendment, including:

- Budget adjustments for NDOT-led projects based on scope changes and updated cost estimates
- Reallocation of scope and budget between projects
- Addition of three new projects and minor timing updates
- Consolidation of four RTC projects into the "Biggest Little Bike Network"
- Minor funding mix change for an additional RTC project

He noted that a public comment period was held from April 24 to May 14, with no comments received, and the amendment was reviewed by CMAC and TAC.

Chair Hill and other Commissioners had no additional questions. No public comment was received during the hearing.

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

Item 6 DISCUSSION ITEMS AND PRESENTATIONS

- 6.1 Receive a presentation on improvements made to RTC's web content for ease of accessibility. (Informational Only)**

Laura Freed, Director of Administrative Services briefed the Board on new ADA Title II web accessibility rules and confirmed that RTC is largely compliant. She noted ongoing efforts to update the website, mobile apps, and report formatting. An RFP is underway for a more accessible web platform compliant with WCAG 2.2 standards.

Chair Hill thanked staff for prioritizing accessibility. Commissioner Garcia and Vice Chair Reese also expressed support.

No action taken.

6.2 Acknowledge receipt of the 2024 Annual Report. (Informational Only)

Bill Thomas, Executive Director presented a short video summary of 2024 accomplishments, including major infrastructure projects and public transportation highlights. He acknowledged RTC partners and staff.

Vice Chair Reese commended innovation and staff dedication. Commissioner Garcia noted the significance of 32 consecutive months of ridership growth and praised community outreach.

No action taken.

6.3 Evaluate the Executive Director's annual performance as it pertains to the duties and obligations of the position and accomplishments for Fiscal Year 2025, and consider approval of a compensation adjustment if the Executive Director's performance has been satisfactory or better. (For Possible Action)

Laura Freed, Director of Administrative Services, outlined the review process governed by Mr. Thomas's employment contract and RTC policy.

Chair Hill presented her evaluation summary, highlighting unanimous Board praise for Mr. Thomas's performance. Strengths noted included implementing Board priorities, staff development, strategic partnerships, and progress on Sun Valley, Tahoe, and Truckee River initiatives.

Commissioner Garcia praised Mr. Thomas's leadership and communication. Vice Chair Reese emphasized his adaptability and praised his humility and commitment.

On motion of Chair Hill to approve an 8% salary increase and a \$5,000 bonus for Executive Director Thomas, seconded by Vice Chair Reese, which motion unanimously carried, Chair Hill ordered that this item be approved.

Mr. Thomas thanked the Board and credited staff and the Board's shared vision for RTC's success.

Item 7 REPORTS (Informational Only)

7.1 RTC Executive Director Report *(Item Removed from Agenda due to time constraints)*

7.2 RTC Federal Report *(Item Removed from Agenda due to time constraints)*

7.3 NDOT Director Report

NDOT Deputy Director Sondra Rosenberg gave a presentation and a summary on the following topics:

- Matley Lane Reconfiguration - Villanova Drive to Plumb Lane
- U.S. 395 North Valleys Lane Switches
- Work Zone Safety Week – Go Orange Day – April 23rd

Item 8 COMMISSIONER ANNOUNCEMENTS AND UPDATES

Commissioner Garcia promoted Biketopia, a community bike safety event on May 17 at the Reno Public Market, and thanked RTC staff and local partners for their support.

Chair Hill reminded Commissioners of the FY 2026 budget hearing scheduled for May 29 at 2:00 p.m.

Item 9 PUBLIC COMMENT

Chair Hill opened the public comment period.

Michael Gawthrop-Hutchins, local resident emailed a comment on May 13, 2025 at 8:14 a.m. He fully supports the agreement between WCSD and RTC to provide free transit for WCSD students. He suggested extending the pilot program to four years to better measure its impact and recommended expanding free transit access to students at non-WCSD public charter schools and including FlexRide service areas for broader coverage. He noted that current bus on-time performance is over 90% and urged raising the official goal from 85% to at least 90% to maintain high standards, suggesting a stretch goal of 92.5%. He requested this topic be added as a future agenda item for further discussion

Item 10 ADJOURNMENT

The meeting was adjourned at 9:41 a.m.

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: 6/20/2025

Agenda Item: 4.1.3

To: Regional Transportation Commission

From: Michelle Kraus, Clerk of the Board

SUBJECT: Draft Meeting Minutes for 05/29/2025

RECOMMENDED ACTION

Approve the meeting minutes for the 05/29/2025 RTC Special Board meeting.

BACKGROUND AND DISCUSSION

See attached for Background and Discussion

FISCAL IMPACT

There is no fiscal impact related to this item.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

**REGIONAL TRANSPORTATION COMMISSION
WASHOE COUNTY, NEVADA**

THURSDAY

2:00 P.M.

May 29, 2025

PRESENT:

**Alexis Hill, Chair, Washoe County Commissioner
Devon Reese, Vice Chair, Reno City Council
Ed Lawson, Mayor of Sparks
Mariluz Garcia, Washoe County Commissioner
Hillary Schieve, Mayor of Reno (Connected Via Zoom 2:12 p.m.)
Bill Thomas, RTC Executive Director
Adam Spear, Legal Counsel
Tracy Larkin Thomason, Director of NDOT**

A special meeting to approve the FY26 RTC Final Budget was held in the 1st Floor Great Room at Regional Transportation Commission of Washoe County, Reno, Nevada. All Board members attended via Zoom, and the meeting was called to order by Chair Hill. 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. There was no public comment.

Items 3 PUBLIC HEARING

- 3.1 Conduct a public hearing on the FY 2026 RTC Final Budget; approve a recommendation from the Executive Director regarding an employee cost-of-living adjustment and performance-based salary increases to be included in the budget; approve the FY 2026 RTC Final Budget. (For Possible Action)
 - a. Staff Presentation
 - b. Public Hearing
 - c. Action

Christian Schonlau, RTC Director of Finance & CFO, presented the final FY26 RTC budget, emphasizing that no substantive changes had occurred since the tentative version submitted and approved by the Nevada Department of Taxation. The only adjustment was a revision of sales tax revenue forecasts to reflect continued decline: a 4% decrease in the current year and an additional 2% decrease projected for the following year.

Vice Chair Reese and Mayor Schieve raised concerns about the lack of a designated fund for emergent, small-scale, constituent-driven safety projects. They cited examples like Seventh Street and Midtown where immediate responses were needed, often exhausting discretionary funds.

Mr. Schonlau explained that although no specific line item exists for these requests, the budget is structured optimistically to allow flexibility. Projects can be reprioritized, and contingency adjustments can be made as needed. He also confirmed there is inherent capacity to pivot within the existing capital budget and that future augmentations could also be considered if necessary.

Bill Thomas, Executive Director, agreed to bring back options for a more formalized approach to emergency or unplanned project funding for future discussion.

Chair Hill and other Commissioners had no additional questions. There was no public comment during the hearing.

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

Item 4 COMMISSIONER ANNOUNCEMENTS AND UPDATES

Chair Hill reported that she, Bill Thomas, and Jim Gee attended a school board meeting to support the Kids Ride Free pilot project. The school board unanimously approved the agreement on consent. A media event celebrating the program will be held on June 3rd at 1:00 p.m., and she encouraged participation. She also noted that Bill is exploring the possibility of wrapping a bus to help promote the initiative as a valuable option for youth transportation.

Vice Chair Reese expressed appreciation for the RTC's student transit access program, emphasizing its importance in providing youth with greater access to transportation for educational, recreational, and basic needs. He highlighted the need for continued communication and outreach to ensure the community is fully informed and able to utilize the program.

Vice Chair Reese also reported on his recent trip to Washington, D.C., alongside Commissioner Garcia and RTC staff. He noted the productivity of their advocacy efforts, especially concerning the Sun Valley Roadway Improvements Project. He commended the bipartisan potential of transportation initiatives and praised the collaboration and leadership of his colleagues and staff during the visit. He expressed gratitude for the opportunity to learn more about APTA and its mission.

Item 5 PUBLIC COMMENT

Chair Hill opened the public comment period. There was no public comment.

Item 6 ADJOURNMENT

The meeting was adjourned at 2:25 p.m.

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: 6/20/2025

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

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.

ATTACHMENT A

PROJECTS CURRENTLY ADVERTISED

<u>Invitations for Bids (IFB)</u>	
Project	Due Date
Sparks Boulevard Capacity Improvement, North Phase	June 11, 2025
Traffic Signal Modifications 25-01	June 12, 2025
West Fourth St. Downtown - Pedestrian Improvements	June 17, 2025
Buck Drive Circulation Project	July 8, 2025

<u>Request for Proposals (RFP)</u>	
Project	Due Date
N/A	

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
E. Lincoln Way Roundabout	Sierra Nevada Construction	05/09/2025	\$3,497,007
2025 Bridge Maintenance Project	Q&D Construction	05/29/2025	\$373,202

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
Bigleaf Networks 3-Year Hardware/Internet Connections	Bigleaf Networks	\$25,164
Construction Access to Arlington Bridge	Washoe Tribe	\$65,000
Construction Access to Arlington Bridge	Reno Sparks Indian Colony	\$65,000
Madison AI Modules FY26	M3 Planning Inc., dba Madison AI	\$30,000
OnStrategy Strategic Planning/Road Mapping	OnStrategy	\$45,760
Engineering Schedule and Constructability Services	ICE Teams	\$49,000
Terminal Way Remodel Director and Agency Services	Bruce Purves Construction	\$64,940
Specialized Federal Lobbying Services	Porter Group LLC	\$83,000

Project	Contractor	Contract Amount
Specialized Federal Lobbying Services	Cardinal Infrastructure	\$84,000
Specialized Legal Services	Lemons, Grundy & Eisenberg	\$49,500

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
OnRoute Supervisor SaaS subscription	Vontas	03/13/2025	Amend 2	\$68,471	\$1,080,412



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 6/20/2025

Agenda Item: 4.2.2

To: Regional Transportation Commission

From: Vanessa Lacer, Planning Director

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: Outreach phase completed, and draft recommendations reviewed for first of two Neighborhood Network Plans (Central Reno); Initial outreach for second Neighborhood Network Plan (Central Sparks) completed with the final of three stakeholder meetings held on June 11, 2025.

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, RFP advertisement released 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, RFP advertisement released 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 expected in late June 2025.

ONGOING PROGRAMS

Data Collection Program

Xuan Wang, Project Manager

<https://d1m.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 scheduled for 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: 6/20/2025

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 is currently finalizing the project design. Coordination with City of Reno staff on project details, including access management, is ongoing. Engagement with adjacent property owners is also underway.

Construction is tentatively anticipated to begin in summer 2025 and continue through fall 2025.

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.

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 just getting started and looking at early scoping and schedule items. 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: 60% design submittal is anticipated later this summer 2025.

Pyramid Improvement Phase 1

Amanda Callegari, Project Manager

<https://rtcwashoe.com/projects/pyramid-highway-us-395-connection-project/>

Status: The Nevada Department of Transportation (NDOT) is performing the construction administration of Phase 1 of the overall Pyramid/395 Connector (NDOT Contract 3948). Construction began May 1, 2023 and as reached substantial completion. A ribbon cutting is scheduled for July 11th.

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.

S Virginia Street & I-580 Exit 29 Capacity & Safety

Jeffrey Wilbrecht, Project Manager

<https://rtcwashoe.com/projects/south-virginia-street-and-i-580-exit-29-capacity-and-safety/>

Status: Construction was substantially completed as of December 2024.

Due to weather, during the Spring 2025, landscape and other miscellaneous items will be finalized.

Sparks Boulevard Capacity Improvement

Garrett Rodgers, Project Manager

<https://rtcwashoe.com/projects/sparks-boulevard-capacity-improvement-greg-street-to-baring-boulevard/>

Status: This Project is currently advertised for bidding. Bids are expected to open in June 2025.

More information is available at SparksBlvdProject.com.

Construction is complete for the southern segment (Phase 1) of the project, between Greg St and I-80.

Steamboat Parkway Improvement

Garrett Rodgers, Project Manager

<https://rtcwashoe.com/projects/steamboat-parkway-improvement-damonte-ranch-pkwy-to-veterans-pkwy/>

Status: Project is approaching completion. Remaining scope includes landscaping. Sod installation will be performed in early Spring.

Vista Boulevard/Disc Drive Intersection Improvement

Alex Wolfson, Project Manager

<https://rtcwashoe.com/projects/vista-boulevard-disc-drive-intersection-improvements/>

Status: Work at the Mira Loma / Veterans and Nichols Blvd locations is expected to begin in June. Major reconstruction work at the Vista/Disc intersection is anticipated to begin in July.

Corridor Improvement Projects

Arlington Avenue Bridges NEPA/Design/EDC

Bryan Byrne, Project Manager	https://rtcwashoe.com/construction-projects/arlington-avenue-bridges-project/
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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/
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Status: Preliminary design is underway.

Keystone Ave Bridge Replacement

Jeffrey Wilbrecht, Project Manager	https://rtcwashoe.com/projects/keystone-avenue-bridge-replacement/
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Status: The project team is working on 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/
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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/
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Status: Preliminary 30% design for (2) segments anticipated Fall 2025

Oddie / Wells Corridor Multi-Modal Improvements

Jeffrey Wilbrecht, Project Manager	https://www.senserasystems.com/public/cameras/oddiewellsproject
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Status: Project is substantially completed.

Punchlist and landscape maintenance work being performed with intermittent lane/shoulder closures.

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 efforts; 60% design anticipated Winter 2025

West Fourth Street Downtown

Scott Gibson,
Project Manager

<https://rtcwashoe.com/projects/west-fourth-street-downtown/>

Status: Design is complete, and the project is out to bid with a bid opening date of June 17th.

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 has been awarded to Q&D Construction. Construction will start late June 2025.

Arrowcreek/Wedge Rehabilitation

Jessica Dover, Project Manager

<https://rtcwashoe.com/projects/arrowcreek-parkway-wedge-rehabilitation/>

Status: Construction NTP is anticipated June 2025.

La Posada Corrective

Bryan Byrne, Project Manager

<https://rtcwashoe.com/projects/la-posada-corrective-project/>

Status: The project will begin data gathering and progress towards a 50% design package. The 50% design submittal is expected in June 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 underway.

Traffic Engineering/ITS

Veterans Parkway ITS

Austin McCoy

<https://rtcwashoe.com/projects/veterans-parkway-its/>

The project was awarded to Titan Electrical Contracting. Project construction has begun and is anticipated to be substantially complete by June 1.

Veterans Roundabout Modifications

Jessica Dover

<https://rtcwashoe.com/projects/veterans-roundabout-modifications/>

Construction NTP is anticipated June 2025.

Traffic Signal Timing 7

Alex Wolfson

<https://rtcwashoe.com/projects/traffic-signal-timing-7-project/>

New timing plans are being developed for the following corridor:

S Virginia St - McCarran Blvd to I-580 / Patriot interchange

Next corridors for re-timing will be:

Pyramid Way - Interstate 80 to Eagle Canyon Dr

N McCarran Blvd - N Virginia St to Pyramid Way

Clear Acre Ln - N McCarran Blvd to Sun Valley

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 and at traffic signals in City of Sparks. 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:

https://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/>

Project has been awarded to Titan Electrical Contracting. Construction is anticipated to begin May 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 is anticipated to begin in June.	

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 early Summer 2025.

REPORT ON NEGOTIATED SETTLEMENT AGREEMENTS FOR THE ACQUISITION OF PROPERTY

Project	Property Owner	Purchase Amount	Amount Over Appraisal
Sparks Boulevard Improvement	Burns Family LLC II	\$21,300.00	\$2,660.00
Traffic Signal Modifications 25-01	Buck Family Trust	\$1,513.00	\$0
Traffic Signal Modifications 25-01	Sandra Warner	\$1,125.00	\$3,875.00
Virginia Line BRT Improvements	El Rancho Enterprises	\$13,421.00	\$3,000.00
Virginia Line BRT Improvements	G and G Yup Corporation	\$10,899.00	\$4,360.00
Virginia Line BRT Improvements	Jackson's Food Stores, Inc.	\$6,318.00	\$0
Virginia Line BRT Improvements	Ohana NV, LLC	\$6,731.00	\$2,464.00
Virginia Line BRT Improvements	Saronic Investments Inc.	\$14,587.00	\$7,841.00
Virginia Line BRT Improvements	Weethee Stout Enterprises Inc.	\$24,240.00	\$0
West Fourth Street Safety	Harbhagwan Sandhu	\$2,034.00	\$0
West Fourth Street Safety	Nevada Ice Co.	\$1,683.00	\$0

CONTRACTS UP TO \$100,000

Project	Vendor	Scope	Amount
Engineering Schedule and Constructability Reviews	ICE Teams	Schedule and constructability reviews for various projects including Arlington Ave Bridges construction schedule update reviews and W. 4 th Street Safety schedule and constructability review	\$49,937



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 6/20/2025

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 May.

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 -

Youth Ride Free on RTC – On Tuesday, June 3rd, RTC Commissioners, along with RTC staff and Washoe County School District staff and WCSD Board President, Beth Smith announced the “Youth Ride Free” Program from Desert Skies Middle School. All Washoe County School District students can ride RTC transit for free using the RTC Youth Pass. Registration for the pass can be done by the student, parent, or teacher and the free service may be used seven days a week. At the end of the first year, RTC staff and WCSD will provide a report outlining the success of this initiative.



Stuff a Bus for Seniors – In Honor of Older Americans Month, the Washoe County Human Services Agency teamed up with KOLO 8 News Now, Keolis and RTC for the 2025 KOLO Cares Stuff A Bus Drive-By Donation for Seniors on Friday, May 23rd at Target across from Legends Mall. Donations collected are stored at the Washoe County Senior Center and offered to seniors in need throughout the year.

Earthquake Response Exercise – RTC coordinated with local emergency management agencies on May 14 for an earthquake response exercise. Several RTC ACCESS vans were utilized to transport simulated patient actors to St. Mary's and Renown Regional Medical Centers. These training exercises are very valuable in helping the community prepare for times of crisis.



Older Americans Month - RTC and other organizations joined the OAM Kickoff Information Fair, Thursday, May 1, 2025, at the National Automobile Museum to provide activities, events, and resources in Washoe County designed especially for older adults. RTC Commissioner Mariluz Garcia attended the event where RTC staff provided information and resources on transportation options available in Washoe County. In addition, staff provided information on the different transportation technologies RTC offers and how these tools can help seniors plan trips more efficiently throughout the Reno-Sparks area.



RTC RIDE Key Highlights – May

- 0 trainees released to Operations for revenue service
- Driver of the Month: Bertha “Renee” Dunlap (April accomplishments)
- Driver bid for 2025 May Service Change
- Bus request: *Mother’s Day Boutique*
- Bus request: *Stuff a Bus for Seniors*
- 99% service hours and trips delivered
- Employee Engagement:
 - Mother’s Day Carnation Giveaway
 - Cinco de Mayo Los 3 Pinguinos
- 0 new Grievance filed, no new Unfair Labor Charges



Keolis represented staffing headcount as of May 29, 2025:

Position	Total Employed	#Needed
Coach Operator Trainees	11	10
Coach Operators	168	5
Dispatchers	6	0
Road Supervisors	4	0
Mechanic A	5	0
Mechanic B	4	1
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 – May

Classes: One class held on May 27th – 15 drivers hired, 10 are in training

Safety:

- **Accidents:**
 - 1 Preventable
 - 1 Non-preventable
- **Incidents**
 - 1
- **Injuries:**
 - 0
- **YTD Preventable Accident Count: 5**
- **YTD Injury Count: 1**

May Safety Blitzes (4)

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

May Safety Meeting

- Bikes and Pedestrians

MTM represented staffing headcount as of May 30, 2025:

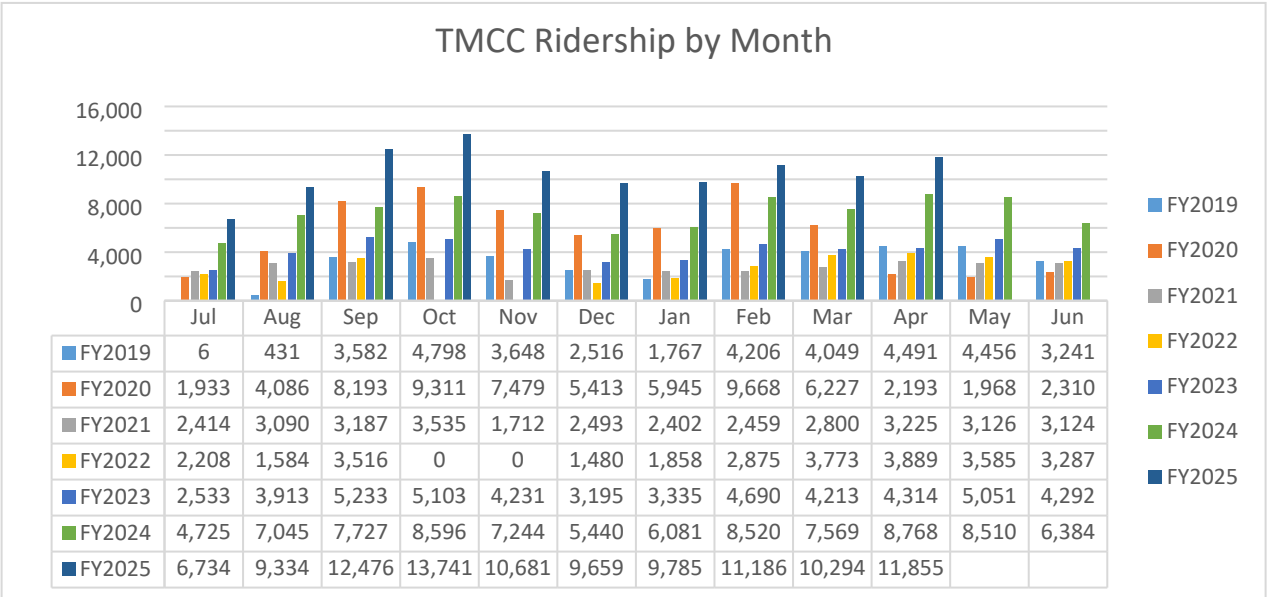
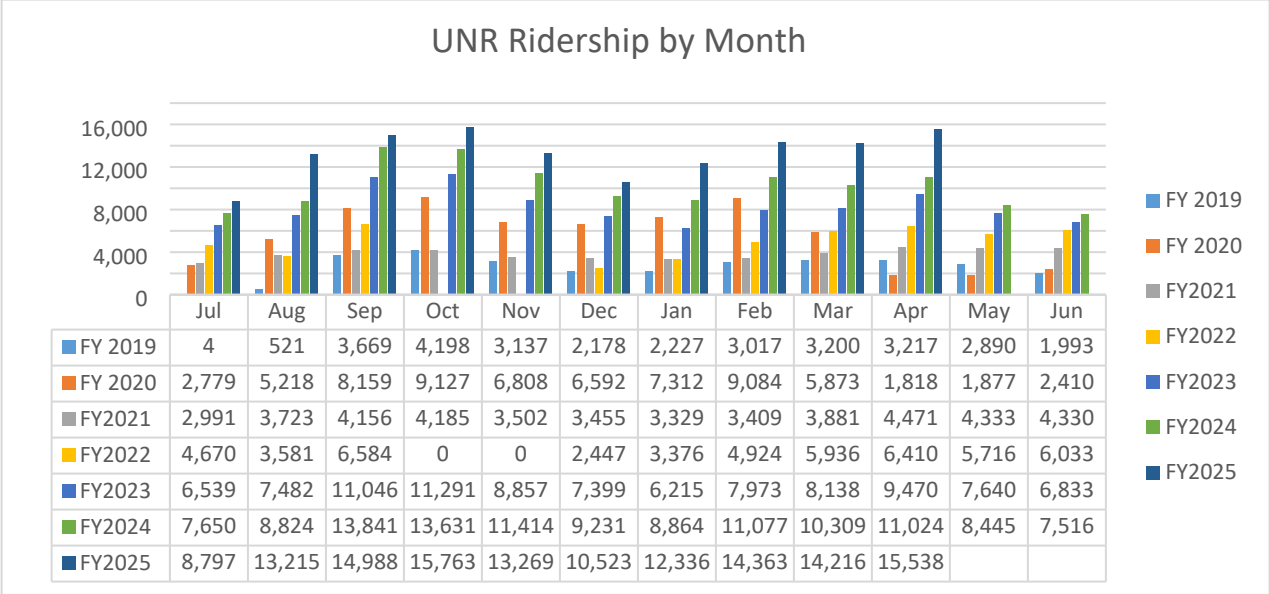
Position	Total Employed	#Needed
Drivers	61FT – 1PT	10FT – 0 PT
Dispatchers	4 FT	0
Reservationists	4. FTE's	0.5
Mechanic A	3.5 FT	0
Utility Worker	1	0
Facility/Maintenance Technician	1	0

TRANSIT DEMAND MANAGEMENT (TDM) Update

- Vanpools remained at 331.
- Staff manned a table at the annual Biketopia event at the Reno Public market on May 17th.
- Staff continues to meet weekly with RTC's marketing company Celtis to discuss deliverables. Celtis has begun work on some User Generated Content (UGC) for RTC's vanpool program. Staff saw the first drafts on May 29th.

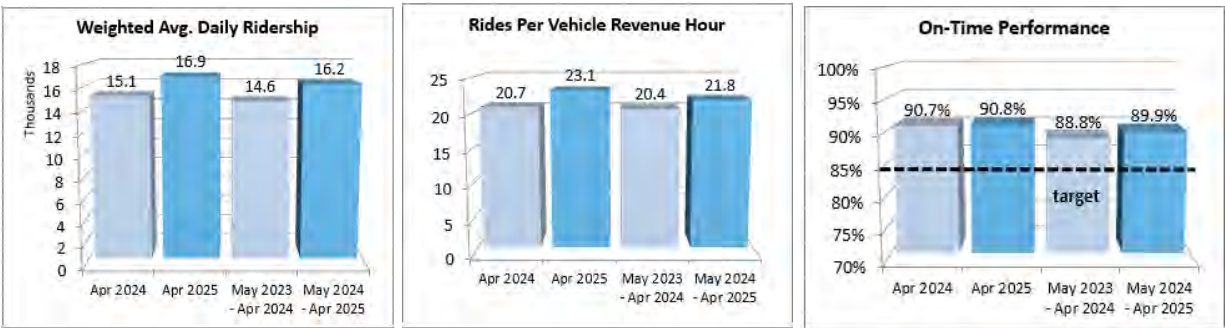


Ridership numbers from the ED Pass Program through the month of April 2025:

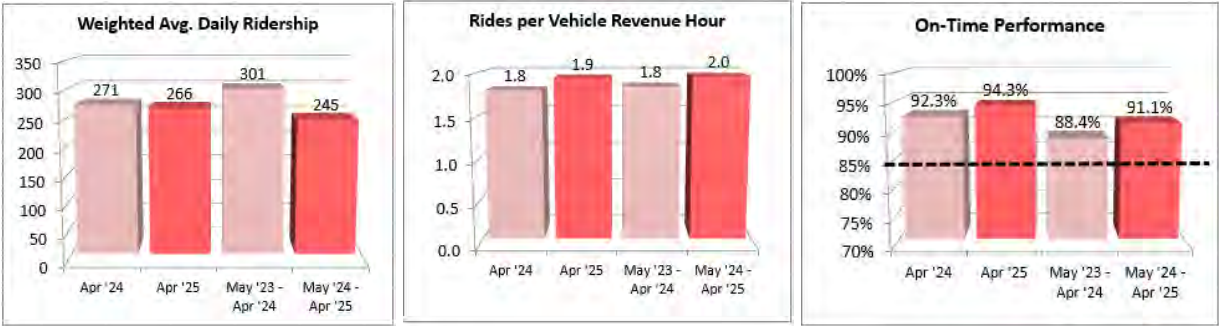


Once again, we hit all-time highs for the month of April with over 27,000 trips!

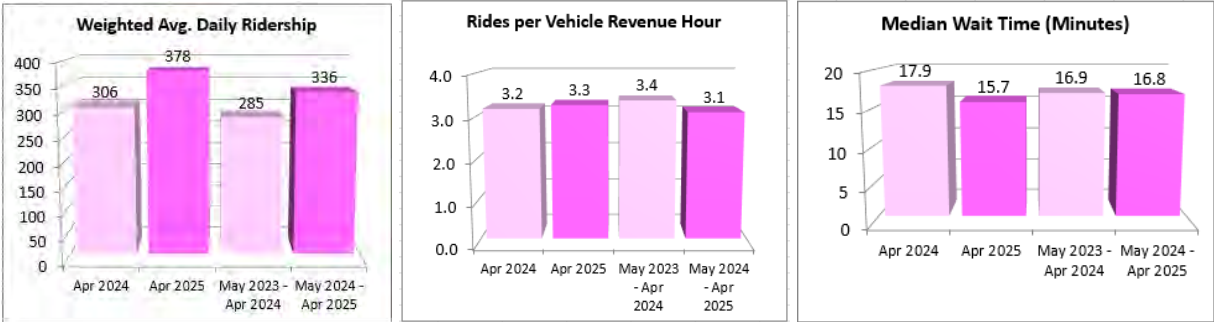
APRIL 2025 TRANSIT PERFORMANCE
RTC RIDE



RTC ACCESS



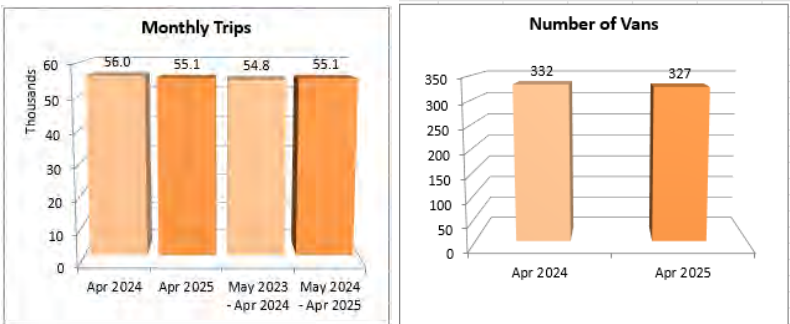
RTC FlexRIDE



TART



RTC VANPOOL





REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 6/20/2025

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 May 2025



www.rtcwashoe.com

Outreach Activities

Josh MacEachern, Project Manager

May Overview:

In May 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:

- Updates on the Arlington Avenue Bridges Project.
- Participation in Bike Month, and the Silver Award for Bicycle Friendly Business.
- Updates on the Mill Street Capacity and Safety Project
- Planning for the Sixth Street for All, Fourth Street Corridor Projects, Keystone/McCarran Flip the Switch, Youth Ride Free, and Sierra Street Bridge events.
- Completion of the Steamboat Parkway Project with ribbon cutting media event.

In addition, RTC made significant progress in the website refresh project and saw growth across all social media channels.

May Highlights:

- **25 TV Spots (see addendum)**
- **157,000 Estimated Audience**
- **\$9,692 Local Ad Value**
- **Biketopia Event**
- **Kiwanis Sponsorship**
- **Steamboat Ribbon Cutting**
- **Stuff A Bus for Seniors**
- **Reno Chamber of Commerce Biggest Little Business Expo**
- **Spanish Springs CAB Meeting**
- **Nevada Transportation Conference**
- **Around Town with RTC (KOLO 8)**
- **Nevada Business Awards**

> Outreach Activities

Josh MacEachern, Project Manager

Press Releases:

- 5.7.25 – Commissioner Mariluz Garcia Celebrates Bike Month with Kiwanis Youth Sponsorship
- 5.9.25 – RTC Providing FREE Shuttle Services for Mother's Day at Idlewild Park
- 5.13.25 – RTC Recognized for Excellence in Transportation
- 5.28.25 – Steamboat Parkway Project Ribbon Cutting

Highlights:



Outreach Activities

Josh MacEachern, Project Manager

Public Outreach:

- **5.1.25 – KOLO 8 Arlington Bridges Filming (Josh)**
- **5.2.25 – Arlington Bridges Live Shot (Josh)**
- **5.4.25 – Bike Month / Idlewild Farmer's Market Tabling (Josh/LaShonn)**
- **5.7.25 – Spanish Springs CAB Meeting (Paul/Bill/Dale/Josh)**
- **5.8.25 – Biggest Little Business Expo (Paul/Josh/Jim)**
- **5.9.25 – City of Reno West Street Plaza Unveiling (Paul/Josh)**
- **5.9.25 – Commissioner Garcia / Kiwanis Media Opportunity (Josh/Paul/Bill)**
- **5.12.25 – Around Town with RTC/KOLO 8 (Paul)**
- **5.13.25 – Nevada Transportation Conference (Dale/Vanessa/Josh)**
- **5.13.25 – Ward 5 Community Forum (Paul)**
- **5.14.25 – Nevada Transportation Conference (Jeff/Josh)**
- **5.15.25 – Safe Routes to School Media Event (Josh/Paul)**
- **5.15.25 – EDAWN Board Meeting (Paul/Vanessa)**
- **5.16.25 – Washoe County Senior Center Ribbon Cutting (Josh)**
- **5.17.25 – Biketopia at Reno Public Market (Josh/Scott M.)**
- **5.22.25 – Family Health Festival (Susi)**
- **5.22.25 – Reno Airport Public Meeting (Bill/Dale/Josh/Paul)**
- **5.23.25 – Stuff a Bus for Seniors (Paul/Josh/Laura)**
- **5.29.25 – Safe Routes to School Bike Presentation (Paul/Josh)**
- **5.30.25 – Steamboat Parkway Ribbon Cutting (Bill/Dale/Josh/Paul/Garrett)**

> Social Media

Josh MacEachern, Project Manager

Facebook

- Reach: 98,763 (up 22% MoM)
- Content Interactions: 1,262
- Link Clicks: 2,491
- Visits: 2,000
- New Follows: 108
- Followers: 4,900 (up from 4.8k MoM)

Instagram

- Reach: 93,409 (up 27% MoM)
- Content Interactions: 720
- Followers: 2.2k

X

- Impressions: 1,300
- Engagements: 64
- Likes: 2
- Followers: 2.2k

YouTube

- Views: 953
- Watch time (hours): 39
- Subscribers: 473

Email Marketing

- Subscribers: 1.4k

> Video Production











Paul Nelson, Project Manager

The Road Ahead:

- **5.6.25 – Bike Month**
- **5.13.25 – Biketopia Event**
- **5.19.25 – Stuff A Bus for Seniors**
- **5.27.25 – Roundabout Improvements**

Other:

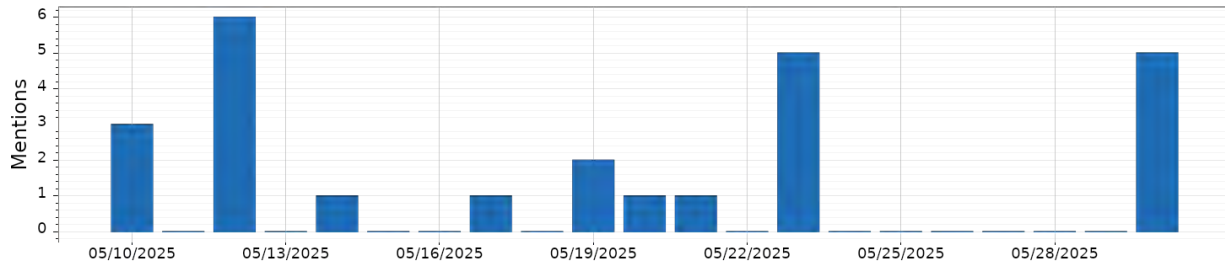
- **Pedestrian Hybrid Beacons (feat. Councilmember Reese)**

	The Road Ahead: Roundabout Improvements The RTC will improve the roundabouts at Legends and at Veterans Parkway. Both of these roundabouts have high volumes of traffic, s...	 Public	None	May 27, 2025 Published
	The Road Ahead: Stuff A Bus for Seniors Let's help our seniors Washoe County! Join RTC, @kolo8newsnow and the Washoe County Human Services Agency...	 Public	None	May 19, 2025 Published
	The Road Ahead: Biketopia The annual Biketopia event will happen this Saturday, May 17 at the Reno Public Market. It will be a great opportunity to learn more abo...	 Public	None	May 13, 2025 Published
	How to use a Pedestrian Hybrid Beacon Pedestrian Hybrid Beacons improve traffic flow and reduce collisions by up to 55%! Reno City Councilmember Devon Reese is here to sho...	 Public	None	May 9, 2025 Published
	The Road Ahead: Bike Month May is National Bike Month. The RTC is encouraging people to ride bikes for some of their transportation needs to save money on gas,...	 Public	None	May 6, 2025 Published



May 2025 Media Report

25 Total Events



Local Audience
157,091



National Audience
0



Estimated Audience
157,091

\$9,692.00

Potential Ad Value



Local Ad Value
\$9,692.00



National Ad Value



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Fox 11 News at 10

Event Type: **TV**
May 30, 2025 10:10:13 PM
Source: **KRXI (FOX)**
Market: **Reno, NV**

Audience: **3,611**
Category: **News**
Country: **US**

>>and next up, **rtc** plans to start work on a project at the veterans parkway in gregor grade roundabout. Stay up to date with all those projects. Head over to **rtc** washoe.com.



Fox 11 News at 10

Event Type: **TV**
May 30, 2025 10:05:12 PM
Source: **KRXI (FOX)**
Market: **Reno, NV**

Audience: **3,611**
Category: **News**
Country: **US**

Rtc of washoe county is cutting the ribbon on its newly finished steamboat parkway improvement project. Will the \$13.2 million



News 4 Nightly at 6.30pm

Event Type: **TV**
May 30, 2025 6:37:52 PM
Source: **KRNV (NBC)**
Market: **Reno, NV**

Audience: **5,191**
Category: **News**
Country: **US**

Well, **rtc** of washoe county is cutting the ribbon on its newly finished steamboat parkway improvement project.



2 News Nevada at 5:30pm

Event Type: **TV**
May 30, 2025 5:46:06 PM
Source: **KTVN (CBS)**
Market: **Reno, NV**

Audience: **11,888**
Category: **News**
Country: **US**

The **regional transportation commission of washoe county** had a ribbon cutting today at steamboat parkway. They're celebrating the completion of a project there... That added more travel lanes... Removed flashing yellow arrow signals... And added new turn lanes.



News 4 at 5

Event Type: **TV** Audience: **8,053**
May 30, 2025 5:05:16 PM Category: **News**
Source: **KRNV (NBC)** Country: **US**
Market: **Reno, NV**

Rtc washoe county is cutting the ribbon on its newly finished steamboat parkway improvement project.



KOLO 8 News Now @ 5PM

Event Type: **TV** Audience: **8,105**
May 23, 2025 5:05:01 PM Category: **News**
Source: **KOLO (ABC)** Country: **US**
Market: **Reno, NV**

And this right here is the bus that **rtc** donated for the day so we could stuff it. Let me show you what's inside. Come on in here. Get on here. All right. Come on in. So we've made a lot of progress. About 30 minutes ago, we were full to right about here. We are back to here right now.



KOLO 8 News Now @ 4PM

Event Type: **TV** Audience: **5,885**
May 23, 2025 4:10:22 PM Category: **Other**
Source: **KOLO (ABC)** Country: **US**
Market: **Reno, NV**

Rtc gave several fans right here. We are here till 6:00 today. Right now it's 410. So you have a little less than two hours to get out here and donate so we can help our seniors.



KOLO 8 News Now @ 4PM

Event Type: **TV** Audience: **5,885**
May 23, 2025 4:05:20 PM Category: **Other**
Source: **KOLO (ABC)** Country: **US**
Market: **Reno, NV**

We're teaming up with the **rtc**... Target... And the washoe county senior center... To collect items for seniors -- on fixed incomes. Kolo 8 news now's noah bond -- joins us live from the target in sparks... Noah -- what's been collected so far? We have a first aid kit. Lotion. This is fantastic. And blankets.



KOLO 8 News Now @ 3PM

Event Type: **TV** Audience: **3,392**
May 23, 2025 3:32:43 PM Category: **News**
Source: **KOLO (ABC)** Country: **US**
Market: **Reno, NV**

We have fans donated by the **rtc**, and let's go on outside and show you what's happening out there. Come on with me here. Let's make this journey. Come on out. Over here we have abby badolato. Come on over. She's with the washoe county senior services. You're the coordinator for that organization.



KOLO 8 News Now @ 3PM

Event Type: **TV** Audience: **3,205**
May 23, 2025 3:05:27 PM Category: **News**
Source: **KOLO (ABC)** Country: **US**
Market: **Reno, NV**

This is the **rtc** bus that josh talked about. I'm going to walk inside. Just come in here with me. Come on in. Okay, so here's the bus. You can see that it's about half full. It's a little sparse. So we have in here again adult diapers. We have food items anything that seniors might need over here.



2 News Nevada at 6:30pm

Event Type: **TV** Audience: **11,052**
May 21, 2025 6:51:26 PM Category: **News**
Source: **KTVN (CBS)** Country: **US**
Market: **Reno, NV**

Rtc is now in the process of letting residents in that area know that improvements are coming soon.



KOLO 8 News Now @ 3PM

Event Type: **TV** Audience: **4,564**
May 20, 2025 3:49:07 PM Category: **News**
Source: **KOLO (ABC)** Country: **US**
Market: **Reno, NV**

Just look for the **rtc** bus -- when you get there. Scientists are baffled... About why monkeys -- on an uninhabited island -- in panama... Are kidnapping babies -- of another species. Researchers made the discovery -- while reviewing camera-trap footage...



2 News Nevada at 11:00pm



Event Type: **TV**

Audience: **8,279**



May 19, 2025 11:05:12 PM

Category: **News**

Source: **KTVN (CBS)**

Country: **US**

Market: **Reno, NV**

Rtc and ndot are continuing to install a traffic signal at the keystone avenue and leadership parkway intersection. Turning left onto mccarran from keystone or left onto mccarran from leadership has proven to be a challenge for some drivers... And has caused a few crashes.



2 News Nevada at 6:30pm



Event Type: **TV**

Audience: **12,396**



May 19, 2025 6:35:00 PM

Category: **News**

Source: **KTVN (CBS)**

Country: **US**

Market: **Reno, NV**

Rtc and ndot are continuing to install a traffic signal at the intersection -- and the leadership parkway intersection there as well. Turning left onto mccarran from keystone or left onto mccarran from leadership has proven to be a challenge as it's caused a few crashes.



News 4 at 5 Weekend



Event Type: **TV**

Audience: **12,418**



May 17, 2025 5:05:24 PM

Category: **News**

Source: **KRNV (NBC)**

Country: **US**

Market: **Reno, NV**

Rtc is contracting with the university of nevada to be the first in the country to use a program that tests synchronized signals for different times of the day, and they're working on sparks boulevard. The new system is expected to cut down on commute times by 15%.



KOLO 8 News Now @ 4PM



Event Type: **TV**

Audience: **7,035**



May 14, 2025 4:19:19 PM

Category: **Other**

Source: **KOLO (ABC)**

Country: **US**

Market: **Reno, NV**

And josh, you're with the **rtc**. Why was it so important to be a part of this event? We tend to make bicycling and multimodal transit into everything that we do as a transit organization.



KOLO 8 News Now @ 3PM

Event Type:	TV	Audience:	3,663
May 12, 2025 3:14:53 PM		Category:	News
Source:	KOLO (ABC)	Country:	US
Market:	Reno, NV		

And the **rtc** connect app that we're using. You can actually book your access or your flex ride with that app. And the nice thing about flex, right? If you're in one of those zones, you can go anywhere within that zone, or they can drop you off at a bus stop so you can get down the road to wherever else you're going.



KOLO 8 News Now @ 3PM

Event Type:	TV	Audience:	3,663
May 12, 2025 3:09:52 PM		Category:	News
Source:	KOLO (ABC)	Country:	US
Market:	Reno, NV		

joining us now, paul nelson, as we go around town with the **rtc**. Paul, this is the busy time when a lot of projects get the green light. We've got a lot of projects going and some big projects too.



Noon News on FOX 11

Event Type:	TV	Audience:	3,434
May 12, 2025 12:23:18 PM		Category:	News
Source:	KRXI (FOX)	Country:	US
Market:	Reno, NV		

The **rtc** of washoe county held an event to celebrate bike month. >>at the event, ten children were presented with a check to participate in. Key one key. >>kiwanis. >>ooh, sorry butcher that kiwanis 2025 summer bike program.



ARC Reno

Event Type:	TV	Audience:	5,783
May 12, 2025 8:51:01 AM		Category:	Other
Source:	KRXI (FOX)	Country:	US
Market:	Reno, NV		

The **rtc** of washoe county held an event on friday to celebrate bike month. >>so at the event, ten children were presented with a check to participate in kiwanis 2025 summer bike program. The kiwanis bike program teaches kids bike riding skills and also helps repair and gift bikes to local children as well.



Mornings on Fox 11

Event Type: **TV**
May 12, 2025 7:50:59 AM
Source: **KRXI (FOX)**
Market: **Reno, NV**

Audience: **5,462**
Category: **News**
Country: **US**

The **rtc** of washoe county held an event to celebrate bike month. >>at the event. Ten children were presented with a check to participate in kiwanis 2025 summer bike program. Kiwanis bike program teaches kids bike riding skills and also helps repair and gift bikes to local children as well.

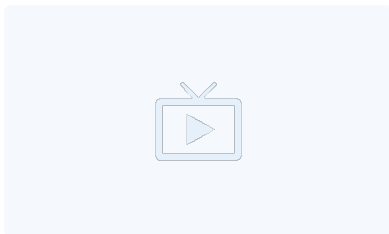


News 4 Today

Event Type: **TV**
May 12, 2025 5:35:20 AM
Source: **KRNV (NBC)**
Market: **Reno, NV**

Audience: **4,842**
Category: **News**
Country: **US**

The **rtc** of washoe county celebrating national bike month by getting the new generation behind the handlebars. >>at an event on friday. Ten children were presented with a check to participate in kiwanis 2025 summer bike program. The program teaches how to ride bikes, practice skills and learn how to repair them.

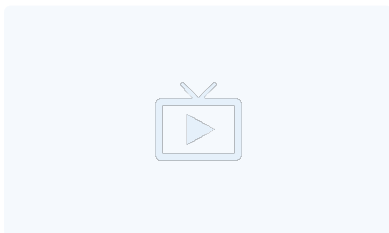


News 4 at 11 Weekend

Event Type: **TV**
May 10, 2025 11:19:32 PM
Source: **KRNV (NBC)**
Market: **Reno, NV**

Audience: **6,794**
Category: **News**
Country: **US**

Well, in celebration of mother's day, **rtc** is providing free shuttle services to idlewild park tomorrow.



News 4 at 11 Weekend

Event Type: **TV**
May 10, 2025 11:05:10 PM
Source: **KRNV (NBC)**
Market: **Reno, NV**

Audience: **7,259**
Category: **News**
Country: **US**

And in celebration of mother's day, **rtc** is providing free shuttle services to idlewild park tomorrow. It's the perfect opportunity to bring mom to the riverside farmers market annual mother's day boutique shuttles will go



Fox 11 News at 10



Event Type: **TV**

Audience: **1,621**



May 10, 2025 10:30:19 PM

Category: **News**

Source: **KRXI (FOX)**

Country: **US**

Market: **Reno, NV**

Well, finally tonight, in celebration of mother's day, **rtc** is providing free shuttle services to idlewild park tomorrow. It's a perfect opportunity to bring mom to the riverside farmers market.



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 6/20/2025

Agenda Item: 4.2.6

To: Regional Transportation Commission

From: Xuan Wang, PHD, PE, PTP, RSP2, 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 06/04/2025 and were presented with two items for discussion and committee feedback: the Truckee River Path Inventory Study and the Transportation Alternative (TA) Set-Aside Project Funding for the current cycle. Members asked clarifying questions about the data collection process along the River and the about different features on the Path. Members also discussed the prioritization methodology for the TA Set-Aside funds and inquired about the future of the funding program at the federal level.

The TAC met on 06/05/2025. Members received a presentation on the Truckee River Path Inventory Study. Discussions included clarifying the study's scope, integrating the Truckee River Vision Plan, and future stakeholder engagement. The meeting also received updates on TA Set-Aside Project Funding, with recommendations for \$1.68 million in projects prioritized through an added impact scoring system. Members were informed about the upcoming launch of the RSIC Transportation Safety Plan survey.

The RRIF TAC met on 05/22/2025, to review proposed updates to the 8th Edition Regional Road Impact Fee (RRIF) General Administrative Manual (GAM) and the draft Capital Improvement Plan (CIP). Members discussed revisions to land use definitions, fee structures, and residential property classifications. The group also reviewed traffic impact fee calculations and modeling methodologies, including trip lengths. The fee schedule is expected to be finalized by late summer.

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: 6/20/2025

Agenda Item: 4.3.1

To: Regional Transportation Commission

From: Graham Dollarhide, Planning Manager

SUBJECT: FY 2026 RTC/TMRPA Shared Work Program

RECOMMENDED ACTION

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

BACKGROUND AND DISCUSSION

The RTC and Truckee Meadows Regional Planning Agency (TMRPA) Shared Work Program is an annual agreement that benefits RTC through expert GIS and data analysis support in developing various planning studies, the collection and provision of necessary traffic model data, maintenance of the online viewer for the RRIF program, and greater coordination with regional land use planning. The Shared Work Program also provides benefit to the community, as efforts are not duplicated and both transportation and land use planning is more coordinated, allowing public resources to be utilized more efficiently and effectively. The RTC/TMRPA Shared Work Program was included as a task in the FY 2026-2027 Unified Planning Work Program (UPWP), which was approved by the RTC Board at the April 18, 2025, meeting. The budget includes \$75,000 for TMRPA services in FY 2026. The full scope of the Work Program is provided in the attachment.

FISCAL IMPACT

The budget for this item is included in the FY 2026-2027 UPWP, and is included in the RTC FY2026 budget.

PREVIOUS BOARD ACTION

4/18/2025 Approved the FY 2026-2027 UPWP.

Regional Transportation Commission of Washoe County and Truckee Meadows Regional Planning Agency Shared Work Program

The Regional Transportation Commission of Washoe County (RTC) has budgeted for the Shared Work Program in the Unified Planning Work Program (UPWP) for fiscal year ending (FYE) 2026. Through this agreement, RTC will reimburse the Truckee Meadows Regional Planning Agency (TMRPA) \$75,000 for the program items described below. In addition, RTC will contribute in-kind staff services to support implementation of the 2024 Truckee Meadows Regional Plan and other regional planning efforts as appropriate and provide IT and phone support to TMRPA in FYE 2026.

GIS, Modeling and Analysis Services

TMRPA staff services for GIS data and modeling work may include:

- Updates and additional improvements of the TMRPA Population & Employment Model (PEM) development and continuous improvement of GIS database framework to provide flexible GIS solutions for both TMRPA and RTC, including:
 - Automation of GIS dataset updates, including database replication and integration
 - Develop online GIS data strategy and work towards creating an online GIS dataset repository and data viewer for transportation demand model results and other transportation related datasets
 - Support for data collection and processing
 - Support for development tracking
- Ongoing support for the RTC's TransCAD travel demand model, including assistance with aggregation of population, employment, feature, and boundary data
- Support maintenance of online viewer for Regional Road Impact Fee (RRIF) Program
- Spatial analysis of residential and employment densities and changing demographics to support the evaluation of land use and transportation policy, including scenario analysis
- Additional GIS data and modeling projects identified during FYE 2026
- Provide GIS and demographic analysis support to RTC staff in developing various planning studies

TMRPA staff services for analysis work may include:

- Review of consultant analysis for RTC planning studies
- Participation in RTC planning studies or research, through activities such as steering committee membership, data collection, data analysis, and methodology development

RTC staff tasks for GIS data and modeling work may include:

- Supporting development of consensus forecasts and aggregating parcel-level data to TAZs
- Supporting development of the Public Infrastructure Plan (PIP) relating to transportation

Operating Support Services

RTC cash contributions for support of TMRPA operations may include:

- Data to support the PEM and Consensus Forecast including, but not limited to, ESRI Census data, income data and employment data
- Proportion of TMRPA ongoing services and supplies

IT Support Services

RTC staff services for support of TMRPA operations will include:

- Information technology support
- Telephone support

Budget & Work Program Implementation

Operational adjustments to the shared work program components and priorities may be made from time to time by mutual agreement of the RTC Executive Director and the Director of Regional Planning. TMRPA services outlined in the Shared Work Program are budgeted at \$75,000. TMRPA will invoice the RTC quarterly and payments will be made to the TMRPA at the end of each quarter during FYE 2026. TMRPA will provide a quarterly progress report including a description of the work completed with the invoices.

Regional Plan Implementation

RTC has budgeted 25 hours for RTC staff services in support of TMRPA operations, including:

- Participation on the Regional Plan Update Working Group, including Natural Resources (NR) Plan and Public Infrastructure Plan (PIP) topics
- Travel demand and air quality modeling support for the Regional Plan
- Support performance metric evaluation
- Assistance with implementation of the 2024 Regional Plan



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 6/20/2025

Agenda Item: 4.3.2

To: Regional Transportation Commission

From: Shay League, Senior Technical Planner

SUBJECT: FFY 2026-2027 TA Set-Aside Award Cycle Funding Recommendations

RECOMMENDED ACTION

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.

BACKGROUND AND DISCUSSION

As the Metropolitan Planning Organization (MPO) for the region, RTC Washoe is tasked with administering the federal TA Set-Aside Program for funding sub-allocated to the Reno-Sparks metropolitan planning area. The TA Set-Aside Program provides funding for a variety of smaller-scale yet critically important transportation projects.

Agencies eligible to receive TA Set-Aside funds include:

- Local or tribal governments;
- Natural resource or public land agencies;
- School districts;
- Individual schools;
- Local education agencies;
- Local or regional transportation agencies;
- Local or regional recreational trail entities; and
- Nonprofit entities.

Eligible uses of TA Set-Aside funds include infrastructure planning, infrastructure construction, and programs. These uses may include:

- Pedestrian and bicycle facilities;
 - Construction of turnouts, overlooks, or viewing areas;
 - Community improvements, such as historic preservation or vegetation management;
 - Environmental mitigation related to stormwater or habitat connectivity;
 - Recreational trails;
 - Safe Routes to School; and
 - Vulnerable road user safety assessments.
-

Previous two-year funding cycles were referred to by the Federal Fiscal Years (FFYs) during which the Nevada Department of Transportation (NDOT) sub-allocated funding to RTC. Beginning with this award cycle, RTC now refers to the two-year award cycle by the FFYs in which awardees will receive their funding. This change was made to better communicate the award timeline to local partners.

RTC held a call for projects for the FFY26 - FFY27 award cycle. It was open to eligible applicants for 12 weeks and received applications from five agencies for eight projects and programs. RTC staff reviewed all applications for completeness and compliance with TA Set-Aside guidelines and the scoring criteria adopted by this Board in 2023. During the initial review, all eight applications were deemed eligible and seven of the eight received the maximum score available under the adopted scoring criteria.

The amount of project funding requested, an approximate total of \$3.87 million, significantly exceeded the estimated \$1.68 million in available funding. RTC staff developed a second-round impact scoring system based on urgency, cost, and benefit, and used it to form a recommendation for the award decision.

Attached are the application summary and staff-recommended award amounts (Attachment A); the initial application scoring, initial scoring criteria, and impact score results and rubric (Attachment B); and the complete application packets as received by RTC (Attachment C).

FISCAL IMPACT

Projects will be funded through the federal TA Set-Aside Program with a minimum local match of 5%. There is no anticipated fiscal impact to RTC Washoe as a result of this Board action.

PREVIOUS BOARD ACTION

7/21/2023 Approved funding for Transportation Alternatives Set-Aside (TA Set-Aside) projects for the federal fiscal year 2023-2024 funding cycle in the amount of \$1,605,000.

TA Set-Aside Award Recommendation Attachment A

Summary and Recommended Award

Submission Summary

Agency	Project Name	Project Scope Description	Total Cost	TA Set-Aside Funds	Local Match
City of Reno	Priority 1 Pat Baker Park Area	This project will be located in Reno, NV, along Helena Avenue between Wedekind Road and Oliver Avenue, as well as on Fife Drive and Bishop Street between Helena Avenue and Reed Street. It involves the construction of new sidewalks to close critical gaps in the existing pedestrian network, creating more continuous and accessible routes.	\$493,410	\$468,740	\$24,671
City of Reno	Priority 2 Grand Canyon Area	This project will be located in Reno, NV, along Grand Canyon Boulevard between Yori Avenue and Kirman Avenue, as well as on Liston Avenue between Grand Canyon Boulevard and Casazza Drive. It involves the construction of new sidewalks to close critical gaps in the existing pedestrian network, creating more continuous and accessible routes.	\$410,340	\$389,823	\$20,517
City of Reno	Priority 3 Longley & Stead Areas	This project includes two distinct areas in Reno, NV, allowing for consolidated construction efforts and cost efficiencies in completing two smaller projects. The first area is along the east side of Longley Lane, from the corner of Huffaker Lane extending north to just before Maestro Drive. The second area is on the west side Stead Boulevard between Silver Lake Road and Ural Street. It involves the construction of new sidewalks to close critical gaps in the existing pedestrian network, creating a continuous and accessible route for non-motorized users.	\$433,830	\$412,139	\$21,692
City of Reno	Priority 4 Vine & Plumas Areas	This project includes two distinct areas in Reno, NV, allowing for consolidated construction efforts and cost efficiencies in completing two smaller projects. The first area is along the west side of Vine Street, between Gear Street and Kimbal Drive. The second area is on the west side of Plumas Street, extending from Mount Rose Street to just south of Glenmanor Drive. It involves the construction of new sidewalks to close critical gaps in the existing pedestrian network, creating more continuous and accessible routes.	\$435,690	\$413,906	\$21,785
City of Sparks	Pedestrian Ramp Improvement	This proposed project is intended to be a continuation from the 2023 RTC TA Set-Aside Program that improves pedestrian ramp infrastructure near 23 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, seven additional elementary school locations have been selected, each with 9 to 17 nearby non-ADA complaint pedestrian ramps, with a total of 80 ramps in the entirety of the project to be updated.	\$799,500	\$759,525	\$39,975
Reno Bike Project	Major Taylor Program	Reno Bike Project is applying for funding for our Major Taylor Program (MTP) for FY 2025 and 2026. The MTP is a cycling education and safety program that provides access to cycling for teens and pre-teens who may not otherwise have the opportunity to experience the benefits of biking.	\$328,392	\$311,972	\$16,420
Truckee Meadows Parks Foundation	Rosewood Regional Trailhead	The project site address is: 6800 Pembroke Drive, Reno Nevada 89502. This application will allow for the implementation of the Rosewood Trailhead Phase Two Construction Project based on a design effort currently underway.	\$617,105	\$586,250	\$30,855
Washoe County School District	Safe Routes to School Program	The Washoe County School District's (WCSD) Safe Routes to Schools (SRTS) program will expand and build upon the existing initiative within Washoe County. With funding from the RTC Transportation Alternatives Program, WCSD SRTS will continue to employ two Safe Routes to Schools Coordinators. The objective of the WCSD SRTS program is to enhance traffic and pedestrian safety for students who walk or roll to school.	\$556,344	\$528,527	\$27,817
Totals			\$4,074,611	\$3,870,881	\$203,730

Funding Available	\$1,683,310
Funding Deficit	\$2,187,571

Award Summary

Score	Impact Score	Agency - Project Name	TA Funding Requested	Total Project Cost	TA Set-Aside Fund Award	Local Match	Percent of Request Awarded
12	2	City of Reno - Priority 1, Pat Baker Park Area	\$468,740				
12	3	City of Reno - Priority 2, Grand Canyon Area	\$389,823	\$251,580	\$239,001	\$12,579	61%
12	2	City of Reno - Priority 3, Longley & Stead Areas	\$412,139				
11	3	City of Reno - Priority 4, Vine & Plumas Areas	\$413,906				
12	3	City of Sparks - Pedestrian Ramp Improvement	\$759,525	\$331,500	\$314,925	\$16,575	41%
12	3	Reno Bike Project, Major Taylor Program	\$311,972	\$173,646	\$164,964	\$8,682	53%
12	5	Truckee Meadows Park Foundation, Rosewood Regional Trailhead	\$586,250	\$617,105	\$586,250	\$30,855	100%
12	5	Washoe County School District, Safe Routes to School Program	\$528,527	\$395,520	\$375,744	\$19,776	71%

Total Requested	TA Set-Aside Fund Award	Local Match	Funding Available	Funds Unawarded
\$3,870,881	\$1,680,883	\$88,468	\$1,683,310	\$2,427

TA Set-Aside Award Recommendation Attachment B

Scoring Criteria

Initial Scoring Criteria

Score Categories	Project Benefits / Safety Enhancement				Equity and Environmental Justice		Project Readiness (infrastructure)		Project Readiness (non-infrastructure)		
Score Identifier	Criterion 1 Question 1	Criterion 1 Question 2	Criterion 1 Question 3	Criterion 1 Question 4	Criterion 2 Question 1	Criterion 2 Question 2	Criterion 3 Question 1 Infrastructure	Criterion 3 Question 1 Non-Infrastructure	Criterion 3 Question 2 Infrastructure	Criterion 3 Question 2 Non-Infrastructure	Total
Points Possible	1	2	1	1	1	1	5	1	5	1	12
Application Name											
Pat Baker Park Area	1	2	1	1	1	1	5	0	0	0	12
Grand Canyon Area	1	2	1	1	1	1	5	0	0	0	12
Longley & Stead Areas	1	2	1	1	1	1	5	0	0	0	12
Vine & Plumas Areas	1	2	1	1	1	0	5	0	0	0	11
Pedestrian Ramp Improvement	1	2	1	1	1	1	5	0	0	0	12
Major Taylor Program	1	2	1	1	1	1	0	0	5	0	12
Rosewood Regional Trailhead	1	2	1	1	1	1	0	0	5	0	12
Safe Routes to School Program	1	2	1	1	1	1	5	0	0	0	12



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Transportation Alternative (TA) Set-Aside Program Scoring Criteria Summary from [Program Document](#)

Criterion 1, Question 1 (1 Point)

Project is included in an adopted plan, study, or program, or aligns with at least one stated goal of the Regional Transportation Plan or the One Nevada Transportation Plan (must state applicable plan(s) and demonstrate how project aligns with goal(s)).

Criterion 1, Question 2 (2 Points)

Project provides traffic calming measures or safety measures that benefit non-motorized road users.

Criterion 1, Question 3 (1 Point)

Project serves multiple modes of transportation.

Criterion 1, Question 4 (1 Point)

Project provides connectivity to an existing regional transportation facility or provides clear benefits to the community according to the stated purpose of the TA Set-Aside Program.

Criterion 2, Question 1 (1 Point)

Project located in an area serving an Environmental Justice population (see [Regional Transportation Plan](#) Chapter 10, Maps 10.1 – 10.4).

Criterion 2, Question 2 (1 Point)

Project provides access to essential services, including medical, employment, or educational facilities.

Criterion 3, Question 1, Infrastructure (5 Points)

Project would be easy to construct and can be implemented within 12 months. The project does not require acquisition of right-of-way, utility relocation, and/or project meets the criteria for a categorical exclusion, according to 23 C.F.R. 771.117(c). Note: 30% design or equivalent documentation must be provided.

Criterion 3, Question 2, Infrastructure (1 Point)

The project will take up to 36 months to construct. Project includes right-of-way acquisition, utility relocation, and/or the project will require an environmental assessment/impact statement.

Criterion 4, Question 1, Non-Infrastructure (5 Points)

The educational/outreach program is established, and schools/partnerships have been identified. Project evaluation criteria are in place to measure program effectiveness. Project can be implemented within 12 months. Note: evidence of an established educational/outreach program, communication about the program with schools and/or other partners, and project evaluation criteria must be provided.

Criterion 4, Question 2, Non-Infrastructure (1 Point)

The Educational/outreach program will need to be developed, partnerships will need to be established and identified. Evaluation criteria will need to be developed to measure the effectiveness of the project. This project may take 24 months or more to implement.

Impact Scoring

Score	Agency	Project Name	Impact Score	Notes
12	City of Reno	Priority 1 Pat Baker Park Area Sidewalk Improvement Project	2	Project is not scalable
12	City of Reno	Priority 2 Grand Canyon Area Sidewalk Improvement Project	3	Project is scalable as it has two construction locations. Grand Canyon South Side from Kirman to Yori is funded in full. Project is Reno's #2 priority.
12	City of Reno	Priority 3 Longly & Stead Areas Sidewalk Improvement Project	2	Project is technically scalable as it has two construction locations however one location is quite small and may not be feasible to construct on its own.
11	City of Reno	Priority 4 Vine & Plumas Areas Sidewalk Improvement Project	3	Project is scalable as it has two construction locations. Not located in underserved area. Project is Reno's #4 priority.
12	City of Sparks	Pedestrian Ramp Improvement Project	3	Funding amount would allow for installation of 1 RRFB (1 was requested) and 32 (80 were requested) ADA Ramp upgrades. Curb ramps are all located in school zones.
12	Reno Bike Project	Major Taylor Program	3	Program would provide one year (two years requested) of training for kids on safe cycling.
12	Truckee Meadows Park Foundation	Rosewood Regional Trailhead Project	5	Awarded TA funding for phase 1- design last cycle. This funding request is for phase 2- construction of project to completion.
12	Washoe County School District	Safe Routes to School Program	5	Previously funded under STBG. State TA funding not available currently and future state funding availability is not confirmed. The state has historically had a multi-year award cycle with the last award occurring in 2023. Previous funding was \$243,200 (federal), 12,800 (local), \$256,000 (total) per year. This award funds 1.5 years of the program at the previous cost with an added 3% increase for inflation.

Impact Scoring Scale (Urgency, Cost, Benefit)

1- Low Impact

- Project is not time sensitive or urgent
- Project cost is high and/or project is not scalable
- Application does not conclusively show benefit

2- Medium Low Impact

- Project is not time sensitive or urgent
- Project cost is high and/or project is not scalable
- Application shows some benefit

3- Medium Impact

- Project is somewhat time sensitive or urgent
- Project cost is somewhat feasible or scalable
- Application shows benefit

4- Medium High Impact

- Project is time sensitive or urgent
- Project cost is feasible or scalable
- Application shows benefit

5- High Impact

- Project is highly time sensitive or urgent
- Project cost is feasible or scalable
- Application conclusively shows benefit
- Project maximizes past or planned investments
- Gains previously made will be lost if unfunded

**TA Set-Aside Award Recommendation
Attachment C – Applications**

**City of Reno
Pat Baker Park Area
Sidewalk Connectivity Project**



May 9, 2025

Shay League
Senior Technical Planner
Regional Transportation Commission of Washoe County
sleague@rtcwashoe.com

Dear Shay,

Attached are four Transportation Alternatives (TA) Set-Aside Program applications for Fiscal Years 2027–2028. Each application proposes a sidewalk connectivity project aimed at improving pedestrian infrastructure throughout the region. The project areas include:

1. Pat Baker Park Area
2. Grand Canyon Area
3. Longley & Stead Areas
4. Vine & Plumas Areas

The City of Reno is committed to enhancing pedestrian safety and accessibility through strategic sidewalk connectivity projects. We are eager to move forward with these initiatives if selected.

Thank you for considering these applications, which we believe will have a meaningful impact on our community.

Sincerely,

Kerrie Koski, P.E.
Director of Public Works, City Engineer



REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY Transportation Alternatives (TA) Set-Aside Program Grant Application

Please submit application materials by May 9, 2025, to sleague@rtcwashoe.com.
Attach additional pages as needed.

Applicant Agency City of Reno

Applicant Agency Address 1 East First Street
Reno, NV 89501

Contact Person's Information

Name Brynna Nichols

Title Senior Management Analyst

Phone Number 775-560-1669

Email nicholsb@reno.gov

Project Name Pat Baker Park Area Sidewalk Connectivity

Description of Project Location and Limits (Must include map, if applicable, as a separate attachment)

This project will be located in Reno, NV, along Helena Avenue between Wedekind Road and Oliver Avenue, as well as on Fife Drive and Bishop Street between Helena Avenue and Reed Street. See attached map.

Project Description (Please include need, benefits, and relation to goals listed below)

This project supports the goals of the Transportation Alternatives Set-Aside Program by enhancing pedestrian accessibility, safety, and connectivity within an under-served area of the community. It involves the construction of new sidewalks to close critical gaps in the existing pedestrian network, creating more continuous and accessible routes.

By improving connectivity between residential areas, Pat Baker Park, and public transit stops, this project will provide a safer, more reliable route for all pedestrians, including individuals with disabilities and other vulnerable populations. These improvements will promote walking as a viable, sustainable transportation option and contribute to reduced vehicle dependency, improved air quality, and a more equitable transportation system.

The proposed improvements are consistent with local and regional planning priorities and support broader objectives related to safety, environmental sustainability, and multi-modal transportation access.

Which goals of the [Regional Transportation Plan](#) and/or [One Nevada Plan](#) are addressed by this project?

This project aligns with the the following goals outlined in the 2050 Regional Transportation Plan.

Safety: This project will improve pedestrian safety by providing accessible sidewalks separated from the roadway.

Congestion Reduction: By promoting walking as an alternative to driving, the project will help reduce local traffic congestion and vehicle use.

System Reliability and Resiliency: The project enhances the reliability of the pedestrian network, ensuring safe access for vulnerable users.

Equity and Environmental Sustainability: Located in an under-served neighborhood, the project supports equity by improving pedestrian infrastructure and reducing dependence on cars, contributing to environmental sustainability.

Accessibility and Mobility: This project will improve pedestrian access and mobility, enhancing connectivity to the existing bus stop and the broader transportation network.

PROJECT COST ESTIMATE (a detailed project budget must be included as a separate attachment)

Total Project Cost \$ 493,410	Amount Reimbursable to Applicant Agency \$ 468,739.50	Applicant Agency Match Requirement (5%) \$ 24,670.50
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Source of Match Funds (Please list source or sources of funds and indicate whether funds are cash or in-kind; in-kind match requires further explanation)

City of Reno Street Fund - cash

Project Schedule (Please describe the expected project schedule and indicate whether it is part of a phased project; attach additional documentation as appropriate)

Design, Bidding and Award: 12 months
Construction: 45 Working Days

Ongoing Maintenance (Please describe the ongoing maintenance requirements after the project has been implemented, including cost and agency or agencies responsible)

The City of Reno will maintain the sidewalk connectivity improvements as part of its regular neighborhood street maintenance procedures.

SCORING CRITERION #1: Project Benefits/Safety Enhancement (5 points possible)

Is the project included in an adopted plan, study, or program, and/or does it align with at least one stated goal of the [Regional Transportation Plan](#) or [One Nevada Plan](#)? Please describe the context of the plan, study, or program. The description must be consistent with goals listed on page 1 of this application.

This project aligns with the the following goals outlined in the 2050 Regional Transportation Plan.

Safety: This project will improve pedestrian safety by providing accessible sidewalks separated from the roadway.

Congestion Reduction: By promoting walking as an alternative to driving, the project will help reduce local traffic congestion and vehicle use.

System Reliability and Resiliency: The project enhances the reliability of the pedestrian network, ensuring safe access for vulnerable users.

Equity and Environmental Sustainability: Located in an under-served neighborhood, the project supports equity by improving pedestrian infrastructure and reducing dependence on cars, contributing to environmental sustainability.

Does the project provide traffic calming or safety measures that benefit non-motorized road users? If yes, please explain.

Yes, this project will add sidewalks where none currently exist, providing pedestrians with a safe and accessible path separated from motorized traffic.

Does the project serve multiple modes of transportation? If yes, please explain.

Yes, this project will benefit pedestrians, public transit users, and drivers by separating foot traffic from vehicles and providing reliable sidewalk connectivity to existing bus stops.

Does the project provide connectivity to an existing regional transportation facility or provide clear benefits to the community according to the stated purpose of the TA Set-Aside Program? If yes, please explain.

Yes, this project will improve connectivity to the bus stop at Wedekind Road and Helena Avenue, supporting better access to the regional transit system.

SCORING CRITERION #2: Equity and Environmental Justice (2 points possible)

Is the project located in an area with a disproportionately impacted community as identified in Chapter 10 of the [2050 Regional Transportation Plan](#) (Maps 10.1 - 10.4)? If yes, please provide additional context about the area served by the project.

Yes, this project is located in a disproportionately impacted community, as identified in the 2050 Regional Transportation Plan. It serves a census tract with higher minority populations and elevated poverty levels. Additionally, the project directly serves environmental justice populations within the area.

Does the project provide access to essential services, including medical, employment, or educational facilities? Please describe how access to each essential service listed is provided.

This project will improve pedestrian access to the City of Reno's Pat Baker Park and strengthen safe routes to Cannan Elementary School and Traner Middle School.

SCORING CRITERION #3: Project Readiness (5 points possible)

Infrastructure Projects (respond to one of the following implementation scenarios)

Project would be relatively easy to construct and can be implemented within the next 12 months. The project does not require acquisition of right-of-way, utility relocation, and/or project meets the criteria for a categorical exclusion, according to 23 C.F.R. 771.117(c). Please describe how the project meets this criterion. Note: 30% design or equivalent documentation must be provided as an attachment.

Yes, this project will be relatively easy to construct and will meet the criteria for a categorical exclusion according to 23 C.F.R. 771.117(c). This project will not have any significant impacts on any natural, cultural, recreational, historic or other resource, and will not have any significant environmental impacts. This project will be within existing right of way and will not require any right of way acquisition.

Project will likely take up to 36 months to construct. Project includes right-of-way acquisition, utility relocation, and/or the project will require an environmental assessment/impact statement. Please describe how the project meets this criterion.

N/A

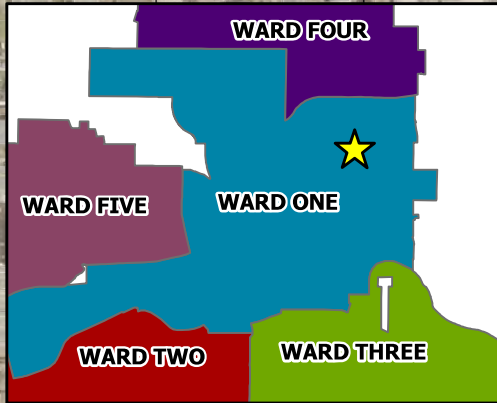
Non-infrastructure Projects (respond to one of the following implementation scenarios)

Educational/outreach program is established and schools/partnerships have been identified. Project evaluation criteria are in place to measure program effectiveness. Project can be implemented within 12 months. Note: evidence of an educational/outreach program, communication about the program with schools and/or other partners, and project evaluation criteria must be included as a separate attachment. Please describe how the project meets this criterion.

N/A

Educational/outreach program will need to be developed, partnerships will need to be established and identified. Evaluation criteria will need to be developed to measure the effectiveness of the project. This project may take 24 months or more to implement. Please describe how the project meets this criterion.

N/A



RTC TA SET ASIDE PROGRAM PAT BAKER PARK SIDEWALK CONECTIVITY VICINITY MAP

Date: April 2025

The information hereon is approximate and is intended for display purposes only.



City of Reno
Department of Public Works
1 E. First Street
Reno, NV 89501

Existing Conditions



Example of Proposed Improvements



Budget

2025 City of Reno - PAT BAKER PARK Engineer's Estimate				
Bid Description	Unit	Quantity	Unit Price	Total
PCC Curb & Gutter (Type 1), Complete in-place. (Contingent Item)	LF	460	\$100.00	\$46,000.00
PCC ADA Sidewalk, Complete in-place (Contingent Item)	SF	5480	\$20.00	\$109,600.00
Remove and replace PCC residential driveway approach (6") and transitions with aggregate base, complete in-base (contingent item)	SF	2950	\$30.00	\$88,500.00
Remove and Replace PCC ADA Pedestrian Ramp, complete in-place	EA	12	\$6,000.00	\$72,000.00
Remove and Replace Bituminous Asphalt, Complete in-place (Contingent Item)	SF	320	\$75.00	\$24,000.00
Remove and Replace Type 1, 3R & 4R Catch Basin to New Finish Grade, Complete in-place	EA	8	\$7,000.00	\$56,000.00
Remove and Replace and/or Relocation of Existing Fence (Contingent Item)	LF	100	\$60.00	\$6,000.00
Remove & Replace Sign with New Base, Anchor, and Post, Complete in-place (Contingent Item)	EA	9	\$875.00	\$7,875.00
Preformed Thermoplastic Pavement Markings, 12" Stop Bar and Speed Table Warning Markings, complete in-place	LF	60	\$20.00	\$1,200.00
Traffic Control, Complete in-place	LS			\$41,117.50
Contingency	LS			\$41,117.50
		Total		\$411,175.00
				\$493,410.00

**TA Set-Aside Award Recommendation
Attachment C – Applications**

**City of Reno
Grand Canyon Area
Sidewalk Connectivity Project**



REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY Transportation Alternatives (TA) Set-Aside Program Grant Application

Please submit application materials by May 9, 2025, to sleague@rtcwashoe.com.
Attach additional pages as needed.

Applicant Agency City of Reno

Applicant Agency Address 1 East First Street
Reno, NV 89501

Contact Person's Information

Name Brynna Nichols

Title Senior Management Analyst

Phone Number 775-560-1669

Email nicholsb@reno.gov

Project Name Grand Canyon Area Sidewalk Connectivity

Description of Project Location and Limits (Must include map, if applicable, as a separate attachment)

This project will be located in Reno, NV, along Grand Canyon Boulevard between Yori Avenue and Kirman Avenue, as well as on Liston Avenue between Grand Canyon Boulevard and Casazza Drive. See attached map.

Project Description (Please include need, benefits, and relation to goals listed below)

This project supports the goals of the Transportation Alternatives Set-Aside Program by enhancing pedestrian accessibility, safety, and connectivity within an under-served area of the community. It involves the construction of new sidewalks to close critical gaps in the existing pedestrian network, creating more continuous and accessible routes.

By improving connectivity between residential areas, Liston Park, and public transit stops, the project will provide a safer, more reliable route for all pedestrians, including individuals with disabilities and other vulnerable populations. These improvements will promote walking as a viable, sustainable transportation option and contribute to reduced vehicle dependency, improved air quality, and a more equitable transportation system.

The proposed improvements are consistent with local and regional planning priorities and support broader objectives related to safety, environmental sustainability, and multi-modal transportation access.

Which goals of the [Regional Transportation Plan](#) and/or [One Nevada Plan](#) are addressed by this project?

This project aligns with the the following goals outlined in the 2050 Regional Transportation Plan.

Safety: This project will improve pedestrian safety by providing accessible sidewalks separated from the roadway.

Congestion Reduction: By promoting walking as an alternative to driving, the project will help reduce local traffic congestion and vehicle use.

System Reliability and Resiliency: The project enhances the reliability of the pedestrian network, ensuring safe access for vulnerable users.

Equity and Environmental Sustainability: Located in an under-served neighborhood, the project supports equity by improving pedestrian infrastructure and reducing dependence on cars, contributing to environmental sustainability.

Accessibility and Mobility: This project will improve pedestrian access and mobility, enhancing connectivity to the existing bus stop and the broader transportation network.

PROJECT COST ESTIMATE (a detailed project budget must be included as a separate attachment)

Total Project Cost \$ 410,340	Amount Reimbursable to Applicant Agency \$ 389,823	Applicant Agency Match Requirement (5%) \$ 20,517
--------------------------------------	-----------------------------------------------------------	----------------------------------------------------------

Source of Match Funds (Please list source or sources of funds and indicate whether funds are cash or in-kind; in-kind match requires further explanation)

City of Reno Street Fund - cash

Project Schedule (Please describe the expected project schedule and indicate whether it is part of a phased project; attach additional documentation as appropriate)

Design, Bidding and Award: 12 months

Construction: 45 Working Days

Ongoing Maintenance (Please describe the ongoing maintenance requirements after the project has been implemented, including cost and agency or agencies responsible)

The City of Reno will maintain the sidewalk connectivity improvements as part of its regular neighborhood street maintenance procedures.

SCORING CRITERION #1: Project Benefits/Safety Enhancement (5 points possible)

Is the project included in an adopted plan, study, or program, and/or does it align with at least one stated goal of the [Regional Transportation Plan](#) or [One Nevada Plan](#)? Please describe the context of the plan, study, or program. The description must be consistent with goals listed on page 1 of this application.

This project aligns with the the following goals outlined in the 2050 Regional Transportation Plan.

Safety: This project will improve pedestrian safety by providing accessible sidewalks separated from the roadway.

Congestion Reduction: By promoting walking as an alternative to driving, the project will help reduce local traffic congestion and vehicle use.

System Reliability and Resiliency: The project enhances the reliability of the pedestrian network, ensuring safe access for vulnerable users.

Equity and Environmental Sustainability: Located in an under-served neighborhood, the project supports equity by improving pedestrian infrastructure and

Does the project provide traffic calming or safety measures that benefit non-motorized road users? If yes, please explain.

Yes, this project will add sidewalks where none currently exist, providing pedestrians with a safe and accessible path separated from motorized traffic.

Does the project serve multiple modes of transportation? If yes, please explain.

Yes, this project will benefit pedestrians, public transit users, and drivers by separating foot traffic from vehicles and providing reliable sidewalk connectivity to existing bus stops.

Does the project provide connectivity to an existing regional transportation facility or provide clear benefits to the community according to the stated purpose of the TA Set-Aside Program? If yes, please explain.

Yes, this project will improve connectivity to the bus stop at Kirman Avenue and Capitol Hill Boulevard, supporting better access to the regional transit system.

SCORING CRITERION #2: Equity and Environmental Justice (2 points possible)

Is the project located in an area with a disproportionately impacted community as identified in Chapter 10 of the [2050 Regional Transportation Plan](#) (Maps 10.1 - 10.4)? If yes, please provide additional context about the area served by the project.

Yes, this project is located in a disproportionately impacted community, as identified in the 2050 Regional Transportation Plan. It serves a census tract with higher limited English proficiency, minority populations and poverty levels. Additionally, the project directly serves environmental justice populations within the area.

Does the project provide access to essential services, including medical, employment, or educational facilities? Please describe how access to each essential service listed is provided.

This project will improve pedestrian access to the City of Reno's Liston Park and strengthen safe routes to Veterans Elementary School, Vaughn Middle School and Wooster High School. It will also improve overall connectivity between nearby residential neighborhoods and commercial areas.

SCORING CRITERION #3: Project Readiness (5 points possible)

Infrastructure Projects (respond to one of the following implementation scenarios)

Project would be relatively easy to construct and can be implemented within the next 12 months. The project does not require acquisition of right-of-way, utility relocation, and/or project meets the criteria for a categorical exclusion, according to 23 C.F.R. 771.117(c). Please describe how the project meets this criterion. Note: 30% design or equivalent documentation must be provided as an attachment.

Yes, this project will be relatively easy to construct and will meet the criteria for a categorical exclusion according to 23 C.F.R. 771.117(c). This project will not have any significant impacts on any natural, cultural, recreational, historic or other resource, and will not have any significant environmental impacts. This project will be within existing right of way and will not require any right of way acquisition.

Project will likely take up to 36 months to construct. Project includes right-of-way acquisition, utility relocation, and/or the project will require an environmental assessment/impact statement. Please describe how the project meets this criterion.

N/A

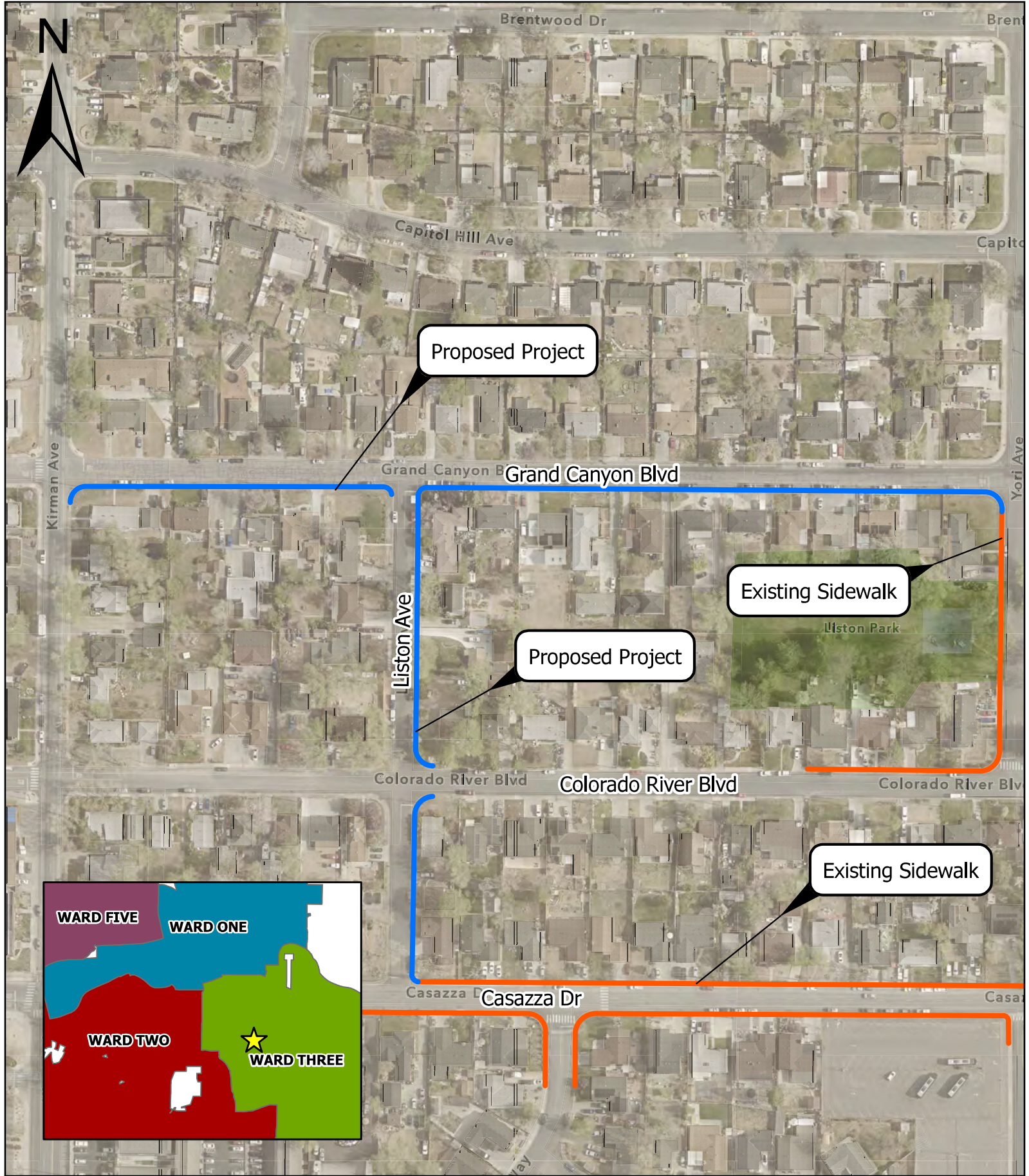
Non-infrastructure Projects (respond to one of the following implementation scenarios)

Educational/outreach program is established and schools/partnerships have been identified. Project evaluation criteria are in place to measure program effectiveness. Project can be implemented within 12 months. Note: evidence of an educational/outreach program, communication about the program with schools and/or other partners, and project evaluation criteria must be included as a separate attachment. Please describe how the project meets this criterion.

N/A

Educational/outreach program will need to be developed, partnerships will need to be established and identified. Evaluation criteria will need to be developed to measure the effectiveness of the project. This project may take 24 months or more to implement. Please describe how the project meets this criterion.

N/A



Existing Conditions



Example of Proposed Improvements



GRAND BLVD
CANYON BLVD

SIDEWALK PATH TO PLACE
NEW CONCRETE IN AREAS
WHERE THERE IS NO
EXISTING CONCRETE.

Budget

2025 City of Reno - Grand Canyon South Side Engineer's Estimate				
Bid Description	Unit	Quantity	Unit Price	Total
PCC Curb & Gutter (Type 1), Complete in-place. (Contingent Item)	LF	320	\$100.00	\$32,000.00
PCC ADA Sidewalk, Complete in-place (Contingent Item)	SF	2320	\$20.00	\$46,400.00
Remove and Replace PCC ADA Pedestrian Ramp, complete in-place	EA	3	\$6,000.00	\$18,000.00
Remove and replace PCC residential driveway approach (6") and transitions with aggregate base, complete in-base (contingent item)	SF	3200	\$30.00	\$96,000.00
Remove & Replace Sign with New Base, Anchor, and Post, Complete in-place (Contingent Item)	EA	2	\$875.00	\$1,750.00
Remove and Replace Bituminous Asphalt, Complete in-place (Contingent Item)	SF	60	\$75.00	\$4,500.00
Remove and Replace and/or Relocation of Existing Fence (Contingent Item)	LF	100	\$60.00	\$6,000.00
Relocate fire hydrant, complete in-place	EA	1	\$5,000.00	\$5,000.00
Traffic Control, Complete in-place	LS			\$20,965.00
Contingency				\$20,965.00
			Total	\$209,650.00
				\$251,580.00
2025 City of Reno - Grand Canyon Liston Engineer's Estimate				
Bid Description	Unit	Quantity	Unit Price	Total
PCC Curb & Gutter (Type 1), Complete in-place. (Contingent Item)	LF	100	\$100.00	\$10,000.00
PCC ADA Sidewalk, Complete in-place (Contingent Item)	SF	2320	\$20.00	\$46,400.00
Remove and Replace PCC ADA Pedestrian Ramp, complete in-place	EA	3	\$6,000.00	\$18,000.00
Remove and replace PCC residential driveway approach (6") and transitions with aggregate base, complete in-base (contingent item)	SF	1000	\$30.00	\$30,000.00
Remove and Replace Type 1, 3R & 4R Catch Basin to New Finish Grade, Complete in-place	EA	3	\$7,000.00	\$21,000.00
Remove and Replace Bituminous Asphalt, Complete in-place (Contingent Item)	SF	60	\$75.00	\$4,500.00
Remove and Replace and/or Relocation of Existing Fence (Contingent Item)	LF	40	\$60.00	\$2,400.00
Traffic Control, Complete in-place	LS			\$13,230.00
Contingency				\$13,230.00
			Total	\$132,300.00
				\$158,760.00

**TA Set-Aside Award Recommendation
Attachment C – Applications**

**City of Reno
Longley & Stead Areas
Sidewalk Connectivity Project**



REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY Transportation Alternatives (TA) Set-Aside Program Grant Application

Please submit application materials by May 9, 2025, to sleague@rtcwashoe.com.
Attach additional pages as needed.

Applicant Agency City of Reno

Applicant Agency Address 1 East First Street
Reno, NV 89501

Contact Person's Information

Name Brynna Nichols

Title Senior Management Analyst

Phone Number 775-560-1669

Email nicholsb@reno.gov

Project Name Longley Lane and Stead Boulevard Areas Sidewalk Connectivity

Description of Project Location and Limits (Must include map, if applicable, as a separate attachment)

This project includes two distinct areas in Reno, NV, allowing for consolidated construction efforts and cost efficiencies in completing two smaller projects. The first area is along the east side of Longley Lane, from the corner of Huffaker Lane extending north to just before Maestro Drive. The second area is on the west side Stead Boulevard between Silver Lake Road and Ural Street. See attached maps.

Project Description (Please include need, benefits, and relation to goals listed below)

This project supports the goals of the Transportation Alternatives Set-Aside Program by enhancing pedestrian accessibility, safety, and connectivity in the community. It involves the construction of new sidewalks to close critical gaps in the existing pedestrian network, creating a continuous and accessible route for non-motorized users.

By improving connectivity, this project will provide a safer, more reliable route for all pedestrians, including individuals with disabilities and other vulnerable populations. These improvements will promote walking as a viable, sustainable transportation option and contribute to reduced vehicle dependency, improved air quality, and a more equitable transportation system.

The proposed improvements are consistent with local and regional planning priorities and support broader objectives related to safety, environmental sustainability, and multimodal transportation access.

Which goals of the [Regional Transportation Plan](#) and/or [One Nevada Plan](#) are addressed by this project?

This project aligns with the the following goals outlined in the 2050 Regional Transportation Plan.

Safety: This project will improve pedestrian safety by providing accessible sidewalks separated from the roadway.

Congestion Reduction: By promoting walking as an alternative to driving, this project will help reduce local traffic congestion and vehicle use.

System Reliability and Resiliency: This project will enhance the reliability of the pedestrian network, ensuring safe access for vulnerable users.

Equity and Environmental Sustainability: This project supports equity by improving pedestrian infrastructure and reducing dependence on cars, contributing to environmental sustainability.

Accessibility and Mobility: This project will improve pedestrian access and mobility in the neighborhood.

PROJECT COST ESTIMATE (a detailed project budget must be included as a separate attachment)

Total Project Cost \$ 433,830	Amount Reimbursable to Applicant Agency \$ 412,138.50	Applicant Agency Match Requirement (5%) \$ 21,691.50
--------------------------------------	--------------------------------------------------------------	-------------------------------------------------------------

Source of Match Funds (Please list source or sources of funds and indicate whether funds are cash or in-kind; in-kind match requires further explanation)

City of Reno Street Fund - cash

Project Schedule (Please describe the expected project schedule and indicate whether it is part of a phased project; attach additional documentation as appropriate)

Design, Bidding and Award: 12 months

Construction: 45 Working Days

Ongoing Maintenance (Please describe the ongoing maintenance requirements after the project has been implemented, including cost and agency or agencies responsible)

The City of Reno will maintain the sidewalk connectivity improvements as part of its regular neighborhood street maintenance procedures.

SCORING CRITERION #1: Project Benefits/Safety Enhancement (5 points possible)

Is the project included in an adopted plan, study, or program, and/or does it align with at least one stated goal of the [Regional Transportation Plan](#) or [One Nevada Plan](#)? Please describe the context of the plan, study, or program. The description must be consistent with goals listed on page 1 of this application.

This project aligns with the the following goals outlined in the 2050 Regional Transportation Plan.

Safety: This project will improve pedestrian safety by providing accessible sidewalks separated from the roadway.

Congestion Reduction: By promoting walking as an alternative to driving, this project will help reduce local traffic congestion and vehicle use.

System Reliability and Resiliency: This project will enhance the reliability of the pedestrian network, ensuring safe access for vulnerable users.

Equity and Environmental Sustainability: This project supports equity by improving pedestrian infrastructure and reducing dependence on cars, contributing to environmental sustainability.

Does the project provide traffic calming or safety measures that benefit non-motorized road users? If yes, please explain.

Yes, this project will add sidewalks where none currently exist, providing pedestrians with a safe and accessible path separated from motorized traffic.

Does the project serve multiple modes of transportation? If yes, please explain.

Yes, this project will benefit pedestrians, public transit users, and drivers by separating foot traffic from vehicles and providing reliable sidewalk connectivity to existing bus stops.

Does the project provide connectivity to an existing regional transportation facility or provide clear benefits to the community according to the stated purpose of the TA Set-Aside Program? If yes, please explain.

Yes, the Longley Lane project will improve access to the South Meadows/Damonte Ranch bus route, while the Stead Boulevard project will enhance access to the bus stops at Stead Boulevard and Sagewood Drive—both supporting better connections to the regional public transit system.

SCORING CRITERION #2: Equity and Environmental Justice (2 points possible)

Is the project located in an area with a disproportionately impacted community as identified in Chapter 10 of the [2050 Regional Transportation Plan](#) (Maps 10.1 - 10.4)? If yes, please provide additional context about the area served by the project.

Yes, both projects are located in areas identified as disproportionately impacted communities in the 2050 Regional Transportation Plan. They are situated in census tracts with higher minority populations, and the Longley Lane project specifically serves an environmental justice population.

Does the project provide access to essential services, including medical, employment, or educational facilities? Please describe how access to each essential service listed is provided.

The Stead Boulevard project will improve safe routes to Stead Elementary School and O'Brien Middle School, enhancing walkability for students. It will also strengthen overall connectivity between nearby residential neighborhoods and commercial areas.

The Longley Lane project will enhance connectivity to between residential and commercial uses, including enhanced connectivity to the regional transit system, benefiting surrounding residents and businesses.

SCORING CRITERION #3: Project Readiness (5 points possible)

Infrastructure Projects (respond to one of the following implementation scenarios)

Project would be relatively easy to construct and can be implemented within the next 12 months. The project does not require acquisition of right-of-way, utility relocation, and/or project meets the criteria for a categorical exclusion, according to 23 C.F.R. 771.117(c). Please describe how the project meets this criterion. Note: 30% design or equivalent documentation must be provided as an attachment.

Yes, this project will be relatively easy to construct and will meet the criteria for a categorical exclusion according to 23 C.F.R. 771.117(c). This project will not have any significant impacts on any natural, cultural, recreational, historic or other resource, and will not have any significant environmental impacts. This project will be within existing right of way and will not require any right of way acquisition.

Project will likely take up to 36 months to construct. Project includes right-of-way acquisition, utility relocation, and/or the project will require an environmental assessment/impact statement. Please describe how the project meets this criterion.

N/A

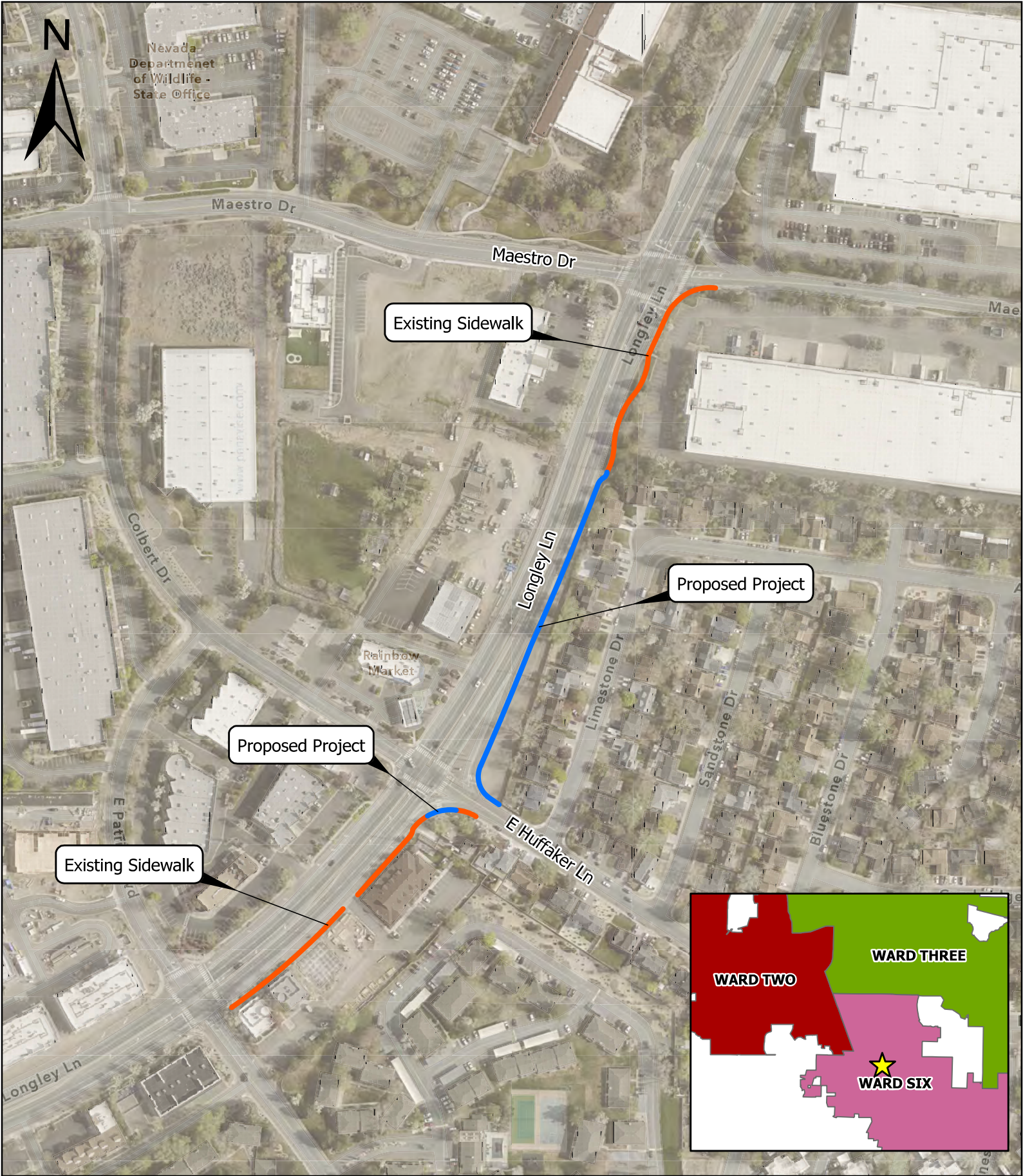
Non-infrastructure Projects (respond to one of the following implementation scenarios)

Educational/outreach program is established and schools/partnerships have been identified. Project evaluation criteria are in place to measure program effectiveness. Project can be implemented within 12 months. Note: evidence of an educational/outreach program, communication about the program with schools and/or other partners, and project evaluation criteria must be included as a separate attachment. Please describe how the project meets this criterion.

N/A

Educational/outreach program will need to be developed, partnerships will need to be established and identified. Evaluation criteria will need to be developed to measure the effectiveness of the project. This project may take 24 months or more to implement. Please describe how the project meets this criterion.

N/A



Existing Conditions - Longley Lane



Example of Proposed Improvements - Longley Lane





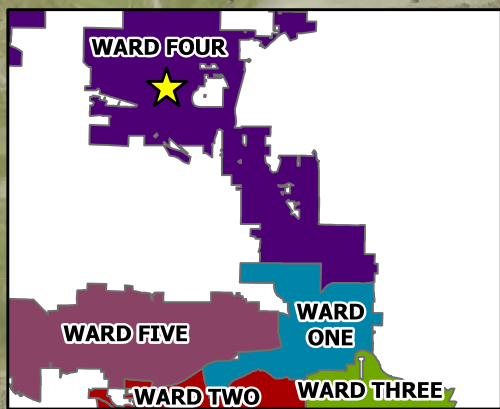
Existing Sidewalk

Proposed Project

Existing Sidewalk

Proposed Project

Existing Sidewalk



City of Reno
Department of Public Works
1 E. First Street
Reno, NV 89501

RTC TA SET ASIDE PROGRAM
STEAD BOULEVARD SIDEWALK CONNECTIVITY
VICINITY MAP

Date: April 2025

The information hereon is approximate and is intended for display purposes only.

Existing Conditions - Stead Boulevard



Example of Proposed Improvements - Stead Boulevard



SIDEWALK PATH TO PLACE
NEW CONCRETE IN AREAS
WHERE THERE IS NO
EXISTING CONCRETE.

Budget

2025 City of Reno - Longley Engineer's Estimate				
Bid Description	Unit	Quantity	Unit Price	Total
PCC Curb & Gutter (Type 1), Complete in-place. (Contingent Item)	LF	600	\$100.00	\$60,000.00
PCC ADA Sidewalk, Complete in-place (Contingent Item)	SF	4080	\$20.00	\$81,600.00
Remove and Replace PCC ADA Pedestrian Ramp, complete in-place	EA	2	\$6,000.00	\$12,000.00
Remove and Replace Bituminous Asphalt, Complete in-place (Contingent Item)	SF	60	\$75.00	\$4,500.00
Remove & Replace Sign with New Base, Anchor, and Post, Complete in-place (Contingent Item)	EA	2	\$875.00	\$1,750.00
INSTALL CLASS 300 RIPRAP, COMPLETE IN-PLACE (CONTINGENT ITEM):	CY	20	\$1,300.00	\$26,000.00
Install 10" SDR-35 PVC SD; complete in-place	LF	20	\$400.00	\$8,000.00
Install Type 4R Catch Basin	EA	1	\$8,000.00	\$8,000.00
Traffic Control, Complete in-place	LS			\$20,185.00
Contingency				\$20,185.00
		Total		\$201,850.00
				\$242,220.00

2025 City of Reno - Stead Blvd Engineer's Estimate				
Bid Description	Unit	Quantity	Unit Price	Total
PCC Curb & Gutter (Type 1), Complete in-place. (Contingent Item)	LF	40	\$100.00	\$4,000.00
PCC ADA Sidewalk, Complete in-place (Contingent Item)	SF	7560	\$20.00	\$151,200.00
Remove and Replace PCC ADA Sidewalk, Complete in-place	SF	60	\$35.00	\$2,100.00
Remove & Replace Sign with New Base, Anchor, and Post, Complete in-place (Contingent Item)	EA	1	\$875.00	\$875.00
Protect and adjust new and existing water/utility boxes to new finish grade, complete in-place	EA	1	\$1,500.00	\$1,500.00
Traffic Control, Complete in-place	LS	1		\$15,967.50
Contingency	LS	1		\$15,967.50
		Total		\$159,675.00
				\$191,610.00

**TA Set-Aside Award Recommendation
Attachment C – Applications**

**City of Reno
Vine & Plumas Areas
Sidewalk Connectivity Project**



REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY Transportation Alternatives (TA) Set-Aside Program Grant Application

Please submit application materials by May 9, 2025, to sleague@rtcwashoe.com.
Attach additional pages as needed.

Applicant Agency City of Reno

Applicant Agency Address 1 East First Street
Reno, NV 89501

Contact Person's Information

Name Brynna Nichols

Title Senior Management Analyst

Phone Number 775-560-1669

Email nicholsb@reno.gov

Project Name Vine Street and Plumas Street Areas Sidewalk Connectivity

Description of Project Location and Limits (Must include map, if applicable, as a separate attachment)

This project includes two distinct areas in Reno, NV, allowing for consolidated construction efforts and cost efficiencies in completing two smaller projects. The first area is along the west side of Vine Street, between Gear Street and Kimbal Drive. The second area is on the west side of Plumas Street, extending from Mount Rose Street to just south of Glenmanor Drive. See attached maps.

Project Description (Please include need, benefits, and relation to goals listed below)

This project supports the goals of the Transportation Alternatives Set-Aside Program by enhancing pedestrian accessibility, safety, and connectivity in the community. It involves the construction of new sidewalks to close critical gaps in the existing pedestrian network, creating more continuous and accessible routes.

By improving residential connectivity, this project will provide a safer, more reliable route for all pedestrians, including individuals with disabilities and other vulnerable populations. These improvements will promote walking as a viable, sustainable transportation option and contribute to reduced vehicle dependency, improved air quality, and a more equitable transportation system.

The proposed improvements are consistent with local and regional planning priorities and support broader objectives related to safety, environmental sustainability, and multi-modal transportation access.

Which goals of the [Regional Transportation Plan](#) and/or [One Nevada Plan](#) are addressed by this project?

This project aligns with the the following goals outlined in the 2050 Regional Transportation Plan.

Safety: This project will improve pedestrian safety by providing accessible sidewalks separated from the roadway.

Congestion Reduction: By promoting walking as an alternative to driving, this project will help reduce local traffic congestion and vehicle use.

System Reliability and Resiliency: This project will enhance the reliability of the pedestrian network, ensuring safe access for vulnerable users.

Equity and Environmental Sustainability: This project supports equity by improving pedestrian infrastructure and reducing dependence on cars, contributing to environmental sustainability.

Accessibility and Mobility: This project will improve pedestrian access and mobility in the neighborhood.

PROJECT COST ESTIMATE (a detailed project budget must be included as a separate attachment)

Total Project Cost \$ 435,690	Amount Reimbursable to Applicant Agency \$ 413,905.50	Applicant Agency Match Requirement (5%) \$ 21,784.50
--------------------------------------	--------------------------------------------------------------	-------------------------------------------------------------

Source of Match Funds (Please list source or sources of funds and indicate whether funds are cash or in-kind; in-kind match requires further explanation)

City of Reno Street Fund - cash

Project Schedule (Please describe the expected project schedule and indicate whether it is part of a phased project; attach additional documentation as appropriate)

Design, Bidding and Award: 12 months

Construction: 45 Working Days

Ongoing Maintenance (Please describe the ongoing maintenance requirements after the project has been implemented, including cost and agency or agencies responsible)

The City of Reno will maintain the sidewalk connectivity improvements as part of its regular neighborhood street maintenance procedures.

SCORING CRITERION #1: Project Benefits/Safety Enhancement (5 points possible)

Is the project included in an adopted plan, study, or program, and/or does it align with at least one stated goal of the [Regional Transportation Plan](#) or [One Nevada Plan](#)? Please describe the context of the plan, study, or program. The description must be consistent with goals listed on page 1 of this application.

This project aligns with the the following goals outlined in the 2050 Regional Transportation Plan.

Safety: This project will improve pedestrian safety by providing accessible sidewalks separated from the roadway.

Congestion Reduction: By promoting walking as an alternative to driving, this project will help reduce local traffic congestion and vehicle use.

System Reliability and Resiliency: This project will enhance the reliability of the pedestrian network, ensuring safe access for vulnerable users.

Equity and Environmental Sustainability: This project supports equity by improving pedestrian infrastructure and reducing dependence on cars, contributing to environmental sustainability.

Does the project provide traffic calming or safety measures that benefit non-motorized road users? If yes, please explain.

Yes, this project will add sidewalks where none currently exist, providing pedestrians with a safe and accessible path separated from motorized traffic.

Does the project serve multiple modes of transportation? If yes, please explain.

Yes, this project will benefit pedestrians, public transit users, and drivers by separating foot traffic from vehicles and providing reliable sidewalk connectivity to existing bus stops.

Does the project provide connectivity to an existing regional transportation facility or provide clear benefits to the community according to the stated purpose of the TA Set-Aside Program? If yes, please explain.

Yes, the Vine Street project will improve access to the West 7th and Washington Street bus stop, while the Plumas Street project will enhance access to the West Plumb Lane and Plumas Street bus stop—both supporting better connections to the regional public transit system.

SCORING CRITERION #2: Equity and Environmental Justice (2 points possible)

Is the project located in an area with a disproportionately impacted community as identified in Chapter 10 of the [2050 Regional Transportation Plan](#) (Maps 10.1 - 10.4)? If yes, please provide additional context about the area served by the project.

No, these project are not located in areas with a disproportionately impacted community as identified in the 2050 Regional Transportation Plan; however, the Vine Street project would benefit the University of Nevada, Reno community and the Plumas Street project builds on previous TA Set-Aside improvements along Plumas Street, contributing to a more seamless and continuous pedestrian experience throughout the corridor.

Does the project provide access to essential services, including medical, employment, or educational facilities? Please describe how access to each essential service listed is provided.

The Vine Street project will enhance connectivity in the West University neighborhood, benefiting the University of Nevada, Reno community—including students, staff, and nearby campus medical facilities. Additionally, the new sidewalk segment will improve safe routes to Peavine Elementary School and provide safer pedestrian access to medical facilities located across the Vine Street bridge, on the south side of I-80.

The Plumas Street project builds on previous TA Set-Aside improvements along the corridor, helping to create a more seamless and continuous pedestrian experience. It will also support students walking to Mount Rose Elementary School and strengthen overall connectivity between surrounding residential neighborhoods and nearby commercial areas.

SCORING CRITERION #3: Project Readiness (5 points possible)

Infrastructure Projects (respond to one of the following implementation scenarios)

Project would be relatively easy to construct and can be implemented within the next 12 months. The project does not require acquisition of right-of-way, utility relocation, and/or project meets the criteria for a categorical exclusion, according to 23 C.F.R. 771.117(c). Please describe how the project meets this criterion. Note: 30% design or equivalent documentation must be provided as an attachment.

Yes, this project will be relatively easy to construct and will meet the criteria for a categorical exclusion according to 23 C.F.R. 771.117(c). This project will not have any significant impacts on any natural, cultural, recreational, historic or other resource, and will not have any significant environmental impacts. This project will be within existing right of way and will not require any right of way acquisition.

Project will likely take up to 36 months to construct. Project includes right-of-way acquisition, utility relocation, and/or the project will require an environmental assessment/impact statement. Please describe how the project meets this criterion.

N/A

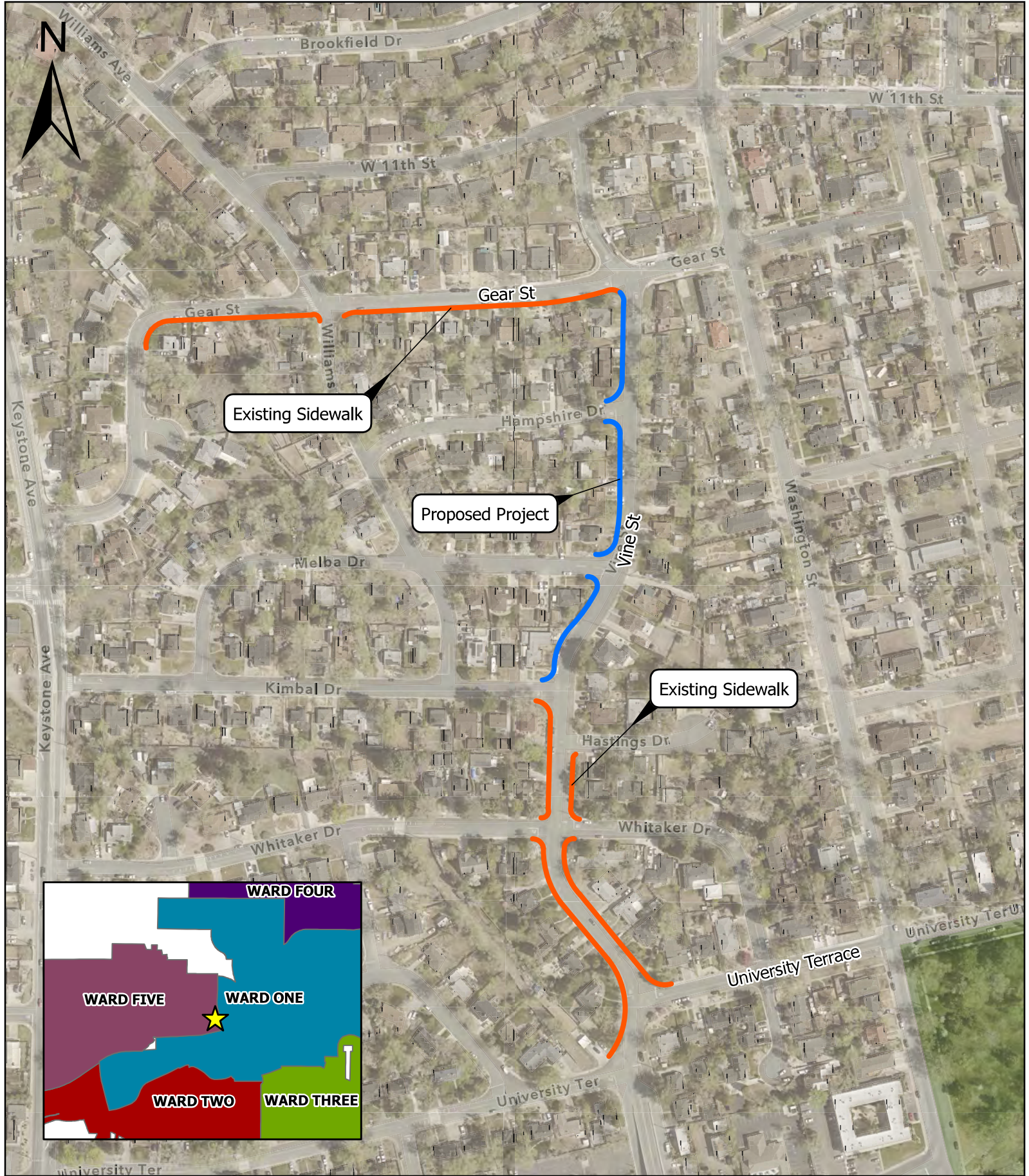
Non-infrastructure Projects (respond to one of the following implementation scenarios)

Educational/outreach program is established and schools/partnerships have been identified. Project evaluation criteria are in place to measure program effectiveness. Project can be implemented within 12 months. Note: evidence of an educational/outreach program, communication about the program with schools and/or other partners, and project evaluation criteria must be included as a separate attachment. Please describe how the project meets this criterion.

N/A

Educational/outreach program will need to be developed, partnerships will need to be established and identified. Evaluation criteria will need to be developed to measure the effectiveness of the project. This project may take 24 months or more to implement. Please describe how the project meets this criterion.

N/A



City of Reno
Department of Public Works
1 E. First Street
Reno, NV 89501

RTC TA SET ASIDE PROGRAM VINE STREET SIDEWALK CONNECTIVITY VICINITY MAP

Date: April 2025

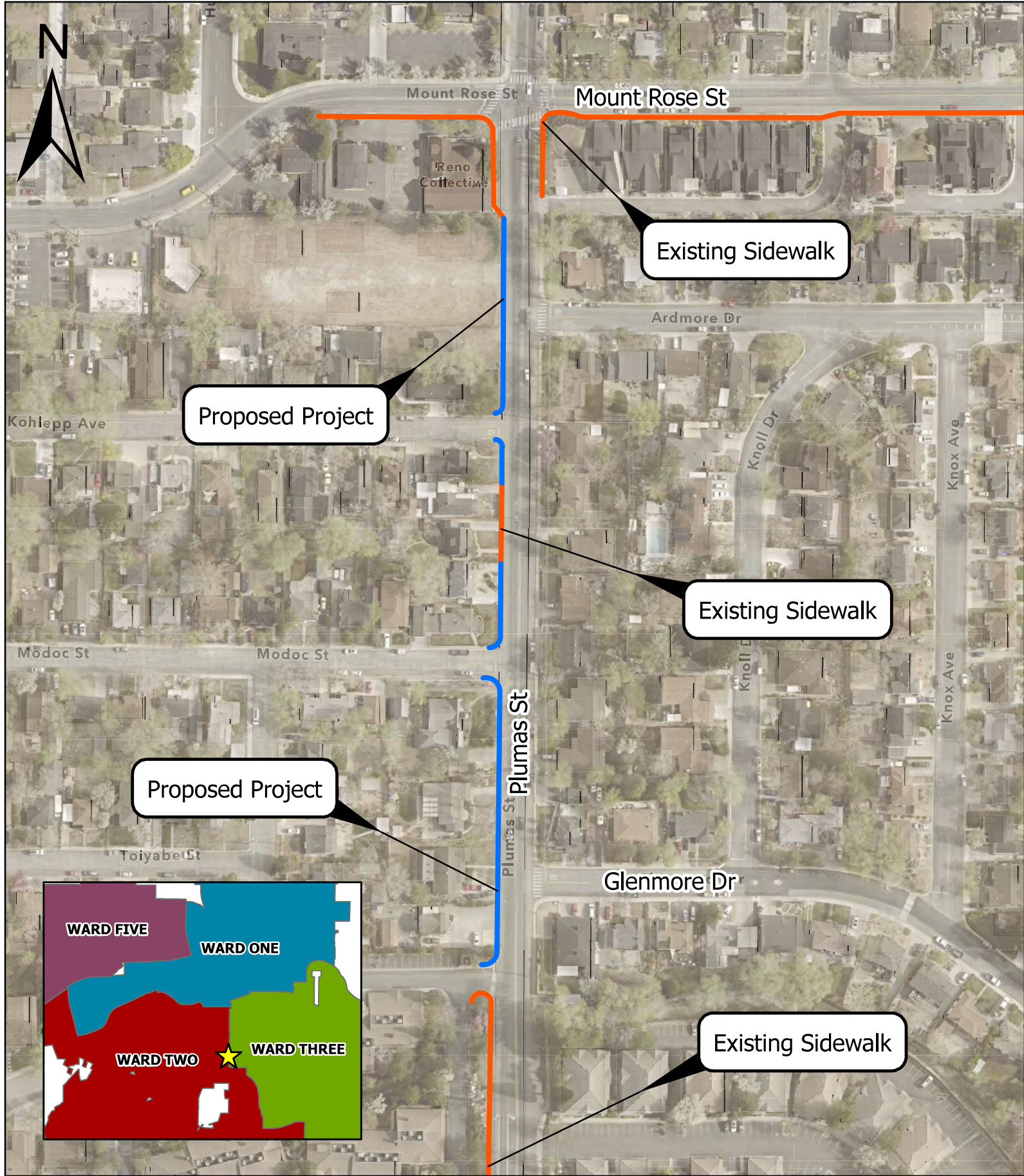
The information hereon is approximate and is intended for display purposes only.

Existing Conditions - Vine Street



Example of Proposed Improvements - Vine Street





Existing Conditions - Plumas Street



Example of Proposed Improvements - Plumas Street



SIDEWALK PATH TO PLACE
NEW CONCRETE IN AREAS
WHERE THERE IS NO
EXISTING CONCRETE.

Budget

2025 City of Reno - Vine Street Engineer's Estimate				
Bid Description	Unit	Quantity	Unit Price	Total
PCC Curb & Gutter (Type 1), Complete in-place. (Contingent Item)	LF	150	\$100.00	\$15,000.00
PCC ADA Sidewalk, Complete in-place (Contingent Item)	SF	3100	\$20.00	\$62,000.00
Remove and replace PCC residential driveway approach (6") and transitions with aggregate base, complete in-base (contingent item)	SF	1100	\$30.00	\$33,000.00
Remove and Replace PCC ADA Pedestrian Ramp, complete in-place	EA	6	\$6,000.00	\$36,000.00
Remove and Replace Bituminous Asphalt, Complete in-place (Contingent Item)	SF	240	\$75.00	\$18,000.00
Remove and Replace Type 1, 3R & 4R Catch Basin to New Finish Grade, Complete in-place	EA	2	\$7,000.00	\$14,000.00
Remove and Replace and/or Relocation of Existing Fence (Contingent Item)	LF	80	\$60.00	\$4,800.00
Remove & Replace Sign with New Base, Anchor, and Post, Complete in-place (Contingent Item)	EA	3	\$875.00	\$2,625.00
Relocate fire hydrant, complete in-place	EA	1	\$5,000.00	\$5,000.00
Traffic Control, Complete in-place	LS		\$31,222.00	\$19,042.50
Contingency				\$19,042.50
		Total		\$190,425.00
				\$228,510.00

2025 City of Reno - Plumas Engineer's Estimate				
Bid Description	Unit	Quantity	Unit Price	Total
PCC Curb & Gutter (Type 1), Complete in-place. (Contingent Item)	LF	160	\$100.00	\$16,000.00
PCC ADA Sidewalk, Complete in-place (Contingent Item)	SF	2500	\$20.00	\$50,000.00
Remove and Replace PCC ADA Sidewalk, Complete in-place	SF	300	\$35.00	\$10,500.00
Remove and replace PCC residential driveway approach (6") and transitions with aggregate base, complete in-base (contingent item)	SF	1400	\$30.00	\$42,000.00
Remove and Replace PCC ADA Pedestrian Ramp, complete in-place	EA	4	\$6,000.00	\$24,000.00
Remove and Replace Bituminous Asphalt, Complete in-place (Contingent Item)	SF	160	\$75.00	\$12,000.00
Remove and Replace Type 1, 3R & 4R Catch Basin to New Finish Grade, Complete in-place	EA	1	\$7,000.00	\$7,000.00
Remove and Replace and/or Relocation of Existing Fence (Contingent Item)	LF	60	\$60.00	\$3,600.00
Remove & Replace Sign with New Base, Anchor, and Post, Complete in-place (Contingent Item)	EA	2	\$875.00	\$1,750.00
Relocate fire hydrant, complete in-place	EA	1	\$5,000.00	\$5,000.00
Preformed Thermoplastic Pavement Markings, 12" Stop Bar and Speed Table Warning Markings, complete in-place	LF	40	\$20.00	\$800.00
Traffic Control, Complete in-place	LS			\$17,265.00
Contingency				\$17,265.00
		Total		\$172,650.00
				\$207,180.00

**TA Set-Aside Award Recommendation
Attachment C – Applications**

**City of Sparks
Pedestrian Ramp Improvement Project**



REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY Transportation Alternatives (TA) Set-Aside Program Grant Application

Please submit application materials by May 9, 2025, to sleague@rtcwashoe.com.

Attach additional pages as needed.

Applicant Agency: City of Sparks

Applicant Agency Address: 431 Prater Way, Sparks, NV 89431

Contact Person's Information

Name: Andrew V. Jayankura, P.E., PTOE, RSP₁

Title: Transportation Manager

Phone Number: (775) 564-2821

Email: ajayankura@cityofsparks.us

Project Name: City of Sparks Pedestrian Ramp Improvement Project – Phase 2

Description of Project Location and Limits (Must include map, if applicable, as a separate attachment)

The locations for this proposed project includes various non-compliant ADA Ramps and the installation of a few new ramps for enhanced connectivity at near-by elementary schools in Sparks, and one location along the Sparks Regional Trail to install a set of new pedestrian ramps and RRFB.

The following is an attachment summary that includes various maps and figures that will help aid your team's consideration of our project proposal:

1. Overview of Sparks that shows location of affected Elementary Schools, Proposed Ramp Upgrades, Wards, and the combined Environmental Justice Areas that includes: Households Below Poverty Level, LEP Residents, Minority Residents, and Residents over 65.
2. Overview of Ped Ramp Locations of what was completed under the 2023 TA Set-Aside Grant.
3. Agres Risley Elementary School – 10 Ramps Proposed
4. Lena Juniper Elementary School – 10 Ramps Proposed
5. Florence Drake Elementary School – 12 Ramps Proposed
6. Katherine Dunn Elementary Schools – 9 Ramps Proposed
7. Lloyd Diedrichsen Elementary School – 10 Ramps Proposed
8. Marvin Moss Elementary School – 10 Ramps Proposed
9. Van Gorder Elementary School – 17 Ramps Proposed
10. Sparks Regional Trail Crossing @ Fen Way – 2 Ramps with RRFB
11. Example pictures of existing outdated pedestrian Ramps
12. Project Cost Estimate

Project Description (Please include need, benefits, and relation to goals listed below)

This proposed project is intended to be a continuation from the 2023 RTC TA Set-Aside Program that improves pedestrian ramp infrastructure near 23 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, seven additional elementary school locations have been selected, each with 9 to 17 nearby non-ADA complaint pedestrian ramps, with a total of 80 ramps in the entirety of the project to be updated.

These improvements are needed to continue the improvement of transportation alternatives in the City, and encourage more participation and a healthier lifestyle for our residents by improving accessibility and removing old physical barriers. To also add, Elementary Schools routes are our highest priority, compared to Middle and High schools due to the vulnerability and limited mode choices often observed with younger students.

Lastly, the improvements will help enhance pedestrian safety around both established and growing neighborhoods within the city promoting the 2050 RTP Goal #1 for Safety. These targeted multi-modal infrastructure improvements throughout the city will also improve pedestrian movement near these schools and will help advance the 2050 RTP Goal #8 of Accessible and Mobility. One of the goals of this project is to encourage new pedestrian activity within these neighborhoods to reduce vehicle miles traveled and improve regional air quality through reduced emissions supporting the 2050 RTP Goal #6 of Equity and Environment Sustainability.

Which goals of the [Regional Transportation Plan](#) and/or [One Nevada Plan](#) are addressed by this project?

Regional Transportation Plan (2025 Update)

*Per Table 4.1: 2050 RTP Update Goals and Objectives
(pg. 38)*

- Goal #1: Safety
- Goal #4: System Reliability and Resiliency
- Goal #6: Equity and Environmental Sustainability
- Goal #8: Accessibility and Mobility
- Goal #9: Integrated Land-Use and Economic Development

One Nevada Plan (Feb 2020 Revision)

- Goal #1: Enhance Safety
- Goal #2: Preserve Infrastructure
- Goal #3: Optimize Mobility
- Goal #5: Foster Sustainability
- Goal #6: Connect Communities

PROJECT COST ESTIMATE (a detailed project budget must be included as a separate attachment)

Total Project Cost	Amount Reimbursable to Applicant Agency	Applicant Agency Match Requirement (5%)
<ul style="list-style-type: none"> • \$799,500.00 	<ul style="list-style-type: none"> • \$759,525.00 	<ul style="list-style-type: none"> • \$39,975.00

Source of Match Funds (Please list source or sources of funds and indicate whether funds are cash or in-kind; in-kind match requires further explanation)

- Will be paid in Cash.

Project Schedule (Please describe the expected project schedule and indicate whether it is part of a phased project; attach additional documentation as appropriate)

1. Agreement with NDOT: 1-3 months
2. Project Design and Preparation for Bidding: 1-3 months
3. Bidding and City Council Award of Project: 1-2 months
4. Preparation to Start Construction: 1 month
5. Construction: 3 months – 40 working days

Total Time: 12 Months

This proposed project is intended to be the second phase of pedestrian infrastructure improvement. Providing safe, reliable pedestrian connectivity to trails and schools is essential to maintaining the quality of life for Sparks residents. The size of this project can be scaled up or down.

Ongoing Maintenance (Please describe the ongoing maintenance requirements after the project has been implemented, including cost and agency or agencies responsible)

The City of Sparks will continue to own and maintain the right-of-way that the ramps and RRFB system are in. The maintenance of the ramps and RRFB system will also continue to be provided by the City of Sparks.

SCORING CRITERION #1: Project Benefits/Safety Enhancement (5 points possible)

Is the project included in an adopted plan, study, or program, and/or does it align with at least one stated goal of the [Regional Transportation Plan](#) or [One Nevada Plan](#)? Please describe the context of the plan, study, or program. The description must be consistent with goals listed on page 1 of this application.

This project is supported by the City of Sparks Comprehensive Plan, the 2050 Regional Transportation Plan and the One Nevada Transportation Plan. Please see below for additional details.

- City of Sparks Comprehensive Plan
 - Vision Statement – Chapter 2
 - “Integrated connectivity with a maintained road network which includes bike and pedestrian pathways.”
 - “A livable, sustainable and healthy community”
 - Connectivity – Chapter 4 – Framework for the Future
 - Connectivity Goals and Policies: Goal C1 – Develop a complete, efficient transportation system that gives Sparks residents of all ages and visitors access to employment, housing, services and recreation throughout urban Washoe County.
 - Connectivity Goals and Policies: Goal C3 – Facilitate non-motorized travel throughout the community.
- 2050 Regional Transportation Plan (2025 Update)
 - Goal #1: Safety – Vision Zero and Safe Routes to School
 - Goal #4: System Reliability and Resiliency – Active Transportation Plan/Sustainability Efforts
 - Goal #6: Equity and Environmental Sustainability – ADA Transition Plan/Sidewalk Connectivity Program
 - Goal #8: Accessibility and Mobility – Multimodal Connectivity Initiatives
 - Goal #9: Integrated Land-Use and Economic Development – WCSD/Community Health Improvement Plan
- One Nevada Transportation Plan (Feb 2020 Revision) – This project supports at least four of the stated goals in the One Nevada Transportation Plan
 - Goal #1: Enhance Safety
 - Goal #2: Preserve Infrastructure
 - Goal #3: Optimize Mobility
 - Goal #5: Foster Sustainability
 - Goal #6: Connect Communities

The proposed project will help advance Goal C1 of the City's Comprehensive Plan by promoting access for residents of the city to schools and other community amenities. These improvements are targeted throughout the near elementary schools to allow for all residents living in the these neighborhoods to get around more efficiently and safer. The proposed project will also support the implementation of Goal C3 to facility non-motrized travel throughout the community. In recent years the city has seen increased traffic near elementary schools due to increased population and vehicle miles traveled. The critical infrastructure improvements will provide residents of the city a safer route to walk or bike near these schools. It the goal of this project to promote multi-modal mobility in these neighborhoods and reduce the reliance of vehicle trips near the schools.

Does the project provide traffic calming or safety measures that benefit non-motorized road users? If yes, please explain.

Yes, it enhances safety measures benefiting non-motorized road users. With the pedestrian ramps being upgraded to ADA compliant, it will meet the needs of pedestrians with limited mobility and/or a combination of disabilities, and create a more inclusive environment. With new curb ramps, it can help reduce vehicular traffic by creating a more welcoming and aesthetically pleasing infrastructure, free of barriers, and promote walking as an alternative for healthier communities.

Does the project serve multiple modes of transportation? If yes, please explain.

Yes, this project does serve multiple modes of transportation. The updated pedestrian ramps will not only serve as a safer connection for all vulnerable road users (kids on scooters, people on wheelchairs, walkers, etc.) but help separate this mode of transportation from vehicular traffic. Also, the new ramps at the Sparks Regional Trail (a multiuse path), will help cyclists, cross a collector road as well.

Does the project provide connectivity to an existing regional transportation facility or provide clear benefits to the community according to the stated purpose of the TA Set-Aside Program? If yes, please explain.

Yes, as stated, the TA Set-Aside Program “is specifically intended to improve safety and accessibility for all, in creating safe, connected, and equitable street and trail networks,” the request for improvements in this projects does meet the requirements and vision intended with this program. This is essential and plays an integral part in the general welfare of the residents of Sparks.

SCORING CRITERION #2: Equity and Environmental Justice (2 points possible)

Is the project located in an area with a disproportionately impacted community as identified in Chapter 10 of the [2050 Regional Transportation Plan](#) (Maps 10.1 - 10.4)? If yes, please provide additional context about the area served by the project.

The project is divided among seven elementary schools located within Sparks. All seven serve some portion of the Environmental Justice Population (Please see map #1). Expansion to more areas is a possibility with future phases of the project (in particular, middle and high school areas, parks, retail areas, etc).

- Agres Risley Elementary School – Yes, Environmental Justice Population
- Lena Juniper Elementary School – Yes, Environmental Justice Population
- Florence Drake Elementary School – Yes, Environmental Justice Population
- Katherine Dunn Elementary Schools – Yes, Environmental Justice Population
- Lloyd Diedrichsen Elementary School – Yes, Environmental Justice Population
- Marvin Moss Elementary School – Yes, Environmental Justice Population
- Van Gorder Elementary School – Yes, Environmental Justice Population

Does the project provide access to essential services, including medical, employment, or educational facilities? Please describe how access to each essential service listed is provided.

Yes, the locations were chosen due to the school zoning areas for each school as indicated by Washoe County School District (see attached school maps). With the exception of the set of pedestrian ramps and RRFB proposed at the Sparks Regional Trail.

- Agres Risley Elementary School Zone
- Lena Juniper Elementary School Zone
- Florence Drake Elementary School Zone
- Katherine Dunn Elementary School Zone
- Lloyd Diedrichsen Elementary School Zone
- Marvin Moss Elementary School Zone
- Van Gorder Elementary School Zone

SCORING CRITERION #3: Project Readiness (5 points possible)

Infrastructure Projects (respond to one of the following implementation scenarios)

Project would be relatively easy to construct and can be implemented within the next 12 months. The project does not require acquisition of right-of-way, utility relocation, and/or project meets the criteria for a categorical exclusion, according to 23 C.F.R. 771.117(c). Please describe how the project meets this criterion. Note: 30% design or equivalent documentation must be provided as an attachment.

Yes, project can be implemented in the next 12 months.

- No ROW acquisition is anticipated as the ramps already exist but do not meet current ADA requirements.
- No utility relocations are anticipated.
- There are three locations where new ramps will have to be constructed (over existing sidewalk).

The locations are already determined as demonstrated in the maps attached. Further, refined locations can be determined expeditiously. The City of Sparks has accepted standard details for pedestrian ramps that will be used for construction.

Project will likely take up to 36 months to construct. Project includes right-of-way acquisition, utility relocation, and/or the project will require an environmental assessment/impact statement. Please describe how the project meets this criterion.

- N/A

Non-infrastructure Projects (respond to one of the following implementation scenarios)

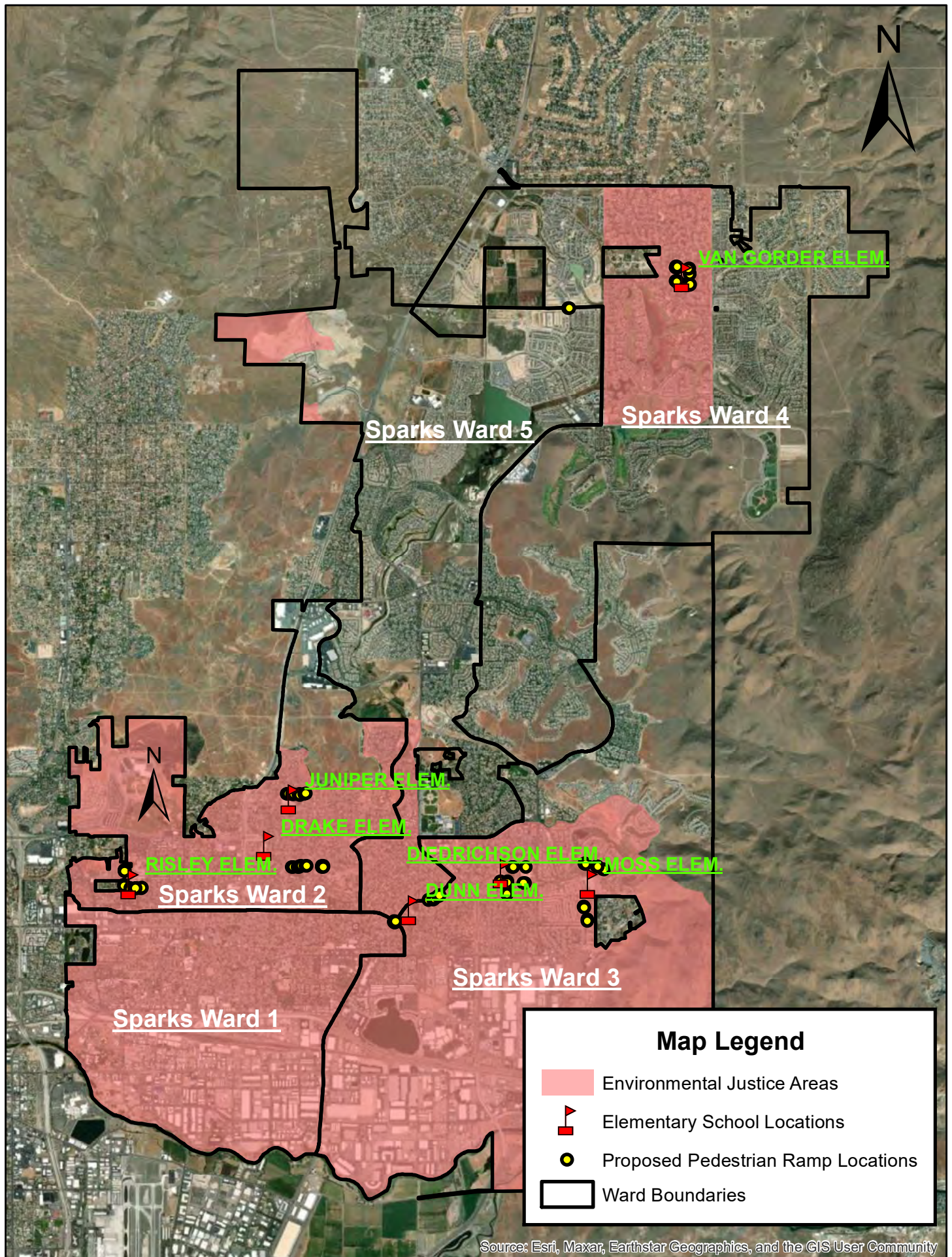
Educational/outreach program is established and schools/partnerships have been identified. Project evaluation criteria are in place to measure program effectiveness. Project can be implemented within 12 months. Note: evidence of an educational/outreach program, communication about the program with schools and/or other partners, and project evaluation criteria must be included as a separate attachment. Please describe how the project meets this criterion.

- N/A

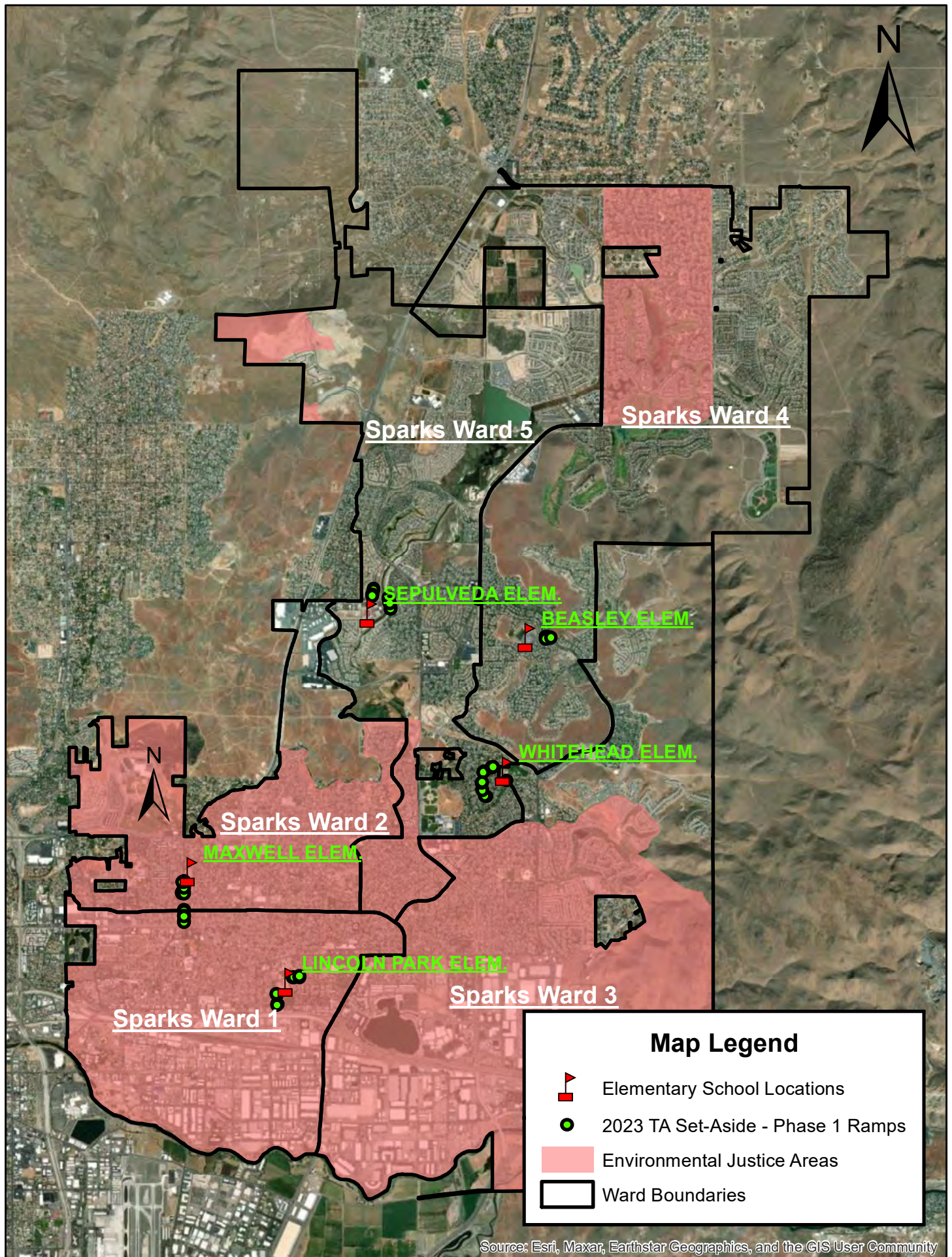
Educational/outreach program will need to be developed, partnerships will need to be established and identified. Evaluation criteria will need to be developed to measure the effectiveness of the project. This project may take 24 months or more to implement. Please describe how the project meets this criterion.

- N/A

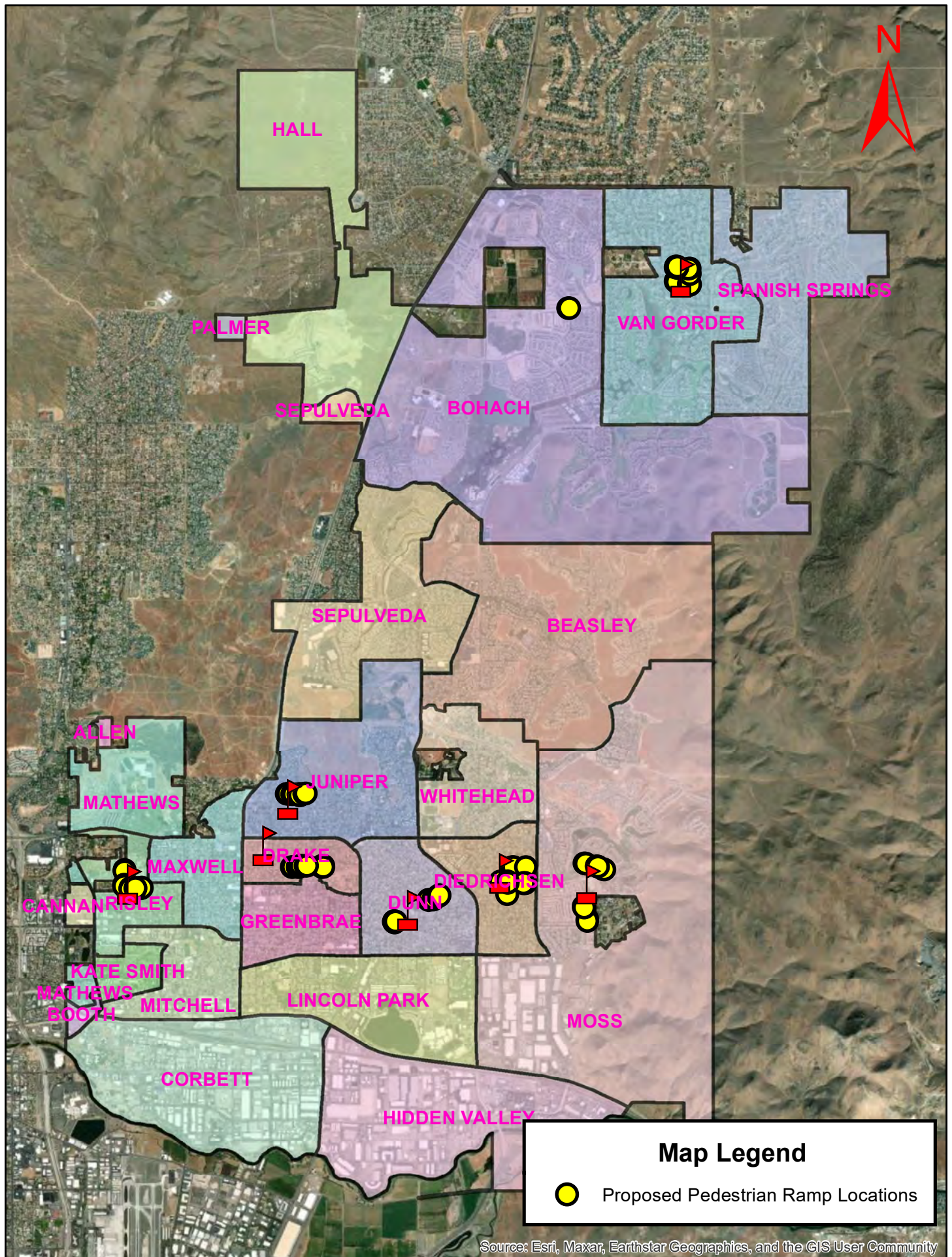
Project Overview



Overview of Completed Ramps from Phase 1



Sparks Elementary School Zones Overview



Risley Elementary - 10 Ramps



Juniper Elementary - 10 Ramps

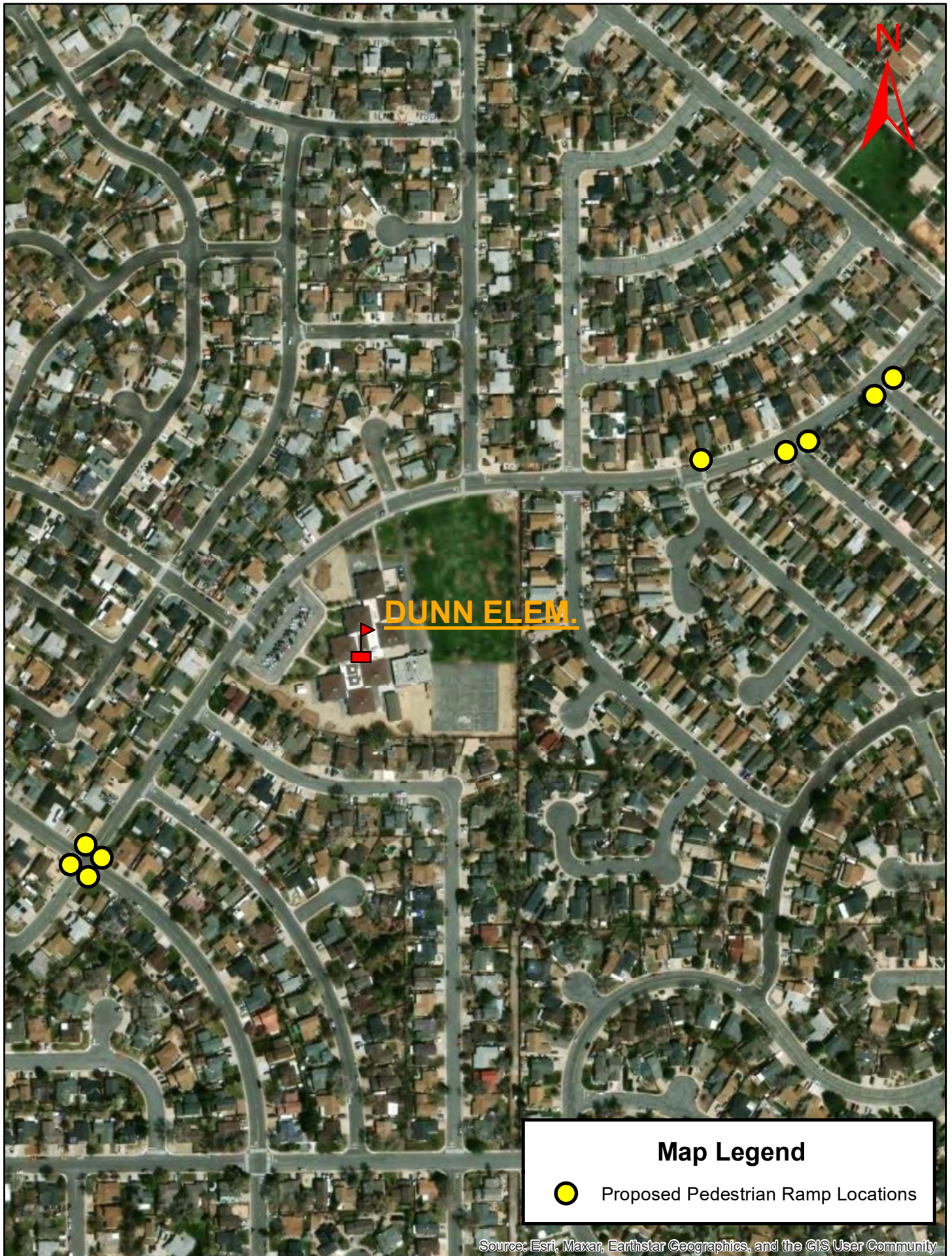


Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

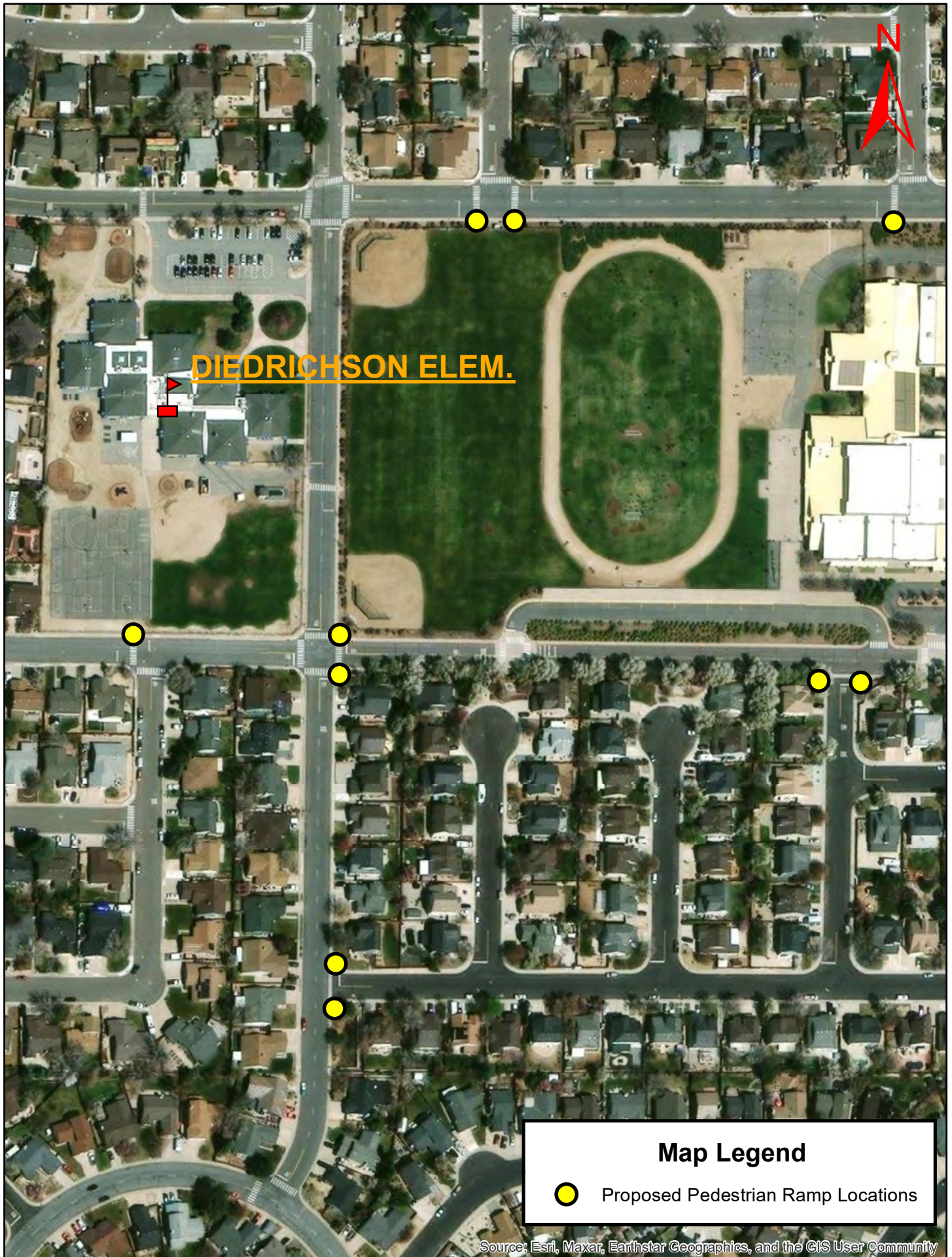
Drake Elementary - 12 Ramps



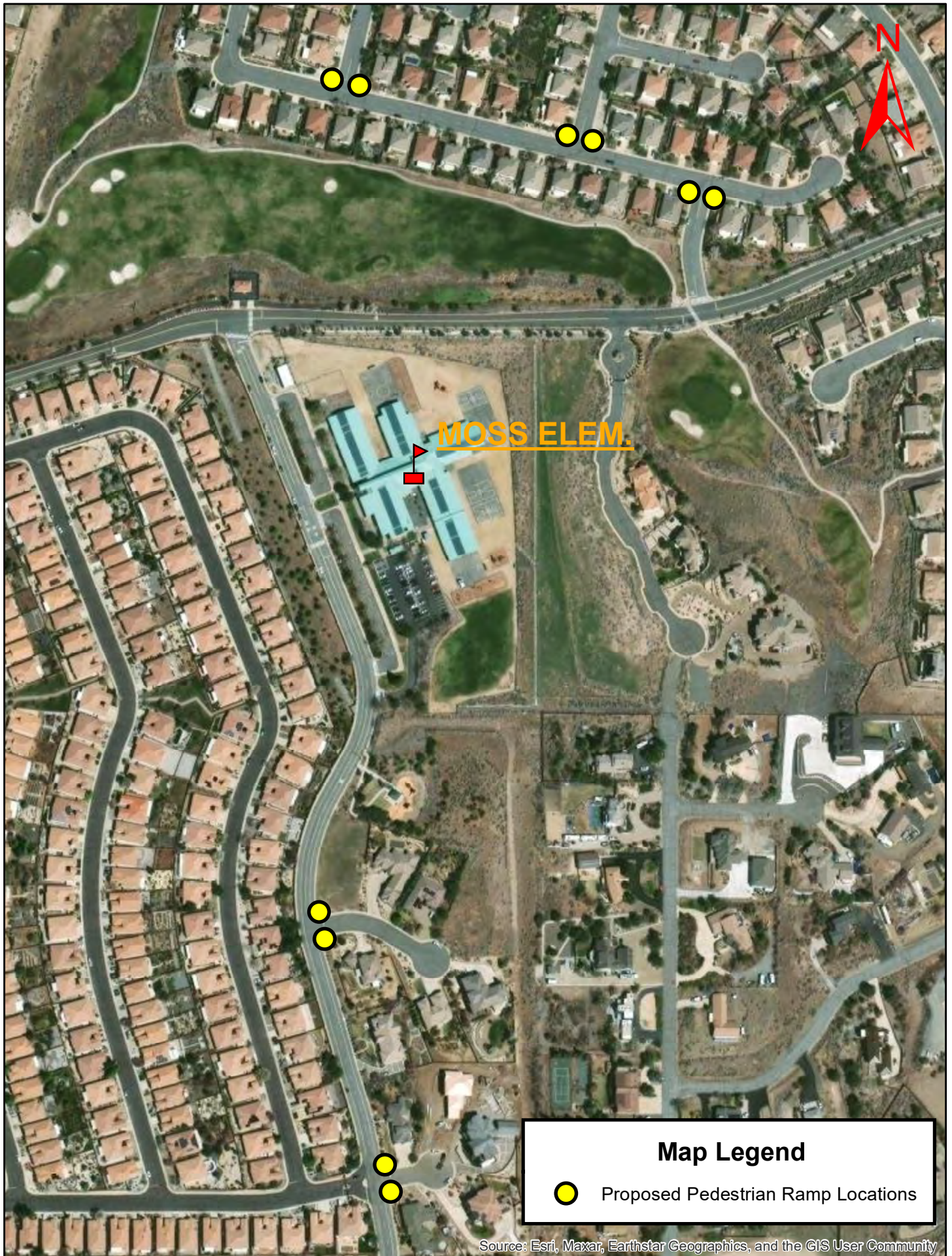
Dunn Elementary - 9 Ramps



Diedrichson Elementary - 10 Ramps

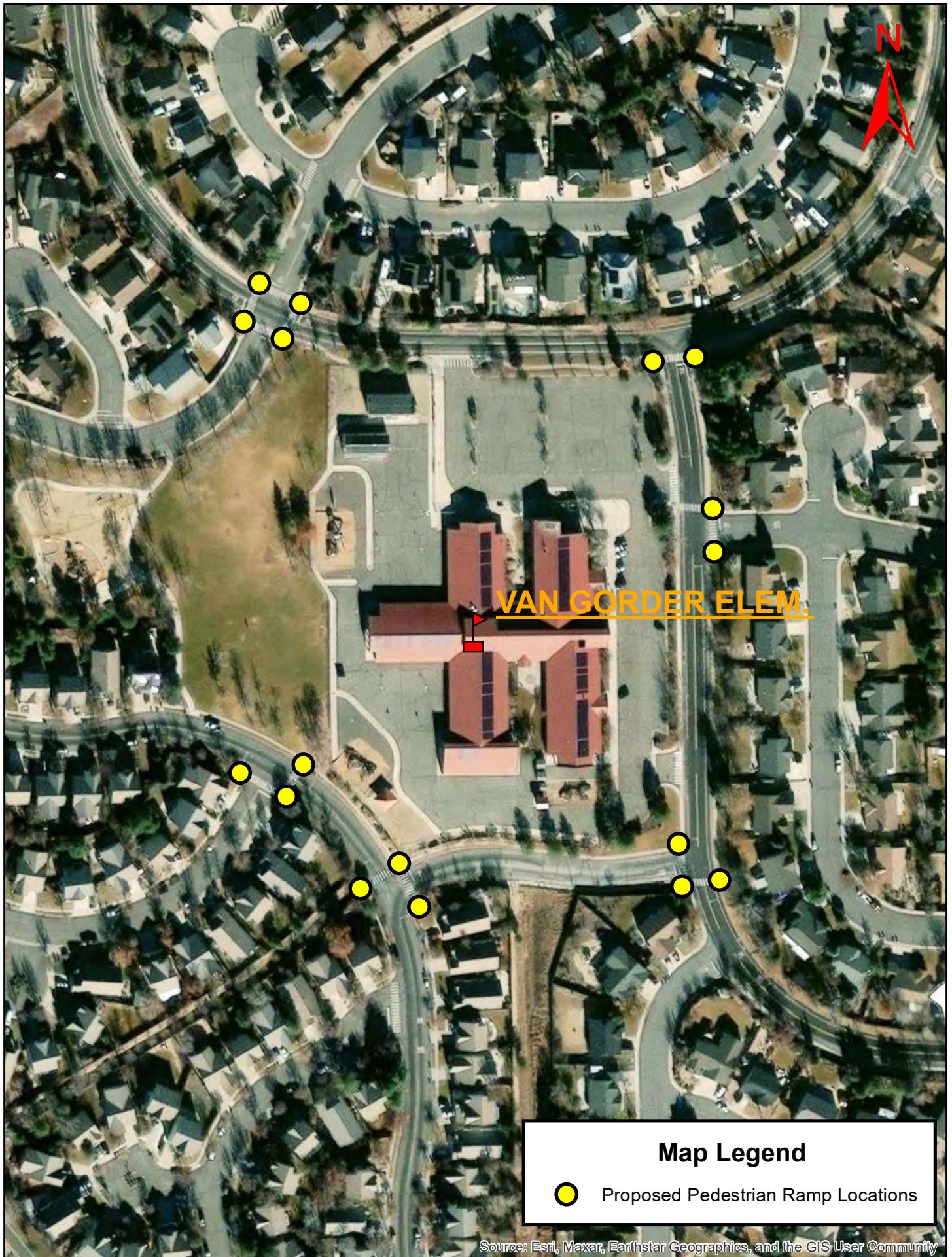


Moss Elementary - 10 Ramps



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Van Gorder Elementary - 17 Ramps



Sparks Regional Trail Crossing @ Fen Way



Non-Compliant ADA Ramp Examples



Sparks Regional Trail Non-Connectivity @ Fen Way



RTC TA SET-ASIDE PROPOSAL
CITY OF SPARKS: PEDESTRIAN RAMP PROJECT - PHASE 2
ESTIMATE OF COSTS - MAY 2025

Engineers Estimate of Probable Costs					
<i>Bid Item</i>	<i>Description</i>	<i>Quantity</i>	<i>Units</i>	<i>Unit Price</i>	<i>Amount</i>
1	Remove Existing and Install ADA Accessible Ramp	80	EA	\$7,500.00	\$600,000.00
2	Installation of RRFB System	1	LS	\$15,000.00	\$15,000.00
2	Force Account / 30% Contingency	1	LS	\$1.00	\$184,500.00

	TOTAL	\$799,500.00
	City of Sparks 5% Match	\$39,975.00
	TA Set Aside Amount Requested	\$759,525.00

**TA Set-Aside Award Recommendation
Attachment C – Applications**

**Reno Bike Project
Major Taylor Program**



Transportation Alternatives (TA) Set-Aside Program Grant Application

REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY

Applicant Agency Reno Bike Project

Applicant Agency Address 216 E. Grove St.
Reno, NV, 89502

Contact Person's Information

Name Andy Perkins

Title Executive Director

Phone Number (775) 323-4488

Email andy@renobikeproject.com

Project Name Major Taylor Program

Description of Project Location and Limits (Must include map, if applicable, upload below)

The Major Taylor Program (MTP) is based at two primary locations within the Reno-Sparks region:

1. Reno Bike Project - 635 E 4th St., Reno, NV (Program and Education Space) and 216 E. Grove St., Reno, NV (Primary Shop)

This location serves as the central hub for MTP activities, including classroom-based bicycle safety education, hands-on maintenance training, and community events. The facility includes a fully equipped bike shop and workshop space, enabling participants to learn technical skills in a structured environment. 635 E. 4th St. is strategically situated in downtown Reno, providing easy access to public transportation, bike lanes, and multi-use paths that connect participants to essential services, schools, and recreational spaces.

This location is positioned within a historically underserved area identified in the 2050 Regional Transportation Plan, enhancing the program's impact on transportation equity and community connectivity.

2. High Desert Montessori School - 101 Fantastic Dr., Reno, NV

MTP partners with High Desert Montessori School to deliver cycling safety and transportation education directly to students. This partnership extends MTP's reach into neighborhoods with limited access to non-motorized transportation options, enhancing connectivity for students traveling to and from school.

Project Limits:

MTP's operational reach extends across the Reno-Sparks area, with program routes designed to connect participants to local schools, community centers, health clinics, and public transit stops. Primary corridors include 4th St., Wells Ave., Virginia St., and Silverada Blvd.

Routes are planned to prioritize bike lanes, shared paths, and low-traffic streets, ensuring safe, accessible travel for all participants.

Upload additional supplemental materials

A small purple square icon with a white document symbol and the letters "PDF" in white.

MTP Budget 2026_2027.pdf



MOU Wildflower Montessori (1).pdf



HDMS MOU.pdf

Project Description (Please include need, benefits, and relation to goals listed below)

Reno Bike Project is applying for funding for our Major Taylor Program (MTP) for FY 2025 and 2026. The MTP is a cycling education and safety program that provides access to cycling for teens and pre-teens who may not otherwise have the opportunity to experience the benefits of biking. Through this program, we aim to increase transportation equity, enhance physical health, and broaden access to opportunities for youth in the Reno-Sparks area.

The MTP is open to all middle and high school students in the region, with targeted outreach to schools and organizations serving at-risk youth. Our partnerships focus on populations experiencing higher incidences of poverty, limited access to physical education, and barriers to STEM programming. For the calendar year 2026, our engagement goals are to enroll 150 youth in the MTP, with a projected graduation rate of at least 90%, reflecting program growth and expanded outreach efforts. We aim to expand the program in the calendar year 2027 to 200 youth. The MTP Education course uses bicycling as a tool to teach youth about safe cycling practices, traffic laws, and environmental stewardship. According to the CDC's most recent Youth Risk Behavioral Survey, 31.4 % of middle school students reported rarely or never wearing a helmet while bicycling. In contrast, 100% of youth participating in the MTP wear helmets and engage in structured safety practices.

Lessons are integrated into bike rides ranging from 5 to 30 miles, allowing participants to practice safe riding skills while discovering new parts of the Truckee Meadows. The program aims to create lifelong cyclists by providing a safe, structured introduction to cycling as a non-motorized option for affordable transportation and as a healthy form of exercise and recreation.

Additionally, the program emphasizes the cost benefits of cycling, with the average annual operating cost for a bicycle at just \$350, compared to \$6,118 for an automobile and \$780 for public transportation. By prioritizing cycling, students gain greater access to employment, education, and community events, contributing to long-term mobility and independence.

With funding support, we plan to update and expand our fleet of bicycles, enhance our safety gear inventory, and increase our outreach to marginalized communities. This growth will allow us to break down transportation barriers for even more youth, empowering them to navigate their communities safely and sustainably.

Additionally, we aim to deepen community partnerships with local schools, after-school programs, and youth-serving organizations to further extend the reach of MTP. With a focus on sustainability, we will continue to refurbish donated bikes for program use, minimizing environmental impact and reinforcing our commitment to community-driven solutions.

Which goals of the Regional Transportation Plan and/or One Nevada Plan are addressed by this project?

The Major Taylor Program (MTP) directly aligns with several key goals outlined in the Regional Transportation Plan (RTP) and the One Nevada Plan by advancing sustainable, equitable, and safe transportation options for youth in the Reno-Sparks area. Specifically, the MTP addresses the following objectives:

Improved Transportation Equity (RTP Goal 6) – The MTP increases transportation access for youth from economically disadvantaged backgrounds by providing free access to bicycles, safety education, and multimodal transportation options. This directly supports the RTP's focus on equitable access to safe, reliable transportation for underserved populations and aligns with One Nevada's goal to reduce barriers to mobility.

Safety and Security Enhancements (RTP Goal 1 & One Nevada Goal 1) – The program's curriculum emphasizes bicycle safety, traffic laws, and helmet usage, aligning with regional safety goals to reduce accidents and improve rider security on public roads. This structured education actively reduces risk and fosters confidence in urban cycling.

Multimodal Transportation Expansion (RTP Goal 8 & One Nevada Goal 6) – MTP encourages youth to use

bicycles as a primary means of transportation, supporting the RTP’s initiative to expand multimodal options and reduce reliance on single-occupancy vehicles. This shift contributes to reduced traffic congestion, lower emissions, and increased access to community spaces and educational opportunities. Environmental Sustainability (RTP Goal 6 & One Nevada Goal 4) – By prioritizing cycling as a zero-emission mode of transport, the MTP promotes environmental sustainability. Participants learn the long-term benefits of cycling over car travel, aligning with state-level goals to reduce environmental impact and promote green transportation alternatives that contribute to Nevada’s carbon reduction goals. Through its alignment with both the Regional Transportation Plan and the One Nevada Plan, the Major Taylor Program not only addresses immediate transportation needs for at-risk youth but also contributes to broader community goals of equity, safety, sustainability, and economic opportunity. By fostering safe, sustainable transportation habits in young people, the program actively supports the region’s long-term vision for a more connected, resilient, and environmentally conscious community.

Project Cost Estimate

(a detailed project budget must be included as a separate attachment)

Total Project Cost	\$328,392
Amount to Reimbursable to Applicant Agency	\$311,972.40
Applicant Agency Match Requirement (5%)	\$16,419.60

Source of Match Funds (Please list source or sources of funds and indicate whether funds are cash or in-kind; in-kind match requires further explanation)

The MTP will leverage a combination of community donations and in-kind match contributions to meet grant requirements. The following sources have been identified: 1. Community Donations: RBP hosts annual fundraising events such as the Tri-Lab Street Fair and the Burning Man Pop-Up, which generate unrestricted funds to support youth programming. We anticipate \$25,000 in direct contributions toward the MTP from these events and individual donations in 2025. 2. In-Kind Contributions: Volunteer Hours: RBP engages community volunteers for bicycle maintenance, ride chaperoning, and program instruction. These volunteer hours are valued at \$28.54 per hour based on the Independent Sector’s 2024 national average. We anticipate 500 volunteer hours dedicated to MTP annually, equating to \$14,270 of in-kind support. Total Match Funding: Community Donations: \$25,000 In-Kind Contributions: \$14,270 Combined, these contributions total \$39,270, meeting and exceeding the required match for grant consideration. RBP’s commitment to both community-driven donations and in-kind support demonstrates strong investment and sustainability for the Major Taylor Program. Additionally, this blended approach of financial and community-driven support strengthens our capacity to maintain and expand program activities year over year.

Project Schedule (Please describe the expected project schedule and indicate whether it is part of a phased project; attach additional documentation as appropriate)

MTP has been an integral part of Reno Bike Project's youth cycling initiatives for several years. This project schedule outlines the continuation and expansion of MTP for the 2026-2027 fiscal years, structured as part of a phased implementation to support program growth, expanded community reach, and enhanced program delivery. The project schedule is divided into three primary phases: Planning & Preparation, Program Delivery, and Evaluation & Expansion. Phase 1: Planning & Preparation (January 2026 – March 2026) Secure funding and finalize community partnerships.

Conduct outreach to middle and high schools for student enrollment. Maintain and update bicycle fleet. Acquire new safety gear and educational materials to meet increased enrollment demands. Train staff and educators in bicycle safety and program curriculum. Schedule program delivery in alignment with academic calendars and community partners. Phase 2: Program Delivery (March 2026 – December 2026) Continue MTP classes in coordination with school schedules and after-school programs, with expanded capacity for new students. Deliver cycling safety education, group rides, and maintenance workshops. Host seasonal community events to promote cycling awareness and safety. Monitor progress and collect data on participation, safety outcomes, and community impact. Perform regular bicycle maintenance to ensure safety and reliability. Phase 3: Evaluation & Expansion (January 2027 – December 2027) Assess program outcomes, participant feedback, and community impact. Evaluate bicycle maintenance needs and replenish inventory as necessary. Identify new opportunities for program expansion in underserved areas. Develop strategic plan for the next grant cycle and program year, incorporating insights gained from expanded operations. Present evaluation findings to community partners and stakeholders. Phased Project Implementation: The Major Taylor Program is designed as a phased project to ensure structured growth, effective community engagement, and sustainability. Each phase builds upon the previous one to enhance safety education, increase youth participation, and expand program reach across the Reno-Sparks area. This structured approach allows RBP to maintain program quality while scaling impact year-over-year. Documentation for each phase, including outreach strategies, maintenance logs, and participant surveys, will be provided upon request to demonstrate progress and accountability. This phased schedule supports strategic growth, continuity of service, and further expansion of cycling opportunities for youth in the region.

Ongoing Maintenance (Please describe the ongoing maintenance requirements after the project has been implemented, including cost and agency or agencies responsible)

The ongoing maintenance requirements for the MTP primarily involve the upkeep of bicycles, safety equipment, and educational materials to ensure safe and effective operation throughout each program cycle. RBP is the sole agency responsible for these maintenance activities, leveraging our in-house expertise and community partnerships to manage costs and sustain program quality. Bicycle Maintenance: RBP operates a fully equipped community bike shop staffed by professional mechanics and trained volunteers. Regular maintenance includes tire replacements, brake adjustments, drivetrain cleaning, and frame inspections. Each bike is inspected for safety before every class session, with necessary repairs performed promptly to prevent disruption. The estimated annual cost for bicycle maintenance across the MTP fleet is approximately \$54,000, covering parts, labor, and consumables. Safety Equipment: The program supplies each participant with a helmet and basic safety gear. Participants are given a helmet to keep to encourage helmet use after the program. Estimated cost for helmets is \$3300 in the first year and \$4,400 in the second year. Educational Materials: Curriculum materials, traffic safety signage, and learning tools are reviewed and updated yearly to maintain alignment with

current safety standards and best practices. We estimate the cost of refreshing educational materials at \$1,000 annually, ensuring participants are learning from the most current resources available. Funding and Sustainability: The ongoing costs associated with maintenance are supported through a combination of program fees, community donations, and grant funding. RBP also hosts community fundraising events to supplement these costs, ensuring that program sustainability is maintained year over year without compromising service quality. By integrating maintenance into our program design, RBP guarantees that the Major Taylor Program remains safe, accessible, and impactful for all participants. Our proactive maintenance strategy minimizes downtime, extends the life of our equipment, and maximizes community benefit while keeping costs sustainable.

SCORING CRITERION #1: Project Benefits/Safety Enhancement

5 POINTS POSSIBLE

Is the project included in an adopted plan, study, or program, and/or does it align with at least one stated goal of the Regional Transportation Plan or One Nevada Plan? Please describe the context of the plan, study, or program. The description must be consistent with goals listed on page 1 of this application.

MTP is directly aligned with key objectives of both the RTP and the One Nevada Plan. These strategic frameworks prioritize multimodal transportation options, safety enhancements, and community-based mobility solutions—all of which are core components of MTP.

Regional Transportation Plan (RTP): The RTP emphasizes the need for expanded multimodal transportation options to reduce vehicle dependency, improve public health, and enhance access to education and employment opportunities. MTP actively supports these goals by providing youth with the skills and resources needed to adopt cycling as a safe, affordable, and sustainable mode of transportation. Through structured safety education and group rides, MTP participants learn how to navigate urban infrastructure safely and confidently.

In addition, the program's focus on bicycle safety education addresses RTP's goals for enhancing safety and reducing accidents involving cyclists. The incorporation of helmet use, traffic law education, and supervised group rides directly supports regional strategies for safer streets. By providing cycling access to students who may not have other transportation options, MTP also contributes to reducing local traffic congestion and emissions.

One Nevada Plan: The One Nevada Plan prioritizes sustainable transportation solutions and improved accessibility across the state. MTP contributes to these goals by providing a zero-emission transportation option that reduces traffic congestion and environmental impact. The program's emphasis on transportation access for youth also aligns with One Nevada's focus on enhancing equitable mobility solutions, particularly in underserved communities.

Furthermore, MTP's community-based approach leverages local partnerships and volunteer support, reinforcing One Nevada's emphasis on collaborative community efforts to improve transportation access and safety. MTP participants not only gain access to safe cycling opportunities but also receive education on environmental stewardship and sustainable travel habits.

Context and Inclusion: MTP is recognized within local transportation and community health initiatives as a critical program for advancing youth mobility and cycling education. Its alignment with both the RTP and the One Nevada Plan positions it as a vital contributor to regional transportation solutions, supporting broader community goals of safety, sustainability, and equitable access.

The continuation and expansion of MTP for 2026-2027 further strengthen its capacity to contribute to these regional goals, making it a strategic investment for long-term community impact and sustainable mobility growth. By building on its existing framework, MTP ensures continuity of service while expanding its reach to more students, reinforcing its role as a transformative community transportation solution.

Does the project provide traffic calming or safety measures that benefit non-motorized road users? If yes, please explain.

MTP provides significant traffic calming and safety measures that directly benefit non-motorized road users, particularly youth cyclists. Through structured education and community engagement, MTP enhances road safety in the following ways:

1. **Bicycle Safety Education:** MTP participants receive hands-on training in bicycle safety, traffic laws, and responsible riding practices. This includes understanding proper lane positioning, signaling, and navigating intersections safely. By equipping youth with this knowledge, MTP reduces risky behavior and promotes safer interactions between cyclists and motorists.
2. **Group Rides with Supervision:** MTP organizes regular group rides that are supervised by trained staff and volunteer ride chaperones. These group rides not only reinforce safe cycling practices but also increase cyclist visibility in the community, encouraging more cautious driving behavior from motorists. This presence on the roads contributes to natural traffic calming, as drivers slow down and exercise greater awareness around groups of cyclists.
3. **Route Planning and Community Awareness:** MTP emphasizes route planning that prioritizes bike lanes, low-traffic streets, and multi-use paths. Participants learn to select safer routes, mitigating exposure to high-risk traffic areas. Additionally, MTP-led community events raise awareness about cyclist presence and rights, promoting shared road use and respect for non-motorized travelers.
4. **Helmet Use and Safety Gear Compliance:** All MTP participants are required to wear helmets and appropriate safety gear during all rides. This emphasis on safety reduces the risk of severe injury in the event of an accident, aligning with regional safety initiatives for non-motorized road users.
5. **Community Engagement and Advocacy:** MTP actively participates in local transportation planning discussions and community events, advocating for safer cycling infrastructure and improved traffic calming measures. By collaborating with local stakeholders, MTP helps drive initiatives for protected bike lanes, improved signage, and community-wide safety campaigns.

Through its comprehensive safety education, supervised rides, and community advocacy, the Major Taylor Program effectively contributes to traffic calming and the creation of safer streets for non-motorized road users across the Reno-Sparks area. These efforts not only enhance safety for program participants but also promote a culture of shared road responsibility among all users.

Does the project serve multiple modes of transportation? If yes, please explain.

MTP serves multiple modes of transportation by promoting and educating participants on cycling as a primary mode of non-motorized travel while also integrating with public transportation options. This multimodal approach is designed to increase access to education, employment, and community resources for youth in the Reno-Sparks area.

1. **Cycling as Primary Transportation:** MTP focuses on teaching youth to use bicycles as a practical, sustainable form of transportation. Participants learn bicycle safety, maintenance, and route planning, enabling them to navigate urban areas safely and confidently. This training allows them to independently access school, work, and community events without reliance on motor vehicles, contributing to reduced traffic congestion and lower emissions.
2. **Integration with Public Transportation:** MTP participants are also educated on how to integrate cycling with local public transit options, such as RTC Ride buses, which are equipped with front-mounted bike racks. This integration expands the range of accessible destinations, allowing participants to travel further while still relying on non-motorized transportation. By combining cycling with public transit, MTP encourages a seamless multimodal experience that enhances mobility for youth.
3. **Multimodal Route Planning:** MTP curriculum includes route planning that combines cycling with public transit for longer commutes. Participants learn how to safely transition from cycling to bus travel, maximizing the efficiency and safety of their commutes. This structured planning empowers youth to explore their communities more fully while reducing dependence on car travel.
4. **Advocacy for Safe Multi-Use Paths:** Through community engagement, MTP advocates for the development and maintenance of multi-use paths that accommodate cyclists, pedestrians, and other non-motorized users. These paths promote safe, shared spaces for various modes of active transportation and connect key community locations such as schools, parks, and community centers.

By promoting cycling as a primary means of travel and supporting its integration with public transportation, MTP enhances multimodal transportation options for youth, contributing to greater mobility, independence, and environmental sustainability. This commitment to multimodal travel not only supports individual mobility but also aligns with regional goals for reducing traffic congestion and

improving community connectivity.

Does the project provide connectivity to an existing regional transportation facility or provide clear benefits to the community according to the stated purpose of the TA Set-Aside Program? If yes, please explain.

The Major Taylor Program (MTP) directly contributes to regional connectivity and delivers clear community benefits, consistent with the stated purpose of the TA Set-Aside Program. By fostering non-motorized transportation habits among youth and integrating cycling with public transit, MTP aligns with regional and state transportation goals.

1. Connectivity to Regional Transportation Facilities:

MTP strategically integrates cycling with existing public transportation infrastructure. Specifically, participants learn how to use RTC Ride buses equipped with bike racks, enabling them to extend their travel range beyond cycling alone. This connectivity improves access to educational, recreational, and employment opportunities while reducing reliance on motor vehicles.

Additionally, MTP’s focus on route planning encourages the use of bike lanes, multi-use paths, and transit hubs, promoting seamless transitions between cycling and public transportation. By teaching youth to efficiently combine cycling with public transit, MTP directly supports the region’s goal of enhanced connectivity for non-motorized users, while also reducing congestion and emissions.

2. Community Benefits:

MTP addresses transportation challenges by providing youth with skills and resources to use bicycles as affordable, sustainable transportation. This empowerment reduces barriers to mobility and promotes public health through increased physical activity. Community events hosted by MTP also help foster a culture of cycling, raising awareness about non-motorized transportation options and safety.

Additionally, MTP’s community-driven approach encourages local partnerships and volunteer involvement, building a stronger, more resilient transportation network. By prioritizing cycling safety and multimodal integration, MTP supports the TA Set-Aside Program’s purpose of improving transportation alternatives and fostering community connectivity. Its focus on youth engagement ensures that the next generation of commuters is well-equipped to choose sustainable, active transportation options, contributing to long-term regional mobility.

SCORING CRITERION #2: Equity and Environmental Justice
2 POINTS POSSIBLE

Is the project located in an area with a disproportionately impacted community as identified in Chapter 10 of the 2050 Regional Transportation Plan (Maps 10.1 - 10.4)? If yes, please provide additional context about the area served by the project.

Yes, the Major Taylor Program (MTP) operates within areas identified as disproportionately impacted communities in Chapter 10 of the 2050 Regional Transportation Plan (RTP) for the Reno-Sparks region.

Context of the Area Served:

Primary Location: MTP is based at Reno Bike Project’s community bicycle shop located at 216 E. 4th St., situated in downtown Reno. This area is characterized by a high concentration of low-income households, limited access to private transportation, and underinvestment in active transportation infrastructure.

Educational Partnership: MTP partners with High Desert Montessori School, located at 101 Fantastic Dr., to provide bicycle safety education and transportation training to students. This collaboration extends MTP's reach into neighborhoods that also exhibit elevated rates of traffic-related incidents involving pedestrians and cyclists.

By providing structured bicycle safety education, supervised group rides, and integration with public transit

options, MTP addresses these disparities directly. The program enhances mobility options for youth, promotes safer travel behaviors, and fosters a culture of active transportation within these communities.

Furthermore, MTP's alignment with the RTP's goals ensures that efforts are concentrated in areas where they are most needed, contributing to the broader objectives of equitable transportation access, safety improvements, and community well-being.

Through its targeted approach, the Major Taylor Program not only addresses immediate transportation challenges but also lays the groundwork for long-term, sustainable improvements in mobility and quality of life for residents in disproportionately impacted communities.

Does the project provide access to essential services, including medical, employment, or educational facilities? Please describe how access to each essential service listed is provided.

MTP actively provides access to essential services, including educational facilities, employment opportunities, and community-based health resources through structured cycling education and strategic community partnerships.

1. Educational Facilities: MTP operates out of Reno Bike Project's education bicycle shop, which includes a dedicated classroom and workshop space for program participants. Additionally, MTP partners with High Desert Montessori School to deliver bicycle safety education and transportation training directly to students. This partnership increases accessibility to educational opportunities by equipping students with transportation skills that enable independent travel to school and after-school programs.

2. Employment Opportunities: Through MTP's cycling education and hands-on bike maintenance workshops, participants develop technical skills that can translate to employment opportunities within the bicycle industry, local bike shops, and community events. MTP also provides mentorship opportunities that connect participants with potential employers, fostering pathways to job readiness and workforce engagement.

3. Community-Based Health Resources: MTP emphasizes cycling as a form of active transportation that improves physical health and access to community health facilities. Participants learn safe, efficient route planning to medical facilities, community health clinics, and recreational centers, reducing barriers to essential health services. Additionally, the program promotes healthy living through active transportation, aligning with local public health initiatives aimed at reducing chronic disease and encouraging physical activity.

By providing education, skill-building, and safe transit options, MTP not only enhances participants' mobility but also improves their access to essential services throughout the Reno-Sparks area.

SCORING CRITERION #3: Project Readiness
5 POINTS POSSIBLE

Infrastructure Projects

(respond to one of the following implementation scenarios)

Non-infrastructure Projects

(respond to one of the following implementation scenarios)

Educational/outreach program is established and schools/partnerships have been identified. Project evaluation criteria are in place to measure program effectiveness. Project can be implemented within 12 months. Note: evidence of an educational/outreach program, communication about the program with schools and/or other partners, and project evaluation criteria must be included as a separate attachment. Please describe how the project meets this criterion.

The Reno Bike Project's (RBP) educational and outreach program is well-established and currently operates in partnership with local schools and community organizations. Notably, the program is actively implemented at High Desert Montessori School and Wildflower Montessori, where students participate in hands-on bicycle maintenance workshops and learn about sustainable transportation.

Evidence of Educational/Outreach Program

RBP's commitment to education is evident through its established curriculum, which includes workshops

on bicycle safety, maintenance, and sustainable transportation. These workshops are conducted both at RBP's 216 E. Grove St. education space and at partner locations, including High Desert Montessori and Wildflower Montessori.

Communication with Schools and Partners

RBP has established regular communication channels with its partner schools and organizations. This includes monthly check-ins, collaborative event planning, and coordinated outreach efforts.

Memorandums of Understanding (MOUs) with High Desert Montessori and Wildflower Montessori are attached as evidence of these

Project Evaluation Criteria

To measure program effectiveness, RBP has developed a set of evaluation criteria, including:

Attendance and Participation Rates: Tracking the number of students and miles ridden.

Skill Acquisition: Assessing participants' improvement in bicycle riding and safety skills through practical evaluations.

Feedback Surveys: Collecting qualitative data from students, teachers, and community partners to gauge impact and areas for improvement.

The evaluation process is designed to ensure that the program not only meets its educational goals but also contributes positively to the community's understanding and practice of sustainable transportation.

Implementation Timeline

The project is structured to be fully implemented within immediately, with milestone tracking and quarterly evaluations to ensure adherence to projected timelines.

Project Budget		
	Annual Budget	TA Set-Aside Funds Requested
2026	\$173,646.00	\$164,963.70
2027	\$154,746.00	\$147,008.70
Budget Total	\$328,392.00	\$311,972.40

Major Taylor Program Budget 2026		
EXPENSES	BUDGET	COMMENTS
Staffing		
Program Director	\$15,600.00	Katie: \$30/hr @ 10 hr/wk @52 wks
MTP Coordinator/Instructor	\$52,000.00	Tom: \$25/hr @ 40hr/wk @52 wks
MTP Assistant Instructor	\$4,800.00	\$20/hr @ 20 hr/wk @ 20 weeks
Staffing Sub-total	\$72,400.00	
Program Expenses		
Bikes	\$40,000.00	50 Bikes @ \$800 each
Replacement Parts	\$7,500.00	50 bikes @ \$150
Instruction Materials	\$1,000.00	Brochures, flyers, handouts
Accessories	\$2,000.00	patch kits, protective eye wear
Helmets	\$3,300.00	150 helmets @ \$22 each
Shirts	\$3,000.00	150 @ \$20 each
Protective Equipment/First Aid	\$1,000.00	Sunscreen, banages, first aid kits
Maintenance - Labor	\$15,000.00	Bike fleet maintenance 600 hours @ \$25 hr
Tools	\$2,000.00	Replacement Tools
Vehicle Maintenance and Insurance	\$1,800.00	\$300*12 months @ 50%
Transportation	\$2,000.00	50% of fuel costs
Insurance	\$2,646.00	General Liability, worker's compensation and youth ride insurance
Certifications	\$1,000.00	CPR, First AID and Background checks
Travel/Continuing Education	\$6,000.00	Youth Bike Summit, Continuing Education
Marketing	\$500.00	Flyers, job postings
Utilities	\$6,000.00	Rent, sewer, gas, electric and water @10%
Program Expense Sub-total	\$94,746.00	
Administration	\$6,500.00	Andy @ \$50* 2.5 hrs* 52 weeks
Total Budget	\$173,646.00	
TA Set-Aside Funds Requested	\$164,963.70	

Major Taylor Program Budget 2027		
EXPENSES	BUDGET	COMMENTS
Staffing		
Program Director	\$15,600.00	Katie: \$30/hr @ 10 hr/wk @52 wks
MTP Coordinator/Instructor	\$52,000.00	Tom: \$25/hr @ 40hr/wk @52 wks
MTP Assistant Instructor	\$4,800.00	\$20/hr @ 20 hr/wk @ 20 weeks
Staffing Sub-total	\$72,400.00	
Program Expenses		
Bikes	\$20,000.00	25 bikes @ \$800 each
Replacement Parts	\$7,500.00	50 bikes @ \$150
Instruction Materials	\$1,000.00	Brochures, flyers, handouts
Accessories	\$2,000.00	patch kits, protective eye wear
Helmets	\$4,400.00	200 helmets @ \$22 each
Shirts	\$4,000.00	200 @ \$20
Protective Equipment/First Aid	\$1,000.00	Sunscreen, banages, first aid kits
Maintenance - Labor	\$15,000.00	Bike fleet maintenance 600 hours @ \$25 hr
Tools	\$1,000.00	Replacement Tools
Vehicle Maintenance and Insurance	\$1,800.00	\$300*12 months @ 50%
Transportation	\$2,000.00	50% of fuel costs
Insurance	\$2,646.00	General Liability, worker's compensation and youth ride insurance
Certifications	\$1,000.00	CPR, First AID and Background checks
Travel/Continuing Education	\$6,000.00	Youth Bike Summit, Continuing Education
Marketing	\$500.00	Flyers, job postings
Utilities	\$6,000.00	Rent, sewer, gas, electric and water @10%
Program Expense Sub-total	\$75,846.00	
Administration	\$6,500.00	Andy @ \$50* 2.5 hrs* 52 weeks
Total Budget	\$154,746.00	
TA Set-Aside Funds Requested	\$147,008.70	95%

MEMORANDUM OF UNDERSTANDING (MOU)

This Memorandum of Understanding (MOU) is entered into on this 8 day of April, 2025, by and between:

- **Northern Nevada Wildflower Montessori (NNWM)** and
- **Reno Bike Project (RBP).**

Purpose:

The purpose of this MOU is to outline the collaborative goals and efforts between NNWM and RBP to promote physical education, bike safety, learning to ride a bike, maintenance workshops, and to support community engagement efforts.

Goals and Responsibilities:

1. Reno Bike Project (RBP) Responsibilities:

- Provide bikes for kids at NNWM to use for physical education and recess.
- Facilitate workshops on bike safety and learning how to ride a bike for NNWM students.
- Provide a 1x a week enrichment activity for students of NNWM

2. Northern Nevada Wildflower Montessori (NNWM) Responsibilities:

- Organize families/caregivers to participate in bike maintenance workshops at Reno Bike Project as part of a community engagement effort.
- Support Reno Bike Project by volunteering or organizing events to assist with maintenance and other activities.
- Store the donated bikes indoors to increase the sustainability of the project and lifecycle of the bicycles.

Duration and Timeline:

- This MOU will remain in effect indefinitely until either party decides to terminate the agreement with written notice to the other party.
- Specific timelines for activities and events will be discussed and agreed upon on a case-by-case basis.

Non-Binding Nature:

- This MOU is not legally binding and does not create a formal partnership or joint venture. It is intended to foster collaboration between the two parties and guide community engagement efforts.

Amendments:

- This MOU is subject to changes and amendments as agreed upon by both parties.

Termination:

- Either party may terminate this MOU with 30 days' written notice to the other party.

Signatures:**Kelly Ryder**

Title: Teacher Leader and Committee to Form Liaison
Northern Nevada Wildflower Montessori (NNWM)

Date: April 8, 2025

Andy PerkinsA handwritten signature in black ink, appearing to read 'Andy Perkins', with a stylized, cursive script.

Title: Interim Executive Director Reno Bike Project (RBP)

Date: April 8, 2025

This MOU reflects a mutual understanding of the goals of NNWM and RBP in supporting community engagement through bike safety, maintenance initiatives, and community engagement.



High Desert Montessori Charter School

101 Fantastic Drive. Reno, Nevada 89512 - 775-624-2800

Memorandum of Understanding (MOU)

Between High Desert Montessori Charter School (hereinafter referred to as "HDMS") and Major Taylor Reno Bike Project (hereinafter referred to as "MTBP")

For the 2025-2026 School Year

Date: May 8, 2025

1. Purpose:

This Memorandum of Understanding (MOU) outlines the terms and conditions of a collaborative partnership between High Desert Montessori Charter School (HDMS) and the Major Taylor Bike Program (MTBP) to provide cycling education and opportunities to HDMS students during the 2025-2026 school year. Both parties recognize the mutual benefits of this partnership in promoting physical activity, healthy lifestyles, skill development, and community engagement among students.

2. Goals and Objectives:

The primary goals and objectives of this partnership are to:

- Introduce HDMS students to the fundamentals of safe cycling.
- Develop students' cycling skills, including balance, coordination, and bike handling.
- Promote physical fitness and healthy habits through cycling.
- Foster teamwork, responsibility, and respect among participants.
- Provide opportunities for students to engage in positive and enriching extracurricular activities.
- Connect students with the local cycling community through the resources and expertise of MTBP.

3. Responsibilities of HDMS:

HDMS will be responsible for:

- Identifying and recruiting interested students to participate in the MTBP activities.
- Providing a suitable and safe on-campus location for some introductory activities, if applicable and agreed upon.
- Facilitating communication between MTBP and participating students, families, and school staff.
- Obtaining necessary parental/guardian consent forms for student participation.
- Providing necessary administrative support for the program within the school environment.
- Collaborating with MTBP to schedule program sessions that minimize disruption to the regular school day, where applicable.
- Ensuring adequate supervision of students during on-campus activities, if any.
- Promoting the MTBP program to the school community through newsletters, website, and other communication channels.

4. Responsibilities of MTBP:

MTBP will be responsible for:

- Providing qualified instructors and volunteers to lead cycling education sessions.
- Developing age-appropriate curriculum and activities focused on cycling safety, skills, and fun.
- Providing access to bicycles, helmets, and basic maintenance tools for participating students who may not have their own, subject to availability.
- Organizing and leading off-campus cycling sessions in safe and appropriate locations, with clear communication of logistics and safety protocols.
- Ensuring that all instructors and volunteers have undergone necessary background checks and safety training.
- Maintaining insurance coverage for their program activities.
- Collaborating with HDMS to adapt program activities to the specific needs and context of the school and its students.

5. Program Details:

- **Program Activities:** The specific activities may include, but are not limited to:
 - Introduction to bicycle safety and parts.
 - Basic cycling skills (starting, stopping, balancing, turning).
 - Safe riding practices in various environments.
 - Basic bike maintenance.
 - Potential group rides in designated areas.
- **Schedule:** The schedule of MTBP activities at HDMS will be mutually agreed upon by both parties prior to the start of the 2025-2026 school year.
- **Location:** Program activities will primarily take place on the HDMS campus in designated areas, at designated off-campus locations organized by MTBP, etc.
- **Student Participation:** Participation in the MTBP program will be voluntary and open to students in grades 7 and 8. The maximum number of participants may be limited based on instructor availability and safety considerations.
- **Fees:** There are no fees associated with participation in this program at this time.

6. Insurance and Liability:

- MTBP will maintain its own liability insurance covering its instructors, volunteers, and program activities. MTBP will provide HDMS with a certificate of insurance upon request.
- HDMS will maintain its general liability insurance covering its students and staff.
- Each participating student will be required to have a signed waiver from their parent/guardian acknowledging the risks associated with cycling activities.

7. Communication:

Regular communication between HDMS and MTBP representatives will be essential for the success of this partnership. Designated points of contact for each organization are:

- **HDMS:** [Eric Perez, Executive Director, 775-230-6258, eric@hdmsreno.com
- **MTBP:** Tom Chapel, Project Manager, 775-323-4488, tom@renobikeproject.com]

Communication methods will include email, phone calls, and periodic meetings as needed.

8. Term and Termination:

This MOU will be effective for the 2025-2026 school year, commencing on August 1, 2025 and concluding on June 5, 2026. This MOU may be extended for subsequent school years by written agreement of both parties.

Either party may terminate this MOU with 30 days written notice to the other party if there is a material breach of the terms outlined herein, or for other mutually agreed upon reasons.

9. Evaluation:

Both parties agree to collaboratively evaluate the effectiveness of the program at the end of the 2025-2026 school year. This evaluation may include feedback from students, parents, teachers, and program instructors. The findings of the evaluation will be used to inform future collaborations.

10. Amendments:

This MOU may be amended or modified by a written agreement signed by authorized representatives of both HDMS and MTBP.

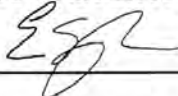
11. Governing Law:

This MOU shall be governed by and construed in accordance with the laws of the State of Nevada.

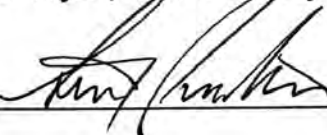

12. Entire Agreement:

Signatures:

High Desert Montessori Charter School

By: , Executive Director, 5/8/2025

Major Taylor, Reno Bike Project

By: , Title:  Executive Director

Date: 5/8/25

**TA Set-Aside Award Recommendation
Attachment C – Applications**

**Truckee Meadows Parks Foundation
Rosewood Regional Trailhead Project**



Transportation Alternatives (TA) Set-Aside Program Grant Application

REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY

Applicant Agency

Truckee Meadows Parks Foundation

Applicant Agency Address

Truckee Meadows Parks Foundation, 50 Cowan Drive
Reno, Nevada, 89509

Contact Person's Information

Name

Jay Howard

Title

Regional Trails Coordinator

Phone Number

(775) 301-3098

Email

jay@tmparksfoundation.org

Project Name

Rosewood Regional Trailhead, Phase 2 Construction

Description of Project Location and Limits (Must include map, if applicable, upload below)

The project site address is: 6800 Pembroke Drive, Reno Nevada 89502. This location can be found on the southwest corner of Pembroke Drive and Veterans Parkway in southeast Reno. The extent of the project limits is the existing facility parking lot with the addition of a 50-foot perimeter or boundary. Additional minor limits may be required for utility connections in the area of the Rosewood visitor center such as sewer, water, and power but, the need for additional project limits beyond the immediate property have not been identified at this time.




Upload Map



Rosewood Trailhead Project_Locationpdf

Upload additional supplemental materials



- TMPF recommendation letter_Diane.pdf
- TMPF Support Letter_COR.pdf
- LOS-Rosewood-TMT_Washoe Co.pdf
- Rosewood Trailhead Prelim Const Esti....pdf

Project Description (Please include need, benefits, and relation to goals listed below)

This application will allow for the implementation of the Rosewood Trailhead Phase Two Construction Project based on a design effort currently underway.

Purpose and Need: To provide a safe pedestrian and bicycle access point to the 12-mile Veterans (Erica Greif) Shared-Use Path, that will further connect users to nearby trail systems; To move forward with construction of the Phase One Trailhead Design process funded by a previous application with this program; and To provide a facility that helps promote regional transportation goals by improving safety, enhancing regional connectivity and connecting communities, optimizing multimodal transportation, and helping to improve transportation sustainability and healthy communities.

Phase Two will enable the construction of a formal trailhead facility in an existing parking lot of the Rosewood Nature Study Area. Once known as the Rosewood Lakes Golf Course, the property is owned by the City of Reno. The non-profit Truckee Meadows Parks Foundation was selected to oversee the development and operation of the site and visitor center, and its conversion back to a natural wetland. Rosewood is also now home to the City of Reno Adaptive Cycling Center. The Adaptive Cycling Center provides cycling equipment to persons with disabilities for use on the property or transportation to other

sites. The Trailhead Project will allow for direct access onto adjacent pathways that can accommodate their special needs, without having to transport equipment off the property.

The parking lot has significant potential for being developed into a formal trailhead, but is in need of upgrading and development to meet this goal. The facility and parking lot is located in an area that is adjacent to (or near) a number of regional trail systems – primarily the Veterans (Erica Greif) Shared Use Path, Truckee River Path or Tahoe Pyramid Trail, and the Washoe County Hidden Valley Regional Park trail system. It is our understanding that RTC may have future plans for a shared use path along Pembroke Ave as well that will connect McCarran Blvd to Veterans Parkway. The concept of transforming the Rosewood parking lot into a formalized trailhead facility includes many project elements that represent commonly accepted trailhead amenities, as well as a direct connection to the Veterans Pathway. The list of project elements that are currently being considered are, but may not be limited to: parking lot repair or upgrade (this may need to involve a full lift and replacement of the pavement), direct access point to the Veterans shared use path and Rosewood wetland trail system, decorative fencing and automatic gate, ADA upgrades, landscaping, lighting, monument / interpretive / wayfinding signage, shade Ramada(s), benches and picnic tables, bicycle repair station, potential vault toilet or upgrades to existing restrooms, and other related site amenities as determined in design.

Funding awarded with this application will allow for the priority design elements of Phase 1 to be implemented. With Phase One Planning and Design currently underway, a private-sector firm is surveying the site and will develop design alternatives, culminating with the selection of facility options. Contract deliverables are to provide a bid-ready set of plans, final engineers estimate, and construction documents to support the elements of this current funding application. This application is based on the anticipated design elements of the project and a preliminary construction budget estimate provided by design professionals familiar with the site. It is anticipated that the design portion of this project will be completed by March 2026.

This project meets many of the goals of local and State transportation plans; specifically in the following categories: Improve and Promote Safety or Enhance Safety, Enhance Regional Connectivity-Connect Communities-Promote Environmental Justice, Optimize Mobility and Integrate All Types of Transportation, and Sustainability and Healthy Communities.

Which goals of the Regional Transportation Plan and/or One Nevada Plan are addressed by this project?

1. Improve and Promote Safety or Enhance Safety: the project elements that are described in this application such as off-roadway designated parking, lighting, fencing and gates, and way-finding signage, will all serve to enhance safety. Currently, there are no formal and developed trailhead parking areas for the Veterans Shared Use Path, and vehicles are parking on road shoulders in high traffic areas.
2. Enhance Regional Connectivity, Connect Communities, and Promote Environmental Justice: Connectivity in communities is greatly enhanced by providing for the access needs of trails and pathways in the Rosewood area. A formalized trailhead will allow and encourage users to utilize these local trails and pathways. Since the trailhead is free and open to anyone from the public, environmental justice for all sectors of society will be improved.
3. Optimize Mobility and Integrate All Types of Transportation: Trailheads for non-motorized uses on trails and pathways do a lot to optimize all forms of mobility, in this case micro mobility, and fully integrate all forms of transportation. As noted earlier, the City of Reno Adaptive Cycling Center is located at Rosewood so with this trailhead improvement project, all forms of transportation, to include adaptive user groups, will benefit.
4. Sustainability and Healthy Communities: Non-motorized uses greatly enhance environmental sustainability by removing vehicles from roadways (as people choose non-motorized forms of transportation over standard vehicles). In addition, the physical and mental benefits of non-motorized transportation and recreational activities are well documented. For example, people consistently report the feeling of well-being after engaging in outdoor activities and, studies have shown that for every \$1 spent on promoting and supporting outdoor recreation activities, a \$3 savings can be realized in health care costs.

Project Cost Estimate

(a detailed project budget must be included as a separate attachment)

Total Project Cost	\$ 617,105
Amount to Reimbursable to Applicant Agency	\$ 586,250 (Special Note: In the event of partial funding for this application, funds would be prioritized through funder coordination to enable the support of those project elements that best meet purpose and need goals)
Applicant Agency Match Requirement (5%)	\$ 30,855
Source of Match Funds (Please list source or sources of funds and indicate whether funds are cash or in-kind; in-kind match requires further explanation)	Cash match will be based on funding related to the following source: Truckee Meadows Parks Foundation paid staff time for Rosewood Regional Trailhead project and financial management, anticipated to be primarily the Truckee Meadows Trails program manager and TMPF financial manager. These personnel funds will be from non-Federal sources, either TMPF general operating funds, or those funds secured from private foundations (currently anticipated to be the E.L. Cord Foundation). This local cash match may also include fundraising from other similar private foundation sources.
Project Schedule (Please describe the expected project schedule and indicate whether it is part of a phased project; attach additional documentation as appropriate)	The Rosewood Regional Trailhead project is a phased effort, and is broken out into Phase 1 Design and Phase 2 Construction. Phase 1 Design is currently funded and being implemented. The proposed Phase 2 Construction portion of the project will begin with the completion of Phase 1 Design, which is anticipated to be March 2026. Therefore, the Phase 2 Construction timeline is as follows: > Project Coordination for Notice to Proceed and Kickoff: April 2026 > Request for Proposal and Contracting: May - July, 2026 > Project Mobilization: July 2026 > Project Implementation (all construction elements): August - January 2027. This includes time for weather delays. > Project closeout: February 2027 > Total Project Time: 11 months
Ongoing Maintenance (Please describe the ongoing maintenance requirements after the project has been implemented, including cost and agency or agencies responsible)	Ongoing maintenance for the implemented Rosewood Trailhead Phase 2 Construction project will be the responsibility of the Truckee Meadows Parks Foundation (TMPF). TMPF has a 50-year lease with the City of Reno for Rosewood operations, and has historically shared certain maintenance responsibilities. In addition, project goals for the Rosewood Regional Trailhead are to minimize maintenance requirements. Regardless, there will likely be oil, overlay, and restriping needs in 5-10 years after operations begin, and repaving needs in 25 or more years. Repaving is more related to capital improvements and will be addressed by future projects and fund-raising efforts. Estimated funding needs for capital improvements is \$75,000 - \$100,000. Any needs for routine maintenance and items like light bulb replacements, graffiti removal, replacement of any damaged trailhead site amenities, signage, irrigation repairs, etc, are estimated at \$3,000 annually and will be covered by the TMPF operations budget.

SCORING CRITERION #1: Project Benefits/Safety Enhancement
5 POINTS POSSIBLE

Is the project included in an adopted plan, study, or program, and/or does it align with at least one stated goal of the Regional Transportation Plan or One Nevada Plan? Please describe the context of the plan, study, or program. The description must be consistent with goals listed on page 1 of this application.

Yes. The Rosewood Trailhead supports regional transportation goals such as those seen in the RTC 2050 Transportation Plan. Those goals are: 1. Improve and Promote Safety 2. Integrate All Types of Transportation and 3. Promote Healthy Communities and Sustainability. Other regional plans have similar goals geared toward the support of micro-modal transportation. This includes the goals of the One Nevada Transportation Plan, that are: 1. Enhance safety 2. Preserve infrastructure 3. Optimize mobility 4. Foster sustainability and 5. Connect communities. This project will meet several goals of the Truckee Meadows Regional Planning Agencies Regional Plan, 2024 Update, as well, such as Improve Public Facilities, Land Use, and Transportation; and Goal #1 for the plan, Improve the Quality of Regional Living. The development of the Rosewood Trailhead also meets the mission and goals of the Truckee Meadows Parks Foundation for community support, inclusion and equity, and promotion of micro-modal transportation and adaptive cycling. Signage and wayfinding alternatives will follow with the goals of the Rosewood Master Plan, and the recently completed Rosewood Signage Plan. Lastly, the Rosewood Regional Trailhead project is identified in the Truckee Meadows Regional Trails Plan, a plan that has been adopted by the City of Reno and is acknowledged and supported by Washoe County.

Does the project provide traffic calming or safety measures that benefit non-motorized road users? If yes, please explain.

Yes. It has often been demonstrated in regional transportation and trails plans that trailhead facilities represent a level of safety not seen over having people just park along roadways. Many times, over the last few years, staff at Rosewood have seen vehicles park along Pembroke Drive near Veterans Parkway on the narrow road shoulder, in order to access the pathway. This represents an unsafe situation for operators and pedestrians alike. The Rosewood Trailhead would give users the opportunity, and even encouragement, to park in a designated parking lot and not along open roadways. The degree of safety and security always increases for non-motorized users with the formalizing of a facility for a designated use. I would cite several measures associated with this project that increase safety: 1. Designated off-roadway parking for pathway users 2. Overhead and pathway lighting in the trailhead parking area 3. Security fencing and automatic gate(s) 4. Established direct and safe connection to the Veterans pathway system without having to walk or ride along Pembroke (which has no designated pathway alignment). It is widely accepted that a formalized trailhead facility provides a much higher level of safety for vehicle operators and trail users alike over simple on-street parking.

Does the project serve multiple modes of transportation? If yes, please explain.

Yes. The development of the Rosewood Facility will indeed serve multiple modes of general transportation. A Trailhead serves the needs of recreation activities, as well as our daily transportation needs. This facility will provide park and ride (walking, bicycling, etc) opportunities for connections throughout south and southeast Reno, and even southeastern Sparks. The non-motorized micro mobility user groups that will be accommodated at this facility include: Walkers, Runners, Hikers, (traditional) Bicycles and E-bikes, Scooters and Mopeds, as well as Adaptive Cycles, which typically include Trikes, or various forms of 3-wheeled machines that can be operated by legs or arms. The Reno Adaptive Cycling Center is now located at the Rosewood Nature Study facility, and is supportive of this trailhead project. The membership-based program will allow people with disabilities to utilize the City's adaptive bikes and go directly onto regional pathways, getting rid of the need for adaptive bike transportation to sites by users.

Does the project provide connectivity to an existing regional transportation facility or provide clear benefits to the community according to the stated purpose of the TA Set-Aside Program? If yes, please explain.

Yes. This trailhead project proposes to support a high level of connection between communities and public services. The Veterans Parkway pathway (to include the striped bike lane section) connects from the Geiger Grade roundabout in the south to the Sparks Blvd region in the north. Continuing on Sparks Blvd, connection can easily be made to Pyramid Highway. There are 6 major residential developments, multiple restaurants, and at least 3 major shopping areas along this route (Damonte Ranch shopping center, South Meadows shopping, and the Legends shopping mall). Countless destinations can be accessed just 2 miles north on the Veterans pathway by connecting with the Truckee River Path or the

114-mile Tahoe Pyramid Trail (connecting Tahoe City to Pyramid Lake). It is a very reasonable ride on a bicycle, or other multimodal means, to travel into the heart of the Reno area along the river, even the Reno City Plaza and downtown area itself. The Truckee River Path also connects multiple city and county parks, such as Cottonwood, Rock, Fishermans, Idlewild, Wingfield and Mayberry parks. There are no other two pathways in the Truckee Meadows that make such a high number of regional connections with public facilities.

SCORING CRITERION #2: Equity and Environmental Justice

2 POINTS POSSIBLE

Is the project located in an area with a disproportionately impacted community as identified in Chapter 10 of the 2050 Regional Transportation Plan (Maps 10.1 - 10.4)? If yes, please provide additional context about the area served by the project.

Yes. This project will allow for a formal trailhead facility where none exists at this time in southeast Reno. Walking, biking, and other forms of micro-mobility frequently occur on the Veterans pathway system, although access to the path is often limited to users who live in the immediate region due to the lack of trailhead facilities. This parking and access issue represents a major barrier to use of the pathway. The development of the Rosewood Trailhead facility will greatly improve access to the region's recreational and transportation opportunities for users outside of the immediate area. Reno and Sparks have a high number of low-income neighborhoods and otherwise 'underserved' communities with respect to accessible recreation opportunities. These areas include the underserved and lower income communities of older Reno homes to the west of Rosewood. Rosewood is a facility that is 'open to all', whereas many of the recreation facilities throughout Reno and Sparks are subject to varying levels of exclusivity such as membership-based clubs at high cost, gated communities, or closed facilities with residential requirements.

Rosewood has also become the location for the City of Reno Adaptive Cycling Center to accommodate the growing adaptive recreational community. The facility maintains alternative cycling equipment that is designed for people with disabilities. This opportunity and the improved ADA design at the Trailhead will allow for a much higher level of access for residents throughout the Truckee Meadows, and full accommodation for all user groups.

It is a major goal of the Truckee Meadows Parks Foundation to serve a role in helping to increase Justice, Equity, Diversity, Inclusion (JEDI), and Accessibility, in parks, trails, and open spaces. JEDI is a foundational principle in everything that the Parks Foundation does and promotes.

Does the project provide access to essential services, including medical, employment, or educational facilities? Please describe how access to each essential service listed is provided.

Yes. As indicated above, this trailhead project proposes to support a high level of connection between communities and public services along the Veterans Parkway pathway system, Truckee River, and Sparks Blvd. There are many residential developments, shopping malls, and a wide variety of businesses along these routes. This includes employment, medical, and educational facilities. For example, the Damonte High School and Middle School are within 2 miles (to the east) of the Veterans pathway. And can easily be accessed through residential roadways. Several elementary schools are near the pathway as well (Brown Elementary, etc). In addition, the Northern Nevada Medical Center is approximately 2 miles to the north of the Veterans and Sparks Blvd pathways, as well as smaller medical offices in Mall type areas. The Truckee River Path passes along multiple business and residential areas as well. There are no other two pathways in the Truckee Meadows that make such a high number of regional connections with businesses and public facilities. All of these facilities are accessible from surface roads that are directly linked to these pathways.

SCORING CRITERION #3: Project Readiness

5 POINTS POSSIBLE

Infrastructure Projects

(respond to one of the following implementation scenarios)

Project would be relatively easy to construct and can be implemented within the next 12 months. The project does not require acquisition of right-of-way, utility relocation, and/or project meets the criteria for a categorical exclusion, according to 23 C.F.R. 771.117(c). Please describe how the project meets this criterion. Note: 30% design or equivalent documentation must be provided as an attachment.

N/A

Project will likely take up to 36 months to construct. Project includes right-of-way acquisition, utility relocation, and/or the project will require an environmental assessment/impact statement. Please describe how the project meets this criterion.

As indicated previously in this application, this request for funding to implement phase 2 construction of the Rosewood Trailhead project cannot begin until the formal planning effort, currently underway, is completed. Phase 1 design for the trailhead will result in a formal engineers estimate, 100% complete construction plan set, and construction document. These design deliverables will enable us to initiate a formal Request for Proposal (RFP) process in order to contract with a construction firm to further implement the project. The project budget that this request is based on is a preliminary informal estimate derived from anticipated or known project elements and with the assistance of design professionals familiar with the project (to include Nevada State Park planners).

The phase 1 design portion of the project is anticipated to be complete in March of 2026. With new funding in place, we will immediately move to initiate the phase 2 construction portion of the project. This phase is anticipated to take up to 11 months, or February of 2027. Summed up, this timeframe will put us beyond the next 12 months for construction of the project, but certainly within the next 36 months. The current phase 1 design process will also assess environmental clearance and permitting needs and address any issues. Since this project is wholly on a previously developed and impacted City of Reno property, and will have its impacts primarily on the surface of that property, it is likely that the project will qualify for a categorical exclusion. Nor is it anticipated that we have any issues with right of way acquisition or utility relocation.

Non-infrastructure Projects

(respond to one of the following implementation scenarios)

Educational/outreach program is established and schools/partnerships have been identified. Project evaluation criteria are in place to measure program effectiveness. Project can be implemented within 12 months. Note: evidence of an educational/outreach program, communication about the program with schools and/or other partners, and project evaluation criteria must be included as a separate attachment. Please describe how the project meets this criterion.

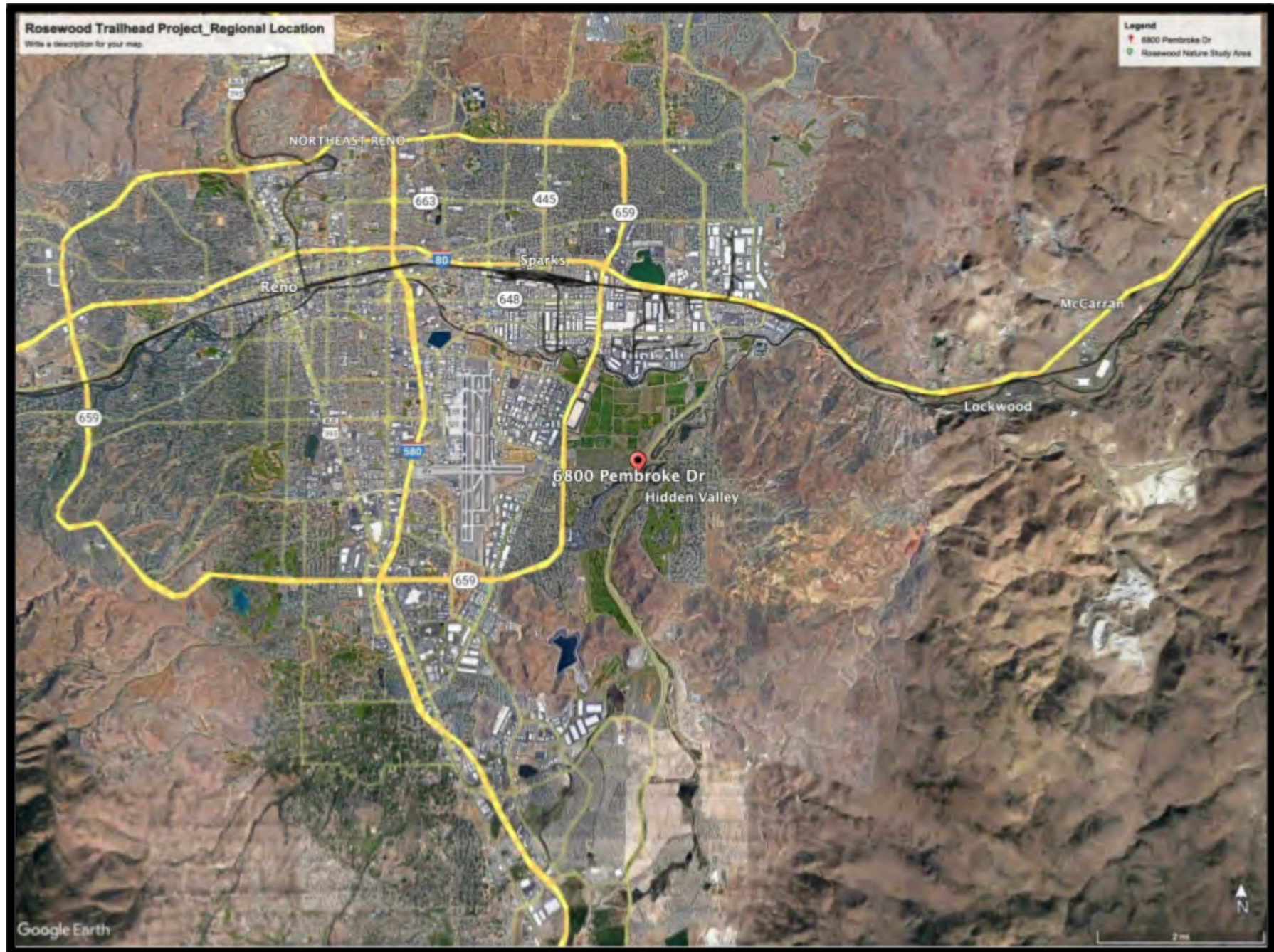
N/A

Educational/outreach program will need to be developed, partnerships will need to be established and identified. Evaluation criteria will need to be developed to measure the effectiveness of the project. This project may take 24 months or more to implement. Please describe how the project meets this criterion.

N/A

Rosewood Regional Trailhead Project Regional and Site Locations - Site Pictures

Truckee Meadows Trails - Truckee Meadows Parks Foundation



Rosewood Trailhead Project_Site Location

Write a description for your map.

Legend
6800 Pembroke Dr
Rosewood Nature Study Area



Rosewood Parking Lot Failure - covering most of the parking lot_March 2025



Rosewood Curb Damage - several locations throughout lot_March 2025



**Existing Facility and Signage - ADA signage needs upgrade, proposed monument signage change:
'Rosewood Nature Study Area and Regional Trailhead' _March 2025**





Potential Direct Access Point to Veterans Pathway-Pembroke and Veterans_March 2025





04/07/2025

ROSEWOOD TRAILHEAD PROJECT: PRELIMINARY CONSTRUCTION ESTIMATE and PROJECT TIMELINE

Preliminary Budget Estimate and Detail

Project Element	Description	Estimated Quantity	Estimated Cost
Parking Lot	Remove asphalt and regrade trailhead area. Grind, replace base, and new asphalt for trailhead parking area. Repair curbing. Add new Striping (to include ADA required).	±20,000 sqft	±\$185,000
Site Lighting	Additional site lighting around trailhead, including electrical connection. Pole mounted down lighting and pathway lights (select areas).	1 LS	±\$25,000
Gate and Fencing	Automatic gate (new mechanism and gate), touch keypad, programming for auto open/close. Approximately 200 feet of matching decorative fencing.	1 LS	±\$75,000
Landscaping	Full landscaping and drip system irrigation, auto timers, deciduous trees and native shrubs/grasses, plant mulch, and DG.	5,000 sqft	±\$50,000
Shared Use Path	Paved trail connections from parking area to existing sidewalk near Veterans and Pembroke, and to Rosewood Trail network. Fence repair with gate at Veterans.	±400 LF	±\$35,000
Signage	Wayfinding signage (8) and trailhead kiosk with map. ADA parking signage. Monument signage upgrade.	1 LS	±\$35,000
Site Amenities	Resting/preparation area including 4-post shade structure and picnic table(s), bench(s), bicycle maintenance station, and outdoor trash enclosures. Locate select amenities at/near Reno Adaptive Cycling Center.	1 LS	±\$65,000
Mobilization	Contractor mobilization of equipment and erosion control for construction.	1 LS	±\$30,000

Construction Subtotal	\$500,000
10% Contingency	\$50,000
Construction Administration, Staking, & Inspection	\$36,250
Total Construction Cost	\$586,250
Grant Match (cash match from personnel costs for project management and/or private foundations)	\$30,855
Total Grant Project	\$617,105
Special Note: In the event of partial funding for this application, funds would be prioritized through funder coordination to enable the support of those project elements that best meet purpose and need goals. If this, or any other level of funding becomes the case, an amended preliminary construction estimate will be submitted, complete with anticipated project elements.	

Project Timeline and Notes

Project Milestone	Timeframe
Project Kickoff and Planning	April 2026
Request for Proposal and Contracting	May - June 2026
Project Mobilization	July 2026
Project Implementation - All Construction Elements	August 2026 - January 2027 (this includes time for weather delays)
Project Checklist and Closeout	February 2027
Total Project Time	11 months

- This **TOTAL PROJECT** is based on phasing: Phase 1 Planning and Design (not a part of this application) and Phase 2 Construction.
- The Phase 2 Construction timeline is based on an estimated completion time of March 2026 for Phase 1 Planning and Design (currently underway).



April 23, 2025

Grant Advisory Committee
Transportation Alternatives (TA) Set-Aside Program

Dear Committee Members,

This is Alan Gubanich, Chair of the Education Committee for our local Lahontan Audubon Society here in Reno. I am writing to you today on behalf of the Truckee Meadows Parks Foundation (TMPF) and would like to express the Lahontan Audubon Society's support for the Rosewood Regional Trailhead, Phase 2 Construction Project. The project will provide a safe pedestrian and bicycle access point for the Veterans Parkway Shared Use Path and also an improved and accessible parking facility for the Rosewood Visitor Center and Wetland Area. Rosewood has great potential to serve as a trailhead for regional trail systems and is itself an important wetland open space for wildlife. It is also a beautiful location for members of Lahontan Audubon, as well as the general public, to enjoy and photograph the many birds that inhabit this wetland area. We understand also that Phase 1 Design of the project is underway with earlier TA Set-Aside funds and endorse the continuation of project implementation with this same funding program.

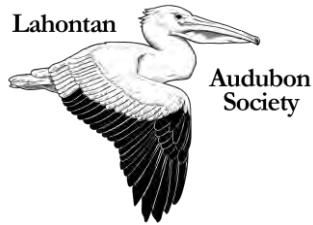
Lahontan Audubon backs the goals of TMPF for developing recreational opportunities at the Rosewood Nature Study Area and will benefit from the work that they are committed to accomplish with this grant funding. We also support the enhancements stemming from this project to trail facilities and access for the larger Truckee Meadows region. We know that this trailhead project meets the goals of several regional transportation and trail plans. The funding requested for the construction of this trailhead project will be instrumental in addressing the recreational needs of the local community while greatly improving the region's access to trails and open spaces.

We hope you will consider and award this TMPF grant application and understand that funding this proposal will ultimately provide for the safety and quality of life of residents within the Truckee Meadows region.

Sincerely,

A handwritten signature in black ink, appearing to read "Alan Gubanich", written in a cursive style.

Alan Gubanich
Chair, Education Committee
Lahontan Audubon Society



Grant Advisory Committee
Transportation Alternatives (TA) Set-Aside Program
April 23, 2025

Dear Committee Members,

Lahontan Audubon Society (LAS) is a local non-profit organization dedicated to avian education and conservation. Our group works with the Truckee Meadows Parks Foundation (TMPF) at the Rosewood Nature Study Area to provide bird walks along the wetland trails. Bird walks further our mission by engaging the public to learn about our local birds. As Reno becomes more populated, regional trail systems are increasingly important to provide open spaces and habitats for our birds, and to provide opportunities for people to recreate. LAS is in support of TMPF's Rosewood Regional Trailhead, Phase 2 Construction Project, which will provide a safe pedestrian and bicycle access point for the Veterans Parkway Shared Use Path. This project will additionally improve an accessible parking facility for the Rosewood Nature Study Visitor Center and trailhead.

The Rosewood Nature Study Area already provides some trails that are connected to important wetland habitat, a habitat that provides critical breeding, migration, and wintering habitat for birds, many of which are experiencing population declines. Wetlands are critically important bird habitats in the arid West, and the Rosewood Nature Study Area is a great example of a wetland that provides a needed wildlife habitat in an urban setting. This area has great potential to serve as a trailhead for a wider regional trail system. LAS endorses the continuation of the Phase 1 Design with Phase 2 Construction.

Lahontan Audubon Society backs the goals of TMPF for developing recreational opportunities at the Rosewood Nature Study Area and we will continue to work with TMPF to provide outdoor bird and outdoor education walks along the trails. Grant funding will enable the necessary safe trail access features that will benefit our entire community. We support the safety improvements stemming from this project that provide access to trails and opens opportunities for greater recreational trail development for the Truckee Meadows region. We know that this trailhead project meets the goals of several regional transportation and trail plans. The funding requested for the construction of this trailhead project will be instrumental in addressing the recreational needs of the local community while greatly improving regional access to trails and open spaces.

LAS believes the proposed Rosewood Regional Trailhead Project is a strong candidate for grant funding because this project will improve the quality of life of residents within the Truckee Meadows region and will allow people to connect with nature.

Sincerely,

A handwritten signature in black ink, appearing to read "Diane Wong-Kone". The signature is fluid and cursive, with a long, sweeping underline.

Diane Wong-Kone
Executive Director

Parks and Recreation



March 31, 2025

Shay League
Senior Technical Planner
Regional Transportation Commission of Washoe County

Dear Shay League,

City of Reno Parks and Recreation is pleased to support the Truckee Meadows Parks Foundation 25-27 Transportation Alternative (TA) Set-Aside grant application for the Rosewood Regional Trailhead.

The City of Reno collaborated with Truckee Meadows Parks Foundation (TMPF) to expand its adaptive sports program by launching an Adaptive Cycling Center at the Rosewood Nature Study Area in Reno, Nevada. Rosewood Nature Study Area is a 219-acre wetland habitat with approximately 2.5 miles of trail and serves as a great launching point to access the Southeast Connector bike trail as well as connecting to the Tahoe-Pyramid Bike trail. Such proximity to the community's bike trail systems makes it a prime location for our adaptive equipment rental hub. The center offers a membership-based program that allows persons with disabilities to access our many adaptive bikes and jump directly on the trail, no bike transport needed. Families with children and/or adults with disabilities can now access a variety of adaptive bikes by appointment or during the open program hours and ride together.

The proposed accessibility improvements in the Rosewood Regional Trailhead project will enhance access for users of the Adaptive Cycling Center. Improvements such as safer connections to existing bikeways, accessible trailhead amenities (e.g. ADA parking, ADA restroom, etc.) will bring many benefits to the community.

Please accept this letter of support as evidence of our collaborative efforts to improve services. Any support provided to Truckee Meadows Parks Foundation through the TA Set-Aside Grant is an investment that truly positively impacts the lives of those they serve. City of Reno recognizes TMPF role in supporting persons with disabilities in the community. If you have any questions, please do not hesitate to contact April Wolfe, Therapeutic Recreation Specialist, at 775-333-7765 or wolfea@reno.gov.

Sincerely,

A handwritten signature in cursive script that reads "April Wolfe".

April Wolfe, CTRS
Therapeutic Recreation Specialist
City of Reno Parks and Recreation



April 18,2025

Transportation Alternatives (TA) Set-Aside Program

Dear Committee Members,

I am writing to you today on behalf of the Truckee Meadows Parks Foundation (TMPF) and would like to express Washoe County support for the Rosewood Regional Trailhead, Phase 2 Construction Project.

The project will provide a safe pedestrian and bicycle access point for the Veterans Parkway shared use path and also an improved and accessible parking facility for the Rosewood Visitor Center and Wetland Area. Rosewood has great potential to serve as a trailhead for connected regional trail systems such as the Truckee River Path (and larger Tahoe Pyramid Trail), Sparks Blvd Path, soft trails throughout the Virginia Range, and others. We understand also that Phase 1 Design of the project is underway with earlier TA Set-Aside funds and endorse the continuation of project implementation with this same funding program.

Washoe County supports the enhancements stemming from this project to trail facilities for the larger Truckee Meadows region. We know that this trailhead project meets the goals of the Truckee Meadows Regional Trails Plan and several regional transportation plans. The funding requested for the construction of this trailhead project will be instrumental in addressing the recreational needs of the local community while greatly improving the region's access to trails and open spaces.

Sincerely,

Christina Thayer

Washoe County Trail Program Coordinator

Cthayer@washoecounty.gov (775)328-2737

**TA Set-Aside Award Recommendation
Attachment C – Applications**

**Washoe County School District
Safe Routes to School Program**



REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY Transportation Alternatives (TA) Set-Aside Program Grant Application

Please submit application materials by May 9, 2025, to sleague@rtcwashoe.com.
Attach additional pages as needed.

Applicant Agency Washoe County School District

Applicant Agency Address 425 Est 9th street
Reno, NV 89520

Contact Person's Information

Name Lauren Ohlin

Title WCSD Director of Grants

Phone Number (775) 348-0254

Email lohlin@Washoeschools.net

Project Name Safe Routes to Schools - Washoe County School District

Description of Project Location and Limits (Must include map, if applicable, as a separate attachment)

The Washoe County School District's (WCSD) Safe Routes to Schools (SRTS) program will expand and build upon the existing initiative within Washoe County. With funding from the RTC Transportation Alternatives Program, WCSD SRTS will continue to employ two Safe Routes to Schools Coordinators.

Project Description (Please include need, benefits, and relation to goals listed below)

The objective of the WCSD SRTS program is to enhance traffic and pedestrian safety for students who walk or roll to school. In pursuit of this goal, the program directly incorporates the six key components known as the "Six E's": Engineering, Education, Enforcement, Encouragement, Evaluation, and Equity. Additionally, WCSD SRTS has established strategic partnerships with other government agencies that share similar goals and objectives. The funding from the RTC TA Set-Aside Program will enable WCSD SRTS to further its mission by expanding efforts to: improve bicycle, pedestrian, and traffic safety; increase the number of children walking and bicycling to and from school; reduce traffic congestion; promote healthy and active lifestyles; enhance community safety; foster greater community involvement; and improve community accessibility and infrastructure.

Which goals of the [Regional Transportation Plan](#) and/or [One Nevada Plan](#) are addressed by this project?

WCSD SRTS aligns with and supports the following goals of the Regional Transportation Plan:

Goal #1 (Safety): Reduction of traffic fatalities and injuries among vulnerable road users. This goal will be accomplished through a comprehensive approach involving Education, Engineering, and Enforcement. Education will be provided through direct engagement with students via safety presentations and events, and through community outreach via media, social media, and public engagement initiatives. Engineering will be facilitated through strategic partnerships with local city and county agencies, including Washoe County School District (WCSD) Capital Projects, the City of Reno, the City of Sparks, Washoe County, the Regional Transportation Commission (RTC), and the Nevada Department of Transportation (NDOT). Enforcement will be executed through the WCSD Police Department and other local law enforcement agencies. This multi-faceted approach aims to enhance road safety and protect vulnerable road users.

Goal #2 (Infrastructure): Engineering will be facilitated through strategic partnerships with local city and county agencies, including WCSD's Capital Projects Department, the City of Reno, the City of Sparks, Washoe County, RTC, and NDOT.

Goal #3 (Congestion Reduction): WCSD SRTS will collaborate with local schools to reduce perimeter traffic congestion, enhancing safety for pedestrian travel in these areas.

Goal #4 (Active Transportation): Active transportation directly substitutes motor vehicle miles traveled, making it effective in reducing vehicle emissions, bridging the first- and last-mile gap, conserving fuel, and improving both individual and public health.

Goal #6 (Equity): WCSD SRTS is committed to meeting the transportation needs of all students in the region, ensuring accessibility and equity without discrimination based on age, income, race, language, ethnicity, or ability.

PROJECT COST ESTIMATE (a detailed project budget must be included as a separate attachment)

Total Project Cost \$ FY26: 275,147; FY27: \$281,197	Amount Reimbursable to Applicant Agency \$ FY26: 261,390; FY27: \$267,137	Applicant Agency Match Requirement (5%) \$ FY26:13,757; FY27: \$14,060
----------------------------------------------------------------	-------------------------------------------------------------------------------------	----------------------------------------------------------------------------------

Source of Match Funds (Please list source or sources of funds and indicate whether funds are cash or in-kind; in-kind match requires further explanation)

WCSD covers the 5% match requirement by paying 5% of the SRTS Coordinators' salary and benefits out of WCSD's General Fund budget. WCSD is reimbursed for 95% of the SRTS Coordinators' salary and benefits.

Project Schedule (Please describe the expected project schedule and indicate whether it is part of a phased project; attach additional documentation as appropriate)

There is no schedule for projects, infrastructure or otherwise, as the budget covers two SRTS Coordinators' salary and benefits for FY 2026.

Ongoing Maintenance (Please describe the ongoing maintenance requirements after the project has been implemented, including cost and agency or agencies responsible)

N/A

SCORING CRITERION #1: Project Benefits/Safety Enhancement (5 points possible)

Is the project included in an adopted plan, study, or program, and/or does it align with at least one stated goal of the [Regional Transportation Plan](#) or [One Nevada Plan](#)? Please describe the context of the plan, study, or program. The description must be consistent with goals listed on page 1 of this application.

Yes = The Safe Routes to School (SRTS) Program in Washoe County is dedicated to increasing the number of students walking, bicycling, and utilizing alternative modes of transportation, while simultaneously reducing the volume of vehicles traveling to and from school. Research indicates students who engage in physical activity before school are more focused and ready to learn. By promoting active transportation options, the project not only fosters healthier students, but also reduces air pollution, alleviates traffic congestion, and enhances safety around school zones. The WCSD SRTS program provides education and resources to parents, students, school faculty, community leaders, and drivers on pedestrian and bicycle safety, with a particular focus on school zones. The program encourages students in grades K-12 and their families to adopt active transportation whenever feasible. The objectives of the WCSD SRTS program are achieved through the implementation of the "6 E's" approach: Education and Encouragement, Engineering, Enforcement, Evaluation and Equity.

Does the project provide traffic calming or safety measures that benefit non-motorized road users? If yes, please explain.

The SRTS Program will actively seek infrastructure grants as they become available, ensuring the program has the necessary resources, timeline, and capacity to manage these grants effectively. In collaboration with WCSD's Emergency Manager, safety plans will be incorporated into the Action Plans for K-12 schools. The program will document improvement projects and any changes occurring throughout the school year that impact student safety when walking or bicycling to and from school. The SRTS team will also work closely with local traffic engineers to address service requests from the public and respond to safety-related concerns raised by school staff or community members. Additionally, the program will collaborate with WCSD's Capital Projects Department to implement SRTS infrastructure improvements. This includes initiatives such as providing additional bike racks, installing skateboard racks, and updating paint on curbing and crosswalks at K-12 schools. The program will maintain active involvement in the planning and design phases of new school construction projects. This includes offering input on traffic patterns, bike rack and crosswalk placement, and other critical elements to ensure that the needs of walking and biking students are prioritized in the development of new schools.

Does the project serve multiple modes of transportation? If yes, please explain.

The primary role of SRTS is to establish alternative modes of transportation through engagement/encouragement. The program fosters enthusiasm for using alternative modes of transportation and promotes increased walking and bicycling among students through engaging events, activities, and programs. The program also promotes events and activities, such as walking school buses, "Walk to School" days, competitions, and bike rodeos. The activities are designed to promote walking, bicycling, public transportation, and overall physical activity.

Does the project provide connectivity to an existing regional transportation facility or provide clear benefits to the community according to the stated purpose of the TA Set-Aside Program? If yes, please explain.

The WCSD SRTS Program seeks to reduce the number of vehicles traveling to and from school. By promoting active transportation alternatives, the program not only supports healthier students but also helps reduce air pollution, ease traffic congestion, and improve safety around school zones. The WCSD SRTS initiative offers education and resources to parents, students, school staff, community leaders, and drivers, with a particular emphasis on pedestrian and bicycle safety in school zones. The program encourages students in grades K-12 and their families to embrace active transportation whenever possible.

SCORING CRITERION #2: Equity and Environmental Justice (2 points possible)

Is the project located in an area with a disproportionately impacted community as identified in Chapter 10 of the [2050 Regional Transportation Plan](#) (Maps 10.1 - 10.4)? If yes, please provide additional context about the area served by the project.

Washoe County includes several areas with communities that are disproportionately impacted. The WCSD SRTS program has adopted a comprehensive approach to regional improvement projects and events. All initiatives will adhere to Americans with Disabilities Act (ADA) requirements and be mindful of the needs of students, staff, and community members with special needs. Furthermore, all systems and programs implemented through the SRTS initiative will take into account the socioeconomic diversity present among K-12 schools.

Does the project provide access to essential services, including medical, employment, or educational facilities? Please describe how access to each essential service listed is provided.

The WCSD SRTS program serves approximately 120 schools and more than 60,000 students. SRTS collaborates with WCSD's Transportation Department, students, guardians, and community members to ensure access to essential educational services.

SCORING CRITERION #3: Project Readiness (5 points possible)

Infrastructure Projects (respond to one of the following implementation scenarios)

Project would be relatively easy to construct and can be implemented within the next 12 months. The project does not require acquisition of right-of-way, utility relocation, and/or project meets the criteria for a categorical exclusion, according to 23 C.F.R. 771.117(c). Please describe how the project meets this criterion. Note: 30% design or equivalent documentation must be provided as an attachment.

N/A

Project will likely take up to 36 months to construct. Project includes right-of-way acquisition, utility relocation, and/or the project will require an environmental assessment/impact statement. Please describe how the project meets this criterion.

N/A

Non-infrastructure Projects (respond to one of the following implementation scenarios)

Educational/outreach program is established and schools/partnerships have been identified. Project evaluation criteria are in place to measure program effectiveness. Project can be implemented within 12 months. Note: evidence of an educational/outreach program, communication about the program with schools and/or other partners, and project evaluation criteria must be included as a separate attachment. Please describe how the project meets this criterion.

The WCSD SRTS program was established in 2009 and has been fully operational since that time.

Evaluations and Monitoring: The program will patrol K-12 schools during peak times and monitor the efficiency of existing traffic patterns. SRTS Coordinators will record unsafe environments and practices and provide recommendations for improvements. Professional walking audits will be conducted as funding allows. These audits will be used to inform recommended improvement projects and grant funding requests for infrastructure support. The program will document the number of schools and students participating in SRTS events, such as International Walk to School Day, NV Moves, and Bike Week. Bi-annual reports will be completed and presented to the Nevada Department of Transportation (NDOT) and RTC Committee for review. These reports will outline the accomplishments of the SRTS program over the past six months. Meeting minutes will document monthly SRTS activities and outcomes.

Educational/outreach program will need to be developed, partnerships will need to be established and identified. Evaluation criteria will need to be developed to measure the effectiveness of the project. This project may take 24 months or more to implement. Please describe how the project meets this criterion.

N/A

Nevada Department of Education - State or Federal Budget Expenditure Summary

Subrecipient:	WASHOE COUNTY SCHOOL DISTRICT	Project Number:	
UEI	DEA6NNBHTV3	Project Title:	
Vendor Number:	105486	FISCAL YEAR	2025-26
Federal/State Project Title:		Budget Code:	NDE Use Only
Check one below:		Category	
		GL:	
Budget: Amendment:		CAN Number:	
		Job Number:	
RTC Transportation Alternatives Program			
Washoe County School District Safe Routes to Schools - TA Set Aside			

OBJECT	DESCRIPTION	INSTRUCTION	SUPPORT	TOTAL
100	Salaries	\$ -	\$ 177,464.00	\$ 177,464.00
200	Benefits	\$ -	\$ 97,683.00	\$ 97,683.00
300	Purchased Professional Services	\$ -	\$ -	\$ -
400	Purchased Property Services	\$ -	\$ -	\$ -
500	510 Student Travel Services	\$ -	\$ -	
	580 Travel	\$ -	\$ -	
	500 Other	\$ -	\$ -	
	Total 500	\$ -	\$ -	\$ -
600	610 General Supplies	\$ -	\$ -	
	612 Non Information Tech Items of Value *	\$ -	\$ -	
	640 Books and Periodicals	\$ -	\$ -	
	641 Textbooks	\$ -	\$ -	
	650 Supplies; Info Tech	\$ -	\$ -	
	651 Software	\$ -	\$ -	
	652 Information Tech Items of Value *	\$ -	\$ -	
	653 Web-based and Similar Programs	\$ -	\$ -	
	654 Information Tech Items < \$1,000	\$ -	\$ -	
	Total 600	\$ -	\$ -	\$ -
800	810 Dues and Fees	\$ -	\$ -	
	890 Other Miscellaneous	\$ -	\$ -	
	800 Other	\$ -	\$ -	
	Total 800	\$ -	\$ -	\$ -
Subtotal 100 - 600 & 800		\$ -	\$ 275,147.00	\$ 275,147.00
Indirect Cost	Approved Rate: 3.31%	\$ -	\$ -	\$ -
700	730 Equipment: over \$5,000 each	\$ -	\$ -	
	700 Other	\$ -	\$ -	
	Total 700	\$ -	\$ -	\$ -
900 Other	900 Other	\$ -	\$ -	
	Total 900	\$ -	\$ -	\$ -
TOTAL		\$ -	\$ 275,147.00	\$ 275,147.00

Signature:		Date	
	Signature of Authorized Sub-grantee Representative		
Name/Title:	Martin Williams, Controller		
	Print Name and Title of Authorized Sub-grantee Representative		

* All Items of Value must be itemized on the Budget Detail.

** Indirect Cost Rates must be approved by the NV Department of Education (NDE) before the sub-grantee may budget for and charge those costs to the grant. **Indirect cost is allowed for Federal Grant Awards only.**

*** Expenditures **cannot** exceed approved budget in any object code. Any changes to object code budget have to be approved by NDE prior to funds being incurred. NDE reserves the right to deny reimbursement for any amount exceeding previously approved budget for each object code .

DEPARTMENT OF EDUCATION USE ONLY	
Program Staff Initial	Date Approved
Grant Unit Staff Initial	Date Approved

Nevada Department of Education
Support Services

	A	B	C	D	E	F	G
1							
2	Subrecipient:	WASHOE COUNTY SCHOOL DISTRICT				Project No:	0
3	Project Title	Safe Routes To Schools TA Set Aside				Fiscal Year:	2025-26
4							
5							
6	A	B	C	D	E	F	
7	Object Code	Title of Position or Description of Item	FTE	Quantity	Unit Amount/ Calculations	Total Amount	Budget Summary Object Total
8	100	PERSONNEL:					
9							
10		Certified Teachers, Traditional				\$ -	
11	1174	SRTS Coord Pape, R E40577	1.00	1	\$ 86,365.00	\$ 86,365.00	
12		SRTS Coord Iveson, J E60918	1.00	1	\$ 91,099.00	\$ 91,099.00	
13		Certified Teachers, Yr Round				\$ -	
14		Substitutes				\$ -	
15		Classified				\$ -	
16		Assistants				\$ -	
17		Aides				\$ -	
18		Extra Duty Stipends: one-time				\$ -	
19		Training Stipends				\$ -	
20		Certified Instructor Stipends				\$ -	
21		Certified Hourly Pay				\$ -	
22							
23							
24							
25							
26		NARRATIVE:					
27		Safe Routes to School (SRTS) Coordinators 2.0 FTE: Coordinators work in the WCSD SRTS Program to enhance traffic and pedestrian safety for students walking, bicycling, or using other alternative modes of transportation.					
28							
29							
30							
31							
32							
33					100 TOTAL		\$ 177,464.00
34	200	BENEFITS:					
35	1174	SRTS Coordinator Pape, R (E40577)					
36	2100	Group Insurance	1.00	\$10,227.00	1.00	\$ 10,227.00	
37	2101	Life Insurance: School Police	1.00	\$80.00	1.00	\$ 80.00	
38		Life Insurance: Admin / Pro		\$500.00		\$ -	
39		Long Term Disab: Admin / Pro		0.20%		\$ -	
40		FICA		6.20%		\$ -	
41	2300	PERS School Police	1.00	58.75%	\$ 86,365.00	\$ 50,739.00	
42		PERS plan A		36.75%		\$ -	
43		PERS plan B		19.25%		\$ -	
44	2400	Medicare	1.00	1.45%	\$ 86,365.00	\$ 1,252.00	
45	2700	Workers Comp-School Police Rate	1.00	6.40%	\$ 86,365.00	\$ 5,527.00	
46		Other Post Emp Benefits		\$329.00		\$ -	
47		Post Employment Benefits				\$ -	
48							
49		SRTS Coordinator Iveson, J (E60918)					
50	2100	Group Insurance	1.00	\$10,227.00	1.00	\$ 10,227.00	
51	2101	Life Insurance: Cert / Class	1.00	\$80.00	1.00	\$ 80.00	
52	2101	Life Insurance: Admin / Pro		\$500.00	\$ -	\$ -	
53	2101	Long Term Disab: Admin / Pro		0.20%	\$ -	\$ -	
54		FICA		6.20%	\$ -	\$ -	
55	2300	PERS plan A		36.75%	\$ -	\$ -	
56	2300	PERS plan B	1.00	19.25%	\$ 91,099.00	\$ 17,537.00	
57	2400	Medicare	1.00	1.45%	\$ 91,099.00	\$ 1,321.00	
58	2700	Workers Compensation	1.00	0.40%	\$ 91,099.00	\$ 364.00	
59		Other Post Emp Benefits	1.00	\$329.00	\$ 1.00	\$ 329.00	
60							

Nevada Department of Education
Support Services

	A	B	C	D	E	F	G
1							
2	Subrecipient:	WASHOE COUNTY SCHOOL DISTRICT				Project No:	0
3	Project Title	Safe Routes To Schools TA Set Aside				Fiscal Year:	2025-26
4							
5							
6	A	B	C	D	E	F	
7	Object Code	Title of Position or Description of Item	FTE	Quantity	Unit Amount/ Calculations	Total Amount	Budget Summary Object Total
62							
63							
64		NARRATIVE:					
65							
66		Standard fringe benefits rates.					
67		OPEB -The District provides other post employment benefits (OPEB) for eligible employees through the Washoe County School District Retiree Health Benefits Plan.					
68					200 TOTAL		\$ 97,683.00

Nevada Department of Education
Support Services

	A	B	C	D	E	F	G
1							
2	Subrecipient:	WASHOE COUNTY SCHOOL DISTRICT				Project No:	0
3	Project Title	Safe Routes To Schools TA Set Aside				Fiscal Year:	2025-26
4							
5							
6	A	B	C	D	E	F	
7	Object Code	Title of Position or Description of Item	FTE	Quantity	Unit Amount/ Calculations	Total Amount	Budget Summary Object Total
69	300	PURCHASED PROF. SERVICES:					
70							
71	320	Educational Consultants				\$ -	
72	330	Employee Training & Develop				\$ -	
73						\$ -	
74						\$ -	
75						\$ -	
76							
77		NARRATIVE:					
78							
79							
80					300 TOTAL		\$ -
81	400	PURCHASED PROP. SERVICES:					
82							
83	Other	Insert Object & Description				\$ -	
84						\$ -	
85						\$ -	
86						\$ -	
87							
88		NARRATIVE:					
89							
90					400 TOTAL		\$ -

Nevada Department of Education
Support Services

1	A	B	C	D	E	F	G
2	Subrecipient:	WASHOE COUNTY SCHOOL DISTRICT				Project No:	0
3	Project Title	Safe Routes To Schools TA Set Aside				Fiscal Year:	2025-26
4							
5							
6	A	B	C	D	E	F	
7	Object Code	Title of Position or Description of Item	FTE	Quantity	Unit Amount/ Calculations	Total Amount	Budget Summary Object Total
91	500	OTHER PURCHASED SERVICES:					
92							
93	510	Student Transportation				\$ -	
94						\$ -	
95						\$ -	\$ -
96							
97	519	Student Travel & Related				\$ -	
98						\$ -	
99						\$ -	\$ -
100							
101	531	Postage				\$ -	
102						\$ -	
103						\$ -	\$ -
104							
105	534	Cell Phone				\$ -	
106						\$ -	
107						\$ -	\$ -
108							
109	550	Printing				\$ -	
110						\$ -	
111						\$ -	\$ -
112							
113	560	Student Tuition				\$ -	
114						\$ -	
115						\$ -	\$ -
116							
117	580	Staff Travel				\$ -	
118						\$ -	
119						\$ -	\$ -
120							
121	589	Non- Staff Travel				\$ -	
122						\$ -	
123						\$ -	\$ -
124							
125	500 Other	Insert Object & Description				\$ -	
126						\$ -	
127						\$ -	
128						\$ -	
129						\$ -	
130						\$ -	\$ -
131		NARRATIVE:					
132							
133							
134							
135							
136					500 TOTAL		\$ -

Nevada Department of Education
Support Services

	A	B	C	D	E	F	G
1							
2	Subrecipient:	WASHOE COUNTY SCHOOL DISTRICT				Project No:	0
3	Project Title	Safe Routes To Schools TA Set Aside				Fiscal Year:	2025-26
4							
5							
6	A	B	C	D	E	F	
7	Object Code	Title of Position or Description of Item	FTE	Quantity	Unit Amount/ Calculations	Total Amount	Budget Summary Object Total
137	600	SUPPLIES:					
138							
139	610	General Supplies				\$ -	
140						\$ -	
141						\$ -	\$ -
142							
143	612	Non Info Tech Inventory Items				\$ -	
144						\$ -	
145						\$ -	\$ -
146							
147	640	Books and Periodicals				\$ -	
148						\$ -	
149						\$ -	
150						\$ -	\$ -
151							
152	641	Textbooks				\$ -	
153						\$ -	
154						\$ -	
155						\$ -	\$ -
156							
157	650	Info Tech Supplies < \$1,000				\$ -	
158						\$ -	
159						\$ -	
160						\$ -	\$ -
161							
162	651	Supplies-Information Technology (Software)				\$ -	
163						\$ -	
164						\$ -	\$ -
165							
166	652	Info Tech Supplies & Computers > \$1,000 - \$4,999				\$ -	
167						\$ -	
168						\$ -	\$ -
169							
170	653	Web Based & Similar				\$ -	
171						\$ -	
172						\$ -	\$ -
173							
174	654	Computers <\$1,000				\$ -	
175						\$ -	
176						\$ -	\$ -
177							
178	6541	Other Tech < \$1,000				\$ -	
179						\$ -	
180						\$ -	
181						\$ -	\$ -
182							
183		NARRATIVE:					
184							
185							
186							
187							

Nevada Department of Education
Support Services

	A	B	C	D	E	F	G
1							
2	Subrecipient:	WASHOE COUNTY SCHOOL DISTRICT				Project No:	0
3	Project Title	Safe Routes To Schools TA Set Aside				Fiscal Year:	2025-26
4							
5							
6	A	B	C	D	E	F	
7	Object Code	Title of Position or Description of Item	FTE	Quantity	Unit Amount/ Calculations	Total Amount	Budget Summary Object Total
188							
189					600 TOTAL		\$ -

Nevada Department of Education
Support Services

	A	B	C	D	E	F	G
1							
2	Subrecipient:	WASHOE COUNTY SCHOOL DISTRICT				Project No:	0
3	Project Title	Safe Routes To Schools TA Set Aside				Fiscal Year:	2025-26
4							
5							
6	A	B	C	D	E	F	
7	Object Code	Title of Position or Description of Item	FTE	Quantity	Unit Amount/ Calculations	Total Amount	Budget Summary Object Total
190	800	OTHER OBJECTS:					
191							
192	810	Dues & Fees				\$ -	
193						\$ -	
194						\$ -	
195						\$ -	\$ -
196							
197	890	Miscellaneous				\$ -	
198						\$ -	
199						\$ -	
200						\$ -	\$ -
201							
202	800 Other	Insert Object & Description				\$ -	
203						\$ -	
204						\$ -	
205						\$ -	\$ -
206							
207							
208		NARRATIVE:					
209							
210							
211							
212							
213					800 TOTAL		\$ -
214	Subtotal Objects 100 - 600 & 800						\$ 275,147.00
215	Approved Indirect Cost		3.31%				
216	700	EQUIPMENT:					
217							
218	700	Capital Equipment > \$5,000				\$ -	
219							
220	730	Other > \$5,000				\$ -	
221							
222		NARRATIVE:					
223							
224							
225							
226							
227							
228					TOTAL 700		\$ -
229	900 Other						
230	900	Other Items				\$ -	
231	971	Pass through Districts				\$ -	
232	972	Pass through Charter Schools				\$ -	
233	973	Pass through Other Entities				\$ -	
234							
235		NARRATIVE:					
236							
237							
238							
239					900 TOTAL		\$ -
240	GRANT TOTAL						\$ 275,147.00

Nevada Department of Education - State or Federal Budget Expenditure Summary

Subrecipient:	WASHOE COUNTY SCHOOL DISTRICT	Project Number:	
UEI	DEA6NNBHTV3	Project Title:	
Vendor Number:	105486	FISCAL YEAR	2026-27
Federal/State Project Title:		Budget Code:	NDE Use Only
Check one below:		Category	
		GL:	
Budget: Amendment:		CAN Number:	
		Job Number:	
RTC Transportation Alternatives Program			
Washoe County School District Safe Routes to Schools - TA Set Aside			

OBJECT	DESCRIPTION	INSTRUCTION	SUPPORT	TOTAL
100	Salaries	\$ -	\$ 181,810.00	\$ 181,810.00
200	Benefits	\$ -	\$ 99,387.00	\$ 99,387.00
300	Purchased Professional Services	\$ -	\$ -	\$ -
400	Purchased Property Services	\$ -	\$ -	\$ -
500	510 Student Travel Services	\$ -	\$ -	
	580 Travel	\$ -	\$ -	
	500 Other	\$ -	\$ -	
	Total 500	\$ -	\$ -	\$ -
600	610 General Supplies	\$ -	\$ -	
	612 Non Information Tech Items of Value *	\$ -	\$ -	
	640 Books and Periodicals	\$ -	\$ -	
	641 Textbooks	\$ -	\$ -	
	650 Supplies; Info Tech	\$ -	\$ -	
	651 Software	\$ -	\$ -	
	652 Information Tech Items of Value *	\$ -	\$ -	
	653 Web-based and Similar Programs	\$ -	\$ -	
	654 Information Tech Items < \$1,000	\$ -	\$ -	
	Total 600	\$ -	\$ -	\$ -
800	810 Dues and Fees	\$ -	\$ -	
	890 Other Miscellaneous	\$ -	\$ -	
	800 Other	\$ -	\$ -	
	Total 800	\$ -	\$ -	\$ -
Subtotal 100 - 600 & 800		\$ -	\$ 281,197.00	\$ 281,197.00
Indirect Cost	Approved Rate: 3.31%	\$ -	\$ -	\$ -
700	730 Equipment: over \$5,000 each	\$ -	\$ -	
	700 Other	\$ -	\$ -	
	Total 700	\$ -	\$ -	\$ -
900 Other	900 Other	\$ -	\$ -	
	Total 900	\$ -	\$ -	\$ -
TOTAL		\$ -	\$ 281,197.00	\$ 281,197.00

Signature:		Date	
	Signature of Authorized Sub-grantee Representative		
Name/Title:	Martin Williams, Controller		
	Print Name and Title of Authorized Sub-grantee Representative		

* All Items of Value must be itemized on the Budget Detail.

** Indirect Cost Rates must be approved by the NV Department of Education (NDE) before the sub-grantee may budget for and charge those costs to the grant. **Indirect cost is allowed for Federal Grant Awards only.**

*** Expenditures cannot exceed approved budget in any object code. Any changes to object code budget have to be approved by NDE prior to funds being incurred. NDE reserves the right to deny reimbursement for any amount exceeding previously approved budget for each object code .

DEPARTMENT OF EDUCATION USE ONLY	
Program Staff Initial	Date Approved
Grant Unit Staff Initial	Date Approved

Nevada Department of Education
Support Services

	A	B	C	D	E	F	G
1							
2	Subrecipient:	WASHOE COUNTY SCHOOL DISTRICT				Project No:	0
3	Project Title	Safe Routes To Schools TA Set Aside				Fiscal Year:	2026-27
4							
5							
6	A	B	C	D	E	F	
7	Object Code	Title of Position or Description of Item	FTE	Quantity	Unit Amount/ Calculations	Total Amount	Budget Summary Object Total
8	100	PERSONNEL:					
9							
10		Certified Teachers, Traditional				\$ -	
11	1174	SRTS Coord Pape, R E40577	1.00	1	\$ 88,092.00	\$ 88,092.00	
12		SRTS Coord Iveson, J E60918	1.00	1	\$ 93,718.00	\$ 93,718.00	
13		Certified Teachers, Yr Round				\$ -	
14		Substitutes				\$ -	
15		Classified				\$ -	
16		Assistants				\$ -	
17		Aides				\$ -	
18		Extra Duty Stipends: one-time				\$ -	
19		Training Stipends				\$ -	
20		Certified Instructor Stipends				\$ -	
21		Certified Hourly Pay				\$ -	
22							
23							
24							
25							
26		NARRATIVE:					
27		Safe Routes to School (SRTS) Coordinators 2.0 FTE: Coordinators work in the WCSD SRTS Program to enhance traffic and pedestrian safety for students walking, bicycling, or using other alternative modes of transportation.					
28							
29							
30							
31							
32							
33					100 TOTAL		\$ 181,810.00
34	200	BENEFITS:					
35	1174	SRTS Coordinator Pape, R (E40577)					
36	2100	Group Insurance	1.00	\$10,227.00	1.00	\$ 10,227.00	
37	2101	Life Insurance: School Police	1.00	\$80.00	1.00	\$ 80.00	
38		Life Insurance: Admin / Pro		\$500.00		\$ -	
39		Long Term Disab: Admin / Pro		0.20%		\$ -	
40		FICA		6.20%		\$ -	
41	2300	PERS School Police	1.00	58.75%	\$ 88,092.00	\$ 51,754.00	
42		PERS plan A		36.75%		\$ -	
43		PERS plan B		19.25%		\$ -	
44	2400	Medicare	1.00	1.45%	\$ 88,092.00	\$ 1,277.00	
45	2700	Workers Comp-School Police Rate	1.00	6.40%	\$ 88,092.00	\$ 5,638.00	
46		Other Post Emp Benefits		\$329.00		\$ -	
47		Post Employment Benefits				\$ -	
48							
49		SRTS Coordinator Iveson, J (E60918)					
50	2100	Group Insurance	1.00	\$10,227.00	1.00	\$ 10,227.00	
51	2101	Life Insurance: Cert / Class	1.00	\$80.00	1.00	\$ 80.00	
52	2101	Life Insurance: Admin / Pro		\$500.00	\$ -	\$ -	
53	2101	Long Term Disab: Admin / Pro		0.20%	\$ -	\$ -	
54		FICA		6.20%	\$ -	\$ -	
55	2300	PERS plan A		36.75%	\$ -	\$ -	
56	2300	PERS plan B	1.00	19.25%	\$ 93,718.00	\$ 18,041.00	
57	2400	Medicare	1.00	1.45%	\$ 93,718.00	\$ 1,359.00	
58	2700	Workers Compensation	1.00	0.40%	\$ 93,718.00	\$ 375.00	
59		Other Post Emp Benefits	1.00	\$329.00	\$ 1.00	\$ 329.00	
60							

Nevada Department of Education
Support Services

	A	B	C	D	E	F	G
1							
2	Subrecipient:	WASHOE COUNTY SCHOOL DISTRICT				Project No:	0
3	Project Title	Safe Routes To Schools TA Set Aside				Fiscal Year:	2026-27
4							
5							
6	A	B	C	D	E	F	
7	Object Code	Title of Position or Description of Item	FTE	Quantity	Unit Amount/ Calculations	Total Amount	Budget Summary Object Total
62							
63							
64		NARRATIVE:					
65							
66		Standard fringe benefits rates.					
67		OPEB -The District provides other post employment benefits (OPEB) for eligible employees through the Washoe County School District Retiree Health Benefits Plan.					
68					200 TOTAL		\$ 99,387.00

Nevada Department of Education
Support Services

	A	B	C	D	E	F	G
1							
2	Subrecipient:	WASHOE COUNTY SCHOOL DISTRICT				Project No:	0
3	Project Title	Safe Routes To Schools TA Set Aside				Fiscal Year:	2026-27
4							
5							
6	A	B	C	D	E	F	
7	Object Code	Title of Position or Description of Item	FTE	Quantity	Unit Amount/ Calculations	Total Amount	Budget Summary Object Total
69	300	PURCHASED PROF. SERVICES:					
70							
71	320	Educational Consultants				\$ -	
72	330	Employee Training & Develop				\$ -	
73						\$ -	
74						\$ -	
75						\$ -	
76							
77		NARRATIVE:					
78							
79							
80					300 TOTAL		\$ -
81	400	PURCHASED PROP. SERVICES:					
82							
83	Other	Insert Object & Description				\$ -	
84						\$ -	
85						\$ -	
86						\$ -	
87							
88		NARRATIVE:					
89							
90					400 TOTAL		\$ -

Nevada Department of Education
Support Services

1	A	B	C	D	E	F	G
2	Subrecipient:	WASHOE COUNTY SCHOOL DISTRICT				Project No:	0
3	Project Title	Safe Routes To Schools TA Set Aside				Fiscal Year:	2026-27
4							
5							
6	A	B	C	D	E	F	
7	Object Code	Title of Position or Description of Item	FTE	Quantity	Unit Amount/ Calculations	Total Amount	Budget Summary Object Total
91	500	OTHER PURCHASED SERVICES:					
92							
93	510	Student Transportation				\$ -	
94						\$ -	
95						\$ -	\$ -
96							
97	519	Student Travel & Related				\$ -	
98						\$ -	
99						\$ -	\$ -
100							
101	531	Postage				\$ -	
102						\$ -	
103						\$ -	\$ -
104							
105	534	Cell Phone				\$ -	
106						\$ -	
107						\$ -	\$ -
108							
109	550	Printing				\$ -	
110						\$ -	
111						\$ -	\$ -
112							
113	560	Student Tuition				\$ -	
114						\$ -	
115						\$ -	\$ -
116							
117	580	Staff Travel				\$ -	
118						\$ -	
119						\$ -	\$ -
120							
121	589	Non- Staff Travel				\$ -	
122						\$ -	
123						\$ -	\$ -
124							
125	500 Other	Insert Object & Description				\$ -	
126						\$ -	
127						\$ -	
128						\$ -	
129						\$ -	
130						\$ -	\$ -
131		NARRATIVE:					
132							
133							
134							
135							
136					500 TOTAL		\$ -

Nevada Department of Education
Support Services

	A	B	C	D	E	F	G
1							
2	Subrecipient:	WASHOE COUNTY SCHOOL DISTRICT				Project No:	0
3	Project Title	Safe Routes To Schools TA Set Aside				Fiscal Year:	2026-27
4							
5							
6	A	B	C	D	E	F	
7	Object Code	Title of Position or Description of Item	FTE	Quantity	Unit Amount/ Calculations	Total Amount	Budget Summary Object Total
137	600	SUPPLIES:					
138							
139	610	General Supplies				\$ -	
140						\$ -	
141						\$ -	\$ -
142							
143	612	Non Info Tech Inventory Items				\$ -	
144						\$ -	
145						\$ -	\$ -
146							
147	640	Books and Periodicals				\$ -	
148						\$ -	
149						\$ -	
150						\$ -	\$ -
151							
152	641	Textbooks				\$ -	
153						\$ -	
154						\$ -	
155						\$ -	\$ -
156							
157	650	Info Tech Supplies < \$1,000				\$ -	
158						\$ -	
159						\$ -	
160						\$ -	\$ -
161							
162	651	Supplies-Information Technology (Software)				\$ -	
163						\$ -	
164						\$ -	\$ -
165							
166	652	Info Tech Supplies & Computers > \$1,000 - \$4,999				\$ -	
167						\$ -	
168						\$ -	\$ -
169							
170	653	Web Based & Similar				\$ -	
171						\$ -	
172						\$ -	\$ -
173							
174	654	Computers <\$1,000				\$ -	
175						\$ -	
176						\$ -	\$ -
177							
178	6541	Other Tech < \$1,000				\$ -	
179						\$ -	
180						\$ -	
181						\$ -	\$ -
182							
183		NARRATIVE:					
184							
185							
186							
187							

Nevada Department of Education
Support Services

	A	B	C	D	E	F	G
1							
2	Subrecipient:	WASHOE COUNTY SCHOOL DISTRICT				Project No:	0
3	Project Title	Safe Routes To Schools TA Set Aside				Fiscal Year:	2026-27
4							
5							
6	A	B	C	D	E	F	
7	Object Code	Title of Position or Description of Item	FTE	Quantity	Unit Amount/ Calculations	Total Amount	Budget Summary Object Total
188							
189					600 TOTAL		\$ -

Nevada Department of Education
Support Services

	A	B	C	D	E	F	G
1							
2	Subrecipient:	WASHOE COUNTY SCHOOL DISTRICT				Project No:	0
3	Project Title	Safe Routes To Schools TA Set Aside				Fiscal Year:	2026-27
4							
5							
6	A	B	C	D	E	F	
7	Object Code	Title of Position or Description of Item	FTE	Quantity	Unit Amount/ Calculations	Total Amount	Budget Summary Object Total
190	800	OTHER OBJECTS:					
191							
192	810	Dues & Fees				\$ -	
193						\$ -	
194						\$ -	
195						\$ -	\$ -
196							
197	890	Miscellaneous				\$ -	
198						\$ -	
199						\$ -	
200						\$ -	\$ -
201							
202	800 Other	Insert Object & Description				\$ -	
203						\$ -	
204						\$ -	
205						\$ -	\$ -
206							
207							
208		NARRATIVE:					
209							
210							
211							
212							
213					800 TOTAL		\$ -
214	Subtotal Objects 100 - 600 & 800						\$ 281,197.00
215	Approved Indirect Cost		3.31%				
216	700	EQUIPMENT:					
217							
218	700	Capital Equipment > \$5,000				\$ -	
219							
220	730	Other > \$5,000				\$ -	
221							
222		NARRATIVE:					
223							
224							
225							
226							
227							
228					TOTAL 700		\$ -
229	900 Other						
230	900	Other Items				\$ -	
231	971	Pass through Districts				\$ -	
232	972	Pass through Charter Schools				\$ -	
233	973	Pass through Other Entities				\$ -	
234							
235		NARRATIVE:					
236							
237							
238							
239					900 TOTAL		\$ -
240	GRANT TOTAL						\$ 281,197.00



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 6/20/2025

Agenda Item: 4.4.1

To: Regional Transportation Commission

From: Garrett Rodgers, Project Manager

**SUBJECT: North Valley North Virginia Street Capacity Project PSA Amendment 1
with DOWL, LLC**

RECOMMENDED ACTION

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.

BACKGROUND AND DISCUSSION

The North Valleys North Virginia Street Corridor Improvement Project (Project) intends to increase vehicle capacity, improve safety, enhance pedestrian and multimodal connectivity, and maintain access to adjacent properties while minimizing impacts along approximately 3.75 miles of North Virginia Street.

The scope of work includes the design and construction of a five-lane roadway section, consisting of two travel lanes in each direction and a center two-way left-turn lane. Additional improvements include full roadway reconstruction and reconfiguration, intersection upgrades, access management, drainage enhancements, and the relocation of existing utilities as needed.

On July 21, 2023, the RTC Board approved a Professional Services Agreement (PSA) with DOWL, LLC (DOWL) to evaluate design alternatives and develop preliminary phasing and constructability plans and cost estimates. The project team has successfully completed the 30% design milestone and delivered all work identified under the original PSA scope. A future amendment to support final design and engineering services during construction was anticipated at the time of initial approval.

Amendment No. 1 to the PSA with DOWL provides an additional \$6,101,705.05 to complete final design services. This includes subsurface utility engineering, geotechnical investigations, final hydraulic analysis, right-of-way engineering, and engineering support during construction. The amendment also extends the agreement expiration date to December 31, 2029.

DOWL was selected from the 2022 Qualified List for Civil Engineering Design and Construction Management to provide design, engineering, construction management, and quality assurance services for the North Valleys North Virginia Street Capacity Project. While the schedule may fluctuate based upon agency and other coordination, the targeted schedule for these services are as follows:

- 60% Design and Right-of-Way Setting: December 2025
- 90% Design: June 2026
- Final Design: December 2026
- Construction: To be coordinated with NDOT's US 395 North Valleys Phase 2 Project

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

7/21/2023 Approved a Professional Services Agreement with DOWL, LLC for preliminary design services related to the North Valleys North Virginia Street Capacity Project in an amount not to exceed \$1,509,982.

AMENDMENT NO. 01

The Regional Transportation Commission of Washoe County (“RTC”) and DOWL, LLC (“Consultant”) entered into an agreement dated July 25, 2023 (the “Agreement”). This Amendment No. 01 is dated and effective as of June 20, 2025.

RECITALS

WHEREAS, the Agreement is scoped to advance engineering design services to the 30% design level;

WHEREAS, the parties have determined that there is a need to amend the Agreement to advance engineering design services through final design and bidding with optional engineering during construction services and to extend the term of the contract.

WHEREAS, the additional services needed, total \$6,101,705.05 for a new not-to-exceed amount of \$7,611,687.05.

NOW, THEREFORE, in consideration of the mutual promises of the parties and other good and valuable consideration, the parties do agree as follows:

1. Section 1.1 shall be replaced in its entirety with the following:
The term of this Agreement shall be from the date first written above through December 31, 2029, unless terminated at an earlier date, or extended to a later date, pursuant to the provisions herein.
2. 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 by a revised fee schedule, and must be approved in writing by the RTC’s Project Manager prior to performance of work. In no case shall Consultant be compensated in excess of the following not-to-exceed amounts:

Design Services (Tasks 1-3, 5-13, 15-24, 26)	\$6,779,168.05
Optional Services (Tasks 2.6 and 4)	\$111,470.00
Design Contingency (Tasks 14 and 25)	\$721,049.00
EDC Services Optional (Task 27)	\$0.00
EDC Contingency Optional (Task 28)	\$0.00
Total Not-to-Exceed Amount	\$7,611,687.05

3. Exhibit A: Scope of Services of Amendment No. 01, Exhibit A attached hereto, is added to the scope of services of the Agreement.
4. Exhibit B: Compensation for Amendment No. 01, Exhibit B attached hereto, is added to the compensation of the Agreement.

5. 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, Executive Director

DOWL, LLC

By: _____
Jeff Shoemaker, P.E., President and CEO

This is **EXHIBIT A**, consisting of **23** pages, is referred to in and part of the **Agreement between Owner and DOWL for Professional Services**.
RTC Project No. 0217010

Engineer's Services

INTRODUCTION

The North Valleys Virginia Street Capacity Project is located in the North Valleys in Reno, Nevada, between Panther Drive and Stead Boulevard (approximately 3.8 miles). The project limits are shown in Figure 1. The project runs parallel to US 395 and provides access to several residences and businesses that abut the project corridor. The roadway also acts as a bypass to US 395 during the morning peak hours primarily in the southbound direction.



Figure 1: Project Location

The existing roadway consists of two lanes with designated left turn and right turn lanes at street intersections and select business accesses. A two-way-left-turn-lane (TWLTL) provides access to residences and businesses for a portion of the corridor. A section east of Lemmon Drive consists of two lanes in the westbound direction for approximately 0.5 miles. Posted speeds are 45 miles per hour (mph) from Stead Boulevard to Lemmon Drive, 40 mph from Lemmon Drive to Golden Valley Road and 35 mph from Golden Valley Road to Panther Drive. There are three signalized intersections within the project: Lemmon Drive, Golden Valley Drive, and Panther Drive. There are currently no medians that restrict access to properties.

Segmented portions of the road contain sidewalks and narrow shoulders to accommodate pedestrians and bicyclists. A majority of the road has no accommodations for either user. Bus stops for transit and school are spaced along the corridor in both directions. The locations and ridership data are discussed in more detail in the corridor study in Appendix A. Pedestrian crossings across North Virginia exist at the three signalized intersections. One mid-block crossing exists at Kennedy Drive, west of Lemmon Drive.

The purpose of the project is to increase vehicle capacity considering the 20+ year horizon for future development and subsequent growth in traffic volumes and improving safety by providing connectivity for pedestrians and bicyclists through the entire corridor.

A 30% design was previously completed under RTC Project Number 0217010. The intent of the 30% design was to identify impacts, additional investigations, and design requirements for the final design.

Engineer shall provide Basic and Additional Services as set forth below.



PART 1 – DESIGN SERVICES

A1.01 *Phase 15 - Project Management Phase*

A. Description of services:

1. CONSULTANT will provide schedule maintenance, cost control, filing, resource allocation, and routine communications throughout duration of project.
2. CONSULTANT will coordinate with RTC project manager and staff, including conference calls and in-person meetings. Scheduled project management progress meetings are planned bi-weekly. It is assumed that up to two (2) CONSULTANT staff will attend. Project duration is assumed to be nineteen (19) months.
3. CONSULTANT will coordinate and attend design kick-off meeting with RTC and City of Reno. The purpose of the meeting is to verify scope of work from the 30% design to be included in the final design effort. It is assumed that up to ten (10) CONSULTANT and Subconsultant staff will attend this initial meeting.
4. CONSULTANT will coordinate and attend quarterly design meetings with RTC and City of Reno to coordinate design and discuss key technical issues by discipline to verify design requirements to develop final design. It is assumed that up to ten (10) CONSULTANT and Subconsultant staff will attend. Project duration is assumed to be nineteen (19) months for a total of six (6) meetings.
5. CONSULTANT will coordinate and attend miscellaneous meetings with key stakeholders, and other parties, as appropriate, to discuss scope, design progress, schedule, and key technical issues. It is assumed that up to four (4) CONSULTANT and subconsultant staff will attend up to eight (8) meetings.
6. CONSULTANT will coordinate with Subconsultant to provide public outreach activities. It is assumed that one public meeting will be attended by up to five (5) CONSULTANT and Subconsultant staff. Public meeting support includes preparing the necessary roll plots and exhibit boards for public viewing. Public outreach will also include four (4) rounds of mailers, website support, and graphics support. CONSULTANT will provide a 3D visualization of the project corridor that will be presented at the meeting and made available on the project website. It is proposed that the visualization will be a 90 second 3D flyover video of the project corridor.
7. CONSULTANT will monitor changes to the scope, budget, or schedule and developing change management strategies with the RTC project manager.
8. CONSULTANT will prepare monthly progress reports, invoices and billing.
9. CONSULTANT will prepare a Project Management Plan (PMP) that will include Project Instructions, Risk Management Plan, Communications Protocols, Project Directory, Scope, Schedule, Budget, File/Information Sharing/Storage Protocols, and the Health and Safety Plan.

Newforma Project Center, or similar, will be used for electronic filing / information sharing.

The PMP will be distributed to the CONSULTANT team, including Subconsultants. It is assumed quarterly updates will be made to the PMP throughout the project duration.

10. CONSULTANT will prepare a Project Quality Plan (PQP) specific to the North Valleys Virginia Street Capacity Project. A CONSULTANT project Quality Manager will be assigned who be responsible for the development and implementation of the plan. The PQP will apply to both CONSULTANT and Subconsultant team members. An independent quality review will be performed at each design deliverable when submitting the 60%, 90%, and 100% milestone packages.
11. CONSULTANT will update and maintain the Project Management Plan, Newforma Project Center, and all project files (electronic and hardcopy as appropriate) throughout the duration of the project. Copies of all outgoing and incoming correspondence will be provided to the RTC Project Manager, as requested. Word processing, data bases, spreadsheets, etc. will be prepared using a format compatible with Microsoft Office.

B. Deliverables:

1. Monthly invoices and progress reports
2. Monthly schedule update in Critical Path Method (CPM) format
3. Meeting agendas and minutes, including action item log for project management and design meetings
4. Project Management Plan (PMP)
5. Project Quality Plan (PQP)

A1.02 *Phase 16 - Final Subsurface Utility Engineering Phase*

A. Description of Services:

1. CONSULTANT will provide general coordination with utility owners and attend meetings as necessary to inform owners of potential conflicts and confirm mitigation strategies to address conflicts. It is assumed that up to twenty (20) meetings will be required and include up to three (3) CONSULTANT staff. Ten (10) of the meetings are assumed to take place on-site with up to two (2) CONSULTANT staff.
2. CONSULTANT will identify potential utility conflicts and develop a utility conflict matrix and exhibit depicting the conflict locations. Areas where sufficient information is unavailable from existing records to clear utility conflicts will be identified. The intent of this effort is to inform utility owners of possible conflicts with the proposed work.
3. CONSULTANT will use the services of a potholing contractor to pothole up to 200 high priority utilities that are in potential conflict with the proposed improvements. These locations will be prioritized from the utility conflict matrix and agreed to by RTC. A total of 5 working days of ground penetrating radar and 5 manhole investigations will be used to supplement potholing in select areas. The contractor will file the final USA Ticket and provide traffic control. CONSULTANT will direct and oversee all potholing procedures. One (1) CONSULTANT inspector will be on-site during all potholing activities to inspect,

photograph, locate (horizontal and vertical) existing infrastructure, and set vertical and horizontal offset/swing tie markers. CONSULTANT will provide a survey crew to survey the offset markers as described above. It is understood and agreed to that the pothole contractor will not expose all existing utilities that are in potential conflict with the proposed improvements. 578 points of conflict were identified in the 30% design and are not all included in this phase. This will leave some verification of existing utilities to be completed during Construction, which may result in design changes. Limited additional potholing can be completed at the written request of RTC, which will be billed to the design contingency task.

4. CONSULTANT will use the services of a CCTV contractor for 10 working days to evaluate the condition of the existing storm drain pipes within the N Virginia St. corridor identified to remain in the 30% submittal. The contractor will provide any necessary traffic control. CONSULTANT will direct and oversee all CCTV investigation. One (1) CONSULTANT field project representative will be on-site during all CCTV activities to inspect, photograph and coordinate with the project engineer. CONSULTANT will provide a survey crew to survey storm drain infrastructure that was not found in previous topographic surveys. CONSULTANT will analyze the resulting videos and assess the condition of the existing storm drain pipes. From this assessment, recommendations on lining and replacements will be provided to RTC. These recommendations will be incorporated into the construction plans.

B. Deliverables:

1. Utility owner meeting agendas, minutes and action item log
2. Utility conflict matrix and plan
3. Draft and final pothole plan
4. Utility pothole data sheets and survey data in Civil3D
5. CCTV videos of existing storm drain pipes.
6. Summary and recommendations following CCTV video review.

C. Assumptions:

1. Night work will be required to minimize traffic impacts to the North Valleys.
2. The potholing contractor will follow all conditions of the City of Reno encroachment permit. It is assumed that temporary patches for potholing work will be maintained by the contractor for one year after the work is completed. Repair of temporary patches beyond one year will be the responsibility of the City of Reno. If the City of Reno requests that repairs be done by the contractor beyond the one year period, the costs for the repair will be billed to the design contingency task.
3. Areas in which ground penetrating radar will be used will be decided upon after further coordination with utility companies, stakeholders, and RTC.
4. Manhole investigations will be utilized in select places where a critical tie-in or crossing requires additional verification and measurements.

5. CCTV work is for existing system and does not include cleaning or pre-flushing.

A1.03 Phase 17 - Final Geotechnical Investigation Phase

A. Permitting, Traffic Control, Work Hours, and USA North:

1. **Entry, Permits, Traffic Control and Work Hours:** It is assumed that all necessary rights of entry will be provided by RTC. Specifically, access to APN 570-090-01, and 570-090-02 will be required. CME will obtain an encroachment permit from the City of Reno for this work and the permit fee will be waived; any environmental permitting (if needed) will be obtained by CONSULTANT. A traffic control plan and set up will be provided by Silver State Barricade & Sign. Traffic control is anticipated to include single lane closure with flaggers and shoulder closures. Due to high traffic volumes and anticipated limited work hours during the day, night work is assumed to be required. Work hours are assumed to be Sunday through Thursday from 6pm to 6am.
2. **Identification of Existing Utilities:** CME will contact USANorth811 to determine the locations of existing utilities. USA North will not locate privately owned and maintained utilities. Standard precautions will be taken by CME to minimize the risk of damaging underground structures. However, it's important to note that underground exploration carries inherent risks, as precise location of all underground structures may not be possible. Existing as-builts and site utility plans shall be provided by RTC prior to mobilization of drilling equipment to the site. All plans shall be to scale.
3. **Responsibility for Damage or Disruption:** CME's fee does not encompass compensation for any damage or disruption of services, or for repair costs resulting from insufficient or incorrect data. In cases where damage to underground structures occurs due to insufficient or incorrect data, RTC will be responsible for the cost of repair.
4. **Private GPR Utility Locator Coordination:** Upon request from RTC, CME can coordinate with a private Ground Penetrating Radar (GPR) utility locator. This service may be used for privately owned utilities located within the upper 2 to 3 feet of the soil profile. For the purposes of drilling and traffic control subcontractors, we assume this is a non-prevailing wage Phase of the project.

B. Exploratory Borings:

1. Due to the different terrains located around the project alignment, two drill rig mobilizations will be required for this project. The table below provides a summary of the proposed drill rig mobilizations and drilling methods. Borings will only be completed where retaining wall heights are greater than 4 feet. To comply with FHWA guidelines for the minimum number of exploration locations along retaining walls, CME is proposing borings at approximate 150-foot intervals. Final locations will be determined after the Preliminary Design Finalization Phase.

Table 2: Drill Method Summary

Retaining Wall Type	Drill Method	Drill Rig Type	Estimated Number of Borings	Drilling Depth (ft)
CIP Cantilever and MSE Walls	Solid-Stem Auger	Truck Rig	48	15 to 40
Soil Nail Walls and Cut Slope	Solid Stem Auger and Rock Coring	Track Rig	6	20 to 40
NOTES: 1. Listed depths are target depths. Borings will be drilled to target depth or practical refusal, whichever comes first.				

Borings will be drilled by a drilling subcontractor and will be drilled to depths of 15 to 40 feet below the existing ground surface or to practical refusal (whichever comes first). Soil sample intervals will generally be at 2.5 to 5-foot intervals. Bulk soil samples will be collected from the near surface soil cuttings. If encountered, groundwater measurements will be recorded. A CME field representative will log subsurface conditions encountered in the test borings and visually classify soils in general accordance with the Unified Soils Classification System. Borings will be backfilled with soil cuttings; excess soil cutting will be hauled offsite. Borings in the roadway will be capped with 6-inches of rapid set non-shrink grout.

2. Cut Slope Borings: For cut slope stability and soil nail wall design, six (6) borings will be drilled on the bedrock cut slopes located between Wellington Way and Panther Drive. Borings will be drilled to depths of 20 to 40 feet below the existing ground surface or to refusal, whichever comes first using a track drill rig equipped with solid-stem augers and rock coring capabilities. Rock coring drilling technique will be utilized where bedrock is encountered.

Bulk samples of the subgrade will be collected at each boring for laboratory testing. During coring operations, the bedrock physical characteristics will be recorded, measured, and identified. These physical characteristics may include:

- a. Core recovery percentage (identifies areas of highly fractured and/or soft, friable rock);
- b. Estimated boulder size based on drilling efforts and core recovery;
- c. For bedrock (if encountered) RQD (Rock Quality Designation) will be determined. RQD is the ratio of intact pieces of recovered core greater than 4 inches to the total length of recovered core;
- d. Schmidt Hammer test results (unconfined compressive strength estimates)
- e. Discontinuities (spacing and orientation of fractures);
- f. Weathering; and

g. Rock type description.

Upon completing the rock coring, bedrock core samples will be retained in core boxes and photographed. Core samples may be bagged in the field depending on the integrity of the material and percent recovery. CME personnel will log material encountered during exploration in the field. Representative soil samples and rock will be returned to our laboratory for testing. Borings will be backfilled with cuttings, bentonite chips, or grout. Excess soil cutting will be hauled offsite.

C. Laboratory Testing: The purpose of the laboratory testing program will be to evaluate the engineering and mechanical properties of soil samples collected in the field. We anticipate that our laboratory testing program will consist of the following:

1. Testing for index properties such as moisture content, grain size distribution and plasticity;
2. Moisture-density relationship (ASTM D1557) to determine density properties for direct shear testing and slope stability modeling;
3. Remolded and in-situ direct shear testing to estimate strength properties for slope stability modeling;
4. Uniaxial compressive strength (UCS) testing on competent bedrock.
5. Corrosion testing including soluble sulfates.

D. Meetings: Attend internal design team meetings and project management team meetings at the direction of the CONSULTANT and RTC. It is assumed that up to 33 meetings will be required throughout the duration of the design phase.

E. Report: The findings and recommendations of CONSULTANT for all tasks identified under this phase shall be submitted by report with backup documentation. Recommendations for slopes, retaining walls and general construction conditions will be provided.

F. Deliverables:

1. Exploration Plan.
2. Final Geotechnical Investigation Report.

G. Assumptions:

1. It is assumed that all necessary rights of entry will be provided by RTC. Specifically, access to APN 570-090-01, and 570-090-02 will be required.
2. Due to high traffic volumes and anticipated limited work hours during the day, night work is assumed to be required.
3. In cases where damage to underground structures occurs due to insufficient or incorrect data, RTC will be responsible for the cost of repair.
4. This is a non-prevailing wage Phase of the project.

A1.04 *Phase 18 - Final Hydrology and Hydraulics Report Phase*

A. Description of Services:

1. CONSULTANT will coordinate with the City of Reno maintenance personnel and others familiar with the historic hydraulic performance of the existing storm drain facilities to determine any current or historical flooding issues within the project area that are not captured in the H&H analysis performed already. CONSULTANT will also become familiar with the maintenance capabilities of the City as it relates to the proposed infrastructure and include language within the final design report.
2. CONSULTANT will perform site visits and collect key storm drainage data for areas outside the North Virginia Street ROW including adjacent developments and streets that inflow onto North Virginia Street, downstream drainages, and down streets where runoff from North Virginia Street flows away. CONSULTANT has assumed six, one-day site visits for an engineer and surveyor.
3. CONSULTANT will review and revise proposed drainage basins and basin characteristics to reflect changes in the roadway design including but not limited to percent impervious, basin slope, typical sections, time of concentration, etc. Revise basins outside of the ROW that directly flow onto North Virginia Street including hillsides and runoff from adjacent developments. The 30% drainage basins assumed a single typical section (2' gutter width, 4 x 11' travel lanes, 12' median/left turn lane, and 2' gutter width = 60' total width). These basins were assumed to be 100% impervious and follow the same drainage and roadway slopes as the existing roadway.
4. CONSULTANT will review and revise proposed stormwater infrastructure locations surrounding intersection locations. Not all intersections are anticipated to be designed with valley gutters to convey stormwater downstream along project corridor. CONSULTANT will verify that proposed gutter flows leaving the project corridor and entering other streets do not create any flood hazards. CONSULTANT will incorporate additional inlets as needed to reduce gutter flows similar to existing conditions, to the extent practicable. CONSULTANT has assumed seven intersections where there is potential for runoff to spill away from the corridor.
5. CONSULTANT will evaluate different stormwater inlets to improve interception efficiencies to help eliminate the amount of storm drain infrastructure along the project corridor. Various inlets to be reviewed include but not limited to slotted drain inlets, sweeper combination inlets, curb cuts, and depressed inlets, curb offsets, and additional road design features.
6. CONSULTANT will revise the proposed storm drain models to reflect all changes discussed below. Bullet point 5 will require discussion with City of Reno to gain approval for this approach.
 - 1) Incorporate more detail in both the existing and proposed model for areas outside the North Virginia Street ROW including adjacent developments and streets that inflow onto North Virginia Street, downstream drainages, and down streets where runoff from

- North Virginia Street flows away. Model updates will incorporate gutter flows paths, inlets, and storm drain systems
- 2) Incorporate detention and retention ponds and the corresponding pond outfall structures into the model
 - 3) Uphill side drainages/culverts and ditches will be added into the model to reflect the current roadway design
 - 4) All proposed catch basins are planned to be spaced using the rational method
 - 5) The SCS TR-55 method will be used to evaluate runoff and size trunk lines within the Storm and Sanitary Analysis stormwater modeling framework
 - a) Several representative drainage basins and pieces infrastructure will be selected, and flow rates will be compared to the rational method as a reasonable design check
 - b) TMRDM states within Section 304.3 "All storm drain pipe systems with a contributing area of less than or equal to 100 acres shall be designed using the rational formula. Any exceptions to these procedures must be approved by the public works department of the appropriate jurisdictional entity prior to their submittal to the local jurisdiction."
7. CONSULTANT will analyze any impacts downstream of the storm drain outlets, culvert upsizing, and proposed storm drain ponds to minimize possible flood risk or issues downstream of project. This discussion and analysis will be added to the design report. This includes seven locations where North Virginia St stormwater is anticipated to be discharged, fifteen locations where culverts may be upsized, and any down streets where runoff from North Virginia Street flows away.
8. CONSULTANT will evaluate culvert hydraulics and define changes in performance due to culvert extensions, lining, replacement, and upsizing. This includes looking at impacts to detention ponds, and downstream stormwater facilities. CONSULTANT has assumed 22 different culverts will be assessed.
9. CONSULTANT will size the proposed detention and/or retention ponds as well as the outlet structures of the ponds. This discussion and analysis will be added to the design report. The following steps will be taken to perform this task:
- 1) Verify detention and retention requirements. Size retention to meet Swan Lake 100-year, 10-day storm collection with no net increase allowed
 - 2) Analyze any potential downstream impacts
 - 3) Infiltration tests will be performed at the proposed retention basin location shown on the 30% plans.
 - 4) Tests should be performed at same elevation as basin floor
 - 5) Preliminary grading of the ponds with site constraints
 - 6) Design and provide outlet stabilization calculations and verify material selection at all proposed storm drain outlets
 - 7) Implement water quality design features by using upstream inline mechanical treatment or treatment at the proposed pond locations to satisfy the City of Reno Public Works Design Manual
10. CONSULTANT will provide cross sectional analysis of all major conveyance ditches created for the project to verify adequate flow depths and provide channel lining stability analysis to ensure ditches will not erode.

11. CONSULTANT will coordinate with the design team and work collaboratively on the following:
 - 1) Intersection catch basin locations
 - 2) Catch basin inlet design alternatives (e.g. curb cuts)
 - 3) Culvert design and performance
 - 4) Adjusting low points in curb lines at the intersections
 - 5) Review preliminary storm drain layout and redesign to eliminate utilities conflicts.
Update model as needed and verify hydraulic performance
12. CONSULTANT will create additional maps to supplement the hydraulic and hydrologic modeling efforts.
13. CONSULTANT will improve discussion about culverts along the project corridor.
14. CONSULTANT will discuss and consider phasing of the proposed project and how it will affect our approach to retention storage.
15. CONSULTANT will perform a quality control review on the hydraulic modeling, hydraulics report, and construction plan and specifications.

B. Assumptions:

1. DOWL will follow and utilize methodologies listed in the TMRDM, City of Reno Design Manual, and the NDOT Drainage Manual as applicable and necessary.

C. Deliverables:

1. Final technical drainage report per TMRDM, City of Reno Design Manual, and the NDOT Drainage Manual.

A1.05 *Phase 19 - Environmental Permitting Phase*

- A. Biological and Aquatic Resources. CONSULTANT will research the project area for natural resources, including sensitive or protected vegetation and wildlife, as well as aquatic resources. CONSULTANT will consult with regulatory agencies as appropriate such as the U.S. Fish and Wildlife Service, Nevada Department of Wildlife, and the Nevada Division of Natural Heritage to obtain lists of sensitive or protected plant or animal species (e.g., threatened and endangered) that may be found within the project area and known biological information.

CONSULTANT will conduct a survey for general habitats and vegetation as well as noxious weeds by systematically walking the survey area and collecting GPS points and photographs of observed conditions and resources. CONSULTANT will document the habitat types including the primary vegetative species and any sensitive plant species encountered, as well as document any observed wildlife, including migratory birds, direct observation, or sign. Noxious weed occurrences within the survey area will also be documented. An aquatic resource delineation will be completed by a subcontractor who will develop an Aquatic Resources Delineation Report to the U.S. Army Corps of Engineers (USACE) Sacramento District standards.

- B. Cultural Resources Desktop Review. A Cultural Resources Class I desktop review will be completed by a subcontractor that will consist of a review of archival records maintained by the Nevada Cultural

Resources Information System (NVCRIS) records. Additional information requested from the State Historic Preservation Office (SHPO) will include GIS shapefiles of previous archaeological and architectural inventories and resources, nation Register listed properties, and records pertinent to resources with a 0.5-mile buffer of the project area. Results of the records search will be compiled into site and inventory tables. Concurrent with the search of records at SHPO, a search of historic documents including GLO plats and historic maps available on-line and at various repositories in order to identify historic features, including roads and trails that may be present on the landscape. Following the record search, a letter report summarizing findings and potential for encountering cultural resources will be prepared.

C. Environmental Permits. CONSULTANT will develop permit applications for the following environmental permits:

1. USACE Nationwide Permit and 401 Water Quality Permit (if determined applicable following the aquatic resource delineation)
2. Nevada Division of Environmental Protection Temporary Working in Waterways
3. County Special Use Permit

D. Deliverables. The following will be delivered under this task:

1. Permit applications
2. Biological Survey Report
3. Aquatic Resource Delineation Report
4. Cultural Resource Class I Inventory Report

E. Assumptions. The following assumptions apply:

1. RTC will pay all permit application fees.
2. The survey area includes a 75-foot buffer of the grading limits available at time of proposal. The biological and aquatic resources will be completed in one 10-hour field day. A total of seven wetlands and fourteen drainages are anticipated with the survey area based on review of available desktop information (National Hydrography Data and National Wetland Inventory).
3. No species-specific surveys are needed for the project.
4. A cultural resource desktop review will be sufficient for the scope of work and a cultural resource pedestrian survey will not be needed.
5. If there are aquatic resources within the project area under the USACE's jurisdiction and a USACE Section 404 Clean Water Act permit is needed, a nationwide permit (e.g. 14 for linear transportation projects) will apply to the project and an individual permit will not be required.
6. The construction contractor will obtain the following environmental permits: Dust Control Permit, Construction Stormwater General Permit (NVR100000).

7. Development of environmental plans for construction, such as a noxious weed control plan, or pre-construction surveys, such as for migratory birds and noxious weeds, are not included in the scope.
8. The project does not include federal funding that would trigger compliance with the National Environmental Policy Act.

A1.06 *Phase 20 - Preliminary Design Finalization Phase*

- A. Access Management Evaluation and Recommendations. CONSULTANT will prepare roll plot exhibit displaying access spacing and spacing standards. Recommendations for removal of access points and consolidation of access points will be shown. It is assumed that no private property improvements will be required.
- B. Typical Section Setting. CONSULTANT will prepare alternative typical sections with varying travel lane widths and evaluate impacts to corridor. Impact evaluation will be limited to a general summary of impacts to right-of-way, utilities and construction cost.
- C. Storm Drain System Setting. CONSULTANT will prepare alternative drainage concepts in an effort to minimize number and length of catch basins and storm drains along the project corridor. Concepts may include, but not be limited to, bio-swales between curb and sidewalk, bulb in curb inlets and high capacity inlets. Exhibits will be prepared that detail potential designs for the feasible alternative drainage concepts. Setting will be intended for discussion with RTC and City of Reno and will include an evaluation of hydraulic and cost impacts.
- D. Retention/Detention Basin Setting. CONSULTANT will develop concept grading plans for the retention and detention basins that are required for the project. This will be a collaborative effort with the City of Reno to ensure the layouts are consistent with the City's vision and are accepted by M&O staff for maintenance access and operations. Right-of-way impacts will be considered and evaluated as part of this effort.
- E. Culvert and Basin Access Road Setting. CONSULTANT will develop concept designs for access roads to all culvert inlets/outlets and basins per City of Reno standards for maintenance access roads. Layouts will show retaining walls that may be necessary and right-of-way impacts. This will be a collaborative effort with the City of Reno to ensure the layouts are consistent with the City's vision and are accepted by M&O staff for maintenance access and operations.
- F. Right-of-Way Value Engineering. The 30% design will be used to evaluate each right-of-way acquisition area. Right-of-way acquisitions will be evaluated based on land values provided by RTC and private property impacts and compared with avoidance measures such as retaining walls, steepened slopes or other methods to avoid right-of-way acquisition. CONSULTANT will prepare exhibits and cost summaries for each acquisition area for discussion with RTC and City of Reno.
- G. CONSULTANT will attend a comment resolution meeting with City of Reno and RTC to discuss the preliminary design recommendations to receive concurrence on the design approach for the 60% design.
- H. Deliverables. The following will be delivered under this task:
 1. Access Evaluation Roll Plot

2. Preliminary Typical Sections and Impact Summary (Right-of-Way and Cost)
3. Concept Drainage Inlet Alternatives (Plan Exhibits and Cost Comparison)
4. Concept Detention/Retention Basin Layouts
5. Concept Culvert and Basin Access Road Layouts
6. Right-of-Way Value Engineering Evaluation (Plan Exhibits and Cost Comparison)

I. Assumptions:

1. RTC and City of Reno will provide review comments on the deliverables no later than 30 days after receipt.
2. Resolution of preliminary design is expected to occur during comment resolution meeting with RTC and City of Reno.

A1.07 Phase 21 - Right-of-Way Engineering and Supplemental Survey

- A. CONSULTANT shall identify the limits of additional fee right-of-way, permanent easements (PE), and temporary construction easements (TE) required to construct the proposed improvements.
- B. CONSULTANT shall prepare 60% design right-of-way setting exhibit and a right-of-way setting memo describing the rights that are needed for the project, as detailed on the right-of-way setting exhibit. It is assumed that two (2) right-of-way setting meetings will be required, initial and final resolution meeting. CONSULTANT will coordinate and attend each meeting with RTC and City of Reno. Right-of-way Setting memo and exhibit shall be reviewed and approved by RTC and City of Reno. From the approved right-of-way setting the CONSULTANT shall provide mapping and legal descriptions for needed fee, PE's and TE's. Up to eighty (80) legal descriptions and exhibits for permanent and temporary acquisitions are assumed necessary. Additional descriptions and exhibits will be billed to the design contingency task.
- C. CONSULTANT will provide permission to construct (PTC) exhibits for each driveway being replaced that extends beyond right-of-way for RTC use. Up to sixty (60) exhibits will be prepared. It is assumed that RTC will provide the PTC document to accompany the exhibit and coordinate with the property owners. Additional exhibits will be billed to the design contingency task.
- D. CONSULTANT will provide topographic survey and mapping for up to four (4) railroad crossings outside of the project limits. This work is required to support the rail crossing improvements that are required as mitigation for the widening at the rail crossing east of Golden Valley Road on North Virginia Street.
- E. CONSULTANT will provide supplemental topographic survey and mapping for new improvements constructed within the project limits since the original design survey was completed in 2024. This work is required for new developments that are anticipated to be completed prior to final design.
- F. Deliverables:
 1. Legal descriptions and exhibits for permanent easements, temporary easements and fee acquisitions.

2. Exhibits for permission to construct (PTC).
3. Right-of-way setting memorandum and plan exhibits. This will include a preliminary draft, final draft, and final deliverable.
4. Topographic mapping in CAD format for use in design.
5. Title reports for each property requiring a permanent fee or easement acquisition. It is assumed up to forty (40) reports will be required.

G. Assumptions. The following assumptions apply:

1. RTC will prepare appraisals and deed or easement documents, and complete negotiations with property owners.

A1.08 Phase 22-24 - Final Design Phase (60%, 90% and Final Design)

- A. CONSULTANT will attend internal design team meetings, review reports, and provide design coordination between disciplines.
- B. CONSULTANT will organize review comment reconciliation meetings with the RTC, City of Reno, utility companies, and other agencies, as necessary following receipt of comments on the 60% and 90% submittals. Ten (10) CONSULTANT and subconsultant team members are anticipated to attend the comment reconciliation meetings. The agreed upon revisions will be incorporated into the plans, specifications, and estimate allowing the CONSULTANT to advance the plans, specifications and engineer's estimate to the next phase. It is assumed that no comments will be made on the 100% submittal. The submittal reviews by RTC, City of Reno, utility companies, and other agencies will be limited to confirm that all 60% and 90% submittal comments have been addressed.
- C. Final Plans and Specifications:
 1. 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 documents on disk in MS Word format. The Contract Documents and Technical Specifications will reference the 2012 edition, revision no. 8, 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.
 2. The final construction plans will be on 22" x 34" size sheets (1"=20') and will show all elements of the project construction, including plan/profile view, right-of-way lines, typical sections and construction/slope limits. The final plan set will include, as a minimum:
 - a. Cover Sheet
 - b. General Notes, Legend, and Abbreviations
 - c. Sheet Index
 - d. Sheet Layout, Survey and Alignment Control

- Layout of sheets
 - Alignment Information including horizontal curve data, bearings, distances
 - Survey Control
- e. Typical Section Sheets
- Proposed improvement typical sections for North Virginia Street, Stead Boulevard, Lemmon Drive and Golden Vally Road
 - Minimum and maximum roadway widths and lane configurations
 - Roadside designs (slopes, curbs, gutters, dikes, ditches and traffic barriers)
 - Proposed pedestrian and bicycle improvements
 - Removal limits
 - Pavement structural section depths
- f. Removal Sheets
- Two stacked plan view windows
 - Roadway feature removal limits
 - Existing ground contours at 1' interval
- g. Roadway – Plan and Profile Sheets
- Plan view over profile view stacked window layout
 - Station and offsets for angle points, tapers, and curves
 - Locations for curbs, gutters, and sidewalk
 - Road and right-of-way widths
 - Cut and fill slope limits
 - Vertical grade and curve data
 - Superelevation Diagrams
- h. Drainage – Storm Drain Mains, Catch Basin Laterals and Side Street Culverts, and Cross Culverts Plan and Profile Sheets
- Plan view over pipe profile view stacked window layout
 - Existing and proposed drainage facilities

- Drainage Removals
 - Proposed Drainage Structures/Pipes/Ditches
 - HGL noted on storm drain mains
 - Existing utilities shown in plan view
 - Locations of utility crossings in pipe profile view
 - Proposed ground contours at 1' interval
 - Existing ground contours at 1' interval
- i. Striping /Signing Sheets
- Two stacked plan view windows
 - Proposed striping showing lane arrangements including turn lanes, storage lengths, acceleration lanes, and deceleration lanes
 - Lane widths
 - Existing Sign Removals
 - Proposed Signs
- j. Traffic Signal Sheets
- Traffic signal modification design for three (3) intersections, which are N. Virginia Street/Lemmon Drive, N. Virginia Street/Golden Valley Road, and N. Virginia Street/US 395 Business/Panther Drive.
 - Pedestrian Hybrid Beacon (PHB) or Rectangular Rapid Flashing Beacon (RRFB) systems at up to six (6) locations
- k. Fiber Optic Interconnect Sheets
- Fiber optic interconnect conduit and pull boxes (Stead to Panther) per RTC standards
- l. Railroad Crossing Sheets
- 4 proposed safety improvement drawings at offsite locations as part of mitigation for widening at the railroad crossing east of Golden Valley Road. One for each location that were identified in the 30% design submittal for the roadway. Drawings will include rail alignments, railroad warning devices, property line's locations, and railroad dimensions and mileposts.

- 2 crossings located within the roadway corridor near Stead Boulevard and Golden Valley Road that are impacted by the road design. Drawings will include rail alignments, railroad warning devices, property line's locations, and railroad dimensions and mileposts.

m. Lighting and/or Electrical Sheets

- Electrical design will include any required new street and pathway lighting, relocating, and/or removing the existing street lighting, electrical service points for lighting, signalized intersections, and pedestrian beacons. Pathway lighting options will be prepared for RTC and City of Reno selection and approval prior to 60% design.
- Photometrics for corridor and intersection lighting.

n. Special Structural and Retaining Wall Details

- Wall plan and profile, cross sections and special structural details for PCC, segmental and soil nail walls
- Wall plan and profile only for MSE walls

o. Details

- Special details for roadway improvements, pedestrian ramps, driveways, approaches and drainage
- City of Reno Standard Details Being Used on the Project

3. Exclusions from plans:

- a. Cross Sections along the alignment will not be included in the plans or provided to the agency(s)
- b. No public art or landscape design is included
- c. No soundwalls are required for the project
- d. Utility specific generated design (water, gas, power, communications, etc.), as necessary resulting from utility conflicts, will not be prepared and are assumed the responsibility of the owning utility.
- e. For this scope of work, it is assumed that all existing cross culverts will be extended and lined, removal and replacement will not be required. Further field investigations (potholing, CCTV), hydraulic modeling, and review of upstream and downstream impacts will be required. If it is determined during design that upsizing a culvert is required (including removal and replacement), then the project design contingency (Task A1.12) will be utilized to complete the design.

- f. Site reconstruct plans for adjacent properties will not be prepared. The contract documents will include specifications and standards for contractor to repair and restore existing improvements impacted by the contractor's work
 - g. No landscape and aesthetic design for remediation of impacts to adjacent private parcels is included. The contract documents will include specifications and standards for contractor to repair and restore existing landscaping impacted by the contractor's work.
 - 4. 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, Local Entity, utility agencies and other affected parties for review at the 60%, 90% and 100% stages of completion per the following:
 - a. 60% & 90% Plans – 22"x34" .pdf set to RTC, Local Entity and each utility agency or other affected parties.
 - b. 90% Specifications and Special Provisions – .pdf and word document to RTC and Local Entity.
 - c. 100% Plans – 22"x34" .pdf set to RTC, Local Entity and each utility agency or other affected parties.
 - d. 100% Specifications and Special Provisions – .pdf and word document to RTC and Local Entity.
 - e. Final Working Plan Set – One 22"x34" set to RTC, one 11"x17" set each to RTC and Local Entity.
 - f. Final Working Specification Document – One set each to RTC and Local Entity, one copy in MS Word format of the Contract Documents and Technical Specifications to RTC.
- D. CONSULTANT will coordinate with NV Energy and prepare applications and required calculations for new services to support corridor lighting and signals. It is assumed that all fees required by NV Energy will be paid by RTC.
- E. CONSULTANT will coordinate with NDOT and prepare applications and required documentation for the signal and roadway modifications at N Virginia/US 395 Business/Panther Dr. This effort will include preparing colored plans as required by NDOT District 2 permits. It is assumed that all fees required by NDOT will be paid by RTC.
- F. CONSULTANT will oversee all submissions with UPRR, including PE agreements, submitting plans as well as utility crossing applications. Horrocks will compile an application for utilities and upload it to UPRR's online utility crossing portal. It is assumed that all fees required by UPRR will be paid by RTC.
- G. CONSULTANT will coordinate and attend one virtual pre-diagnostic meeting, one on-site diagnostic, perform railroad coordination, and update crossing plans based on comments from the diagnostic team. It is assumed that the pre-diagnostic meeting and on-site diagnostic meeting will

cover all crossings related to the Project. It is assumed the on-site diagnostic meeting will be held in conjunction with the 25% plan review with UPRR, otherwise a contract mod for scope, schedule, and fee may be required and will be negotiated through the design contingency task to cover any additional on-site meetings. Additional virtual meetings are included if deemed necessary.

- H. Design Deviation Report. CONSULTANT will prepare a list of any design exceptions identifying station limits, standards, and potential mitigation measures at the 60% submittal. Design exceptions shall be approved by City of Reno prior to development of 90% design. CONSULTANT will include these exceptions in a design technical memorandum for the 60% and 90% submittals that also summarizes the major design components, design decisions, assumptions, and items requiring further discussion with RTC and City of Reno.
- I. Engineer's Opinion of Probable Construction Costs and Time. CONSULTANT will provide an Engineer's opinion of probable construction costs for the project based on the level of design and any alternatives or options. The cost opinion will be in the same format as the bid proposal form included in the contract documents. A quality control review of the cost opinion will be performed by the CONSULTANT. The CONSULTANT will also estimate the number of working or calendar days, as appropriate, for the construction of the project. The estimate of contract time will cover major items of work, such as earthwork, utility relocations, storm drain, concrete, paving and signals. This deliverable will be provided at the 60%, 90% and 100% design milestones.
- J. CONSULTANT will assist the RTC with documenting quantities and costs associated with City of Reno betterment requests.
- K. Constructability Review, Independent Cost Estimate and Construction Schedule
 - 1. Subconsultant Pre-Construction Services Group (PCSG) will provide a constructability review of the 60% design plans. A constructability meeting with the RTC, City of Reno, PCSG, and CONSULTANT will summarize results from the constructability review and identify possible value engineering design alternatives.
 - 2. PCSG will provide an independent cost estimate (ICE) based on material unit takeoffs at the 60%, 90% and 100% milestones. The Engineer's Opinion of Probable Cost will be reconciled with the ICE prior to submittal to the RTC at each major milestone.
 - 3. PCSG will provide a preliminary construction schedule based on the 60%, 90% and 100% design and quantities.
- L. Quality Assurance / Quality Control. CONSULTANT will perform quality assurance / quality control on all plans and documents as outlined in the Quality Management Plan described in the Project Management phase.
- M. CONSULTANT will prepare a comment resolution matrix with the 90% and 100% submittals that addresses comments received on the 60% and 90% submittals. Responses will be noted as A (no further action, designer will comply), B (designer to re-evaluate), or D (designer will not comply).
- N. CONSULTANT will provide a design technical memorandum for the 60% and 90% submittals that summarizes the major design components, design decisions, assumptions, and items requiring further discussion with RTC and City of Reno.

O. Assumptions: The following assumptions apply:

1. Only one bid package is included. Multiple bid packages in excess of one will be billed to the design contingency task.
2. Structural design for MSE walls is not included. Structural design for MSE walls is dependent on selected and approved wall system. Design will include plan and profile views where MSE walls are specified.

A1.09 *Phase 25 - Design Contingency Phase (Optional)*

- A. Design Contingency. This is a contingency for miscellaneous increases within the scope of this contract related to design and right-of-way services. 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. Anticipated tasks include, but are not limited to, additional utility potholing, developing multiple bid packages, and right-of-way engineering beyond the stated assumption. Additional potholing is limited to 90 potholes. It is understood and agreed to that the pothole contractor will not expose all existing utilities that are in potential conflict with the proposed improvements. This will leave some verification of existing utilities to be completed during Construction, which may result in design changes.

A1.10 *Phase 26 - Bidding Services Phase*

- A. 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.
- B. Pre-bid Meeting. CONSULTANT will be available during the bidding process to answer technical questions and will organize and attend 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.
- C. Bid Opening. CONSULTANT will attend the bid opening and review the bids received for irregularities and provide a recommendation for award. CONSULTANT will tabulate bid results into a MS Excel spreadsheet and check multiplication and addition of bid items.
- D. CONSULTANT will prepared conformed plans and specifications to the RTC for use during construction.
- E. Deliverables:
1. Addenda and responses to RFIs.
 2. Bid tabulation.
- F. Assumptions: The following assumptions apply:
1. Only one bid package is included. Multiple bid packages in excess of one will be billed to the design contingency task.

A1.11 Phase 27 - Engineering Support During Construction Phase

- A. CONSULTANT will provide project management services for the scope of work of this task for the duration of construction and preparation of the Record Drawings, assumed to occur from December 2027 through November 2029, a duration of twenty-four (24) months. Project management includes task setup and administration, continued management of Subconsultants, quality assurance on deliverables, coordination with the RTC Project Manager and Construction Management Team, and task closeout.
- B. CONSULTANT will provide engineering services during construction assumed to be from December 2027 through November 2029. The CONSULTANT Project Manager will be responsible for the ongoing coordination with the RTC Project Manager and the construction management team's Construction Manager, including attending up to one-hundred and four (104) weekly construction progress meetings and as necessary, conducting field site visits to the project construction site to observe the progress and the general quality of the work.
- C. CONSULTANT will review and prepare written responses to up to fifty (50) Requests for Information (RFIs) from the Contractor for resolution of conflicts and providing clarifications or interpretations of the plans or specifications prepared by CONSULTANT. CONSULTANT will not maintain document control for the questions and responses, this will be the responsibility of the independent Construction Manager hired by the RTC.
- D. CONSULTANT will review up to fifty (50) submittals and shop drawings as requested by the construction management team to ensure accuracy and conformance with the project plans and specifications.
- E. CONSULTANT will participate in the final inspection field review and will coordinate with the construction management team regarding deficiencies to be included as part of the project punch list.
- F. Upon the Contractor achieving final project acceptance, or upon receipt of the as-built drawings from the Contractor, CONSULTANT will complete a Record Drawing set of plans accounting for all known field revisions occurring during construction. Revisions shall be shown in blue ink and shall be inserted by electronic methods. Each sheet of the plan set shall be dated and marked "RECORD DRAWING." CONSULTANT will furnish one (1) USB Drive containing images of the Record Drawings to the RTC and City of Reno. The images shall be 11" x 17" and in .tiff or .pdf format with a resolution of not less than 300 dpi.
- G. Deliverables:
 - 1. Record drawings.
- H. Assumptions: The following assumptions apply:
 - 1. The consultant selected by the RTC for construction management will handle all activities not related to design, including but not limited to, review of contractor pay requests and certified payroll, materials testing, construction staking, construction observation, weekly meeting agendas and minutes, stakeholder coordination, review of contractor supplied traffic control plans, and the general day to day activities that are generally included in construction administration of RTC projects.



A1.12 *Phase 28 - Engineering Support During Construction Contingency Phase (Optional)*

- A. Engineering Support During Construction Contingency. This is a contingency for miscellaneous increases within the scope of this contract during construction related to engineering support. 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.

PART 2 - COMPENSATION

- A. Owner shall pay Engineer for Basic Services set forth in this Exhibit A as follows:

1. A Time and Materials amount of \$6,101,705 (Not to Exceed) based on the following estimated distribution of compensation:
 - a. Phase 15 - Project Management Phase \$367,888
 - b. Phase 16 - Final Subsurface Utility Engineering Phase \$696,897
 - c. Phase 17 - Final Geotechnical Investigation Phase \$388,811
 - d. Phase 18 - Final Hydrology and Hydraulics Report Phase \$389,242
 - e. Phase 19 - Environmental Permitting Phase \$85,756
 - f. Phase 20 - Preliminary Design Finalization Phase \$291,365
 - g. Phase 21 - Right-of-Way Engineering and Supplemental Survey Phase \$507,761
 - h. Phase 22 - 60% Design Phase \$1,347,982
 - i. Phase 23 - 90% Design Phase \$1,021,505
 - j. Phase 24 - Final Design Phase \$351,395
 - k. Phase 25 - Design Contingency Phase (Optional) \$621,049
 - l. Phase 26 - Bidding Services Phase \$32,054
 - m. Phase 27 - Engineering Support During Construction Phase (Future Amendment)
 - n. Phase 28 - Construction Contingency Phase (Optional) (Future Amendment)
2. Engineer may alter the distribution of compensation between individual phases noted herein to be consistent with services actually rendered, but shall not exceed the total Not to Exceed amount unless approved in writing by the Owner.
3. The Not to Exceed amount includes compensation for Engineer's services and services of Engineer's Consultants, if any. Appropriate amounts have been incorporated in the Not to Exceed amount to account for labor, overhead, profit, and Reimbursable Expenses.

4. The portion of the Not to Exceed amount billed for Engineer's services will be based upon Engineer's estimate of the percentage of the total services actually completed during the billing period.

B. *Period of Service:* The compensation amount stipulated above is conditioned on a period of service not exceeding 21 months. This duration is through the bidding period and does not include constructed related services. If such period of service is extended, the compensation amount for Engineer's services shall be appropriately adjusted.

PART 3 – PROJECT SCHEDULE/DURATION

Milestone	Duration
RTC Board Approval	TBD
Notice to Proceed	1 week
Access Management, Right-of-Way, and Storm Drainage Evaluation and Recommendations	12 weeks
60% Design and Right-of-Way Setting	26 weeks
Agency Review (60% Design)	6 weeks
90% Design	26 weeks
Agency Review (90% Design)	6 weeks
100% Design	8 weeks
Bid Preparation and Bidding	8 weeks
Construction	Spring 2028 – Fall 2029



Project: North Valleys Virginia Street Capacity Improvements Project - Final Design Client: RTC of Washoe County Project or Contract #: RTC Project Number 0217010 5/12/2025							Prepared By: K. Karpstein Reviewed By: G. Lyman
Summary							
Phase Name	Task		Labor Subtotal		Direct Expenses Subtotal	Subconsultants	Project Totals
			Hours	Cost			
Phase 15 - Project Management	15.1	Coordination, Administration, Scheduling, Invoicing, File Management, Resource Allocation	872	\$ 213,024.00	\$ -	\$ -	\$ 213,024.00
	15.2	Bi-Weekly Project Management Meetings	65	\$ 17,997.00	\$ -	\$ -	\$ 17,997.00
	15.3	Kickoff Meetings	56	\$ 11,949.00	\$ -	\$ -	\$ 11,949.00
	15.4	Quarterly Coordination Meetings	60	\$ 13,072.50	\$ -	\$ -	\$ 13,072.50
	15.5	Miscellaneous Meetings	36	\$ 10,206.00	\$ -	\$ -	\$ 10,206.00
	15.6	Public Outreach Activities and Public Meeting	30	\$ 5,460.00	\$ 1,308.00	\$ 83,300.00	\$ 90,068.00
	15.7	Project Management Plan	36	\$ 7,686.00	\$ -	\$ -	\$ 7,686.00
	15.8	Project Quality Plan	20	\$ 3,885.00	\$ -	\$ -	\$ 3,885.00
	<input checked="" type="checkbox"/> T&M <input type="checkbox"/> Lump Sum <input type="checkbox"/> Other	Subtotal	1175	\$ 283,279.50	\$ 1,308.00	\$ 83,300.00	\$ 367,887.50
Phase 16 - Final Subsurface Utility Engineering	16.1	Utility Owner Coordination and Meetings	120	\$ 26,302.50	\$ -	\$ -	\$ 26,302.50
	16.2	Pothole Investigation (200 Total)	450	\$ 77,395.50	\$ -	\$ 463,000.00	\$ 540,395.50
	16.3	CCTV Investigation	156	\$ 27,699.00	\$ -	\$ 102,500.00	\$ 130,199.00
	<input checked="" type="checkbox"/> T&M <input type="checkbox"/> Lump Sum <input type="checkbox"/> Other	Subtotal	726	\$ 131,397.00	\$ -	\$ 565,500.00	\$ 696,897.00
Phase 17 - Final Geotechnical Investigation	17.1	Coordination and Project Management	-	\$ -	\$ -	\$ 15,120.00	\$ 15,120.00
	17.2	Permitting	-	\$ -	\$ -	\$ 1,580.00	\$ 1,580.00
	17.3	USA North	-	\$ -	\$ -	\$ 5,580.00	\$ 5,580.00
	17.4	Field Exploration	-	\$ -	\$ -	\$ 251,996.00	\$ 251,996.00
	17.5	Laboratory Testing	-	\$ -	\$ -	\$ 59,335.00	\$ 59,335.00
	17.6	Analysis and Reporting Preparation	-	\$ -	\$ -	\$ 44,310.00	\$ 44,310.00
	17.7	Design Meetings	-	\$ -	\$ -	\$ 10,890.00	\$ 10,890.00
	<input checked="" type="checkbox"/> T&M <input type="checkbox"/> Lump Sum <input type="checkbox"/> Other	Subtotal	-	\$ -	\$ -	\$ 388,811.00	\$ 388,811.00
Phase 18 - Final Hydrology and Hydraulics Report	18.1	Coordination & Discussions with City of Reno	8	\$ 1,596.00	\$ -	\$ -	\$ 1,596.00
	18.2	Site Visit, Data Collection, & Analysis	76	\$ 14,049.00	\$ 332.80	\$ -	\$ 14,381.80
	18.3	Catch Basin Inlet Spacing Final Design	180	\$ 33,747.00	\$ -	\$ -	\$ 33,747.00
	18.4	Adjust & Update Proposed Drainage Basins	195	\$ 36,193.50	\$ -	\$ -	\$ 36,193.50
	18.5	Adjust SD Infrastructure at Intersections	24	\$ 4,284.00	\$ -	\$ -	\$ 4,284.00
	18.6	Evaluate Alternative SD Capture & Conveyance Infrastructure	60	\$ 11,592.00	\$ -	\$ -	\$ 11,592.00
	18.7	Update Storm Drain Hydraulic Models	527	\$ 98,689.50	\$ -	\$ -	\$ 98,689.50
	18.8	Analyze Downstream Impacts & Flood Risk	208	\$ 39,774.00	\$ -	\$ -	\$ 39,774.00
	18.9	Evaluate Culvert Hydraulics & Impacts	176	\$ 33,033.00	\$ -	\$ -	\$ 33,033.00
	18.10	Size Ponds & Outlet Structures	240	\$ 44,940.00	\$ -	\$ -	\$ 44,940.00
	18.11	Roadside Ditch Conveyance & Stability Analysis	110	\$ 20,611.50	\$ -	\$ -	\$ 20,611.50
	18.12	Coordination with Design Team & On Design Report	52	\$ 9,534.00	\$ -	\$ -	\$ 9,534.00
	18.13	Create Additional Supplemental Maps for Hydrology & Hydraulic Modeling Efforts	48	\$ 8,736.00	\$ -	\$ -	\$ 8,736.00
	18.14	Update Technical Drainage Report	112	\$ 21,126.00	\$ -	\$ -	\$ 21,126.00



Project: North Valleys Virginia Street Capacity Improvements Project - Final Design Client: RTC of Washoe County Project or Contract #: RTC Project Number 0217010 5/12/2025							Prepared By: K. Karpstein Reviewed By: G. Lyman
Summary							
Phase Name	Task		Labor Subtotal		Direct Expenses Subtotal	Subconsultants	Project Totals
			Hours	Cost			
	18.15	Discuss Phasing within Technical Drainage Report	4	\$ 714.00	\$ -	\$ -	\$ 714.00
	18.16	Final QC & Review of Deliverables	40	\$ 10,290.00	\$ -	\$ -	\$ 10,290.00
	<input checked="" type="checkbox"/> T&M <input type="checkbox"/> Lump Sum <input type="checkbox"/> Other	Subtotal	2060	\$ 388,909.50	\$ 332.80	\$ -	\$ 389,242.30
Phase 19 - Environmental Permitting	19.1	Biological and Aquatic Resources Survey	138	\$ 20,979.00	\$ 165.00	\$ 10,976.00	\$ 32,120.00
	19.2	Cultural Resources Desktop Review	10	\$ 2,541.00	\$ -	\$ 5,000.00	\$ 7,541.00
	19.3	Environmental Permits	290	\$ 46,095.00	\$ -	\$ -	\$ 46,095.00
	<input checked="" type="checkbox"/> T&M <input type="checkbox"/> Lump Sum <input type="checkbox"/> Other	Subtotal	438	\$ 69,615.00	\$ 165.00	\$ 15,976.00	\$ 85,756.00
Phase 20 - Preliminary Design Finalization	20.1	Access Management Evaluation and Recommendations	128	\$ 21,924.00	\$ -	\$ 25,200.00	\$ 47,124.00
	20.2	Typical Section Setting	68	\$ 11,676.00	\$ -	\$ -	\$ 11,676.00
	20.3	Storm Drain System Setting	256	\$ 51,408.00	\$ -	\$ -	\$ 51,408.00
	20.4	Retention/Detention Basin Setting	204	\$ 29,337.00	\$ -	\$ -	\$ 29,337.00
	20.5	Culvert and Basin Access Road Setting	778	\$ 110,491.50	\$ -	\$ -	\$ 110,491.50
	20.6	Right-of-way Value Engineering	256	\$ 41,328.00	\$ -	\$ -	\$ 41,328.00
	<input checked="" type="checkbox"/> T&M <input type="checkbox"/> Lump Sum <input type="checkbox"/> Other	Subtotal	1690	\$ 266,164.50	\$ -	\$ 25,200.00	\$ 291,364.50
Phase 21 - Right-of-Way Engineering and Supplemental Survey	21.1	Project Management	40	\$ 9,030.00	\$ -	\$ -	\$ 9,030.00
	21.2	Survey Control	23	\$ 3,176.25	\$ 41.60	\$ -	\$ 3,217.85
	21.3	UPRR Crossing Topo	380	\$ 59,115.00	\$ 6,348.00	\$ -	\$ 65,463.00
	21.4	Corridor Supplemental Topo	940	\$ 143,010.00	\$ 208.00	\$ -	\$ 143,218.00
	21.5	Permanent Easements / Fee Acquisition (40 assumed)	560	\$ 105,840.00	\$ 40,000.00	\$ -	\$ 145,840.00
	21.6	Temporary Easements (40 assumed)	210	\$ 39,690.00	\$ -	\$ -	\$ 39,690.00
	21.7	QA/QC	160	\$ 36,120.00	\$ 208.00	\$ -	\$ 36,328.00
	21.8	PTC Exhibits	176	\$ 28,518.00	\$ -	\$ -	\$ 28,518.00
	21.9	Right-of-way Setting Memo	212	\$ 36,456.00	\$ -	\$ -	\$ 36,456.00
	<input checked="" type="checkbox"/> T&M <input type="checkbox"/> Lump Sum <input type="checkbox"/> Other	Subtotal	2701	\$ 460,955.25	\$ 46,805.60	\$ -	\$ 507,760.85
Phase 22 - 60% Design	22.1	Internal Design Coordination Meetings	110	\$ 22,365.00	\$ -	\$ -	\$ 22,365.00
	22.2	Roadway, Removals, Signage & Striping Design	2160	\$ 369,810.00	\$ 2,086.80	\$ -	\$ 371,896.80
	22.3	Storm Drain System Design	720	\$ 142,800.00	\$ 124.80	\$ -	\$ 142,924.80
	22.4	Detention/Retention Basin and Culvert Access Road Grading Design	628	\$ 91,234.50	\$ 41.60	\$ -	\$ 91,276.10
	22.5	Retaining Wall Design	488	\$ 85,344.00	\$ 41.60	\$ -	\$ 85,385.60
	22.6	Electrical Design (Corridor Lighting and Signals)	172	\$ 30,471.00	\$ 41.60	\$ 21,140.00	\$ 51,652.60
	22.7	Traffic and Ped Signal and Fiber Conduit Design (Sub)	-	\$ -	\$ -	\$ 144,050.00	\$ 144,050.00
	22.8	60% Plan Set	964	\$ 153,993.00	\$ -	\$ -	\$ 153,993.00
	22.9	60% Specifications	116	\$ 26,586.00	\$ -	\$ -	\$ 26,586.00
	22.10	60% Cost Estimate	224	\$ 37,947.00	\$ -	\$ -	\$ 37,947.00
	22.11	60% ICE and Construction Schedule (Sub)	8	\$ 2,184.00	\$ -	\$ 21,600.00	\$ 23,784.00
	22.12	QA/QC	172	\$ 46,893.00	\$ -	\$ -	\$ 46,893.00



Project: North Valleys Virginia Street Capacity Improvements Project - Final Design Client: RTC of Washoe County Project or Contract #: RTC Project Number 0217010 5/12/2025							Prepared By: K. Karpstein Reviewed By: G. Lyman
Summary							
Phase Name	Task		Labor Subtotal		Direct Expenses Subtotal	Subconsultants	Project Totals
			Hours	Cost			
	22.13	60% Submittal	24	\$ 4,284.00	\$ -	\$ -	\$ 4,284.00
	22.14	60% Review Comment Response and Resolution Meeting	108	\$ 21,378.00	\$ -	\$ -	\$ 21,378.00
	22.15	UPRR Crossing Design and Coordination (Sub)	-	\$ -	\$ -	\$ 101,600.00	\$ 101,600.00
	22.16	60% Design Report	132	\$ 21,966.00	\$ -	\$ -	\$ 21,966.00
	<input checked="" type="checkbox"/> T&M <input type="checkbox"/> Lump Sum <input type="checkbox"/> Other _____	Subtotal	6026	\$ 1,057,255.50	\$ 2,336.40	\$ 288,390.00	\$ 1,347,981.90
Phase 23 - 90% Design	23.1	Internal Design Coordination Meetings	110	\$ 21,262.50	\$ -	\$ -	\$ 21,262.50
	23.2	Roadway, Removals, Signage & Striping Design	1760	\$ 299,775.00	\$ -	\$ -	\$ 299,775.00
	23.3	Storm Drain System Design	540	\$ 107,100.00	\$ -	\$ -	\$ 107,100.00
	23.4	Detention/Retention Basin and Culvert Access Road Grading Design	438	\$ 62,643.00	\$ -	\$ -	\$ 62,643.00
	23.5	Retaining Wall Design	406	\$ 68,628.00	\$ -	\$ -	\$ 68,628.00
	23.6	Electrical Design (Corridor Lighting and Signals)	46	\$ 8,568.00	\$ -	\$ -	\$ 8,568.00
	23.7	Traffic and Ped Signal and Fiber Conduit Design (Sub)	-	\$ -	\$ -	\$ 115,320.00	\$ 115,320.00
	23.8	90% Plan Set	944	\$ 149,898.00	\$ -	\$ -	\$ 149,898.00
	23.9	90% Specifications	148	\$ 33,138.00	\$ -	\$ -	\$ 33,138.00
	23.10	90% Cost Estimate	204	\$ 34,797.00	\$ -	\$ -	\$ 34,797.00
	23.11	90% ICE and Construction Schedule (Sub)	18	\$ 3,759.00	\$ -	\$ 12,600.00	\$ 16,359.00
	23.12	QA/QC	180	\$ 48,321.00	\$ -	\$ -	\$ 48,321.00
	23.13	90% Submittal	24	\$ 4,284.00	\$ -	\$ -	\$ 4,284.00
	23.14	90% Review Comment Response and Resolution Meeting	112	\$ 21,630.00	\$ -	\$ -	\$ 21,630.00
	23.15	UPRR Crossing Design and Coordination (Sub)	-	\$ -	\$ -	\$ 14,200.00	\$ 14,200.00
	23.16	90% Design Report	94	\$ 15,582.00	\$ -	\$ -	\$ 15,582.00
	<input checked="" type="checkbox"/> T&M <input type="checkbox"/> Lump Sum <input type="checkbox"/> Other _____	Subtotal	5024	\$ 879,385.50	\$ -	\$ 142,120.00	\$ 1,021,505.50
Phase 24 - Final Design	24.1	Internal Design Coordination Meetings	44	\$ 8,505.00	\$ -	\$ -	\$ 8,505.00
	24.2	PS&E Plan Set (All disciplines)	1010	\$ 168,378.00	\$ -	\$ 67,980.00	\$ 236,358.00
	24.3	PS&E Specifications	40	\$ 8,736.00	\$ -	\$ -	\$ 8,736.00
	24.4	PS&E Cost Estimate	36	\$ 6,667.50	\$ -	\$ -	\$ 6,667.50
	24.5	PS&E ICE and Construction Schedule (Sub)	-	\$ -	\$ -	\$ 6,600.00	\$ 6,600.00
	24.6	QA/QC	176	\$ 39,417.00	\$ -	\$ -	\$ 39,417.00
	24.7	PS&E Submittal	24	\$ 4,284.00	\$ -	\$ -	\$ 4,284.00
	24.8	NDOT Permitting	100	\$ 17,178.00	\$ -	\$ 9,050.00	\$ 26,228.00
	24.9	UPRR Crossing Design and Coordination (Sub)	-	\$ -	\$ -	\$ 14,600.00	\$ 14,600.00
	<input checked="" type="checkbox"/> T&M <input type="checkbox"/> Lump Sum <input type="checkbox"/> Other _____	Subtotal	1430	\$ 253,165.50	\$ -	\$ 98,230.00	\$ 351,395.50
Phase 25 - Design Contingency (Optional)	25.1	Design Contingency	-	\$ -	\$ 400,000.00	\$ -	\$ 400,000.00
	25.2	Pothole Investigation (Additional)	204	\$ 35,049.00	\$ -	\$ 186,000.00	\$ 221,049.00
	<input checked="" type="checkbox"/> T&M <input type="checkbox"/> Lump Sum <input type="checkbox"/> Other _____	Subtotal	204	\$ 35,049.00	\$ 400,000.00	\$ 186,000.00	\$ 621,049.00
	26.1	Pre-bid Meeting	4	\$ 1,092.00	\$ -	\$ -	\$ 1,092.00



Project: North Valleys Virginia Street Capacity Improvements Project - Final Design							Prepared By:	
Client: RTC of Washoe County							K. Karpstein	
Project or Contract #: RTC Project Number 0217010							Reviewed By:	
Summary							G. Lyman	
Phase Name		Task		Labor Subtotal		Direct Expenses Subtotal	Subconsultants	Project Totals
				Hours	Cost			
Phase 26 - Bidding Services	26.2	RFIs During Bidding - Plans and Specs		86	\$ 15,729.00	\$ -	\$ 5,510.00	\$ 21,239.00
	26.3	Bid Opening and Bid Tabulation		10	\$ 2,163.00	\$ -	\$ -	\$ 2,163.00
	26.4	Conformed Plans and Specs		42	\$ 7,560.00	\$ -	\$ -	\$ 7,560.00
	<input checked="" type="checkbox"/> T&M <input type="checkbox"/> Lump Sum <input type="checkbox"/> Other _____		Subtotal	142	\$ 26,544.00	\$ -	\$ 5,510.00	\$ 32,054.00
Phase 27 - Engineering Support During Construction	27.1	Weekly Construction Meetings		-	\$ -	\$ -	\$ -	\$ -
	27.2	RFIs		-	\$ -	\$ -	\$ -	\$ -
	27.3	Submittals		-	\$ -	\$ -	\$ -	\$ -
	27.4	Project Management and Document Control		-	\$ -	\$ -	\$ -	\$ -
	27.5	As-builts		-	\$ -	\$ -	\$ -	\$ -
	27.6	Miscellaneous Meetings and Site Visits		-	\$ -	\$ -	\$ -	\$ -
	<input checked="" type="checkbox"/> T&M <input type="checkbox"/> Lump Sum <input type="checkbox"/> Other _____		Subtotal	-	\$ -	\$ -	\$ -	\$ -
Phase 28 - Construction Contingency	28.1	Construction Contingency		-	\$ -	\$ -	\$ -	\$ -
	<input checked="" type="checkbox"/> T&M <input type="checkbox"/> Lump Sum <input type="checkbox"/> Other _____		Subtotal	-	\$ -	\$ -	\$ -	\$ -
TOTAL				21616	\$ 3,851,720.25	\$ 450,947.80	\$ 1,799,037.00	\$ 6,101,705.05



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Labor



North Valleys Virginia Street Capacity Improvements Project - Final Design																														Prepared By: K. Karpstein						
Client: RTC of Washoe County																														Reviewed By: G. Lyman						
Project or Contract #: RTC Project Number 0217010																																				
5/12/2025																																				
Labor																																				
Phase Name	Task	Accounting Technician	CAD Drafter III	Technical Coordinator	Project Assistant II	Project Manager VI	Field Project Representative IV	Engineer II	Engineer I	Engineer II	Engineer II	Engineer II	Engineer IV	Engineer IV	Engineer IV	Engineer IV	Engineer V	Engineer V	Engineer VII	Engineer VIII	Engineer IX	Engineer IX	Engineer X	Senior Manager IV	GIS Manager	GIS Technician	Professional Land Surveyor IX	Professional Land Surveyor VIII	Professional Land Surveyor VIII	Survey Technician I	Survey Technician VII	Survey Technician VIII	Labor Subtotal			
		D. Blanton \$ 121/hour	A. Wolford \$ 131/hour	B. Sailer \$ 184/hour	A. Lacko \$ 131/hour	R. Cruz \$ 242/hour	Paterson / S. Cook \$ 173/hour	K. Seeger \$ 142/hour	O. Mogboyin \$ 131/hour	Z. Munoz \$ 142/hour	N. Shek \$ 142/hour	J. Boothe \$ 142/hour	E. Davis \$ 179/hour	M. Bodge \$ 179/hour	H. Pinto \$ 179/hour	T. Klein \$ 179/hour	D. Jones \$ 179/hour	A. Stodtmeister \$ 200/hour	S. Callahan \$ 200/hour	D. Oto / K. Jones \$ 221/hour	J. Trowbridge \$ 231/hour	G. Gabel \$ 257/hour	M. Phillips \$ 257/hour	K. Karpstein \$ 273/hour	G. Lyman \$ 305/hour	\$ 189/hour	\$ 110/hour	G. Nicholas \$ 226/hour	G. Saunders \$ 189/hour	K. Constantine \$ 189/hour	A. Lessenger \$ 116/hour	C. Collins \$ 147/hour	A. Haukaas \$ 163/hour	Hours	Cost	
Phase 24 - Final Design	24.5 PS&E ICE and Construction Schedule (Sub)				4								8								24			60							80	176	\$ 39,417.00			
	24.6 QA/QC				16																		8									24	\$ 4,284.00			
	24.7 PS&E Submittal																						4										100	\$ 17,178.00		
	24.8 NDOT Permitting							24			16		16		24	8				8														-	\$ -	
	24.9 UPRR Crossing Design and Coordination (Sub)																																	-	\$ -	
	Subtotal	-	184	44	28	2	-	148	100	16	84	64	76	8	144	132	-	-	28	24	60	24	46	76	60	-	-	-	2	-	-	-	80	1430	\$ 253,165.50	
Phase 25 - Design Contingency (Optional)	25.1 Design Contingency																																		-	\$ -
	25.2 Pothole Investigation (Additional)						120								30					10												36	8	204	\$ 35,049.00	
	Subtotal	-	-	-	-	-	120	-	-	-	-	-	-	30	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	36	8	204	\$ 35,049.00	
Phase 26 - Bidding Services	26.1 Pre-bid Meeting																						4											4	\$ 1,092.00	
	26.2 RFIs During Bidding - Plans and Specs							16		8	8	4			16	8			2	4	8		4	8										86	\$ 15,729.00	
	26.3 Bid Opening and Bid Tabulation				4																		6											10	\$ 2,163.00	
	26.4 Conformed Plans and Specs				4			8		4	2	2			8	4				2			8											42	\$ 7,560.00	
	Subtotal	-	-	-	8	-	-	24	-	12	10	6	-	-	24	12	-	-	2	6	8	-	4	26	-	-	-	-	-	-	-	-	-	142	\$ 26,544.00	
Phase 27 - Engineering Support During Construction	27.1 Weekly Construction Meetings																																		-	\$ -
	27.2 RFIs																																		-	\$ -
	27.3 Submittals																																		-	\$ -
	27.4 Project Management and Document Control																																		-	\$ -
	27.5 As-builts																																		-	\$ -
Phase 28 - Construction Contingency	27.6 Miscellaneous Meetings and Site Visits																																		-	\$ -
	Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -
LABOR HOUR TOTAL		32	1164	384	350	144	638	1784	1200	200	1478	858	978	52	2212	1424	1558	372	226	284	860	292	572	1391	338	20	48	200	518	770	605	551	113	21616		
LABOR COST TOTAL		\$ 3,864.00	\$ 152,775.00	\$ 70,560.00	\$ 45,937.50	\$ 34,776.00	\$ 110,533.50	\$ 252,882.00	\$ 157,500.00	\$ 28,350.00	\$ 209,506.50	\$ 121,621.50	\$ 174,573.00	\$ 9,282.00	\$ 394,842.00	\$ 254,184.00	\$ 278,103.00	\$ 74,214.00	\$ 45,087.00	\$ 62,622.00	\$ 198,660.00	\$ 75,117.00	\$ 147,147.00	\$ 379,743.00	\$ 102,921.00	\$ 3,780.00	\$ 5,292.00	\$ 45,150.00	\$ 97,902.00	\$ 145,530.00	\$ 69,877.50	\$ 80,997.00	\$ 18,390.75	\$ 3,851,720.25		

Prepared By:
K. Karpstein
Reviewed By:
G. Lyman



North Valleys Virginia Street Capacity Improvements Project - Final Design										Prepared By: K. Karpstein Reviewed By: G. Lyman					
Expenses			Client: RTC of Washoe County Project or Contract #: RTC Project Number 0217010 5/12/2025												
			Travel, Mileage, & Misc. Subtotal								Direct Expenses Subtotal	% Mark Up	Total w/ Mark Up		
			Per Diem (State)		Lodging (State)		Vehicle Miles		Travel, Mileage, & Misc. Subtotal	Supplies				*Other Expenses	
Phase Name	Task													*Other Expenses Description	
Phase 15 - Project Management	15.1	Coordination, Administration, Scheduling, Invoicing, File Management, Resource Allocation		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	15.2	Bi-Weekly Project Management Meetings		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	15.3	Kickoff Meetings		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	15.4	Quarterly Coordination Meetings		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	15.5	Miscellaneous Meetings		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	15.6	Public Outreach Activities and Public Meeting	6	\$ 480.00	6	\$ 828.00		\$ -	\$ 1,308.00			\$ 1,308.00	0%	\$ 1,308.00	
	15.7	Project Management Plan		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	15.8	Project Quality Plan		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	Subtotal		6	\$ 480.00	6	\$ 828.00	-	\$ -	\$ 1,308.00	\$ -	\$ -	\$ 1,308.00		\$ 1,308.00	
Phase 16 - Final Subsurface Utility Engineering	16.1	Utility Owner Coordination and Meetings		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	16.2	Pothole Investigation (200 Total)		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	16.3	CCTV Investigation		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	Subtotal		-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	
Phase 17 - Final Geotechnical Investigation	17.1	Coordination and Project Management		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	17.2	Permitting		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	17.3	USA North		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	17.4	Field Exploration		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	17.5	Laboratory Testing		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	17.6	Analysis and Reporting Preparation		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	17.7	Design Meetings		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	Subtotal		-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	
Phase 18 - Final Hydrology and Hydraulics Report	18.1	Coordination & Discussions with City of Reno		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	18.2	Site Visit, Data Collection, & Analysis		\$ -		\$ -	256	\$ 332.80	\$ 332.80			\$ 332.80	0%	\$ 332.80	
	18.3	Catch Basin Inlet Spacing Final Design		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	18.4	Adjust & Update Proposed Drainage Basins		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	18.5	Adjust SD Infrastructure at Intersections		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	18.6	Evaluate Alternative SD Capture & Conveyance Infrastructure		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	18.7	Update Storm Drain Hydraulic Models		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	18.8	Analyze Downstream Impacts & Flood Risk		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	18.9	Evaluate Culvert Hydraulics & Impacts		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	18.1	Size Ponds & Outlet Structures		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	18.11	Roadside Ditch Conveyance & Stability Analysis		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	18.12	Coordination with Design Team & On Design Report		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	18.13	Create Additional Supplemental Maps for Hydrology & Hydraulic Modeling Efforts		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	18.14	Update Technical Drainage Report		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	18.15	Discuss Phasing within Technical Drainage Report		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	18.16	Final QC & Review of Deliverables		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	Subtotal		-	\$ -	-	\$ -	256	\$ 332.80	\$ 332.80	\$ -	\$ -	\$ 332.80		\$ 332.80	
Phase 19 - Environmental	19.1	Biological and Aquatic Resources Survey		\$ -		\$ -	50	\$ 65.00	\$ 65.00		\$ 100.00	\$ 165.00	0%	\$ 165.00	
	19.2	Cultural Resources Desktop Review		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	



North Valleys Virginia Street Capacity Improvements Project - Final Design															
Expenses					Client: RTC of Washoe County Project or Contract #: RTC Project Number 0217010 5/12/2025							Prepared By: K. Karpstein Reviewed By: G. Lyman			
					Travel, Mileage, & Misc. Subtotal							Direct Expenses Subtotal	% Mark Up	Total w/ Mark Up	
Phase Name	Task		Per Diem (State)		Lodging (State)		Vehicle Miles		Travel, Mileage, & Misc. Subtotal	Supplies	*Other Expenses				
				Total		Total	Autos	Total	Cost						
			\$80/day	Cost	\$138/night	Cost	\$ 1.30	Cost							
Environmental Permitting	19.3	Environmental Permits		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	Subtotal		-	\$ -	-	\$ -	50	\$ 65.00	\$ 65.00	\$ -	\$ 100.00	\$ 165.00		\$ 165.00	
Phase 20 - Preliminary Design Finalization	20.1	Access Management Evaluation and Recommendations		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	20.2	Typical Section Setting		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	20.3	Storm Drain System Setting		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	20.4	Retention/Detention Basin Setting		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	20.5	Culvert and Basin Access Road Setting		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	20.6	Right-of-way Value Engineering		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	Subtotal		-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	
Phase 21 - Right of-Way Engineering and Supplemental Survey	20.1	Project Management		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	20.2	Survey Control		\$ -		\$ -	32	\$ 41.60	\$ 41.60			\$ 41.60	0%	\$ 41.60	
	20.3	UPRR Crossing Topo		\$ -		\$ -	160	\$ 208.00	\$ 208.00		\$ 6,140.00	\$ 6,348.00	0%	\$ 6,348.00	UPRR Flagging
	20.4	Corridor Supplemental Topo		\$ -		\$ -	160	\$ 208.00	\$ 208.00			\$ 208.00	0%	\$ 208.00	
	20.5	Permanent Easements / Fee Acquisition (40 assumed)		\$ -		\$ -		\$ -	\$ -		\$ 40,000.00	\$ 40,000.00	0%	\$ 40,000.00	40 Title Reports
	20.6	Temporary Easements (40 assumed)		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	7	QA/QC		\$ -		\$ -	160	\$ 208.00	\$ 208.00			\$ 208.00	0%	\$ 208.00	
	8	PTC Exhibits		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	9	Right-of-way Setting Memo		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
Subtotal		-	\$ -	-	\$ -	512	\$ 665.60	\$ 665.60	\$ -	\$ 46,140.00	\$ 46,805.60		\$ 46,805.60		
Phase 22 - 60% Design	22.1	Internal Design Coordination Meetings		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	22.2	Roadway, Removals, Signage & Striping Design	9	\$ 720.00	9	\$ 1,242.00	96	\$ 124.80	\$ 2,086.80			\$ 2,086.80	0%	\$ 2,086.80	
	22.3	Storm Drain System Design		\$ -		\$ -	96	\$ 124.80	\$ 124.80			\$ 124.80	0%	\$ 124.80	
	22.4	Detention/Retention Basin and Culvert Access Road Grading Design		\$ -		\$ -	32	\$ 41.60	\$ 41.60			\$ 41.60	0%	\$ 41.60	
	22.5	Retaining Wall Design		\$ -		\$ -	32	\$ 41.60	\$ 41.60			\$ 41.60	0%	\$ 41.60	
	22.6	Electrical Design (Corridor Lighting and Signals)		\$ -		\$ -	32	\$ 41.60	\$ 41.60			\$ 41.60	0%	\$ 41.60	
	22.7	Traffic and Ped Signal and Fiber Conduit Design (Sub)		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	22.8	60% Plan Set		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	22.9	60% Specifications		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	22.1	60% Cost Estimate		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	22.11	60% ICE and Construction Schedule (Sub)		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	22.12	QA/QC		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	22.13	60% Submittal		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	22.14	60% Review Comment Response and Resolution Meeting		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	22.15	UPRR Crossing Design and Coordination (Sub)		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	Subtotal		9	\$ 720.00	9	\$ 1,242.00	288	\$ 374.40	\$ 2,336.40	\$ -	\$ -	\$ 2,336.40		\$ 2,336.40	
	23.1	Internal Design Coordination Meetings		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	23.2	Roadway, Removals, Signage & Striping Design		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	



North Valleys Virginia Street Capacity Improvements Project - Final Design															
Expenses			Client: RTC of Washoe County Project or Contract #: RTC Project Number 0217010 5/12/2025								Prepared By: K. Karpstein Reviewed By: G. Lyman				
			Travel, Mileage, & Misc. Subtotal								Direct Expenses Subtotal	% Mark Up	Total w/ Mark Up		
			Per Diem (State)		Lodging (State)		Vehicle Miles		Travel, Mileage, & Misc. Subtotal	Supplies					*Other Expenses
				Total		Total	Autos	Total	Cost						
Phase Name	Task		\$80/day	Cost	\$138/night	Cost	\$ 1.30	Cost						*Other Expenses Description	
Phase 23 - 90% Design	23.3	Storm Drain System Design		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	23.4	Detention/Retention Basin and Culvert Access Road Grading Design		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	23.5	Retaining Wall Design		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	23.6	Electrical Design (Corridor Lighting and Signals)		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	23.7	Traffic and Ped Signal and Fiber Conduit Design (Sub)		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	23.8	90% Plan Set		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	23.9	90% Specifications		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	23.1	90% Cost Estimate		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	23.11	90% ICE and Construction Schedule (Sub)		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	23.12	QA/QC		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	23.13	90% Submittal		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	23.14	90% Review Comment Response and Resolution Meeting		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	23.15	UPRR Crossing Design and Coordination (Sub)		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	Subtotal			-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	\$ -		\$ -	
Phase 24 - Final Design	24.1	Internal Design Coordination Meetings		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	24.2	PS&E Plan Set (All disciplines)		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	24.3	PS&E Specifications		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	24.4	PS&E Cost Estimate		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	24.5	PS&E ICE and Construction Schedule (Sub)		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	24.6	QA/QC		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	24.7	PS&E Submittal		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	24.8	NDOT Permitting		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	24.9	UPRR Crossing Design and Coordination (Sub)		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	Subtotal			-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	\$ -		\$ -	
Phase 25 - Design Contingency (Optional)	25.1	Design Contingency		\$ -		\$ -		\$ -	\$ -		\$ 400,000.00	\$ 400,000.00	0%	\$ 400,000.00	
	25.2	Pothole Investigation (Additional)		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	Subtotal			-	\$ -	-	\$ -	-	\$ -	\$ -	\$ 400,000.00	\$ 400,000.00		\$ 400,000.00	
Phase 26 - Bidding Services	26.1	Pre-bid Meeting		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	26.2	RFIs During Bidding - Plans and Specs		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	26.3	Bid Opening and Bid Tabulation		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	26.4	Conformed Plans and Specs		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	Subtotal			-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	\$ -		\$ -	
Phase 27 - Engineering Support During Construction	27.1	Weekly Construction Meetings		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	27.2	RFIs		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	27.3	Submittals		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	27.4	Project Management and Document Control		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	27.5	As-builts		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	
	Subtotal			-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	\$ -		\$ -	
Phase 28 - Construction	28.1	Construction Contingency		\$ -		\$ -		\$ -	\$ -			\$ -	0%	\$ -	



Expenses		North Valleys Virginia Street Capacity Improvements Project - Final Design								Prepared By: K. Karpstein				
		Client: RTC of Washoe County								Reviewed By: G. Lyman				
		Project or Contract #: RTC Project Number 0217010												
		5/12/2025												
Phase Name	Task	Travel, Mileage, & Misc. Subtotal									Direct Expenses Subtotal	% Mark Up	Total w/ Mark Up	
		Per Diem (State)		Lodging (State)		Vehicle Miles		Travel, Mileage, & Misc. Subtotal	Supplies	*Other Expenses				
			Total		Total	Autos	Total	Cost						
		\$80/day	Cost	\$138/night	Cost	\$ 1.30	Cost							
Construction Contingency	Subtotal	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	*Other Expenses Description
EXPENSES TOTAL		15	#####	15	\$ 2,070.00	1106	\$ 1,437.80	\$ 4,707.80	\$ -	\$ 446,240.00	\$ 450,947.80		\$ 450,947.80	



Subconsultants			Project:North Valleys Virginia Street Capacity Improvements Project - Final Design Client:RTC of Washoe County Project or Contract #:RTC Project Number 0217010 5/12/2025 *See attachment for subconsultants full cost breakout									Prepared By: K. Karpstein Reviewed By: G. Lyman
Phase Name	Task		Acquatic Resources (Arcadis)	Cultural (TBD)	CME (Geotech)	GCW (Traffic)	PCSG (ICE)	Nevada Dirt Works (Field Investigation)	MJT Consulting (PI)	PI Visualization (TBD)	Horrocks (RR Crossing Design)	Subconsultants Subtotal
			Cost*	Cost*	Cost*	Cost*	Cost*	Cost*	Cost*	Cost*	Cost*	
Phase 15 - Project Management	1	Coordination, Administration, Scheduling, Invoicing, File Management, Resource Allocation										\$ -
	2	Bi-Weekly Project Management Meetings										\$ -
	3	Kickoff Meetings										\$ -
	4	Quarterly Coordination Meetings										\$ -
	5	Miscellaneous Meetings										\$ -
	6	Public Outreach Activities and Public Meeting							\$ 33,300.00	\$ 50,000.00		\$ 83,300.00
	7	Project Management Plan										\$ -
	8	Project Quality Plan										\$ -
	Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 33,300.00	\$ 50,000.00	\$ -	\$ 83,300.00
Phase 16 - Final Subsurface Utility Engineering	1	Utility Owner Coordination and Meetings										\$ -
	2	Pothole Investigation (200 Total)						\$ 463,000.00				\$ 463,000.00
	3	CCTV Investigation						\$ 102,500.00				\$ 102,500.00
	Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 565,500.00	\$ -	\$ -	\$ -	\$ 565,500.00
Phase 17 - Final Geotechnical Investigation	1	Coordination and Project Management			\$ 15,120.00							\$ 15,120.00
	2	Permitting			\$ 1,580.00							\$ 1,580.00
	3	USA North			\$ 5,580.00							\$ 5,580.00
	4	Field Exploration			\$ 251,996.00							\$ 251,996.00
	5	Laboratory Testing			\$ 59,335.00							\$ 59,335.00
	6	Analysis and Reporting Preparation			\$ 44,310.00							\$ 44,310.00
	7	Design Meetings			\$ 10,890.00							\$ 10,890.00
	Subtotal		\$ -	\$ -	\$ 388,811.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 388,811.00
Phase 18 - Final Hydrology and Hydraulics Report	1	Coordination & Discussions with City of Reno										\$ -
	2	Site Visit, Data Collection, & Analysis										\$ -
	3	Catch Basin Inlet Spacing Final Design										\$ -
	4	Adjust & Update Proposed Drainage Basins										\$ -
	5	Adjust SD Infrastructure at Intersections										\$ -
	6	Evaluate Alternative SD Capture & Conveyance Infrastructure										\$ -
	7	Update Storm Drain Hydraulic Models										\$ -
	8	Analyze Downstream Impacts & Flood Risk										\$ -
	9	Evaluate Culvert Hydraulics & Impacts										\$ -
	10	Size Ponds & Outlet Structures										\$ -
	11	Roadside Ditch Conveyance & Stability Analysis										\$ -
	12	Coordination with Design Team & On Design Report										\$ -
	13	Create Additional Supplemental Maps for Hydrology & Hydraulic Modeling Efforts										\$ -



Subconsultants			Project:North Valleys Virginia Street Capacity Improvements Project - Final Design Client:RTC of Washoe County Project or Contract #:RTC Project Number 0217010 5/12/2025 *See attachment for subconsultants full cost breakout										Prepared By: K. Karpstein Reviewed By: G. Lyman
Phase Name	Task		Acquatic Resources (Arcadis)	Cultural (TBD)	CME (Geotech)	GCW (Traffic)	PCSG (ICE)	Nevada Dirt Works (Field Investigation)	MJT Consulting (PI)	PI Visualization (TBD)	Horrocks (RR Crossing Design)	Subconsultants Subtotal	
			Cost*	Cost*	Cost*	Cost*	Cost*	Cost*	Cost*	Cost*	Cost*		Cost*
	14	Update Technical Drainage Report										\$ -	
	15	Discuss Phasing within Technical Drainage Report										\$ -	
	16	Final QC & Review of Deliverables										\$ -	
	Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Phase 19 - Environmental Permitting	1	Biological and Aquatic Resources Survey	\$ 10,976.00									\$ 10,976.00	
	2	Cultural Resources Desktop Review		\$ 5,000.00								\$ 5,000.00	
	3	Environmental Permits										\$ -	
	Subtotal		\$ 10,976.00	\$ 5,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,976.00	
Phase 20 - Preliminary Design Finalization	1	Access Management Evaluation and Recommendations				\$ 25,200.00						\$ 25,200.00	
	2	Typical Section Setting										\$ -	
	3	Storm Drain System Setting										\$ -	
	4	Retention/Detention Basin Setting										\$ -	
	5	Culvert and Basin Access Road Setting										\$ -	
	6	Right-of-way Value Engineering										\$ -	
	Subtotal		\$ -	\$ -	\$ -	\$ 25,200.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,200.00	
Phase 21 - Right-of-Way Engineering and Supplemental Survey	1	Project Management										\$ -	
	2	Survey Control										\$ -	
	3	UPRR Crossing Topo										\$ -	
	4	Corridor Supplemental Topo										\$ -	
	5	Permanent Easements / Fee Acquisition (40 assumed)										\$ -	
	6	Temporary Easements (40 assumed)										\$ -	
	7	QA/QC										\$ -	
	8	PTC Exhibits										\$ -	
	9	Right-of-way Setting Memo										\$ -	
	Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Phase 22 - 60% Design	1	Internal Design Coordination Meetings										\$ -	
	2	Roadway, Removals, Signage & Striping Design										\$ -	
	3	Storm Drain System Design										\$ -	
	4	Detention/Retention Basin and Culvert Access Road Grading Design										\$ -	
	5	Retaining Wall Design										\$ -	
	6	Electrical Design (Corridor Lighting and Signals)				\$ 21,140.00						\$ 21,140.00	
	7	Traffic and Ped Signal and Fiber Conduit Design (Sub)				\$ 144,050.00						\$ 144,050.00	
	8	60% Plan Set										\$ -	
	9	60% Specifications										\$ -	
	10	60% Cost Estimate										\$ -	



Subconsultants			Project:North Valleys Virginia Street Capacity Improvements Project - Final Design Client:RTC of Washoe County Project or Contract #:RTC Project Number 0217010 5/12/2025 *See attachment for subconsultants full cost breakout									Prepared By: K. Karpstein Reviewed By: G. Lyman
Phase Name	Task		Acquatic Resources (Arcadis)	Cultural (TBD)	CME (Geotech)	GCW (Traffic)	PCSG (ICE)	Nevada Dirt Works (Field Investigation)	MJT Consulting (PI)	PI Visualization (TBD)	Horrocks (RR Crossing Design)	Subconsultants Subtotal
			Cost*	Cost*	Cost*	Cost*	Cost*	Cost*	Cost*	Cost*	Cost*	
	11	60% ICE and Construction Schedule (Sub)					\$ 21,600.00					\$ 21,600.00
	12	QA/QC										\$ -
	13	60% Submittal										\$ -
	14	60% Review Comment Response and Resolution Meeting										\$ -
	15	UPRR Crossing Design and Coordination (Sub)								\$ 50,800.00	\$ 50,800.00	\$ 101,600.00
	Subtotal		\$ -	\$ -	\$ -	\$ 165,190.00	\$ 21,600.00	\$ -	\$ -	\$ 50,800.00	\$ 50,800.00	\$ 288,390.00
Phase 23 - 90% Design	1	Internal Design Coordination Meetings										\$ -
	2	Roadway, Removals, Signage & Striping Design										\$ -
	3	Storm Drain System Design										\$ -
	4	Detention/Retention Basin and Culvert Access Road Grading Design										\$ -
	5	Retaining Wall Design										\$ -
	6	Electrical Design (Corridor Lighting and Signals)										\$ -
	7	Traffic and Ped Signal and Fiber Conduit Design (Sub)				\$ 115,320.00						\$ 115,320.00
	8	90% Plan Set										\$ -
	9	90% Specifications										\$ -
	10	90% Cost Estimate										\$ -
	11	90% ICE and Construction Schedule (Sub)					\$ 12,600.00					\$ 12,600.00
	12	QA/QC										\$ -
	13	90% Submittal										\$ -
	14	90% Review Comment Response and Resolution Meeting										\$ -
	15	UPRR Crossing Design and Coordination (Sub)								\$ 7,100.00	\$ 7,100.00	\$ 14,200.00
	Subtotal		\$ -	\$ -	\$ -	\$ 115,320.00	\$ 12,600.00	\$ -	\$ -	\$ 7,100.00	\$ 7,100.00	\$ 142,120.00
Phase 24 - Final Design	1	Internal Design Coordination Meetings										\$ -
	2	PS&E Plan Set (All disciplines)				\$ 67,980.00						\$ 67,980.00
	3	PS&E Specifications										\$ -
	4	PS&E Cost Estimate										\$ -
	5	PS&E ICE and Construction Schedule (Sub)					\$ 6,600.00					\$ 6,600.00
	6	QA/QC										\$ -
	7	PS&E Submittal										\$ -
	8	NDOT Permitting				\$ 9,050.00						\$ 9,050.00
	9	UPRR Crossing Design and Coordination (Sub)								\$ 7,300.00	\$ 7,300.00	\$ 14,600.00
	Subtotal		\$ -	\$ -	\$ -	\$ 77,030.00	\$ 6,600.00	\$ -	\$ -	\$ 7,300.00	\$ 7,300.00	\$ 98,230.00
Phase 25 - Design Contingency	1	Design Contingency										\$ -
	2	Pothole Investigation (Additional)						\$ 186,000.00				\$ 186,000.00



Subconsultants			Project:North Valleys Virginia Street Capacity Improvements Project - Final Design Client:RTC of Washoe County Project or Contract #:RTC Project Number 0217010 5/12/2025 *See attachment for subconsultants full cost breakout									Prepared By: K. Karpstein Reviewed By: G. Lyman			
			Phase Name	Task		Acquatic Resources (Arcadis)	Cultural (TBD)	CME (Geotech)	GCW (Traffic)	PCSG (ICE)	Nevada Dirt Works (Field Investigation)	MJT Consulting (PI)	PI Visualization (TBD)	Horrocks (RR Crossing Design)	Subconsultants Subtotal
						Cost*	Cost*	Cost*	Cost*	Cost*	Cost*	Cost*	Cost*	Cost*	
Contingency (Optional)	Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 186,000.00	\$ -	\$ -	\$ -	\$ 186,000.00			
Phase 26 - Bidding Services	1	Pre-bid Meeting										\$ -			
	2	RFIs During Bidding - Plans and Specs				\$ 5,510.00						\$ 5,510.00			
	3	Bid Opening and Bid Tabulation										\$ -			
	4	Conformed Plans and Specs										\$ -			
	Subtotal		\$ -	\$ -	\$ -	\$ 5,510.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,510.00			
Phase 27 - Engineering Support During Construction	1	Weekly Construction Meetings										\$ -			
	2	RFIs										\$ -			
	3	Submittals										\$ -			
	4	Project Management and Document Control										\$ -			
	5	As-builts										\$ -			
Phase 28 - Construction Contingency	Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
	1	Construction Contingency										\$ -			
	Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
SUBCONSULTANTS TOTAL			\$ 10,976.00	\$ 5,000.00	\$ 388,811.00	\$ 388,250.00	\$ 40,800.00	\$ 751,500.00	\$ 33,300.00	\$ 115,200.00	\$ 65,200.00	\$ 1,799,037.00			



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 6/20/2025

Agenda Item: 4.4.2

To: Regional Transportation Commission

From: Michele Payne, Property Agent

SUBJECT: Resolution of Condemnation: GCS Multi LLC - Virginia Line Bus Rapid Transit Improvements Project

RECOMMENDED ACTION

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.

BACKGROUND AND DISCUSSION

The purpose of the project is to construct roadway, transit stations and safety improvements along Virginia Street between Plumb Lane and Peckham Lane. The 100% design plans for the project are complete. The project is currently scheduled to begin construction in Fall 2025.

Through an Interlocal Cooperative Agreement with the City of Reno and Washoe County dated May 24, 2023, 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 GCS Multi LLC in order to construct the Virginia Line BRT roadway improvements.

GCS Multi 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. In order to avoid potential delays to the project, staff is requesting approval of this Resolution of Condemnation to allow 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 during this process 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 25-12

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 2024 Program of Projects for the Regional Street & Highway Program, which included the Virginia Line Bus Rapid Transit Improvement Project (the “Project”); and

WHEREAS, pursuant to an Interlocal Cooperative Agreement (“ICA”) between the RTC and the City of Reno dated May 24, 2023, 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 GCS Multi, LLC.

NOW, THEREFORE, BE IT RESOLVED, that the 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 019-360-13 (the “Property Rights”). The Property Rights are depicted in the metes and bounds descriptions and design drawings 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 May 29, 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 June 20, 2025.

Alexis Hill, Chair
Regional Transportation Commission of Washoe County

Attachments

1. Exhibit “A” and “A-1” for Ptn. of APN 019-360-13 – Temporary Construction Easement

EXHIBIT A
TEMPORARY CONSTRUCTION EASEMENT
APN: 019-360-13

All that certain real property situate within a portion of the South One-Half (S 1/2) of Section Twenty-four (24), Township Nineteen (19) North, Range Nineteen (19) East, Mount Diablo Meridian, City of Reno, County of Washoe, State of Nevada, being a portion of Parcel 1 as shown on Parcel Map NO. 109, recorded October 17, 1974 as File No. 344393 in the Official Records of Washoe County, Nevada, being more particularly described as follows:

BEGINNING at the northeast corner of said Parcel 1 being the westerly right of way of South Virginia Street;

THENCE along said westerly right of way South $18^{\circ}38'40''$ East a distance of 116.86 feet to the northerly right of way of Gentry Way;

THENCE along said northerly right of way 12.62 feet along the arc of a tangent 15.00 foot radius curve to the right through a central angle of $48^{\circ}11'23''$

THENCE departing said northerly right of way the following three (3) courses and distances:

1. North $18^{\circ}38'41''$ West a distance of 86.78 feet;
2. South $71^{\circ}07'57''$ West a distance of 11.34 feet;
3. North $18^{\circ}48'12''$ West a distance of 44.10 feet to the northerly line of said Parcel 1;

THENCE along said northerly line North $81^{\circ}00'36''$ East a distance of 16.70 feet to the **POINT OF BEGINNING**.

Containing 1,117 square feet of land, more or less.

The Basis of Bearings is Nevada State Plane Coordinates NAD 83/94, West Zone. All dimensions are ground distances, combined Grid-to-Ground Factor = 1.000197939.

See Exhibit A-1 attached hereto and made a part hereof.

Prepared by:

Wood Rodgers, Inc.

1361 Corporate Blvd.

Reno, NV 89502



2/2/24

Eric C. Sage, P.L.S.
Nevada Certificate No. 23301

EXHIBIT A-1

PLAT TO ACCOMPANY

TEMPORARY CONSTRUCTION EASEMENT
(APN: 019-360-13)
BEING A PORTION OF THE S 1/2 OF SECTION 24
TOWNSHIP 19 NORTH, RANGE 19 EAST, M.D.M.
RENO WASHOE COUNTY NEVADA

APN 019-323-03
L&M FAMILY LIVING TRUST
DOC. NO. 4973199

APN 019-323-04
L&M FAMILY LIVING TRUST
DOC. NO. 4973200

LINE TABLE		
NO.	BEARING	LENGTH
L1	S18°38'40"E	116.86'
L2	N18°38'41"W	86.78'
L3	S71°07'57"W	11.34'
L4	N18°48'12"W	44.10'
L5	N81°00'36"E	16.70'

CURVE TABLE			
NO.	RADIUS	DELTA	LENGTH
C1	15.00'	48°11'23"	12.62'

APN 019-360-13
GCS MULTI LLC
DOC. NO. 5130913

TEMPORARY
CONSTRUCTION
EASEMENT
1,117 S.F.±

SOUTH VIRGINIA STREET
(PER RELINQUISHMENT DOC. 5329604)

GENTRY WAY

1" = 40'

JOB NO. 8312044
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

U:\Jobs\8312 - RTC Of Washoe County\8312044 - Virginia Line BR\Geomatics\layouts_exhibits\6-APN019-360-13\019-360-13_TCE_EX-A1.dwg 2/9/2024 10:52 AM Eric Sage



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 6/20/2025

Agenda Item: 4.4.3

To: Regional Transportation Commission

From: Michele Payne, Property Agent

SUBJECT: Resolution of Condemnation: Center Line Group LLC-Reno Series - Virginia Line Bus Rapid Transit Improvements Project

RECOMMENDED ACTION

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.

BACKGROUND AND DISCUSSION

The purpose of the project is to construct roadways, transit stations and safety improvements along Virginia Street between Plumb Lane and Peckham Lane. The 100% design plans for the project are complete. The project is currently scheduled to begin construction in Fall 2025.

Through an Interlocal Cooperative Agreement with the City of Reno and Washoe County dated May 24, 2023, 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 Center Line Group LLC-Reno Series in order to construct the Virginia Line BRT roadway improvements.

Center Line Group LLC-Reno Series 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. In order to avoid potential delays to the project, staff is requesting approval of this Resolution of Condemnation to allow 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 during this process 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 25-11

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 2024 Program of Projects for the Regional Street & Highway Program, which included the Virginia Line Bus Rapid Transit Improvement Project (the “Project”); and

WHEREAS, pursuant to an Interlocal Cooperative Agreement (“ICA”) between the RTC and the City of Reno dated May 24, 2023, 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 Centerline Group, LLC-Reno Series.

NOW, THEREFORE, BE IT RESOLVED, that RTC does hereby find:

1. That RTC needs the following property interests to construct the Project: (1) a fee simple interest in a portion of APN 019-360-15; (2) a temporary construction easement on a portion of APN 019-360-15 (collectively, the “Property Rights”). The Property Rights are depicted in the metes and bounds descriptions and design drawings 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 May 29, 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 June 20, 2025.

Alexis Hill, Chair
Regional Transportation Commission of Washoe County

Attachments

1. Exhibit “A” and “A-1” for Ptn. of APN 019-360-15 – Fee Simple
2. Exhibit “A” and “A-1” for Ptn. of APN 019-360-15 – Temporary Construction Easement

EXHIBIT A
RIGHT OF WAY ACQUISITION
APN: 019-360-15

All that certain real property situate within a portion of the South One-Half (SE 1/2) of Section Twenty-four (24), Township Nineteen (19) North, Range Nineteen (19) East, Mount Diablo Meridian, City of Reno, County of Washoe, State of Nevada, being a portion of the that particular Parcel of land as described in Deed Document No. 5262926, recorded December 28, 2021 in the Official Records of Washoe County, Nevada, being more particularly described as follows:

COMMENCING at the northeast corner of said Parcel being the westerly right of way of South Virginia Street;

THENCE along westerly right of way South 18°38'41" East a distance of 14.39 feet;

THENCE continuing along said right of way 152.33 feet along the arc of a tangent 5043.00 foot radius curve to the left through a central angle of 01°43'51" to the **POINT OF BEGINNING**;

THENCE continuing along said right of way and the northerly right of way of Isbell Road 26.70 feet along the arc of a reverse 15.00 foot radius curve to the right through a central angle of 101°59'41";

THENCE continuing along said right of way South 81°37'08" West a distance of 6.18 feet:

THENCE departing said northerly right of way the following Three (3) arcs, courses and distances:

1. North 08°12'18" West a distance of 1.87 feet;
2. North 68°13'15" East a distance of 10.19 feet;
3. 19.06 feet along the arc of a tangent 14.23 foot radius curve to the left through a central angle of 76°44'09" to the **POINT OF BEGINNING**.

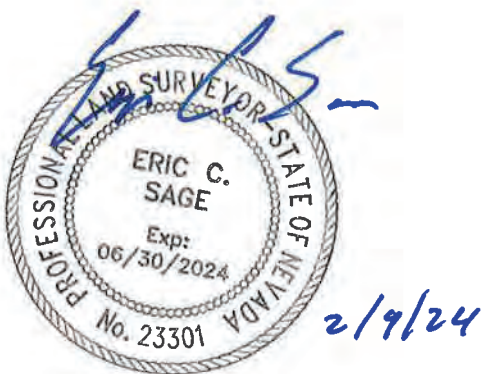
Containing 73 square feet of land, more or less.

The Basis of Bearings is Nevada State Plane Coordinates NAD 83/94, West Zone. All dimensions are ground distances, combined Grid-to-Ground Factor = 1.000197939.

See Exhibit A-1 attached hereto and made a part hereof.

Prepared by:

Wood Rodgers, Inc.
1361 Corporate Blvd.
Reno, NV 89502

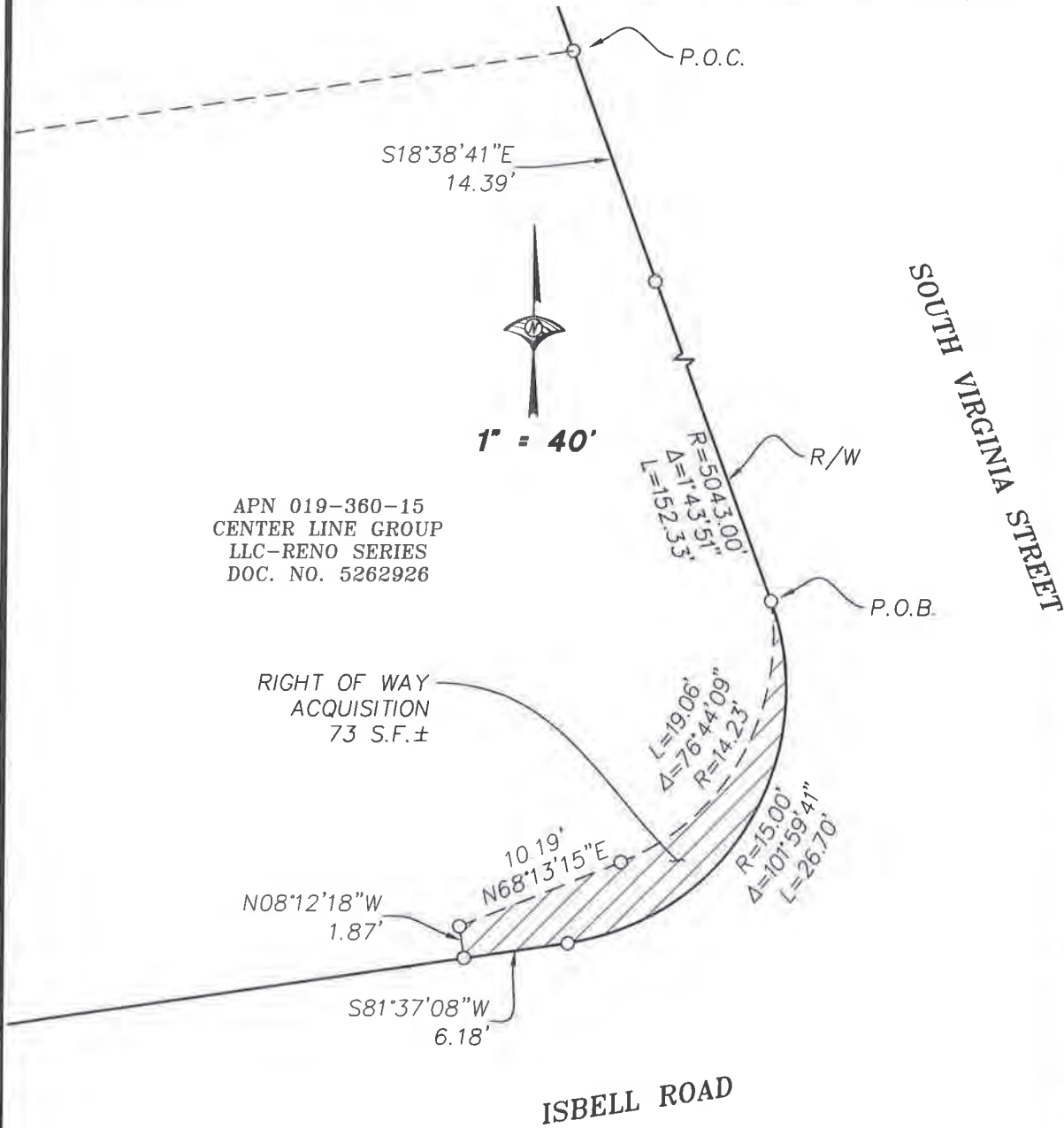


Eric C. Sage, P.L.S.
Nevada Certificate No. 23301

EXHIBIT A-1

PLAT TO ACCOMPANY

RIGHT OF WAY ACQUISITION
(APN: 019-360-15)
BEING A PORTION OF THE S 1/2 OF SECTION 24
TOWNSHIP 19 NORTH, RANGE 19 EAST, M.D.M.
RENO WASHOE COUNTY NEVADA



JOB NO. 8312044
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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EXHIBIT A
TEMPORARY CONSTRUCTION EASEMENT
APN: 019-360-15

All that certain real property situate within a portion of the South One-Half (S 1/2) of Section Twenty-four (24), Township Nineteen (19) North, Range Nineteen (19) East, Mount Diablo Meridian, City of Reno, County of Washoe, State of Nevada, being a portion of that particular Parcel of land as described in Deed Document No. 5262926, recorded December 28, 2021 in the Official Records of Washoe County, Nevada, being more particularly described as follows:

BEGINNING at the northeast corner of said Parcel being the westerly right of way of South Virginia Street;

THENCE along said westerly right of way South 18°38'41" East a distance of 14.39 feet;

THENCE continuing along said right of way 152.33 feet along the arc of a tangent 5043.00 foot radius curve to the left through a central angle of 01°43'51";

THENCE departing said right of way from a radial line which bears South 81°29'06" West, 19.06 feet along the arc of a non-tangent 14.23 foot radius curve to the right through a central angle of 76°44'09";

THENCE South 68°13'15" West a distance of 10.19 feet;

THENCE South 08°12'18" East a distance of 1.87 feet to the northerly right of way of Isbell Road;

THENCE along said northerly right of way South 81°37'08" West a distance of 4.50 feet;

THENCE departing said northerly right of way the following nine (9) arcs, courses and distances:

1. North 07°27'33" West a distance of 5.00 feet;
2. North 81°37'08" East a distance of 10.64 feet;
3. 16.44 feet along the arc of a tangent 10.00 foot radius curve to the left through a central angle of 94°10'28";
4. South 70°26'04" West a distance of 4.32 feet;
5. North 19°33'56" West a distance of 33.00 feet;
6. North 70°26'04" East a distance of 4.00 feet;
7. from a radial line which bears North 69°59'01" East, 109.56 feet along the arc of a non-tangent 5048.00 foot radius curve to the right through a central angle of 1°14'37";
8. South 71°21'19" West a distance of 6.26 feet;
9. North 18°38'41" West a distance of 27.69 feet to the northerly line of said Parcel;

THENCE along said northerly line North 81°30'46" East a distance of 11.43 feet to the **POINT OF BEGINNING**.

Containing 1,235 square feet of land, more or less.

The Basis of Bearings is Nevada State Plane Coordinates NAD 83/94, West Zone. All dimensions are ground distances, combined Grid-to-Ground Factor = 1.000197939.

See Exhibit A-1 attached hereto and made a part hereof.

Prepared by:
Wood Rodgers, Inc.
1361 Corporate Blvd.
Reno, NV 89502

Eric C. Sage, P.L.S.
Nevada Certificate No. 23301

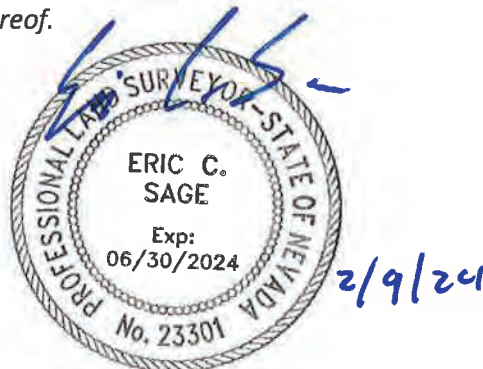


EXHIBIT A-1

PLAT TO ACCOMPANY

TEMPORARY CONSTRUCTION EASEMENT
(APN: 019-360-15)
BEING A PORTION OF THE S 1/2 OF SECTION 24
TOWNSHIP 19 NORTH, RANGE 19 EAST, M.D.M.
RENO WASHOE COUNTY NEVADA

APN 019-360-25
SARONIC INVESTMENTS LLC
DOC. NO. 4571962

LINE TABLE		
NO.	BEARING	LENGTH
L1	S18°38'41"E	14.39'
L2	S68°13'15"W	10.19'
L3	S8°12'18"E	1.87'
L4	S81°37'08"W	4.50'
L5	N7°27'33"W	5.00'
L6	N81°37'08"E	10.64'
L7	S70°26'04"W	4.32'
L8	N19°33'56"W	33.00'
L9	N70°26'04"E	4.00'
L10	S71°21'19"W	6.26'
L11	N18°38'41"W	27.69'
L12	N81°30'46"E	11.43'

CURVE TABLE			
NO.	RADIUS	DELTA	LENGTH
C1	5043.00'	1°43'51"	152.33'
C2	14.23'	76°44'09"	19.06'
C3	10.00'	94°10'28"	16.44'
C4	5048.00'	1°14'37"	109.56'

1" = 40'

APN 019-360-15
CENTER LINE GROUP
LLC-RENO SERIES
DOC. NO. 5262926

ISBELL ROAD

APN 019-373-8
WESTERN FINANCIAL LLC
DOC. NO. 4504590

SOUTH VIRGINIA STREET
(PER RELINQUISHMENT DOC. 3326904)

R/W

TEMPORARY CONSTRUCTION EASEMENT
1,235 S.F.±

N69°59'01"E(R)

S81°29'06"W(R)



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1361 Corporate Blvd
Reno, NV 89502

Tel 775.823.4068
Fax 775.823.4066

JOB NO. 8312044
SHEET 1 OF 1

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REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 6/20/2025

Agenda Item: 4.4.4

To: Regional Transportation Commission

From: Dale Keller, Director of Engineering

SUBJECT: Settlement Agreement - Mill Street Capacity and Safety Project

RECOMMENDED ACTION

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.

BACKGROUND AND DISCUSSION

RTC is acquiring property from ZRA Enterprises, Ltd. for the Mill Street Capacity and Safety Project through the exercise of eminent domain. RTC filed a complaint in eminent domain to acquire APN: 013-082-10, a portion of APN: 013-082-14, and a temporary construction easement. The case is set for trial before the Second Judicial District Court (Case No. CV24-01399). As part of the property acquisition process, RTC also provided relocation assistance to Robert Allen Pools & Spas, Inc. as a commercial tenant that was displaced by the property acquisition.

The three parties have negotiated the attached settlement agreement. The settlement will resolve all existing or potential litigation and claims related to RTC's acquisition of the property, including Case No. CV24-01399. If the Board approves the settlement, RTC will deposit an additional \$485,000 with the Court which would be in addition to the \$1,437,960 that RTC already deposited. RTC and ZRA Enterprises, Ltd., will stipulate to a Final Order of Condemnation and Judgement to be entered by the Court. The three parties will release all claims against each other.

RTC Management Policies P-55 (Real Property Acquisition) and P-57 (Settlement Authority) both require Board approval of settlements in excess of \$50,000. If the Board approves the settlement, the Executive Director will execute the settlement agreement.

FISCAL IMPACT

The cost of the settlement is included in the FY 2026 budget.

PREVIOUS BOARD ACTION

5/17/2024 Approved a Resolution of Condemnation authorizing RTC's legal counsel to commence condemnation proceedings to acquire a fee simple interest in the entirety of APN 013-082-10, a fee simple interest in a portion of APN 013-082-14, and a temporary construction easement on a portion of APN 013-082-14 from ZRA Enterprises LTD, which are needed to construct the Mill Street Capacity and Safety project.

SETTLEMENT AGREEMENT

This Settlement Agreement (“Agreement”) is entered into by and between ZRA Enterprises Ltd. (“ZRA”), Robert Allen Pools & Spas, Inc. (“RAPS”), and the Regional Transportation Commission of Washoe County (“RTC”). ZRA, RAPS, and RTC are sometimes referred to collectively herein as the “Parties” and individually as a “Party.”

WHEREAS, RTC is acquiring certain real property interests from ZRA through the exercise of RTC’s power of eminent domain for the Mill Street Capacity and Safety Project (the “Project”);

WHEREAS, RTC filed a Verified Complaint in Eminent Domain to acquire from ZRA the following real property interests: (1) in fee, APN 013-082-10; (2) in fee, a portion of APN 013-082-14; and (3) a temporary construction easement on APN 013-082-14. The case is set for trial before the Second Judicial District Court (Case No. CV24-01399);

WHEREAS, RAPS is a commercial tenant that was displaced by RTC’s acquisition of the property from ZRA and RTC has provided relocation assistance to RAPS as required by Chapter 342 of the Nevada Revised Statutes and RTC policy adopted pursuant thereto;

WHEREAS, without admission of fault or liability on the part of any Party, the Parties have negotiated this Agreement to resolve any and all existing and potential claims and litigation related to the Project and the amounts that ZRA and RAPS may or may not be entitled to under applicable law.

NOW THEREFORE, for and in consideration of the terms and conditions set forth herein, the Parties hereby agree as follows:

1. Incorporation. The foregoing recitals are true and correct and incorporated herein by reference.

2. Settlement Amount. RTC will pay ZRA the total sum of \$1,922,960. Of this total amount, RTC has already deposited \$1,437,960 with the Clerk of the Court in Case No. CV24-01399 and ZRA has already withdrawn and received that amount. Upon the filing of the Stipulation for Entry of Final Order of Condemnation and Judgment as set forth in Paragraph 4 below, RTC will deposit an additional \$485,000 (the “Settlement Amount”) with the Clerk of the Court. Upon the entry of the Court’s Final Order of Condemnation based on that stipulation, ZRA will receive the additional \$485,000. This amount will serve as just compensation arising from RTC’s acquisition of the above property interests from ZRA. Other than as set forth in Paragraph 5 below, RTC will not pay RAPS any further amounts pursuant to this Agreement.

3. Utilities and Access to Remainder Parcel. ZRA retains ownership of the portion of APN 013-082-14 not acquired by RTC (“Remainder Property”) in its existing, as-is condition. The only available access point is on Golden Lane and there is no existing driveway cut. Utilities to the Remainder Property are available but not currently connected via lateral lines. During construction of the Project, RTC will install a driveway cut on the Golden Lane side of the Remainder Property in a location selected by ZRA by August 1, 2025. The length of the driveway cut must meet City of Reno standards and the location must meet RTC’s access management standards. If ZRA does not select a suitable location by August 1, 2025, RTC will select a location and install a driveway cut. During construction of the Project, RTC will also cause to be installed lateral lines for water and sewer and ensure that electrical service will be available. RTC will not be responsible for installing a lateral line for gas service. Any arrangements for gas service must be made between ZRA and NV Energy. Other than as specifically provided in this paragraph, ZRA retains ownership of the Remainder Property in its current, as-is condition.

4. Stipulated Final Order of Condemnation and Judgment. RTC and ZRA shall file the Stipulation for Entry of Final Order of Condemnation and Judgment attached as **Exhibit 1** to this Agreement (the “Stipulation”) and shall submit for the Court’s entry the proposed Final Order of Condemnation and Judgment (the “Judgment”) attached as **Exhibit 2**. Both exhibits are incorporated into and made a part of this Agreement. This Agreement is subject to the Court’s entry of the Final Order of Condemnation.

5. No Further Relocation Assistance. RTC will process and pay a final claim for relocation assistance to RAPS in the amount of \$5,800. With payment of that final claim, RAPS agrees that it has received all relocation assistance that it is entitled to receive under applicable law and RTC policy, has no other claims for relocation assistance related to the Project, and shall have no further claim for, or right to, payment or reimbursement of relocation-related expenses.

6. Mutual Release. In consideration of the mutual covenants and agreements herein including the Settlement Amount, the Parties, on their own behalf and on behalf of their agents, servants, attorneys, insurers, heirs, assigns, and other representatives, forever release and discharge the other Party, and its respective affiliated business entities, subsidiaries, parent companies, predecessors, successors, insurers, assigns, trustees, shareholders, partners, directors, officers, employees, agents, attorneys, and other representatives from all actual or potential claims, complaints, demands, causes of action, damages, costs, expenses, fees, and other liabilities of every sort and description, direct or indirect, fixed or contingent, known or unknown, and whether or not liquidated, that it may have had or may now have against the other Party, that arise out of, or relate to, the Project, including but not limited to claims for relocation assistance, just compensation for any alleged taking of property, inverse condemnation, compensation for loss of goodwill, property damage, and any and all other potential claims that may or may not be available

under the law. This release shall not prevent either Party from enforcing its rights specifically described in this Agreement and the foregoing releases shall not place any limitation on either Party's obligations under this Agreement or either Party's ability to bring suit for breach of this Agreement.

7. No Admission of Fault or Liability. Neither the execution of this Agreement, nor the performance of the obligations hereunder are to be construed as an admission of fault or liability on the part of the Parties. This Agreement memorializes the resolution of disputes and claims to avoid any future claims processes or litigation.

8. No Assignment. The Parties expressly represent and agree that they have not assigned or transferred any of the released potential claims in this Agreement (or any portion of or interest in them) to any third person or entity.

9. Each Party Solely Responsible for Tax Consequences. The Parties are solely responsible for their tax consequences arising out of this settlement. Neither Party made any representation(s) to the other Party regarding said tax consequences, if any.

10. Joint Drafting. In the event that a dispute arises between the Parties regarding the construction of this Agreement, they represent and agree that this Agreement was drafted jointly, and the terms of this Agreement shall not be construed in favor or against either of them based on any rule of law that ambiguities shall be construed against the drafter.

11. Entire Agreement. The terms of this Agreement contain the entire agreement between the parties relating to the subject matter contained herein. The Parties executing this Agreement do so freely and voluntarily, solely relying upon their own judgment and that of their respective attorneys and not as a result of any fraud, duress or coercion. This Agreement supersedes any and all prior agreements, negotiations, correspondence, undertakings, promises,

covenants, arrangements communications, representations and warranties, whether oral or written, of any Party to this Agreement, including any and all representatives or agents of either Party, in connection with the Project and the subject matter contained herein, and no party may rely upon, or shall be deemed to have relied upon, any such communications.

12. Miscellaneous. The Parties hereby represent and warrant to each other that they have access to adequate information regarding the scope and effect of this Agreement to make an informed and knowledgeable decision with regard to entering into this Agreement. The Parties hereby acknowledge that they have investigated to their complete satisfaction all facts and potential claims that relate to or arise out of the matters referred to above, and that there is a risk that, after the execution of this Agreement, a Party will discover, incur or suffer claims that were unknown or unanticipated at the time this Agreement was executed, and which if known on the date of execution and delivery hereof may have materially affected its decision to enter into this Agreement. The Parties further acknowledge and agree that by reason of the covenants to each other provided for above, they are assuming the risk of such unknown claims, and agree that this Agreement applies thereto.

13. Choice of Law. This Agreement will be governed by and construed in accordance with the laws of the State of Nevada, without giving effect to conflict of laws principles thereof. The Parties agree that the Second Judicial District Court of the State of Nevada in and for the County of Washoe Nevada shall have exclusive jurisdiction over all disputes, actions or proceedings that in any way arise out of or relate to this Agreement. The Parties waive any claim that the forum set forth in this paragraph is an inconvenient or improper venue.

14. Binding Effect. Unless otherwise specifically provided herein, this Agreement shall be binding upon and inure to the benefit of the Parties, their affiliated business entities,

subsidiaries, parent corporations, predecessors, successors, insurers, heirs, assigns, trustees, shareholders, partners, directors, officers, agents, attorneys, and other representatives.

15. Severability. If any provision of this Agreement is for any reason held to be invalid or unenforceable, such provision shall not affect any other provision, and this Agreement shall be construed as if such invalid and/or unenforceable provision had never been contained in this Agreement.

16. Waiver. Failure by any Party to enforce any of the remedies available to it in this Agreement shall not be deemed a waiver of those rights.

17. Signatures. Each Party represents that it and, if applicable, its undersigned representative, are duly authorized and empowered to sign this Agreement.

18. Counterparts. This Agreement may be executed in any number of counterparts and delivered via facsimile and/or email, each such counterpart hereof shall be deemed to be an original instrument, but all such counterparts shall constitute one and the same instrument. This Agreement may be executed using acceptable digital procedures.

19. Agreement Subject to RTC Board Approval. This Agreement is subject to the approval of the RTC Board at a public meeting. Absent such approval, this Agreement is of no force or effect.

20. Each party to bear its own attorney fees and costs. Each party shall bear its own attorney fees and costs arising in any way from the Project.

///

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///

IN WITNESS WHEREOF, the Parties have entered into this Agreement as of June 13th, 2025, the date signed by the RTC signatory below.

REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY

Bill Thomas, Executive Director

ZRA ENTERPRISES LTD

Zach Allen, Manager

ROBERT ALLEN POOLS & SPAS, INC.

Zach Allen, President

Exhibit 1

Stipulation for Entry of Final Order of Condemnation and Judgment

Dane W. Anderson, Esq.
Nevada Bar No. 6883
ANDERSON KEUSCHER BRACHMAN
905 Plumas Street
Reno, Nevada 89509
Telephone: 775-823-0049
Email: dane@andersonkeuscher.com

Attorneys for Plaintiff, the Regional Transportation
Commission of Washoe County

IN THE SECOND JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA

IN AND FOR THE COUNTY OF WASHOE

THE REGIONAL TRANSPORTATION
COMMISSION OF WASHOE COUNTY, a
special purpose unit of the government,

Plaintiff,

v.

ZRA ENTERPRISES LTD., a Nevada
limited liability company; and DOES 1 – 5,
inclusive;

Defendants.

Case No.: CV24-01399

Dept. No.: 6

STIPULATION FOR ENTRY OF
FINAL ORDER OF CONDEMNATION
AND JUDGMENT

Plaintiff, the Regional Transportation Commission of Washoe County (“RTC”) and
Defendant ZRA Enterprises Ltd. (“ZRA”) stipulate as follows to the entry of a Final Order of
Condemnation and Judgment pursuant to NRS 37.160.

1. RTC is a special purpose unit of government, duly organized and existing
under the laws of the State of Nevada. RTC is charged with providing regional transportation
services which are of a quality and standard necessary to satisfactorily meet the needs of the
traveling public.

2. Pursuant to Chapters 37, 241 and 277A of the Nevada Revised Statutes, RTC
has the power to exercise the right of eminent domain to acquire property for public purposes
within the jurisdictional limits of local government if authority for the acquisition of the
property has been approved by said government and notice of the condemning agency’s intent
to condemn has been given as required by law.

3. Pursuant to an Interlocal Cooperative Agreement, the County of Washoe and the City of Reno authorized the RTC to initiate condemnation proceedings, as necessary, to acquire property needed for the construction of the Mill Street Capacity and Safety Project which will widen Mill Street from 4 to 6 lanes from Terminal Way to Kietzke Lane (referred to herein as “the Project.”).

4. The property RTC seeks to acquire by its power of eminent domain consists of the following situated in Washoe County, Nevada: (1) a fee simple interest in the entirety of APN 013-082-10;¹ (2) a fee simple interest in a portion of APN 013-082-14; and (3) a temporary construction easement on a portion of APN 013-082-14. Metes and bounds descriptions and depictions of these property interests are set forth in **Exhibit 1** hereto and are incorporated herein by reference (which property interests are collectively referred to herein as “the Property”).

5. ZRA is the current fee simple owner of APNs 013-082-10 and 013-082-14.

6. The use to which the Property is to be applied is a public use authorized by law and its taking is necessary to that use.

7. On or about September 5, 2024, RTC deposited \$1,437,960 with the Clerk of the Court pursuant to this Court's Order Granting Motion For Immediate Occupancy Pending Entry of Judgment. ZRA subsequently withdrew and received those funds.

8. The only remaining issue in this case is the amount of compensation due ZRA arising from RTC's acquisition of the Property. RTC and ZRA desire to resolve that remaining issue by this stipulation.

9. RTC and ZRA agree that the total amount of compensation RTC shall pay for its acquisition of the Property is \$1,922,960. Therefore, pursuant to this stipulation and NRS 37.150, RTC shall deposit the additional sum of \$485,000 with the Clerk of this Court. Upon the entry of a Final Order of Condemnation and Judgment as requested in this stipulation, these additional funds shall be disbursed to ZRA.

¹ Due to a typographical error, this parcel was inadvertently and incorrectly identified as 013-032-10 in the Verified Complaint In Eminent Domain, ¶ 4. RTC and ZRA stipulate that the correct APN is 013-082-10.

10. ZRA agrees that the total amount of \$1,922,960 is just compensation for RTC's acquisition of the Property under NRS Chapter 37 and other applicable Nevada law.

11. ZRA represents and warrants that all taxes due to Washoe County and any other public agency on APN 013-082-10 and APN 013-082-14 have, at this time, been paid.

12. RTC and ZRA stipulate that the Court may enter a final order of condemnation and judgment awarding title to the Property, as defined herein, to RTC. ZRA asks that the Court's final order of condemnation and judgment direct the Clerk of the Court to disburse the additional \$485,000 to ZRA.

13. Each party shall bear its own attorney fees and costs related to this matter.

Affirmation pursuant to NRS 239B.030

The undersigned does hereby affirm that the preceding document does not contain the social security number of any person.

DATED: June 13, 2025.

ANDERSON KEUSCHER BRACHMANN

WOMBLE BOND DICKINSON

By /s/ Dane W. Anderson
Dane W. Anderson, Esq.
Nevada Bar No. 6883
Attorneys for RTC

By /s/ Nicole Scott
Nicole Scott, Esq.
Nevada Bar No. 13757
Attorneys for ZRA Enterprises Ltd.

EXHIBIT 1

EXHIBIT 1

Attachments

1. Exhibit "A" and "B" for Ptn. of APN 013-082-10 – Fee Parcel
2. Exhibit "A" and "B" for Ptn. of APN 013-082-10 – Fee Parcel No. 1 (uneconomic remainder)
3. Exhibit "A" and "B" for Ptn. of APN 013-082-14 – Fee Parcel
4. Exhibit "A" and "B" for Ptn. of APN 013-082-14 – Temporary Construction Easement

LEGAL DESCRIPTION PREPARED BY:
HALANA D. SALAZAR, PLS
JACOBS ENGINEERING
50 W. LIBERTY ST., SUITE 205
RENO, NV 89501

EXHIBIT "A"
LEGAL DESCRIPTION

Ptn. of APN 013-082-10
Fee Parcel

Situate, lying and being in the City of Reno, County of Washoe, State of Nevada, and more particularly described as being a portion of the SW 1/4 of Section 7, T. 19 N., R. 20 E., M.D.M.; and more fully described by metes and bounds as follows:

BEGINNING at the intersection of the right or easterly right-of-way line of Golden Lane with Grantor's northerly boundary line, 27.00 feet right of and at right angles to Highway Engineer's Station "G" 1+48.89 P.O.T.; said point of beginning further described as bearing S. 35°41'32" W. a distance of 3,070.85 feet from the center quarter corner of said Section 7; said corner further described as being a 3 inch brass cap in a survey well stamped "Center Sec 7/C ENGR" in Glendale Avenue; thence along said easterly right-of-way line the following four (4) courses and distances:

- 1) S. 25°48'13" W. — 84.72 feet;
- 2) from a tangent which bears the last described course, curving to the left with a radius of 44.00 feet, through an angle of 45°00'48", an arc distance of 34.57 feet to a point of compound curvature;
- 3) from a tangent which bears S. 19°12'33" E., curving to the left with a radius of 24.00 feet, through an angle of 33°22'10", an arc distance of 13.98 feet;
- 4) S. 47°19'10" E. — 5.14 feet to Grantor's southerly boundary line which is coincident with the northerly right-of-way line of Market Street;

thence N. 64°13'04" W. along said southerly boundary line and said northerly right-of-way line, a distance of 69.87 feet to Grantor's westerly boundary line; thence N. 25°47'53" E., along said westerly boundary line, a distance of 124.10 feet to Grantor's northerly boundary line; thence S. 63°53'38" E., along said northerly boundary line, a distance of 39.94 feet to the point of beginning; said parcel contains an area of 5,231 square feet (0.12 of an acre).

The Basis of Bearing for this description is the NEVADA STATE PLANE COORDINATE SYSTEM, NAD 83/94 DATUM, West Zone as determined by the State of Nevada, Department of Transportation.

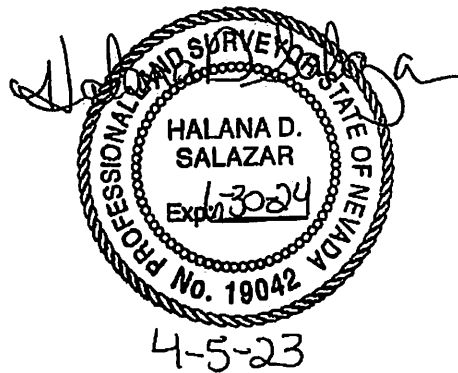


EXHIBIT "B"



SCALE: 1"=50'



FEE ACQUISITION

CURVE NO.	TANGENT BEARING	Δ DELTA	RADIUS	LENGTH	POINT NO.	STATION	OFFSET
1	S 19°12'33" E	33°22'10"	24.0'	13.98'	1	"G" 0+25.02 P.O.T.	56.94' RT
2		45°00'48"	44.0'	34.57'	2	"G" 0+26.51 P.O.T.	52.03' RT
					3	"G" 0+32.80 P.O.T.	40.13' RT
					4	"G" 0+33.05 P.O.T.	27.00' RT
					5	"G" 1+48.89 P.O.T.	27.00' RT



OWNER: ZRA ENTERPRISES LTD
 ASSESSOR PARCEL NO's: APN 013-082-10
 SECTION, TOWNSHIP, RANGE: SW 1/4 SECTION 7, T. 19 N., R. 20 E.
 AREA: 5,231 SQUARE FEET
 LOCATION: CITY OF RENO, COUNTY OF WASHOE

PROPERTY LOCATION MAP

JOB NO: W7Y47500

DATE: APRIL 2023

DRAWN BY: SB

CHECKED BY: HS

JACOBS

50 W. LIBERTY ST. STE #205
 RENO, NV 89501
 (775) 329-7300

LEGAL DESCRIPTION PREPARED BY:
HALANA D. SALAZAR, PLS
JACOBS ENGINEERING
50 W. LIBERTY ST., SUITE 205
RENO, NV 89501

EXHIBIT "A"
LEGAL DESCRIPTION

Ptn. of APN 013-082-10
Fee Parcel No. 1

Situate, lying and being in the City of Reno, County of Washoe, State of Nevada, and more particularly described as being a portion of the SW 1/4 of Section 7, T. 19 N., R. 20 E., M.D.M.; and more fully described by metes and bounds as follows:

BEGINNING at the intersection of the right or easterly right-of-way line of Golden Lane with Grantor's northerly boundary line, 27.00 feet right of and at right angles to Highway Engineer's Station "G" 1+48.89 P.O.T.; said point of beginning further described as bearing S. 35°41'32" W. a distance of 3,070.85 feet from the center quarter corner of said Section 7; said corner further described as being a 3 inch brass cap in a survey well stamped "Center Sec 7/C ENGR" in Glendale Avenue; thence S. 63°53'38" E., along said northerly boundary line, a distance of 35.06 feet to Grantor's easterly boundary line; thence S. 25°47'53" W., along said easterly boundary line, a distance of 123.68 feet to Grantor's southerly boundary line which is coincident with the northerly right-of-way line of Market Street; thence N. 64°13'04" W., along said southerly boundary line and said northerly right-of-way line, a distance of 5.13 feet to said right or easterly right-of-way line of Golden Lane; thence along said easterly right-of-way line the following four (4) courses and distances:

- 1) N. 47°19'10" W. – 5.14 feet;
- 2) from a tangent which bears N. 52°34'44" W., curving to the right with a radius of 24.00 feet, through an angle of 33°22'10", an arc distance of 13.98 feet to a point of compound curvature;
- 3) from a tangent which bears N. 19°12'35" W., curving to the right with a radius of 44.00 feet, through an angle of 45°00'48", an arc distance of 34.57 feet;
- 4) N. 25°48'13" E. – 84.72 feet to the point of beginning;

said parcel contains an area of 4,060 square feet (0.09 of an acre).

The Basis of Bearing for this description is the NEVADA STATE PLANE COORDINATE SYSTEM, NAD 83/94 DATUM, West Zone as determined by the State of Nevada, Department of Transportation.

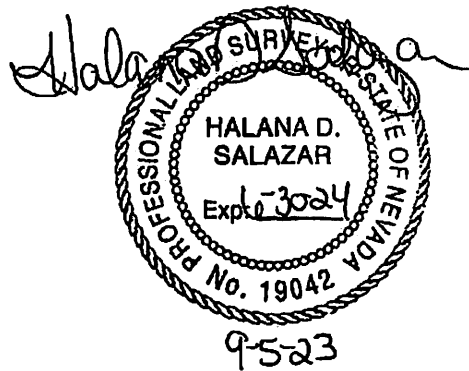


EXHIBIT "B"

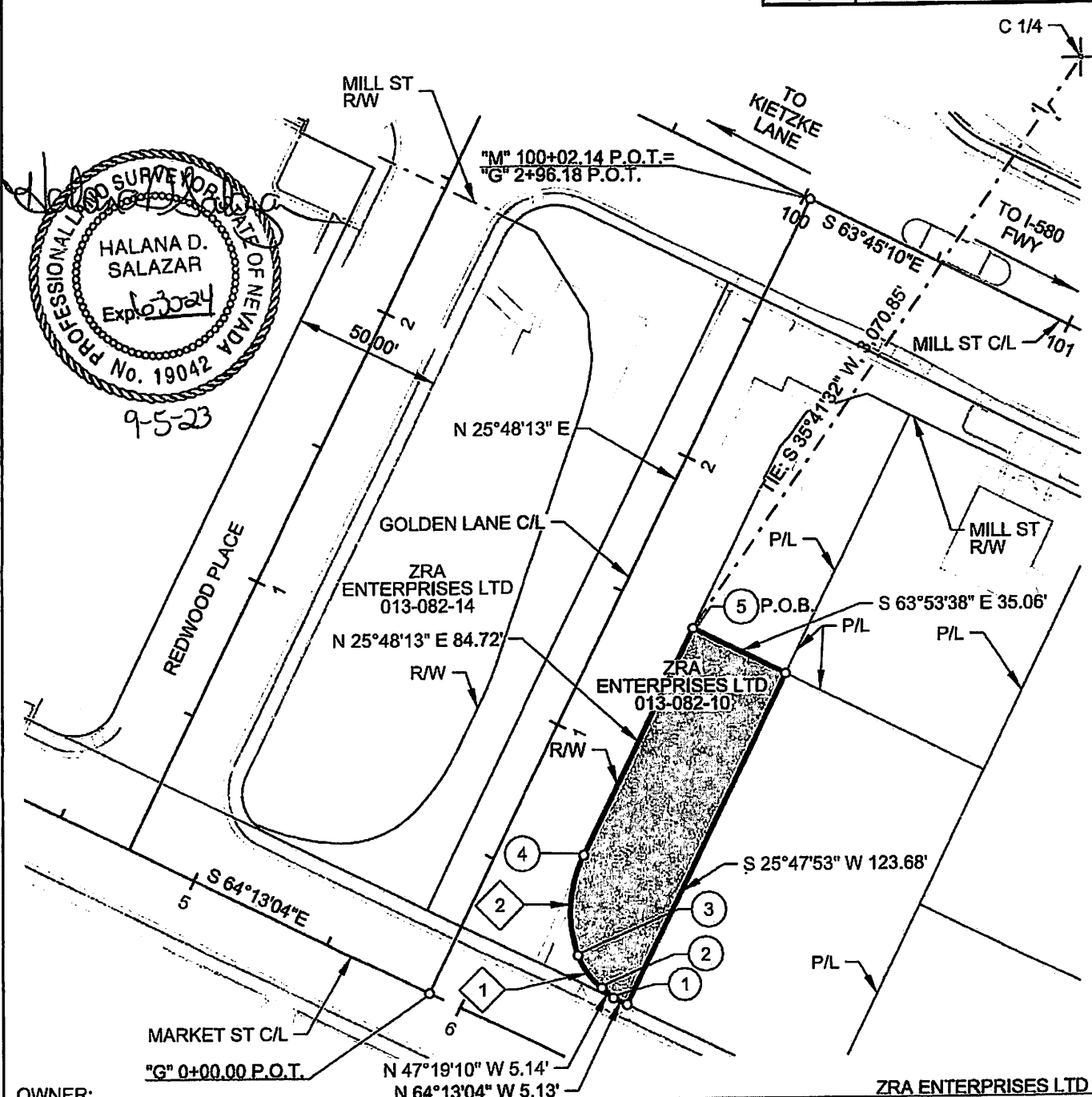


SCALE: 1"=50'

CURVE NO.	TANGENT BEARING	Δ DELTA	RADIUS	LENGTH
①	N 52°34'44" W	33°22'10"	24.0'	13.98'
②	N 19°12'35" W	45°00'48"	44.0'	34.57'

POINT NO.	STATION	OFFSET
①	"G" 0+25.02 P.O.T.	56.94' RT
②	"G" 0+26.51 P.O.T.	52.03' RT
③	"G" 0+33.05 P.O.T.	39.89' RT
④	"G" 0+64.17 P.O.T.	27.00' RT
⑤	"G" 1+48.89 P.O.T.	27.00' RT

FEE PARCEL No. 1 ACQUISITION



OWNER: ZRA ENTERPRISES LTD
 ASSESSOR PARCEL NO's: APN 013-082-10
 SECTION, TOWNSHIP, RANGE: SW 1/4 SECTION 7, T. 19 N., R. 20 E.
 AREA: 4.060 SQUARE FEET
 LOCATION: CITY OF RENO, COUNTY OF WASHOE

PROPERTY LOCATION MAP

JOB NO: W7Y47500

DATE: 09/05/2023

DRAWN BY: SB

CHECKED BY: HS

JACOBS

50 W. LIBERTY ST. STE #205
 RENO, NV 89501
 (775) 329-7300

LEGAL DESCRIPTION PREPARED BY:
HALANA D. SALAZAR, PLS
JACOBS ENGINEERING
50 W. LIBERTY ST., SUITE 205
RENO, NV 89501

EXHIBIT "A"
LEGAL DESCRIPTION

Ptn. of APN 013-082-14
Fee Parcel

Situate, lying and being in the City of Reno, County of Washoe, State of Nevada, and more particularly described as being a portion of the SW 1/4 of Section 7, T. 19 N., R. 20 E., M.D.M.; and further described as being a portion of the parcel shown on that certain RECORD OF SURVEY FOR ZRA ENTERPRISES, LTD., Map 5810, File No. 4685652, filed for record March 8, 2017, in the Official Records of Washoe County, Nevada and more fully described by metes and bounds as follows:

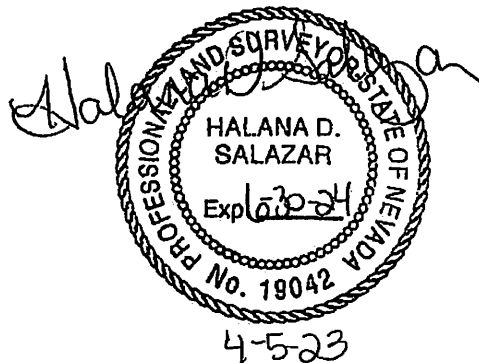
BEGINNING at the intersection of the right or southerly right-of-way line of Mill Street with the left or westerly right-of-way line of Golden Lane, 50.50 feet right of and at right angles to Highway Engineer's Station "M" 99+15.83 P.O.T.; said point of beginning further described as bearing S. 38°09'15" W. a distance of 2,997.12 feet from the center quarter corner of said Section 7; said corner further described as being a 3 inch brass cap in a survey well stamped "Center Sec 7/C ENGR" in Glendale Avenue; thence from a tangent which bears N. 46°10'05" E. curving to the right along Grantor's westerly boundary line, with a radius of 20.00 feet, through an angle of 69°55'48", an arc distance of 24.41 feet; thence S. 63°53'38" E., along the former right or southerly right-of-way line of said Mill Street, a distance of 54.89 feet to Grantor's easterly boundary line; thence S. 25°47'53" W., along said easterly boundary line, a distance of 234.10 feet to the northerly right-of-way line of Market Street, which is coincident with Grantor's southerly boundary line; thence N. 64°13'04" W., along said northerly right-of-way line and said southerly boundary line, a distance of 60.00 feet; thence from a tangent which bears the last described course, curving to the right along said southerly boundary line with a radius of 15.00 feet, through an angle of 21°31'22", an arc distance of 5.63 feet to the left or westerly right-of-way line of said Golden Lane; thence along said westerly right-of-way line the following eleven (11) courses and distances:

- 1) from a tangent which bears S. 66°09'33" E., curving to the left with a radius of 80.00 feet, through an angle of 20°34'58", an arc distance of 28.74 feet to a point of compound curvature;

- 2) from a tangent which bears S. 86°44'31" E., curving to the left with a radius of 34.00 feet, through an angle of 46°57'53", an arc distance of 27.87 feet to a point of compound curvature;
- 3) from a tangent which bears N. 46°17'35" E., curving to the left with a radius of 74.00 feet, through an angle of 20°29'22", an arc distance of 26.46 feet;
- 4) N. 25°48'13" E. – 20.96 feet;
- 5) from a tangent which bears the last described course, curving to the left with a radius of 94.00 feet, through an angle of 07°07'30", an arc distance of 11.69 feet;
- 6) N. 18°40'43" E. – 88.55 feet;
- 7) from a tangent which bears last described course, curving to the left with a radius of 74.00 feet, through an angle of 15°26'10", an arc distance of 19.94 feet;
- 8) N. 09°58'56" W. – 5.11 feet;
- 9) from a tangent which bears N. 00°40'05" W., curving to the left with a radius of 73.00 feet, through an angle of 06°36'05", an arc distance of 8.41 feet;
- 10) N. 31°47'13" W. – 32.94 feet;
- 11) N. 63°45'10" W. – 7.92 feet to the point of beginning;

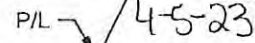
said parcel contains an area of 6,239 square feet (0.14 of an acre).

The Basis of Bearing for this description is the NEVADA STATE PLANE COORDINATE SYSTEM, NAD 83/94 DATUM, West Zone as determined by the State of Nevada, Department of Transportation.



SCALE: 1"=50'

"G" 2+96.18 P.O.T.



CITY OF RENO, COUNTY OF WASHOE

50 W. LIBERTY ST. STE #205
RENO, NV 89501
(775) 329-7300

LEGAL DESCRIPTION PREPARED BY:
HALANA D. SALAZAR, PLS
JACOBS ENGINEERING
50 W. LIBERTY ST., SUITE 205
RENO, NV 89501

EXHIBIT "A"
TEMPORARY CONSTRUCTION EASEMENT
LEGAL DESCRIPTION

Ptn. of APN 013-082-14

Situate, lying and being in the City of Reno, County of Washoe, State of Nevada, and more particularly described as being a portion of the SW 1/4 of Section 7, T. 19 N., R. 20 E., M.D.M.; and further described as being a portion of the parcel shown on that certain RECORD OF SURVEY FOR ZRA ENTERPRISES, LTD., Map 5810, File No. 4685652, filed for record March 8, 2017, in the Official Records of Washoe County, Nevada and more fully described by metes and bounds as follows:

BEGINNING at the intersection of the right or southerly right-of-way line of Mill Street with the left or westerly right-of-way line of Golden Lane, 50.50 feet right of and at right angles to Highway Engineer's Station "M" 99+15.83 P.O.T., said point of beginning further described as bearing S. 38°09'15" W. a distance of 2,997.12 feet from the center quarter corner of said Section 7; said corner further described as being a 3 inch brass cap in a survey well stamped "Center Sec 7/C ENGR" in Glendale Avenue; thence S. 63°45'10" E., along said southerly right-of-way line of Mill Street, a distance of 7.92 feet to the left or westerly right-of-way line of Golden Lane; thence along said westerly right-of-way line the following ten (10) courses and distances:

- 1) S. 31°47'13" E. – 32.94 feet;
- 2) from a tangent which bears S. 07°16'10" E., curving to the right with a radius of 73.00 feet, through an angle of 06°36'05", an arc distance of 8.41 feet;
- 3) S. 09°58'56" E. – 5.11 feet;
- 4) from a tangent which bears S. 03°14'33" W., curving to the right with a radius of 74.00 feet, through an angle of 15°26'10", an arc distance of 19.94 feet;

- 5) S. 18°40'43" W. – 88.55 feet;
- 6) from a tangent which bears the last described course, curving to the right with a radius of 94.00 feet, through an angle of 07°07'30", an arc distance of 11.69 feet;
- 7) S. 25°48'13" W. – 20.96 feet;
- 8) from a tangent which bears the last described course, curving to the right with a radius of 74.00 feet, through an angle of 20°29'22", an arc distance of 26.46 feet to a point of compound curvature;
- 9) from a tangent which bears S. 46°17'35" W., curving to the right with a radius of 34.00 feet, through an angle of 46°57'53", an arc distance of 27.87 feet to a point of compound curvature;
- 10) from a tangent which bears N. 86°44'31" W., curving to the right with a radius of 80.00 feet, through an angle of 20°34'58", an arc distance of 28.74 feet to a point of compound curvature on the westerly boundary line of said parcel shown on that certain RECORD OF SURVEY FOR ZRA ENTERPRISES, LTD.;

thence along said boundary line the following three (3) courses and distances:

- 1) from a tangent which bears N. 42°41'42" W., curving to the right with a radius of 15.00 feet, through an angle of 68°28'38", an arc distance of 17.93 feet;
- 2) N. 25°47'53" E. – 199.42 feet;
- 3) from a tangent which bears the last described course, curving to the right with a radius of 20.00 feet, through an angle of 20°22'12", an arc distance of 7.11 feet to the point of beginning;

said parcel contains an area of 11,200 square feet (0.26 of an acre).

The Basis of Bearing for this description is the NEVADA STATE PLANE COORDINATE SYSTEM, NAD 83/94 DATUM, West Zone as determined by the State of Nevada, Department of Transportation.

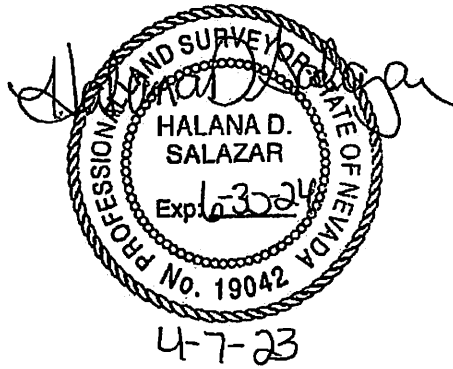


EXHIBIT "B"

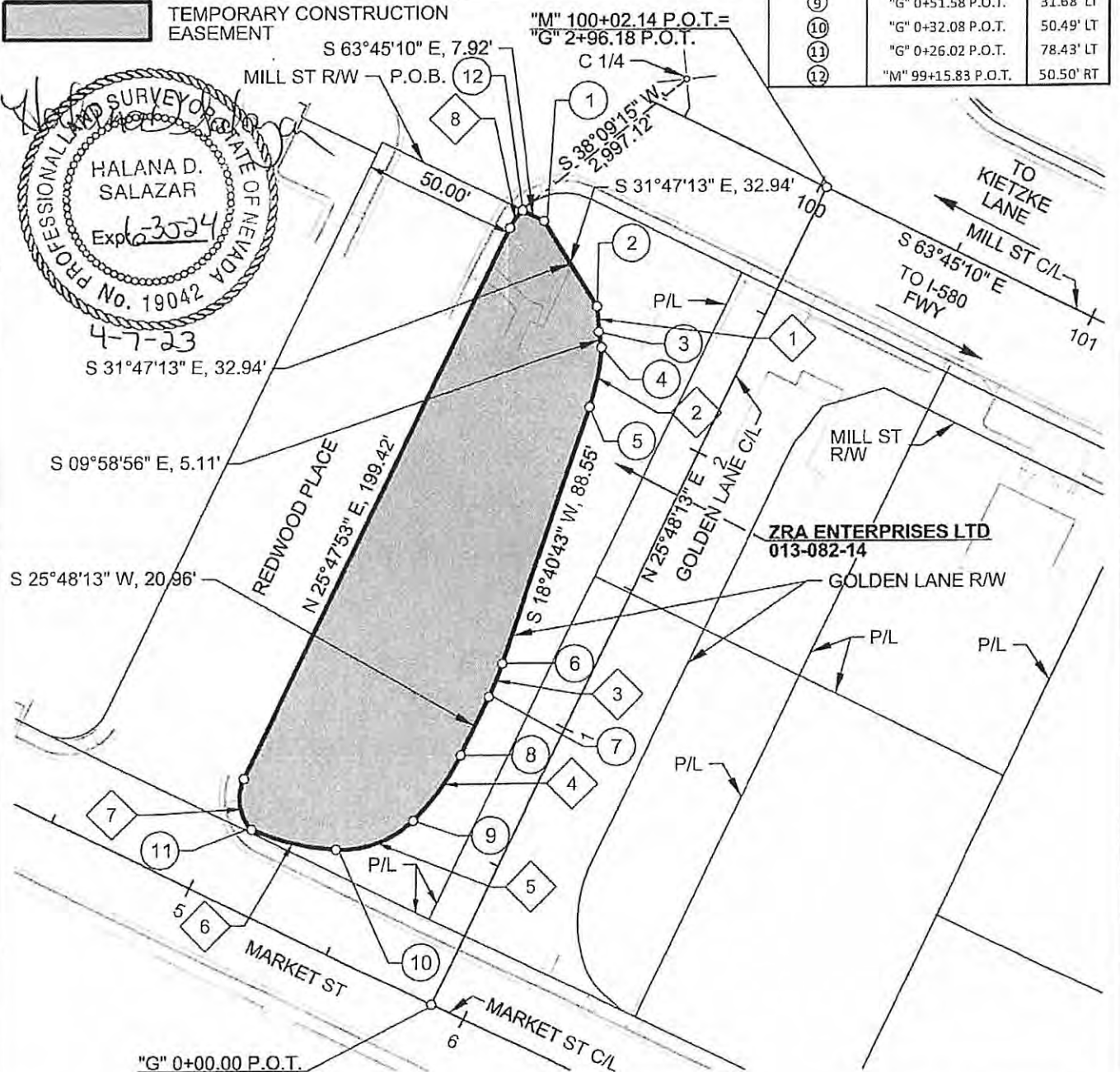


SCALE: 1"=50'

CURVE NO.	TANGENT BEARING	Δ DELTA	RADIUS	LENGTH	POINT NO.	STATION	OFFSET
1	S 7°16'10" E	6°36'05"	73.00'	8.41'	1	"M" 99+23.75 P.O.T.	50.50' RT
2	S 3°14'33" W	15°26'10"	74.00'	19.94'	2	"G" 2+28.63 P.O.T.	50.97' LT
3		7°07'30"	94.00'	11.69'	3	"G" 2+21.34 P.O.T.	46.79' LT
4		20°29'22"	74.00'	26.46'	4	"G" 2+17.19 P.O.T.	43.80' LT
5	S 46°17'35" W	46°57'53"	34.00'	27.87'	5	"G" 1+97.98 P.O.T.	38.71' LT
6	N 86°44'31" W	20°34'58"	80.00'	28.74'	6	"G" 1+10.11 P.O.T.	27.73' LT
7	N 42°41'42" W	68°28'38"	15.00'	17.93'	7	"G" 0+98.45 P.O.T.	27.00' LT
8		20°22'12"	20.00'	7.11'	8	"G" 0+77.49 P.O.T.	27.00' LT
					9	"G" 0+51.58 P.O.T.	31.68' LT
					10	"G" 0+32.08 P.O.T.	50.49' LT
					11	"G" 0+26.02 P.O.T.	78.43' LT
					12	"M" 99+15.83 P.O.T.	50.50' RT



TEMPORARY CONSTRUCTION
EASEMENT



OWNER: ZRA ENTERPRISES LTD
 ASSESSOR PARCEL NO's: APN 013-082-14
 SECTION, TOWNSHIP, RANGE: SW 1/4 SECTION 7, T. 19 N., R. 20 E.
 AREA: 11,200 SQUARE FEET
 LOCATION: CITY OF RENO, COUNTY OF WASHOE

PROPERTY LOCATION MAP

JOB NO: W7Y47500

DATE: 04/07/23

DRAWN BY: TP

CHECKED BY: HS

JACOBS

50 W. LIBERTY ST. STE #205
 RENO, NV 89501
 (775) 329-7300

Exhibit 2

Final Order of Condemnation and Judgment

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IN THE SECOND JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA
IN AND FOR THE COUNTY OF WASHOE

THE REGIONAL TRANSPORTATION
COMMISSION OF WASHOE COUNTY, a
special purpose unit of the government,

Case No.: CV24-01399

Dept. No.: 6

Plaintiff,

v.

ZRA ENTERPRISES LTD., a Nevada limited
liability company; and DOES 1 – 5, inclusive;

Defendants.

FINAL ORDER OF CONDEMNATION AND JUDGMENT

Based on the Stipulation for Entry of Final Order of Condemnation and Judgment filed by Plaintiff, The Regional Transportation Commission of Washoe County (“RTC”) and Defendant ZRA Enterprises Ltd. (“ZRA”), and the other pleadings and papers on file in this matter, and good cause appearing, the Court finds and concludes as follows:

1. RTC is a special purpose unit of government, duly organized and existing under the laws of the State of Nevada. RTC is charged with providing regional transportation services which are of a quality and standard necessary to satisfactorily meet the needs of the traveling public.

2. Pursuant to Chapters 37, 241, and 277A of the Nevada Revised Statutes, RTC has the power to exercise the right of eminent domain to acquire property for public purposes within the jurisdictional limits of local government if authority for the acquisition of the

property has been approved by said government and notice of the condemning agency's intent to condemn has been given as required by law.

3. Pursuant to an Interlocal Cooperative Agreement, the County of Washoe and the City of Reno authorized the RTC to initiate condemnation proceedings, as necessary, to acquire property needed for the construction of the Mill Street Capacity and Safety Project which will widen Mill Street from 4 to 6 lanes from Terminal Way to Kietzke Lane (referred to herein as "the Project.").

4. The property RTC seeks to acquire by its power of eminent domain consists of the following situated in Washoe County, Nevada: (1) a fee simple interest in the entirety of APN 013-082-10;¹ (2) a fee simple interest in a portion of APN 013-082-14; and (3) a temporary construction easement on a portion of APN 013-082-14. Metes and bounds descriptions and depictions of these property interests are set forth in **Exhibit 1** hereto and are incorporated herein by reference (which property interests are collectively referred to herein as "the Property").

5. ZRA is the current fee simple owner of APNs 013-082-10 and 013-082-14.

6. The use to which the Property is to be applied is a public use authorized by law and its taking is necessary to that use.

7. On or about September 5, 2024, RTC deposited \$1,437,960 with the Clerk of the Court pursuant to this Court's Order Granting Motion for Immediate Occupancy Pending Entry of Judgment. ZRA subsequently withdrew and received those funds.

8. The only remaining issue in this case is the amount of compensation due ZRA arising from RTC's acquisition of the Property. RTC and ZRA agree, and the Court finds, that the total amount of just compensation due ZRA for RTC's acquisition of the Property is \$1,922,960, of which ZRA has already received \$1,437,960. RTC has deposited the additional \$485,000 with the Clerk of the Court pursuant to NRS 37.150.

9. Based on ZRA's representations, all taxes due Washoe County or any other public agency on the Property have, at this time, been paid.

¹ Due to a typographical error, this parcel was inadvertently and incorrectly identified as 013-032-10 in the Verified Complaint in Eminent Domain, ¶ 4. The Court finds that the correct APN is 013-082-10.

1 Based on the foregoing and with good cause appearing,

2 IT IS HEREBY ORDERED, ADJUDGED AND DECREED:

- 3 1. That the Property described in the attached **Exhibit 1** is hereby condemned in favor
4 of RTC and that the purpose of such condemnation is for RTC's use in the Project.
- 5 2. That the amount of \$1,922,960 is just compensation to ZRA for RTC's acquisition
6 of the Property and that RTC has deposited that amount with the Clerk of the Court;
- 7 3. The Clerk of the Court is directed to release the remaining \$485,000 to ZRA
8 Enterprises, Ltd.
- 9 4. Each party shall bear its own attorney fees and costs related to this matter.
- 10 5. A copy of this order and judgment shall be filed with the Washoe County Recorder
11 so as to provide public notice of the property rights vested in RTC by way of this
12 order and judgment.

13 IT IS SO ORDERED.

14 DATED this ____ day of June, 2025.

15
16 _____
DISTRICT JUDGE

EXHIBIT 1

EXHIBIT 1

Attachments

1. Exhibit "A" and "B" for Ptn. of APN 013-082-10 – Fee Parcel
2. Exhibit "A" and "B" for Ptn. of APN 013-082-10 – Fee Parcel No. 1 (uneconomic remainder)
3. Exhibit "A" and "B" for Ptn. of APN 013-082-14 – Fee Parcel
4. Exhibit "A" and "B" for Ptn. of APN 013-082-14 – Temporary Construction Easement

LEGAL DESCRIPTION PREPARED BY:
HALANA D. SALAZAR, PLS
JACOBS ENGINEERING
50 W. LIBERTY ST., SUITE 205
RENO, NV 89501

EXHIBIT "A"
LEGAL DESCRIPTION

Ptn. of APN 013-082-10
Fee Parcel

Situate, lying and being in the City of Reno, County of Washoe, State of Nevada, and more particularly described as being a portion of the SW 1/4 of Section 7, T. 19 N., R. 20 E., M.D.M.; and more fully described by metes and bounds as follows:

BEGINNING at the intersection of the right or easterly right-of-way line of Golden Lane with Grantor's northerly boundary line, 27.00 feet right of and at right angles to Highway Engineer's Station "G" 1+48.89 P.O.T.; said point of beginning further described as bearing S. 35°41'32" W. a distance of 3,070.85 feet from the center quarter corner of said Section 7; said corner further described as being a 3 inch brass cap in a survey well stamped "Center Sec 7/C ENGR" in Glendale Avenue; thence along said easterly right-of-way line the following four (4) courses and distances:

- 1) S. 25°48'13" W. — 84.72 feet;
- 2) from a tangent which bears the last described course, curving to the left with a radius of 44.00 feet, through an angle of 45°00'48", an arc distance of 34.57 feet to a point of compound curvature;
- 3) from a tangent which bears S. 19°12'33" E., curving to the left with a radius of 24.00 feet, through an angle of 33°22'10", an arc distance of 13.98 feet;
- 4) S. 47°19'10" E. — 5.14 feet to Grantor's southerly boundary line which is coincident with the northerly right-of-way line of Market Street;

thence N. 64°13'04" W. along said southerly boundary line and said northerly right-of-way line, a distance of 69.87 feet to Grantor's westerly boundary line; thence N. 25°47'53" E., along said westerly boundary line, a distance of 124.10 feet to Grantor's northerly boundary line; thence S. 63°53'38" E., along said northerly boundary line, a distance of 39.94 feet to the point of beginning; said parcel contains an area of 5,231 square feet (0.12 of an acre).

The Basis of Bearing for this description is the NEVADA STATE PLANE COORDINATE SYSTEM, NAD 83/94 DATUM, West Zone as determined by the State of Nevada, Department of Transportation.

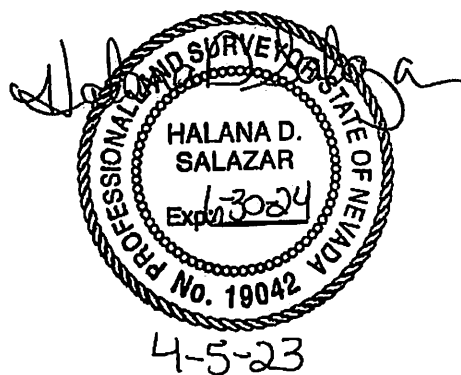


EXHIBIT "B"

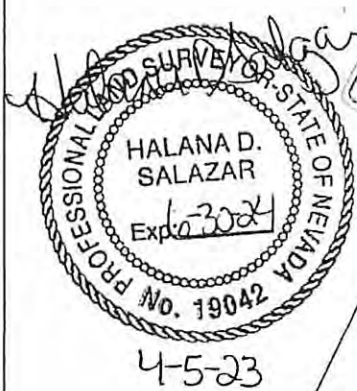


SCALE: 1"=50'



FEE ACQUISITION

CURVE NO.	TANGENT BEARING	Δ DELTA	RADIUS	LENGTH	POINT NO.	STATION	OFFSET
1	S 19°12'33" E	33°22'10"	24.0'	13.98'	1	"G" 0+25.02 P.O.T.	56.94' RT
2		45°00'48"	44.0'	34.57'	2	"G" 0+26.51 P.O.T.	52.03' RT
					3	"G" 0+32.80 P.O.T.	40.13' RT
					4	"G" 0+33.05 P.O.T.	27.00' RT
					5	"G" 1+48.89 P.O.T.	27.00' RT



OWNER: ZRA ENTERPRISES LTD
 ASSESSOR PARCEL NO's: APN 013-082-10
 SECTION, TOWNSHIP, RANGE: SW 1/4 SECTION 7, T. 19 N., R. 20 E.
 AREA: 5,231 SQUARE FEET
 LOCATION: CITY OF RENO, COUNTY OF WASHOE

PROPERTY LOCATION MAP

JOB NO: W7Y47500

DATE: APRIL 2023

DRAWN BY: SB

CHECKED BY: HS

JACOBS

50 W. LIBERTY ST. STE #205
 RENO, NV 89501
 (775) 329-7300

LEGAL DESCRIPTION PREPARED BY:
HALANA D. SALAZAR, PLS
JACOBS ENGINEERING
50 W. LIBERTY ST., SUITE 205
RENO, NV 89501

EXHIBIT "A"
LEGAL DESCRIPTION

Ptn. of APN 013-082-10
Fee Parcel No. 1

Situate, lying and being in the City of Reno, County of Washoe, State of Nevada, and more particularly described as being a portion of the SW 1/4 of Section 7, T. 19 N., R. 20 E., M.D.M.; and more fully described by metes and bounds as follows:

BEGINNING at the intersection of the right or easterly right-of-way line of Golden Lane with Grantor's northerly boundary line, 27.00 feet right of and at right angles to Highway Engineer's Station "G" 1+48.89 P.O.T.; said point of beginning further described as bearing S. 35°41'32" W. a distance of 3,070.85 feet from the center quarter corner of said Section 7; said corner further described as being a 3 inch brass cap in a survey well stamped "Center Sec 7/C ENGR" in Glendale Avenue; thence S. 63°53'38" E., along said northerly boundary line, a distance of 35.06 feet to Grantor's easterly boundary line; thence S. 25°47'53" W., along said easterly boundary line, a distance of 123.68 feet to Grantor's southerly boundary line which is coincident with the northerly right-of-way line of Market Street; thence N. 64°13'04" W., along said southerly boundary line and said northerly right-of-way line, a distance of 5.13 feet to said right or easterly right-of-way line of Golden Lane; thence along said easterly right-of-way line the following four (4) courses and distances:

- 1) N. 47°19'10" W. – 5.14 feet;
- 2) from a tangent which bears N. 52°34'44" W., curving to the right with a radius of 24.00 feet, through an angle of 33°22'10", an arc distance of 13.98 feet to a point of compound curvature;
- 3) from a tangent which bears N. 19°12'35" W., curving to the right with a radius of 44.00 feet, through an angle of 45°00'48", an arc distance of 34.57 feet;
- 4) N. 25°48'13" E. – 84.72 feet to the point of beginning;

said parcel contains an area of 4,060 square feet (0.09 of an acre).

The Basis of Bearing for this description is the NEVADA STATE PLANE COORDINATE SYSTEM, NAD 83/94 DATUM, West Zone as determined by the State of Nevada, Department of Transportation.

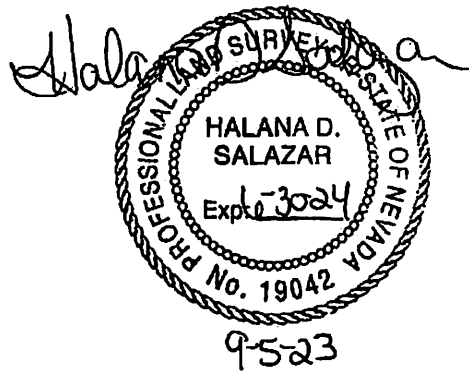


EXHIBIT "B"

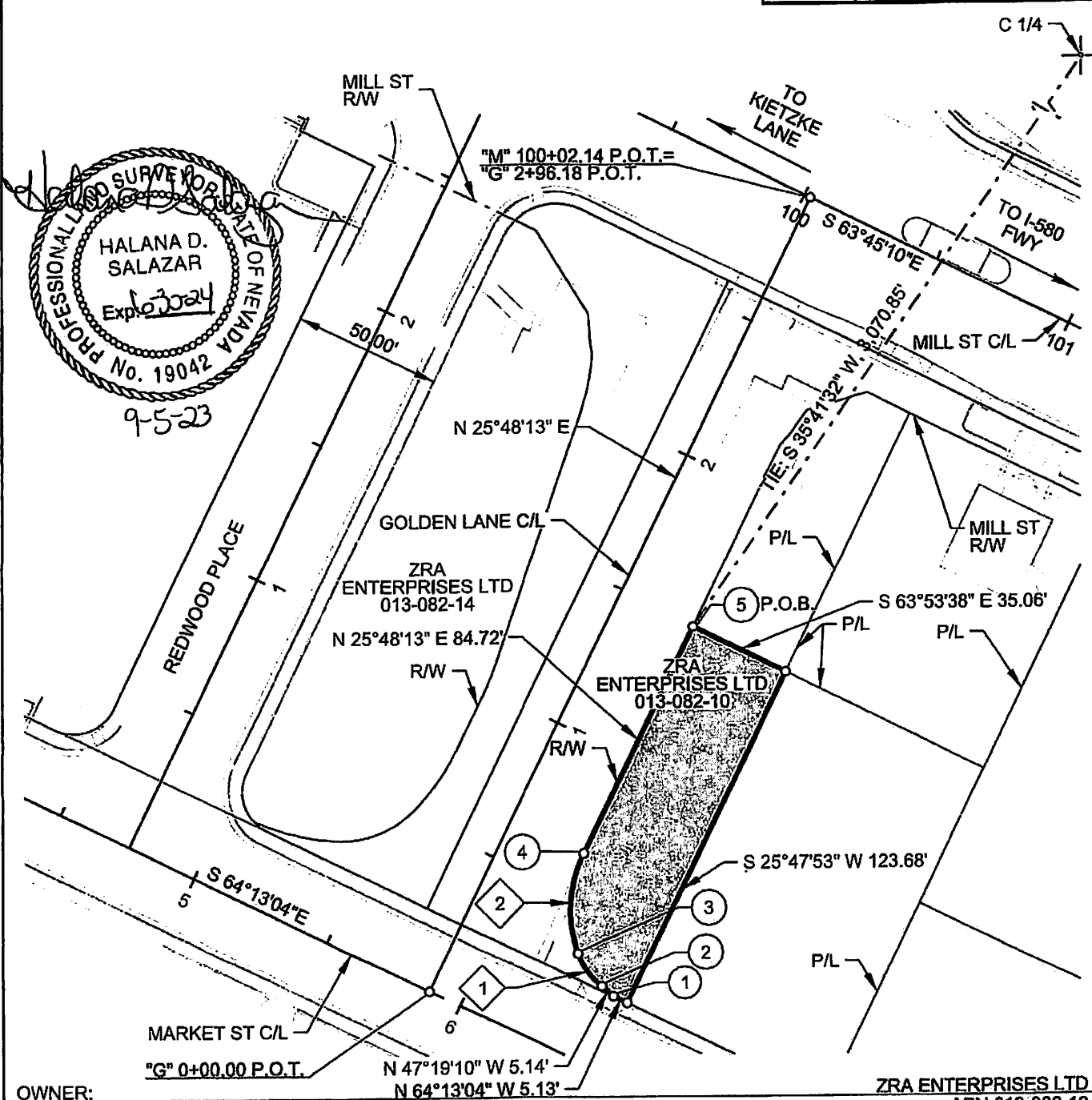


SCALE: 1"=50'

CURVE NO.	TANGENT BEARING	Δ DELTA	RADIUS	LENGTH
1	N 52°34'44" W	33°22'10"	24.0'	13.98'
2	N 19°12'35" W	45°00'48"	44.0'	34.57'

POINT NO.	STATION	OFFSET
1	"G" 0+25.02 P.O.T.	56.94' RT
2	"G" 0+26.51 P.O.T.	52.03' RT
3	"G" 0+33.05 P.O.T.	39.89' RT
4	"G" 0+64.17 P.O.T.	27.00' RT
5	"G" 1+48.89 P.O.T.	27.00' RT

FEE PARCEL No. 1 ACQUISITION



OWNER: ZRA ENTERPRISES LTD
 ASSESSOR PARCEL NO's: APN 013-082-10
 SECTION, TOWNSHIP, RANGE: SW 1/4 SECTION 7, T. 19 N., R. 20 E.
 AREA: 4.060 SQUARE FEET
 LOCATION: CITY OF RENO, COUNTY OF WASHOE

PROPERTY LOCATION MAP

JOB NO: W7Y47500

DATE: 09/05/2023

DRAWN BY: SB

CHECKED BY: HS

JACOBS

50 W. LIBERTY ST. STE #205
 RENO, NV 89501
 (775) 329-7300

LEGAL DESCRIPTION PREPARED BY:
HALANA D. SALAZAR, PLS
JACOBS ENGINEERING
50 W. LIBERTY ST., SUITE 205
RENO, NV 89501

EXHIBIT "A"
LEGAL DESCRIPTION

Ptn. of APN 013-082-14
Fee Parcel

Situate, lying and being in the City of Reno, County of Washoe, State of Nevada, and more particularly described as being a portion of the SW 1/4 of Section 7, T. 19 N., R. 20 E., M.D.M.; and further described as being a portion of the parcel shown on that certain RECORD OF SURVEY FOR ZRA ENTERPRISES, LTD., Map 5810, File No. 4685652, filed for record March 8, 2017, in the Official Records of Washoe County, Nevada and more fully described by metes and bounds as follows:

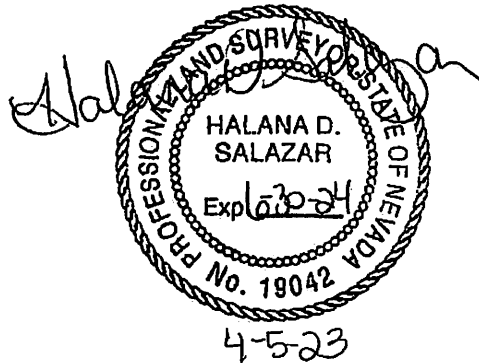
BEGINNING at the intersection of the right or southerly right-of-way line of Mill Street with the left or westerly right-of-way line of Golden Lane, 50.50 feet right of and at right angles to Highway Engineer's Station "M" 99+15.83 P.O.T.; said point of beginning further described as bearing S. 38°09'15" W. a distance of 2,997.12 feet from the center quarter corner of said Section 7; said corner further described as being a 3 inch brass cap in a survey well stamped "Center Sec 7/C ENGR" in Glendale Avenue; thence from a tangent which bears N. 46°10'05" E. curving to the right along Grantor's westerly boundary line, with a radius of 20.00 feet, through an angle of 69°55'48", an arc distance of 24.41 feet; thence S. 63°53'38" E., along the former right or southerly right-of-way line of said Mill Street, a distance of 54.89 feet to Grantor's easterly boundary line; thence S. 25°47'53" W., along said easterly boundary line, a distance of 234.10 feet to the northerly right-of-way line of Market Street, which is coincident with Grantor's southerly boundary line; thence N. 64°13'04" W., along said northerly right-of-way line and said southerly boundary line, a distance of 60.00 feet; thence from a tangent which bears the last described course, curving to the right along said southerly boundary line with a radius of 15.00 feet, through an angle of 21°31'22", an arc distance of 5.63 feet to the left or westerly right-of-way line of said Golden Lane; thence along said westerly right-of-way line the following eleven (11) courses and distances:

- 1) from a tangent which bears S. 66°09'33" E., curving to the left with a radius of 80.00 feet, through an angle of 20°34'58", an arc distance of 28.74 feet to a point of compound curvature;

- 2) from a tangent which bears S. 86°44'31" E., curving to the left with a radius of 34.00 feet, through an angle of 46°57'53", an arc distance of 27.87 feet to a point of compound curvature;
- 3) from a tangent which bears N. 46°17'35" E., curving to the left with a radius of 74.00 feet, through an angle of 20°29'22", an arc distance of 26.46 feet;
- 4) N. 25°48'13" E. – 20.96 feet;
- 5) from a tangent which bears the last described course, curving to the left with a radius of 94.00 feet, through an angle of 07°07'30", an arc distance of 11.69 feet;
- 6) N. 18°40'43" E. – 88.55 feet;
- 7) from a tangent which bears last described course, curving to the left with a radius of 74.00 feet, through an angle of 15°26'10", an arc distance of 19.94 feet;
- 8) N. 09°58'56" W. – 5.11 feet;
- 9) from a tangent which bears N. 00°40'05" W., curving to the left with a radius of 73.00 feet, through an angle of 06°36'05", an arc distance of 8.41 feet;
- 10) N. 31°47'13" W. – 32.94 feet;
- 11) N. 63°45'10" W. – 7.92 feet to the point of beginning;

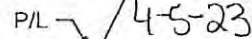
said parcel contains an area of 6,239 square feet (0.14 of an acre).

The Basis of Bearing for this description is the NEVADA STATE PLANE COORDINATE SYSTEM, NAD 83/94 DATUM, West Zone as determined by the State of Nevada, Department of Transportation.



SCALE: 1"=50'

"G" 2+96.18 P.O.T.



CITY OF RENO, COUNTY OF WASHOE

50 W. LIBERTY ST. STE #205
RENO, NV 89501
(775) 329-7300

LEGAL DESCRIPTION PREPARED BY:
HALANA D. SALAZAR, PLS
JACOBS ENGINEERING
50 W. LIBERTY ST., SUITE 205
RENO, NV 89501

EXHIBIT "A"
TEMPORARY CONSTRUCTION EASEMENT
LEGAL DESCRIPTION

Ptn. of APN 013-082-14

Situate, lying and being in the City of Reno, County of Washoe, State of Nevada, and more particularly described as being a portion of the SW 1/4 of Section 7, T. 19 N., R. 20 E., M.D.M.; and further described as being a portion of the parcel shown on that certain RECORD OF SURVEY FOR ZRA ENTERPRISES, LTD., Map 5810, File No. 4685652, filed for record March 8, 2017, in the Official Records of Washoe County, Nevada and more fully described by metes and bounds as follows:

BEGINNING at the intersection of the right or southerly right-of-way line of Mill Street with the left or westerly right-of-way line of Golden Lane, 50.50 feet right of and at right angles to Highway Engineer's Station "M" 99+15.83 P.O.T., said point of beginning further described as bearing S. 38°09'15" W. a distance of 2,997.12 feet from the center quarter corner of said Section 7; said corner further described as being a 3 inch brass cap in a survey well stamped "Center Sec 7/C ENGR" in Glendale Avenue; thence S. 63°45'10" E., along said southerly right-of-way line of Mill Street, a distance of 7.92 feet to the left or westerly right-of-way line of Golden Lane; thence along said westerly right-of-way line the following ten (10) courses and distances:

- 1) S. 31°47'13" E. – 32.94 feet;
- 2) from a tangent which bears S. 07°16'10" E., curving to the right with a radius of 73.00 feet, through an angle of 06°36'05", an arc distance of 8.41 feet;
- 3) S. 09°58'56" E. – 5.11 feet;
- 4) from a tangent which bears S. 03°14'33" W., curving to the right with a radius of 74.00 feet, through an angle of 15°26'10", an arc distance of 19.94 feet;

- 5) S. 18°40'43" W. – 88.55 feet;
- 6) from a tangent which bears the last described course, curving to the right with a radius of 94.00 feet, through an angle of 07°07'30", an arc distance of 11.69 feet;
- 7) S. 25°48'13" W. – 20.96 feet;
- 8) from a tangent which bears the last described course, curving to the right with a radius of 74.00 feet, through an angle of 20°29'22", an arc distance of 26.46 feet to a point of compound curvature;
- 9) from a tangent which bears S. 46°17'35" W., curving to the right with a radius of 34.00 feet, through an angle of 46°57'53", an arc distance of 27.87 feet to a point of compound curvature;
- 10) from a tangent which bears N. 86°44'31" W., curving to the right with a radius of 80.00 feet, through an angle of 20°34'58", an arc distance of 28.74 feet to a point of compound curvature on the westerly boundary line of said parcel shown on that certain RECORD OF SURVEY FOR ZRA ENTERPRISES, LTD.;

thence along said boundary line the following three (3) courses and distances:

- 1) from a tangent which bears N. 42°41'42" W., curving to the right with a radius of 15.00 feet, through an angle of 68°28'38", an arc distance of 17.93 feet;
- 2) N. 25°47'53" E. – 199.42 feet;
- 3) from a tangent which bears the last described course, curving to the right with a radius of 20.00 feet, through an angle of 20°22'12", an arc distance of 7.11 feet to the point of beginning;

said parcel contains an area of 11,200 square feet (0.26 of an acre).

The Basis of Bearing for this description is the NEVADA STATE PLANE COORDINATE SYSTEM, NAD 83/94 DATUM, West Zone as determined by the State of Nevada, Department of Transportation.

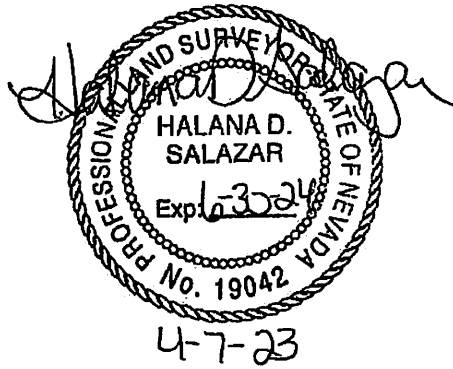


EXHIBIT "B"

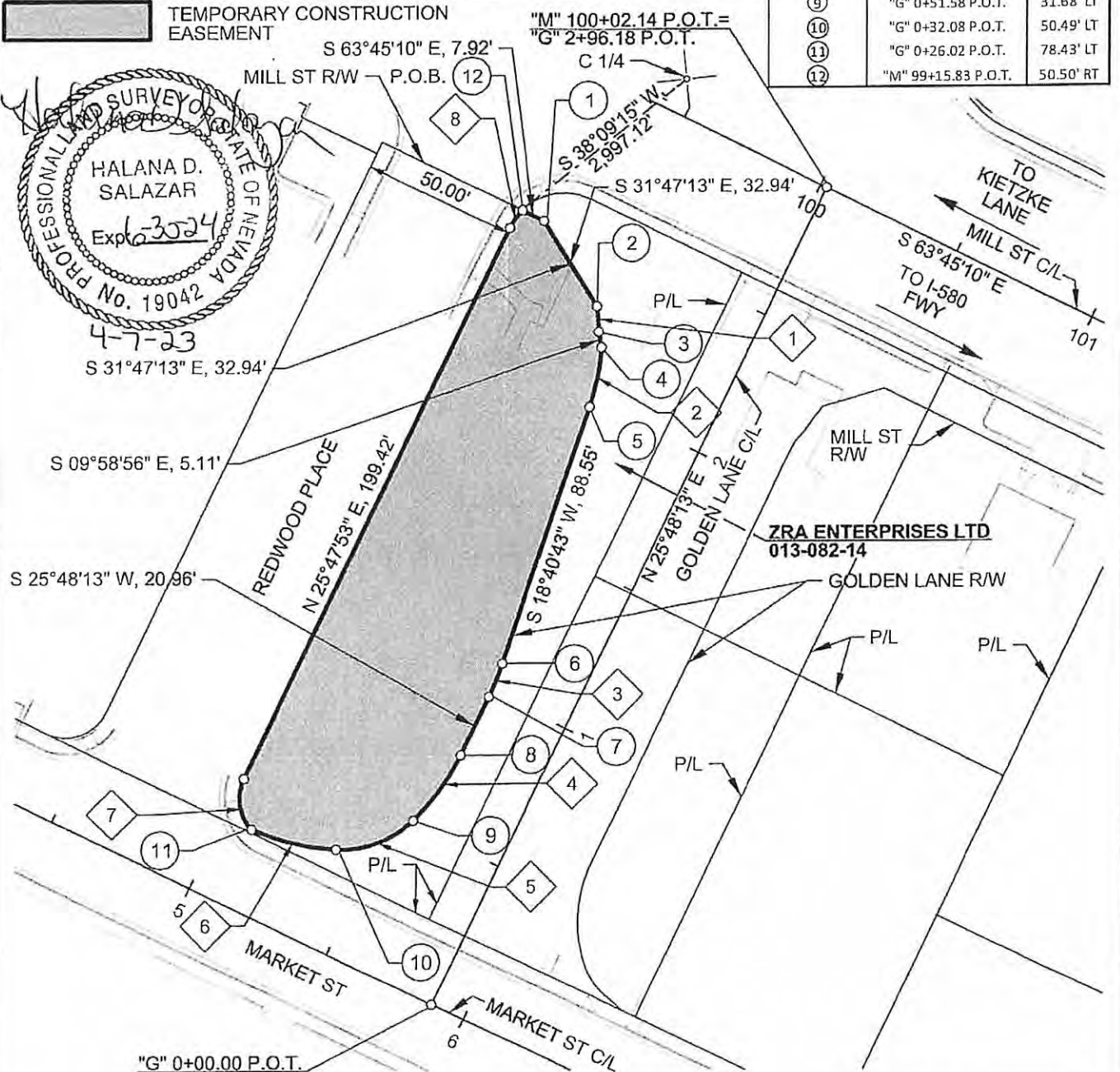


SCALE: 1"=50'

CURVE NO.	TANGENT BEARING	Δ DELTA	RADIUS	LENGTH	POINT NO.	STATION	OFFSET
1	S 7°16'10" E	6°36'05"	73.00'	8.41'	1	"M" 99+23.75 P.O.T.	50.50' RT
2	S 3°14'33" W	15°26'10"	74.00'	19.94'	2	"G" 2+28.63 P.O.T.	50.97' LT
3		7°07'30"	94.00'	11.69'	3	"G" 2+21.34 P.O.T.	46.79' LT
4		20°29'22"	74.00'	26.46'	4	"G" 2+17.19 P.O.T.	43.80' LT
5	S 46°17'35" W	46°57'53"	34.00'	27.87'	5	"G" 1+97.98 P.O.T.	38.71' LT
6	N 86°44'31" W	20°34'58"	80.00'	28.74'	6	"G" 1+10.11 P.O.T.	27.73' LT
7	N 42°41'42" W	68°28'38"	15.00'	17.93'	7	"G" 0+98.45 P.O.T.	27.00' LT
8		20°22'12"	20.00'	7.11'	8	"G" 0+77.49 P.O.T.	27.00' LT
					9	"G" 0+51.58 P.O.T.	31.68' LT
					10	"G" 0+32.08 P.O.T.	50.49' LT
					11	"G" 0+26.02 P.O.T.	78.43' LT
					12	"M" 99+15.83 P.O.T.	50.50' RT



TEMPORARY CONSTRUCTION
EASEMENT



OWNER: ZRA ENTERPRISES LTD
 ASSESSOR PARCEL NO's: APN 013-082-14
 SECTION, TOWNSHIP, RANGE: SW 1/4 SECTION 7, T. 19 N., R. 20 E.
 AREA: 11,200 SQUARE FEET
 LOCATION: CITY OF RENO, COUNTY OF WASHOE

PROPERTY LOCATION MAP

JOB NO: W7Y47500

DATE: 04/07/23

DRAWN BY: TP

CHECKED BY: HS

JACOBS

50 W. LIBERTY ST. STE #205
 RENO, NV 89501
 (775) 329-7300



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 6/20/2025

Agenda Item: 4.5.1

To: Regional Transportation Commission

From: James Gee, Director of Public Transportation and Operations

SUBJECT: Spare Labs, Inc. Amendment No. 2 (Order Form #SL-5055)

RECOMMENDED ACTION

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.

BACKGROUND AND DISCUSSION

RTC Public Transportation uses an application known as Spare Labs to manage its FlexRIDE and ACCESS services. This software has been in use by RTC since the elimination of the initial FlexRIDE pilot in 2020. The software is also branded as a mobile application called “RTC Connect” and is used by passengers to plan and book their FlexRIDE and ACCESS trips. The software cost also includes variable expenditures used for Lyft trips for FlexRIDE passengers who would otherwise experience a long wait time. Such trips are activated and controlled by the RTC. This contract was previously extended by board action to July 31, 2027.

This amendment expands the functionality of the RTC Connect app by adding artificial intelligence (AI) capabilities for passengers to manage their trips. With AI, passengers will now be able to more easily book, cancel, and manage their trips without waiting to talk to a reservationist. The additional total cost for this amendment, including 2,000 monthly calls to AI, is \$50,000. Additional AI calls, over the 2,000 allotted monthly, are \$.75 each.

This project is in line with the Board’s adoption of the Transit Optimization Plans Strategies (TOPS) recommendation to improve technology, service delivery and passenger communication. Additionally, this item supports Strategic Roadmap Goal #1, "Expand public transportation utilization".

FISCAL IMPACT

Funding for this software and services are included in the FY26 budget.

PREVIOUS BOARD ACTION

7/19/2024 Approved Amendment No. 1 to the contract with Spare Labs, Inc., (Order Form #SL-5055) for the Spare Platform software and services that RTC uses to manage its FlexRIDE service, to integrate additional modules (Spare Engage, Spare Dispatch, and Optimization Pro) and extend the contract term through July 31, 2027.

AMENDMENT # 2
To
Order Form #SL-5055
DATED May 30th, 2025
BETWEEN
Spare Labs Inc (“Spare”)
AND
Regional Transportation Commission of Washoe County, Nevada (“RTC”)

THIS Amendment Agreement **Amendment 2** to the Order Form #SL-5055 DATED May 30th, 2025 (the “**Agreement**”) between Spare and RTC is entered into by and between Spare and RTC, with an effective date of July 1st (the “**Amendment 2 Effective Date**”).

WHEREAS, Spare and RTC desire to modify and amend the Agreement as set forth in this Amendment 2 to purchase additional Spare products on the terms of this Amendment 2 ,

NOW, THEREFORE, Order Form #SL-5055 is hereby amended by adding the following to the Summary of Deliverables:

1. The following is added to Summary of Deliverables:

- a). Services and Fees. The Customer will pay the following fees on a monthly basis for access to the Spare AI Platform subscription and AI Outcomes (outcomes are defined in **Attachment A**).

Products	Cost	Unit	Start Date
Spare AI Platform Fee	\$1,500 per month	Billed Monthly	Post Successful UAT
2,000 minimum AI Outcomes (Chat & Voice)	\$1,000 per month	Billed Monthly	Post Successful UAT
AI Outcome overage fee (Over 2000 outcomes per month)	\$0.75 per outcome	Billed Monthly	Post Successful UAT

(b) **Implementation Fee (one-time)**: US\$0 Partner will use commercially reasonable efforts to provide Customer the services described in this Order Form, and the Customer shall pay the Implementation Fee (as defined above), in advance, in accordance with the terms herein;

2. Term. This amendment ("Amendment 2") specifically addresses the provision of Spare AI Voice services and does not alter the original contractual dates or terms of the Order Form to which it is appended, except as explicitly stated herein regarding AI Voice. Spare will provide the customer with five (5) months of credited access to Spare AI Voice, commencing July 1st, 2025. The customer will have a two-week opt-out period prior to the end of this five-month credited access period. Should the customer not opt out, the paid access for Spare AI Voice will automatically begin after the five-month credited period and will run until July 31st, 2027. This results in a total of twenty (20) months of paid access following the initial five months of free access for Ai Voice.

3. Renewal

Both the initial Order Form and this AI Voice Amendment 2 shall automatically renew for two (2) additional twelve (12) month terms (each, a “Renewal Term”), unless either Party provides notice of non-renewal no less than thirty (30) days prior to the end of the Initial Term or Renewal Term. The Initial Term and all Renewal Terms together shall be referred to herein as the “Term.”

4. Authority. The person signing on behalf of Customer represents that it has the full authority to execute and bind Customer to this Cost Proposal Order Form.

ENTIRE AGREEMENT. This Amendment 2, together with the Agreement and all previous amendments, sets forth the entire agreement between the parties with respect to the matters set forth herein and supersedes all prior and contemporaneous discussions or understandings between them relating thereto. Capitalized terms used in this Amendment 2 and not defined herein shall have the meanings set forth in the Agreement. Except as otherwise expressly set forth herein, the Agreement and each and every provision thereof shall remain in full force and effect. In the event of an inconsistency between the terms and conditions of this Amendment 1 and the Agreement, the terms and conditions of this Amendment 2 shall prevail.

IN WITNESS WHEREOF, the parties hereto have duly executed this Amendment 2 to the Agreement by their respective duly authorized officers to be effective as of the Amendment 2 Effective Date.

<u>Spare</u>	<u>RTC</u>
Name	Name
Title	Title
Signature	Signature
Date	Date

Attachment A

Pricing FAQ: Spare AI

What is an Outcome? An outcome is a successfully handled interaction, such as:

- Booking a trip
- Cancelling a trip
- Providing an Estimated Time of Arrival (ETA)
- Rider registration
- Add payment method
- Check status of eligibility application
- Leave a review for your recent trip



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 6/20/2025

Agenda Item: 4.5.2

To: Regional Transportation Commission

From: James Gee, Director of Public Transportation and Operations

SUBJECT: Amendment No. 2 with Celtis Ventures, Inc. for RTC TOPS Program, Phase 3 Services

RECOMMENDED ACTION

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.

BACKGROUND AND DISCUSSION

The Board approved a contract with Celtis Ventures, Inc. for marketing consulting services for RTC's TOPS Program on November 17, 2023. The contract with Celtis allows RTC to amend the original contract to provide additional budget and funding for future phases. The original contract provided funding to complete Phase 1. Amendment No. 1 provided additional funding to complete Phase 2. This Amendment No. 2 provides additional funding for Phase 3 activities including:

- Continue Digital Marketing: continue paid and organic digital marketing
- Conduct Customer/Ridership Research Follow-up: Conduct another rider study to determine impacts of marketing and communications efforts; use identical questions to measure change
- Continue Spanish-first Communications: continue Spanish-first campaigns and communications to grow ridership
- Continue ED-Pass Ridership Marketing: continue ridership marketing efforts to core student and faculty customer segment
- Continue RAPID Ridership Growth Campaign: market RTC's best service; promote the RAPID lines as the heart of the high-frequency system
- Continue TOPS Service Marketing: promote TOPS system improvements as they are made

Since working with RTC, Celtis has been the creator of the successful "Si RTC", ED Pass, and Youth Pass marketing programs along with other activities. For FY 2026, Celtis will continue these programs with additional marketing focus on improving vanpool ridership, additional Youth Pass materials, and improved graphics and wayfinding at our transit facilities.

This item supports Strategic Roadmap Goal #1, "Expand public transportation utilization".

FISCAL IMPACT

RTC sales tax funding is available in the FY2026 budget for these services. Future budget allocations will be determined by the Board during the annual budget process.

PREVIOUS BOARD ACTION

11/17/2023 Approved a contract with Celtis Ventures, Inc. for marketing consulting services for RTC TOPS Program in an amount not-to-exceed \$500,000 for FY2023-2024.

AMENDMENT NO. 2

The Regional Transportation Commission of Washoe County (“RTC”) and Celtis Ventures, Inc. (“Consultant”) entered into an agreement dated November 17, 2023, as previously amended by Amendment No. 1 dated May 1, 2025 (the “Agreement”). This Amendment No. 2 is dated and effective as of July 1, 2025.

RECITALS

WHEREAS, Section 5(c) Compensation allows the RTC to amend the Agreement to provide for additional funding for future phases per the Scope of Services in Exhibit A;

WHEREAS, after completing Phase 1, RTC authorized Consultant to proceed with Phase 2 using available funding and then the parties entered into Amendment No. 1 to provide funding needed to complete Phase 2;

WHEREAS, the purpose of this Amendment No. 2 is to provide funding for Phase 3 in the amount of \$500,000;

WHEREAS, the parties have agreed to amend the Agreement to add additional funding as described herein.

NOW, THEREFORE, in consideration of the mutual promises of the parties and other good and valuable consideration, the parties do agree as follows:

1. Section #5 Compensation sub-section (c) shall be increased by an additional \$500,000 for Phase 3, for a new total not-to-exceed contract amount of \$1,095,000.
2. 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

CELTIS VENTURES, INC.

By: _____
Matt Raymond, President/CEO



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 6/20/2025

Agenda Item: 4.6.1

To: Regional Transportation Commission

From: Christian Schonlau, Director of Finance, CFO

SUBJECT: Annual Insurance Renewal

RECOMMENDED ACTION

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 the Nevada Public Agency Insurance Pool (POOL) and Public Agency Compensation Trust (PACT).

BACKGROUND AND DISCUSSION

The Nevada Public Agency Insurance Pool (NPAIP) was formed in 1987 by Nevada public entities to provide a stable and consistent alternative to the commercial insurance markets. The pool provides property & casualty coverage as well as risk management, human resources and loss control services to its members. Membership in the pool includes counties, cities, school districts, special districts and towns. The pool is governed by a Board of Directors represented by members. NPAIP provides property/casualty coverage to a diverse group of more than 100 Nevada public entities.

NPAIP provides broad, manuscript property coverage with a maximum limit per loss of \$300,000,000. NPAIP also provides \$150,000,000 shared aggregate limits separately for Earthquake and Flood losses, subject to a \$25,000,000 aggregate sub-limit for flood losses in flood zone A. Property coverage will be subject to a deductible of \$25,000 per event, including for earthquake and flood losses. Coverage is also included for boiler & machinery (equipment breakdown) with a policy limit of \$100,000,000 per loss. Physical damage coverage is also included for scheduled vehicles both on and off-premises (does not include the Buses & Coaches).

NPAIP provides liability limits of \$10,000,000 each event/each member subject to a member annual aggregate liability limit of \$10,000,000 for Auto Liability, General Liability, Personal Injury Liability, Employment Practices Liability, Law Enforcement Liability and Wrongful Acts (Errors & Omissions) Liability. Coverage will be subject to a \$25,000 deductible per event/wrongful act.

NPAIP provides Cyber Risk Security coverage for Privacy or Security Liability per event and in the aggregate for each member. This limit was reduced from \$3,000,000 to \$1,000,000 in 2024, due to challenges in cyber market. Coverage for First-Party Event Management and Network Interruption Coverage will still be included but subject to a combined \$250,000 sub-limit. Coverage will also continue to include a \$50,000 sub-limit for Proof of Loss Preparation Costs. Coverage will be subject to a \$15,000,000 aggregate limit for all NPAIP members combined. For this renewal, a deductible of 10% up to \$25,000 will be in place.

NPAIP also provides Environmental Liability with coverage for Third Party Claims for Bodily Injury, Property Damage or Remediation Expense, First Party Remediation Expense and Emergency Response Expense with each incident limit of \$2,000,000, subject to an annual aggregate limit of \$10,000,000 and \$25,000 deductible. Coverage is also included for Business Interruption with a limit of \$2,000,000 up to 365 days.

The total NPAIP renewal premium reduced from \$325,997 to \$319,847.02, a decrease of 1.9% due to favorable market conditions and negotiations by the POOL.

The RTC RIDE contractor, Keolis Transit Services LLC, is responsible for automobile and general liability losses for the RTC RIDE system. The RTC ACCESS contractor, MTM LLC, is responsible for automobile and general liability losses for RTC ACCESS and RTC FlexRide. RTC still has responsibility for automobile/general liability for RTC support vehicles, RTC road programs, and RTC facilities.

Staff is recommending renewal of Crime Insurance with limits of \$5,000,000 for employee theft, forgery, computer fraud, funds transfer fraud, money orders and counterfeit currency fraud and Fiduciary Liability with a limit of \$4,000,000. The deductible for employee theft and money & securities on-premises is \$500,000 to provide coverage excess of the limit provided by the NPAIP and \$25,000 for the other listed coverage. Coverage will include social engineering fraud with a limit of \$250,000 and \$100,000 deductible. The renewal premium for the Crime and Fiduciary Liability coverage is \$13,758, a reduction of 5.2%.

RTC's Workers Compensation and Employer's Liability coverage is provided through the Public Agency Compensation Trust (PACT), which is a Nevada based insurance pool that was formed under Nevada's Interlocal Cooperation Act in 1996. PACT provides workers compensation, claims and risk management services to its Nevada government entity members. This premium is estimated and subject to audit based on actual payroll once the policy term is completed.

The estimated proposed total cost of the insurance coverage is \$390,523. The total estimated cost represents a decrease of \$3,966 (1%) when compared to the expiring term cost.

The RTC has maintained an agreement with the Reno office of USI Insurance Services LLC for the purpose of brokering insurance coverage as required for the effective operation of the RTC.

In concurrence with USI Insurance Services, staff recommends that the coverage be bound effective July 1, 2025.

The broker's compensation for these renewals is included as part of the overall insurance cost. This year, the broker's total estimated annual compensation at renewal will be \$27,874, a \$341 decrease from last year. The broker provides insurance services, risk management services and contract review services throughout the year as a component of the broker's compensation.

Staff has always looked to protect the agency at the best possible price against catastrophic losses that have the potential to inhibit the agency's ability to continue providing the necessary transportation services for our community. Staff believes this program accomplishes that goal.

FISCAL IMPACT

Funding for the insurance coverage is included in the FY 2026 Budget.

PREVIOUS BOARD ACTION

6/16/2024 Authorized the Executive Director to bind annual insurance coverage effective July 1, 2024.

REGIONAL TRANSPORTATION COMMISSION
Attachment A. INSURANCE RENEWAL COST RECAP

Coverage	Renewal Limits	Renewal Deductibles	Renewal Insurer	2024/25 Premiums	2025/26 Premiums	\$ Variance	% Var.
Property	\$300,000,000 per loss	\$25,000	Nevada Public	\$325,997	\$319,847	(\$6,150)	(1.9%)
Earthquake	\$150,000,000*	\$25,000	Agency Insurance				
Flood	\$150,000,000*	\$25,000	Pool (POOL)				
Flood A/V	\$25,000,000*	\$25,000					
Cyber Liability	\$1,000,000**	10%***					
Cyber Security	\$250,000	10%***					
Employee Theft	\$500,000	\$25,000					
Pollution Liability	\$2,000,000	\$25,000					
General Liability, Auto Liability, Employment Practices & Wrongful Acts Liability	\$10,000,000 per event \$10,000,000 aggregate	\$25,000	Nevada Public Agency Insurance Pool (POOL)	Included above			
Workers Comp. Employer's Liability	Statutory Coverage \$2,000,000	N/A (Nil)	Public Agency Compensation Trust (PACT)	\$43,903	\$46,839^	(\$2,615)	(5.3%)
Crime	Employee Theft: \$5M On Premises: \$5M Other Coverages: \$5M Social Engineering: \$250k	\$500,000 \$500,000 \$25,000 \$100,000	Federal Ins. Co. (Chubb)	\$14,510	\$13,758	(\$752)	(5.2%)
Fiduciary Liability	Limit: \$4,000,000	N/A (Nil)	Federal Ins. Co. (Chubb)	\$10,079	\$10,079	-	-
Total Annual Insurance Cost				\$394,489	\$390,523	(\$3,966)	(1%)
<i>Estimated Broker Compensation (Included Above)</i>				<i>\$28,555</i>	<i>\$27,874</i>	<i>(\$681)</i>	<i>(2.4%)</i>

* Shared, Annual Aggregate Limits

** Subject to an annual aggregate limit of \$15,000,000 for all Pool members, combined

*** The cyber coverage deductible is 10% up to \$25,000

^ Estimated & Auditable Premium

All coverage is subject to policy terms, conditions, sub-limits, and exclusions.



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 6/20/2025

Agenda Item: 5.1.

To: Regional Transportation Commission

From: Vanessa Lacer, Planning Director

SUBJECT: Truckee River Path Inventory Study

RECOMMENDED ACTION

Receive a presentation on the Truckee River Path Inventory Study.

BACKGROUND AND DISCUSSION

This inventory study was conducted along the Truckee River Path spanning approximately 11.2 miles from Riverhaven Drive in Reno to Larkin Circle in Sparks. Data was collected in summer 2024 through a detailed field survey at 100-foot intervals, utilizing GPS and geotagged photography to assess the physical infrastructure of the path, such as pavement condition, width, slope, and striping, as well as the surrounding environment, including amenities and general observations of conditions that may impact user experience. The report reflects a snapshot of conditions as of July and August of 2024, provides data and information for future planning and supports the development of a GIS dataset for sharing and public access. The full report is provided as an attachment and is available at rtcwashoe.com. A map of the data collected can also be accessed at rtcwashoe.com.

This item supports Strategic Roadmap Goal #3, "Explore the Truckee River as a mobility corridor" and FY2025 RTC Goal, "Initiate: Truckee River Transportation Network Study".

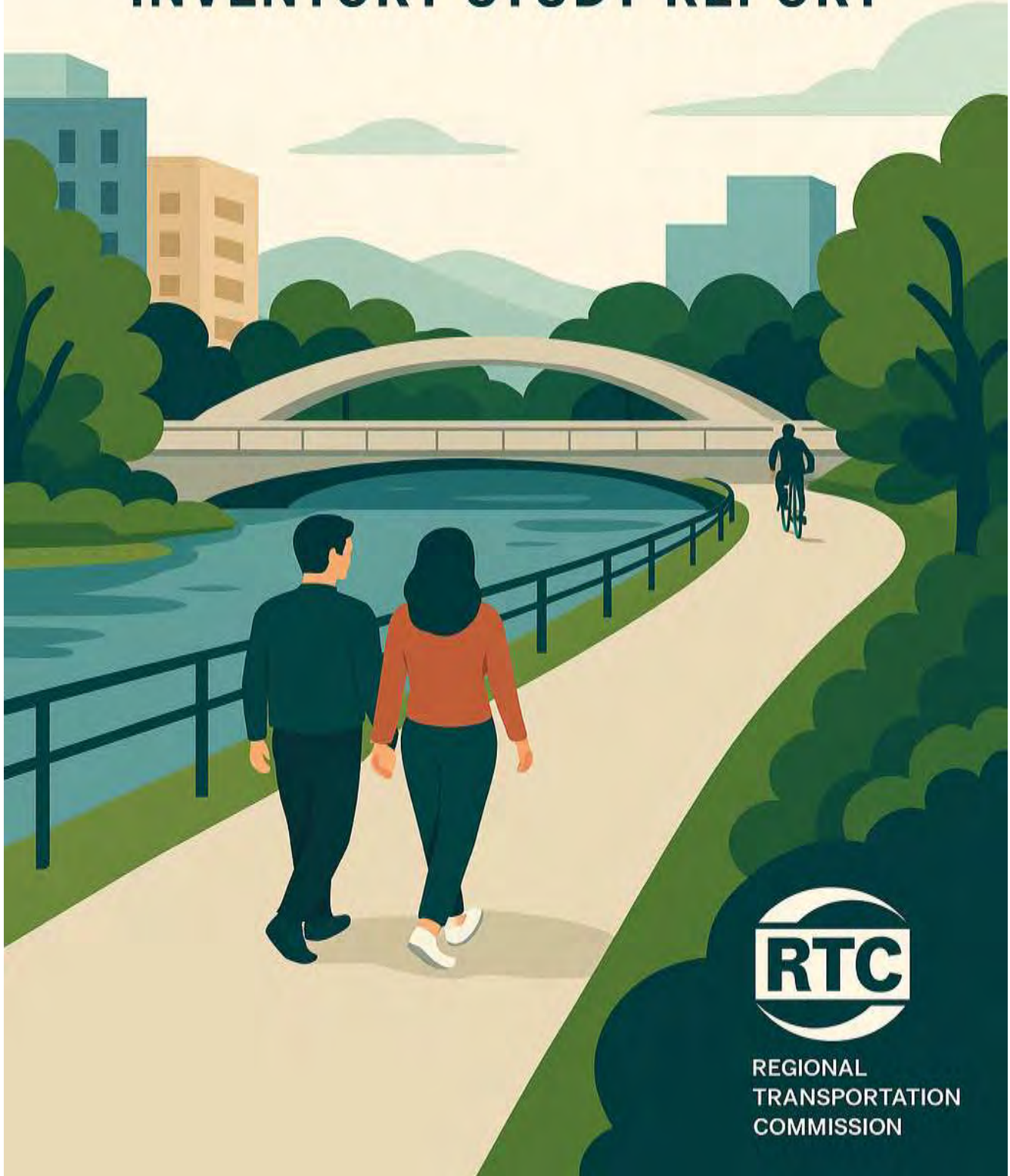
FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

TRUCKEE RIVER PATH INVENTORY STUDY REPORT



REGIONAL
TRANSPORTATION
COMMISSION

Truckee River Path Inventory Study Report

Table of Contents

Executive Summary	1
Introduction	3
Background	3
Objective	3
Scope and Limitations.....	3
Methodology and Guidance	4
Path Classification.....	4
Data Collection.....	5
Guidance Document.....	6
Width	6
Longitudinal Slope	6
Cross Slope.....	6
Existing Conditions Inventory.....	7
Infrastructure	7
Path Surface and Condition.....	7
Width	9
Slope	11
Striping	15
Amenities	16
Restrooms	16
Benches.....	17
Trash Cans	19
Lighting.....	19
User Experience Observations	22
Obstructions	22
Signage	23
Road Crossings.....	24
Access Points	25
Additional Observations.....	27

Truckee River Path Inventory Study Report

Executive Summary

This report provides an inventory of the Truckee River Path, a 11.2 mile corridor of paved shared-use path, for non-motorized users, located along the Truckee River from Riverhaven Drive in Reno to Larkin Circle in Sparks. The inventory was conducted in July and August of 2024 and includes both the physical infrastructure of the path and observations of the surrounding environment that may impact user experience.

This inventory assesses the condition of paved infrastructure, the presence of amenities such as bathrooms, lighting, benches, and trash cans, the locations of access points for pedestrians and cyclists, roadway crossings, signage, and other elements that contribute to the overall user experience.

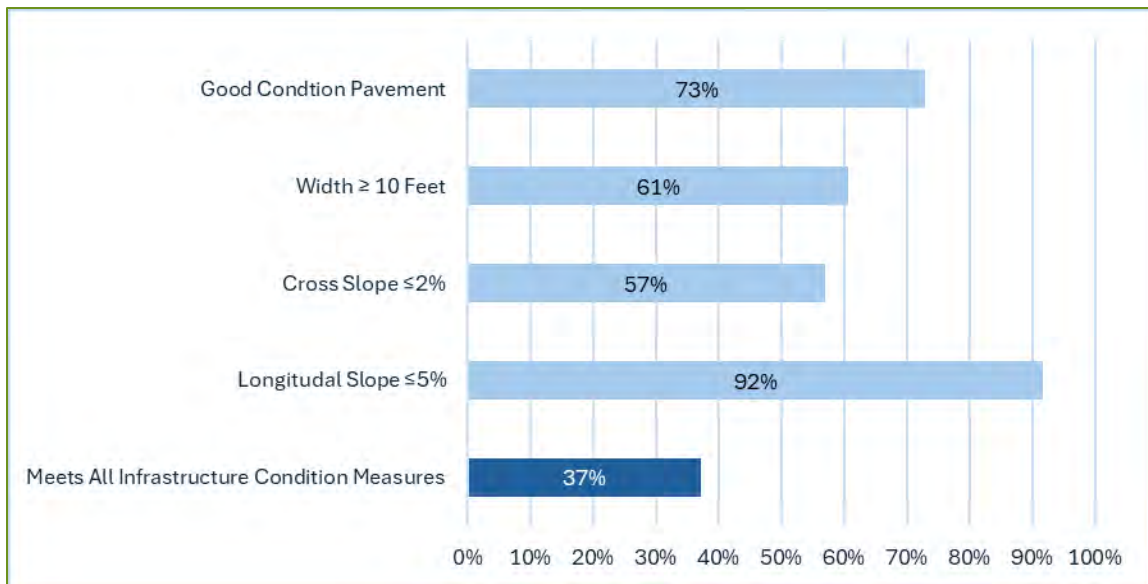
The inventory presented in this report is a snapshot of conditions observed during field visits in the summer of 2024 and does not include any improvements or amenities installed after August 2024. The purpose of this inventory is to identify the current conditions of the path, which may assist in future planning efforts.



Truckee River Path Inventory Study Report

Key findings from the inventory include:

- **Infrastructure Condition:** Approximately 73% of the path surface was found to be in good condition. The path was found to have an average width of 10.85 feet, with 61% of the path meeting the Federal Highway Administration (FHWA) recommended minimum width of 10 feet for two-directional shared-use paths. The average longitudinal slope of the path was 1.97%, with 92% of the path within the FHWA's recommended maximum of 5%. The average cross slope was 2.73%, ranging from 0% to 15%. Approximately 57% of the path complies with the FHWA's recommended maximum cross slope of 2%. As shown in the graph below, 37% of the path was found to meet all three FHWA recommendations (width, cross slope, and longitudinal slope) and was found to have good pavement surface condition.



- **Amenities:** A total of 172 amenities were inventoried, including 99 lights, 36 benches, 36 trash cans, and 1 bathroom. Amenities were primarily clustered within designated park areas as well as along sections of the path within the City of Reno. It should be noted that amenities have been installed since this inventory was conducted and are therefore not captured in this report.
- **Observations:** General observations were conducted along the path to document key features, including 67 obstructions, 9 signs, 12 road crossings, and 44 access points. Obstructions included tree branches, tree trunks, utility poles, fencing, and overgrown shrubs. Signage observed along the corridor primarily included wayfinding markers for the Tahoe Pyramid Trail, local city parks and warning signs indicating potential hazards, such as low-clearance bridge crossings. Road crossings, locations where the path intersects with roadways, were found to be either at-grade or through grade-separated facilities. A total of 44 access points, through adjacent asphalt or concrete paths, were observed.

Truckee River Path Inventory Study Report

Introduction

Background

The Truckee River Path is a paved, off-street facility that accommodates nonmotorized users, including pedestrians, bicyclists, and individuals using mobility devices. In 2024, the RTC Board of Commissioners identified the Truckee River Path as a priority and set a strategic goal for Fiscal Year (FY) 2025 to explore the Truckee River as a mobility corridor. This inventory report is an initiative of the FY 2025 goal.

Objective

This inventory report documents the existing conditions and characteristics of the Truckee River Path and provides a count of observed amenities as well as general observations of conditions that may impact user experience. This report assesses both the physical infrastructure of the path and the surrounding environment. Additionally, data collected for this report will be utilized to develop a publicly available Geographic Information System (GIS) dataset, provided through stand-alone GIS files and ArcGIS Online.

Scope and Limitations

The inventory area is the Truckee River Path, from Riverhaven Drive in Reno to Larkin Circle in Sparks (Figure 2). The inventory area spans approximately 11.2 miles and traverses a range of land uses, including industrial, commercial, residential, and downtown districts (Figure 2). Access points and recreational destinations near the inventory area include Idlewild Park, **Wingfield Park, Downtown Reno, the Reno Aces Baseball Stadium, Fisherman's Park,** Cottonwood Park, and major north-south roadways. The inventory presented in this report is a snapshot of conditions observed during field visits in July and August of 2024 and does not include any improvements or amenities added after the inventory data collection. This report also does not include long-term forecasting or an analysis of future infrastructure needs.



Figure 1-Types of Land Use: Industrial, Residential, Downtown

Truckee River Path Inventory Study Report



Figure 1-Truckee River Path Inventory Area

Methodology and Guidance

Path Classification

The Truckee River Path is classified in this report as a shared-use path. The term shared-use path is defined by the American Association of State Highway and Transportation Officials (AASHTO) as **“a bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way.”** Shared-use paths may be used by pedestrians, skaters, wheelchair users, joggers, and **other nonmotorized users.”** According to the Federal Highway Administration (FHWA) University Course on Bicycle and Pedestrian Transportation, common shared-use path types include rail-trails, rails-with-trails, greenway paths, side paths, towpaths, utility corridors, and paths on institutional or private developments. Based on the FHWA guidance, the Truckee River Path can be further classified as a shared-use greenway path, since it can be integrated within the larger natural corridor of the Truckee River.

Truckee River Path Inventory Study Report

Data Collection

RTC recruited two University of Nevada, Reno (UNR) student interns, one undergraduate and one graduate student, to collect data for the Truckee River Path Inventory Study. The inclusion of UNR students in this initiative **highlights RTC's ongoing commitment to** strong community partnerships. Data were collected during July and August of 2024 through in-person field visits. Cellphones were utilized to enter data points through the ESRI ArcGIS Field Maps Cellphone App. The Field Maps App was selected for this effort as it provides accurate location tracking and easy integration with desktop GIS. Data input screens from the App are shown in Figure 2.

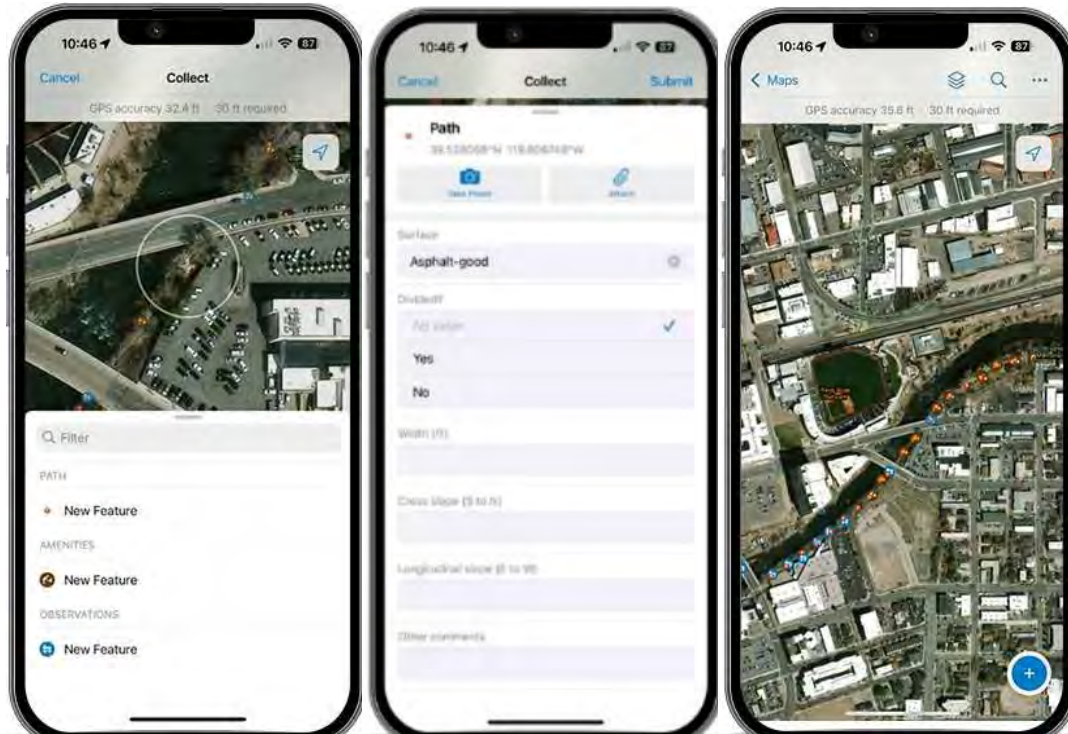


Figure 2-Field Maps Data Collection Cellphone App

Path data were collected at 100-foot intervals along the 11.2 mile inventory area, resulting in a total of 578 collection locations. About 0.25 miles were not measured due to accessibility or safety reasons. Segments not measured **are labeled as “Other” in the analysis.** At data collection locations, data points were entered into the App, and a photograph was taken to provide visual context. The data points were processed using GIS, allowing for spatial analysis and geotagging of the photographs taken at each location.

The following path infrastructure data were collected at each 100-foot interval:

1. GPS Coordinates
2. Path Width
3. Longitudinal Slope
4. Cross Slope
5. Path Surface and Condition
6. Path Striping

Truckee River Path Inventory Study Report

In addition to the path infrastructure data, the inventory also documented amenities and notable features as they were encountered along the path. Each amenity and feature was recorded with associated GPS coordinates. The following amenities and features were collected:

1. Lighting
2. Benches
3. Restrooms
4. Trash Cans
5. Obstructions
6. Access Points
7. Road Crossings
8. Signage

Guidance Document

The Federal Highway Administration (FHWA) Guide for the Development of Bicycle Facilities was utilized to determine data collection parameters for the width, longitudinal slope, and cross slope of the Truckee River Path. The FHWA recommended shared-use path measurements are further described in this section.

Width

The appropriate paved width for a shared-use path is dependent on the context, volume, and mix of users. The FHWA recommended minimum paved width for a two-directional shared-use path is 10 feet (3.0 meters). Typically, shared-use path widths range from 10 to 14 feet (3.0 to 4.3 meters), with the wider values applicable to areas with high use and/or a wider variety of user groups. In rare circumstances, a reduced width of 8 feet (2.4 meters) may be appropriate.

Longitudinal Slope

The FHWA recommends a maximum longitudinal slope of 5% for shared-use paths. When paths are located **adjacent to a roadway, they may match the roadway's grade even if it exceeds 5%**. Paths on independent rights-of-way should keep grades at or below 5%, especially on long inclines, for accessibility and user comfort.

Cross Slope

Cross slope is essential for drainage, preventing water accumulation and minimizing the risk of surface deterioration or slipperiness. FHWA recommends 1% cross slope for most shared-use paths. This provides adequate drainage while remaining comfortable for users, including those with disabilities. The maximum recommended cross slope is 2%, as required by accessibility guidelines. This applies whether the path is adjacent to roadways or in independent rights-of-way. A center crown design with 1% slope in each direction may also be used for drainage and accessibility.

Existing Conditions Inventory

Infrastructure

Path Surface and Condition

The path surface was found to consist of three primary materials: asphalt, concrete, and wood (bridges). It is estimated that 8.83 miles are asphalt, 2.06 miles are concrete, and 0.06 miles are wood bridge surfaces. Approximately 0.25 miles of the path were not assessed due to accessibility or safety constraints. Surface material and condition were visually assessed at each data collection location. Surfaces showing noticeable wear and deterioration were classified as being in "poor" condition. Surfaces without visible wear or deterioration were **classified as being in "good" condition**. Surface material and condition were assigned one of the following five classifications:

1. Asphalt-Good Condition
2. Asphalt- Poor Condition
3. Concrete-Good Condition
4. Concrete- Poor Condition
5. Bridge (i.e., Wooden Bridges)

Examples of photos taken as part of the surface condition assessments are shown as Figure 4. About 8.2 miles (73%) of the path surface was found to be in good condition (Figure 6). Asphalt comprises a significant portion of the path, with around 6.1 miles (54.5%) in good condition and 2.73 miles (24.4%) in poor condition, while concrete sections account for another 2.0 miles (18.1%) in good condition and 0.04 miles (0.3%) in poor condition.



Figure 3-Path Surface Material and Condition

Truckee River Path Inventory Study Report



Figure 4 (Continued)-Path Surface Material and Condition

The remaining 0.06 miles (0.5%) consist of bridges, which are constructed with a variety of wood products. All wooden bridge surfaces were found to be in good condition. About 0.25 miles (2.2%) of the path was not assessed due to accessibility or safety reasons. These segments are classified as **“Other”**. Path locations with the most concentrated areas of poor surface condition were between Lake Street and Galletti Way, where sections of asphalt displayed wear, including horizontal and vertical cracking, crumbling edges, and uneven surfaces (Figure 6).

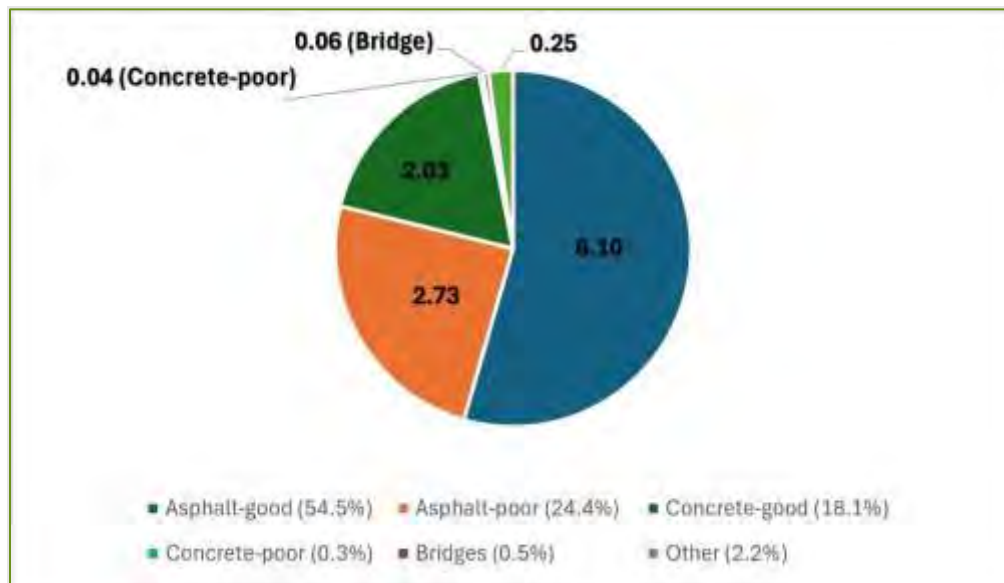


Figure 5-Surface Material and Condition



Figure 6-Areas of Poor Surface Condition

Width

The path was found to have an average width of 10.85 feet, with 61% of the path meeting the FHWA recommended minimum width of 10 feet for two-directional shared-use paths. Figure 7 shows locations of the path where the width meets the 10-foot recommendation. The mileage and percentage of the path meeting or not meeting the FHWA recommended width are shown in Figure 8.

Most of the path was found to measure between 7 feet and 14 feet (Figure 10). Locations wider than 10 feet were generally within parks and adjacent open spaces. Path locations less than 10 feet wide, were generally those in residential areas, including along Idlewild Drive. In the locations where the path was narrower, widths were between 3 and 5 feet.

Examples of path locations less than 10 feet wide include neighborhood areas with sidewalk infrastructure connecting to the path, locations on bridges or overpasses, and some pedestrian-focused sections such as along Riverside Drive, where bicycle users are transitioned to the Bicycle Boulevard corridor (Figure 11).

Truckee River Path Inventory Study Report



Figure 7- Path Width Meeting FHWA Recommendation (10 feet)



Figure 8-Path Width Mileage

Truckee River Path Inventory Study Report

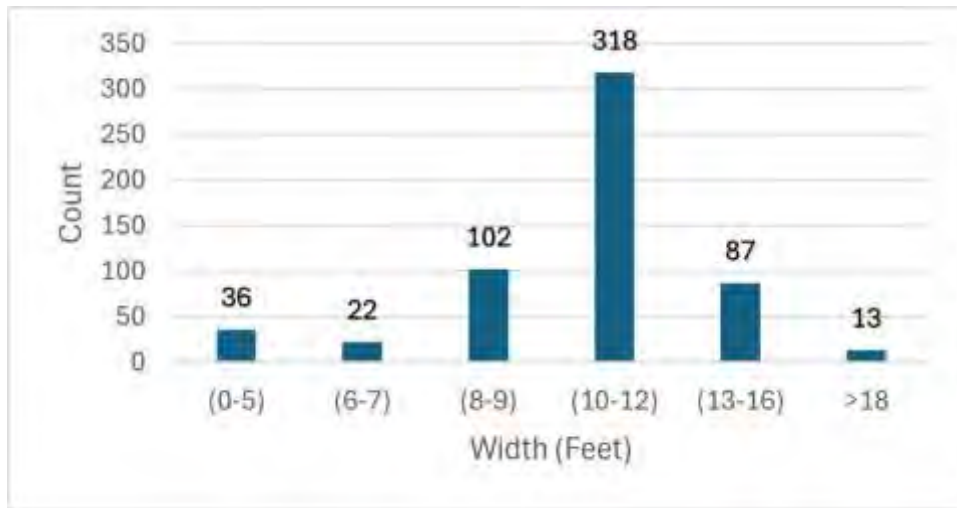


Figure 9-Path Width



Figure 10-Path Width Examples (Meets Recommendation / Does Not Meet Recommendation)

Slope

The path was found to have an average longitudinal slope (east to west) of 1.97% (Figure 11), with 92% of the path within the FHWA recommended 5% slope (Figure 12). However, throughout the path, there were several outlier slope measurement locations, including short inclines and hill-like rises. These variations in slope were primarily due to the natural topography of the area, as well as adjustments made to navigate bridges, overpasses, and other infrastructural elements.

Truckee River Path Inventory Study Report

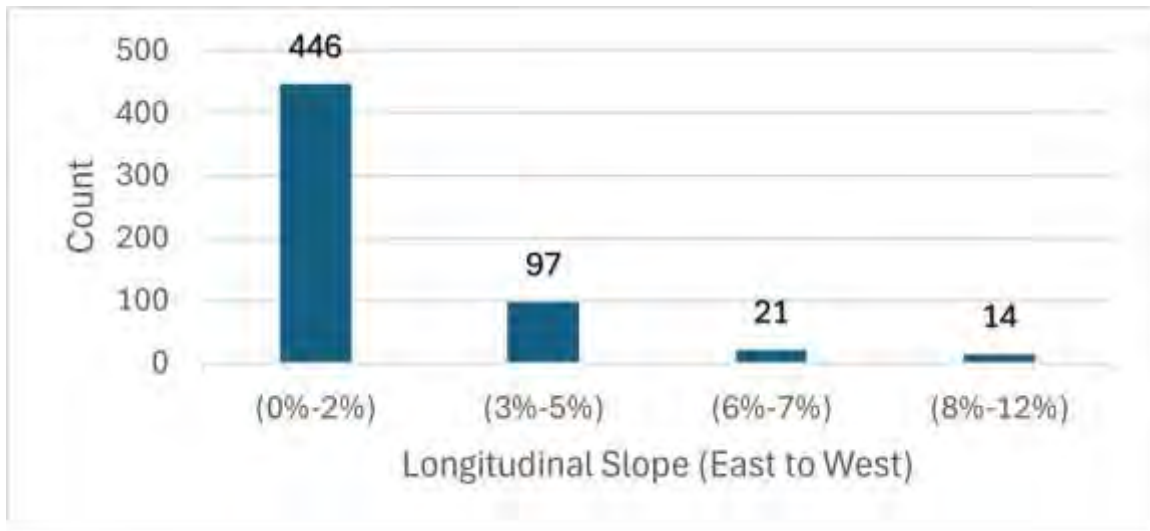


Figure 11- Longitudinal Slope

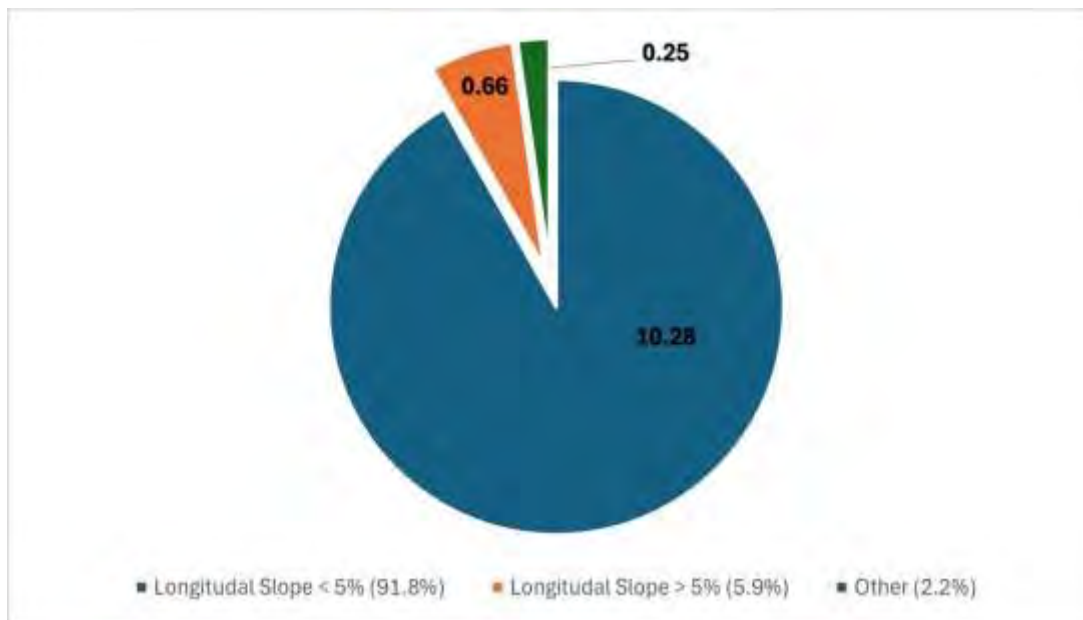


Figure 12-Longitudinal Slope Mileage

The path was found to have an average cross slope (north to south) of 2.73% (Figure 13), with slope varying between 0% and 15%, with about 57% of the path meeting the 2% cross slope recommended maximum (Figure 14). The outlier areas with higher grade slopes were primarily associated with specific features such as sidewalks and driveway access in residential areas, particularly along Idlewild Drive in Reno. These sections typically had steeper inclines due to the presence of driveways and residential access points. In addition to these outliers, higher-grade slopes were also observed in multiple concrete sections along Riverside Drive and asphalt areas throughout the path.

Truckee River Path Inventory Study Report

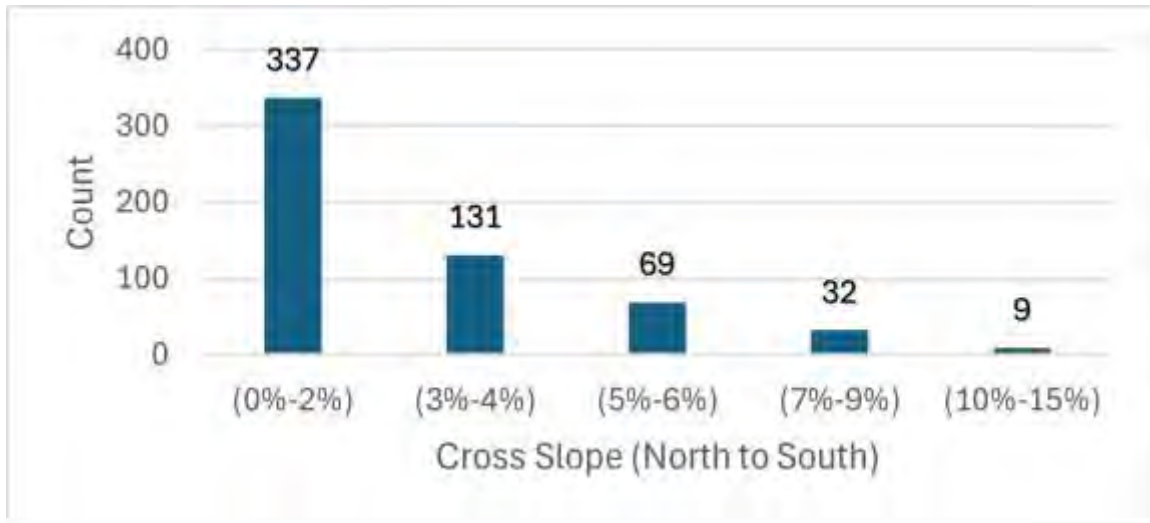


Figure 13-Cross Slope



Figure 14-Cross Slope Mileage

The inventory found approximately 35 locations along the path where the longitudinal slope measurements exceeded 5% and approximately 241 sites that had cross slope measurements exceeding 2%. These sites are dispersed throughout the path, with a combination of areas exhibiting both good and poor surface quality, as well as varying surface material. Figure 15 shows examples of locations with different longitudinal slopes and surface material.

Truckee River Path Inventory Study Report



Figure 15-Longitudinal Slope Examples: Concrete Within Recommended Slope / Asphalt Outside Recommended Threshold)

37% of the path was found to meet all three FHWA recommendations (width, cross slope, and longitudinal slope) and was also found to have good pavement surface condition (Figure 17).

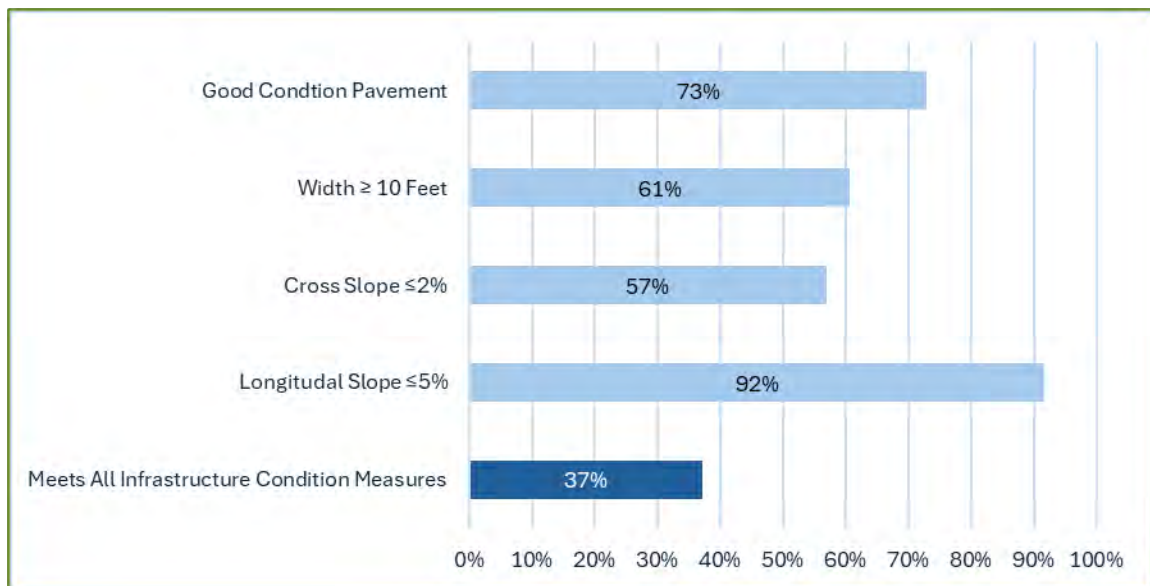


Figure 17-Percent of Path Meeting all Measures

Truckee River Path Inventory Study Report

Striping

Throughout the path, some sections were clearly divided by a striped center line (Figure 18). Most of the striped path sections were within the city of Sparks, but there was also a continuous segment through Idlewild Park in Reno (Figure 19). In total, approximately 5.6 miles of the path were found to be marked with striping (Figure 20).



Figure 18-Striped Path



Figure 19-Striped Path Location

Truckee River Path Inventory Study Report

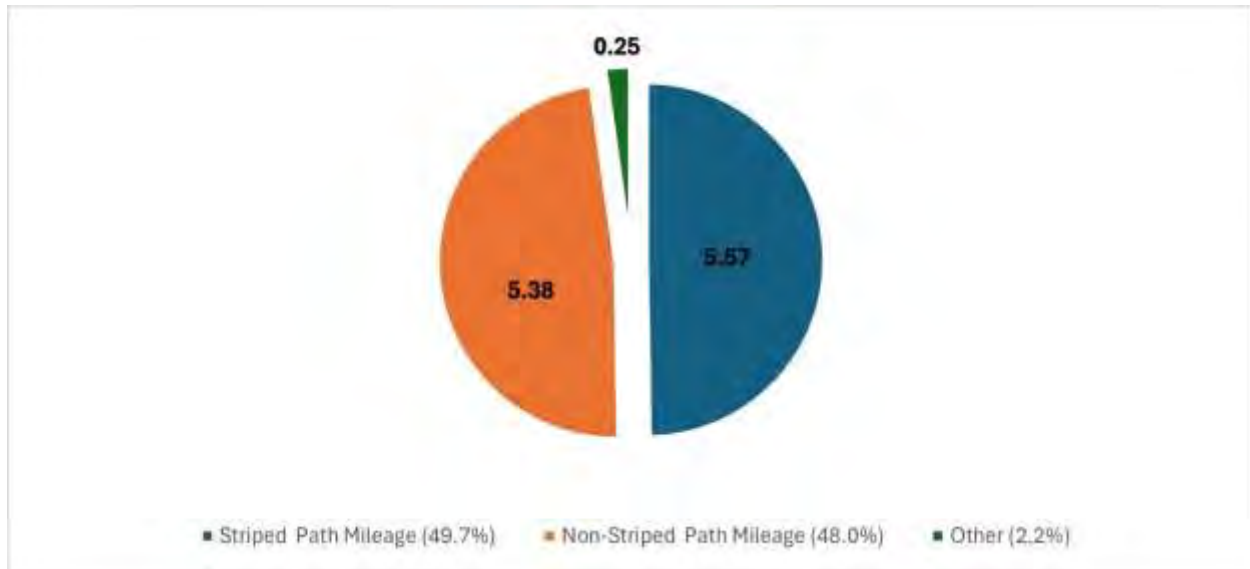


Figure 20-Striped Path Mileage

Amenities

Restrooms

One restroom, located within Cottonwood Park (Figure 21), was counted in the initial inventory. As observations were only collected every 100 feet, no restroom facilities between data collection locations were included in the initial inventory. Recognizing the limitations of the data collection methodology for the identification of restrooms, a post-inventory desktop analysis was conducted in the spring of 2025. At that time five additional publicly available restrooms along the path were identified, **including three “Portland Loo” restrooms** (Figure 22). The additional restrooms were located within Rock Park, John Champion Memorial Park, Brodhead Memorial Park, City Plaza Park, and Crissie Caughlin Park (Figure 23).



Figure 21-Restroom (Cottonwood Park)

Truckee River Path Inventory Study Report



Figure 22-Restroom (Portland Loo)

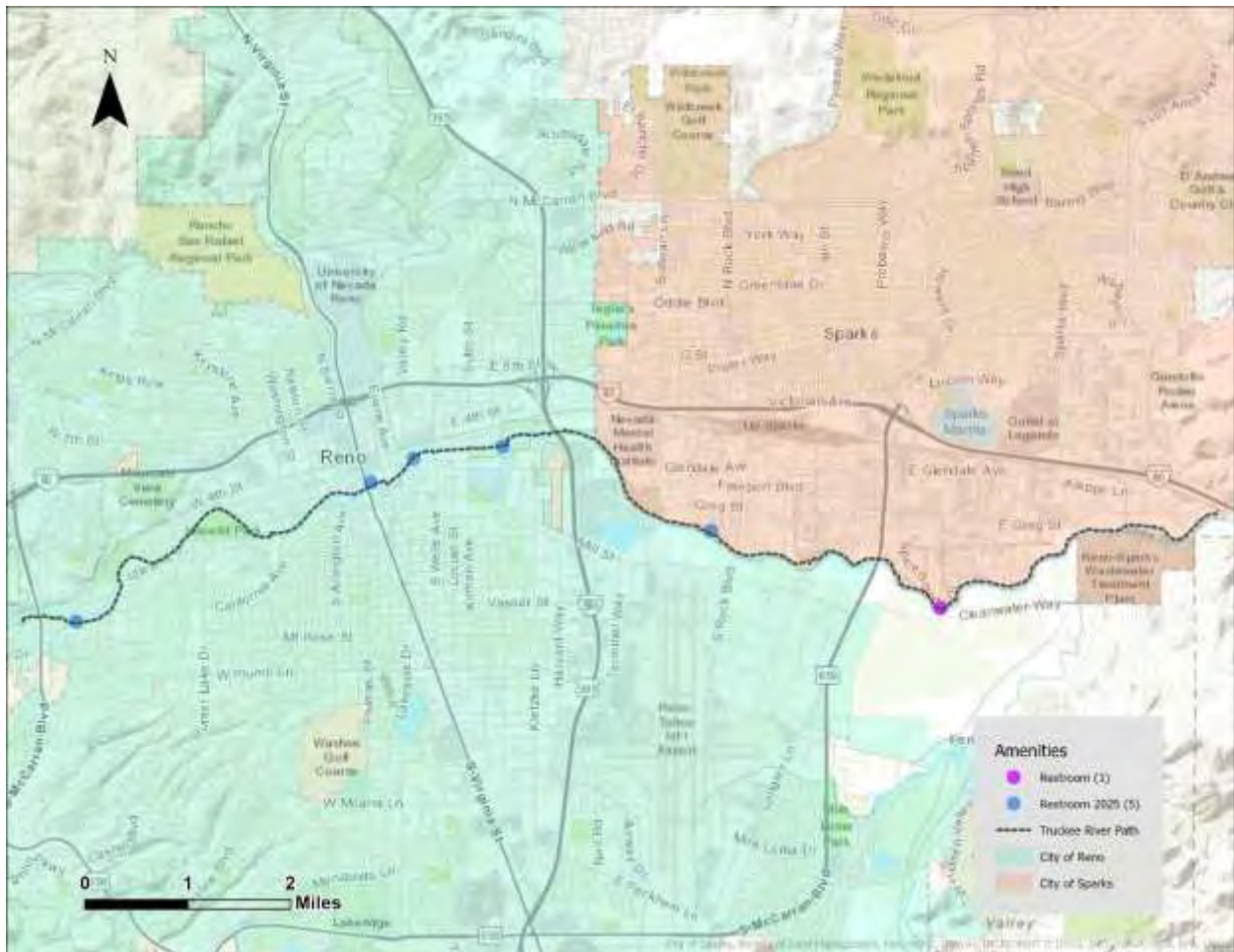


Figure 23-Amenities Across Entire Path (Restrooms)

Benches

The design and quality of the benches varies along the path, with cement, wood, and metal being the three main materials used for bench construction (Figure 24). Some benches

Truckee River Path Inventory Study Report

feature more modern, ergonomic designs, while others are simpler and more traditional. Benches were found to be located throughout the path corridor (Figure 25), with fewer benches found within Sparks.



Figure 24-Benches (Wood, Cement, and Metal)



Figure 25-Amenities Across Entire Path (Benches)

Truckee River Path Inventory Study Report

Trash Cans

Trash cans were found to be distributed along the path, however more trash cans were found within the City of Reno. (Figure 26). The design and condition of the trash cans varied by location. While some were found to be in good condition, others exhibited signs of deterioration, including physical wear, aging materials, and evidence of vandalism such as graffiti and tagging.



Figure 26- Amenities Across Entire Path (Trash Cans)

Lighting

Lighting infrastructure found along the path was limited in the City of Sparks, with extended segments lacking lighting fixtures. In Reno, lights were found to be concentrated within the Riverwalk District and along the path adjacent to Kuenzli Street (Figure 27). A variety of light fixture styles were observed, including units designed to emit light omnidirectionally, laterally, and downward (Figure 28). The type of lighting technology also varied by location, with a mixture of LED and non-LED bulbs observed. As the inventory was conducted during daylight hours, the functionality and illumination quality of the lighting fixtures could not be assessed.

Truckee River Path Inventory Study Report



Figure 27-Amenities Across Entire Path (Lights)

Truckee River Path Inventory Study Report



Figure 28-Light Styles

User Experience Observations

Obstructions

Obstructions were defined as vertical barriers within seven feet of path clearance and horizontal barriers within two feet of the path edge. A total of 67 obstructions were identified along the path, consisting of 54 horizontal obstructions and 13 vertical obstructions. Obstructions observed along the path included trees, foliage, and fencing, either along or through the path. Tree branches were the primary vertical obstructions. Both horizontal and vertical obstructions were found to be present throughout the path (Figure 29). Horizontal obstructions observed consisted of narrow fencing, poles, depressions in the path, and tree roots (Figure 30).

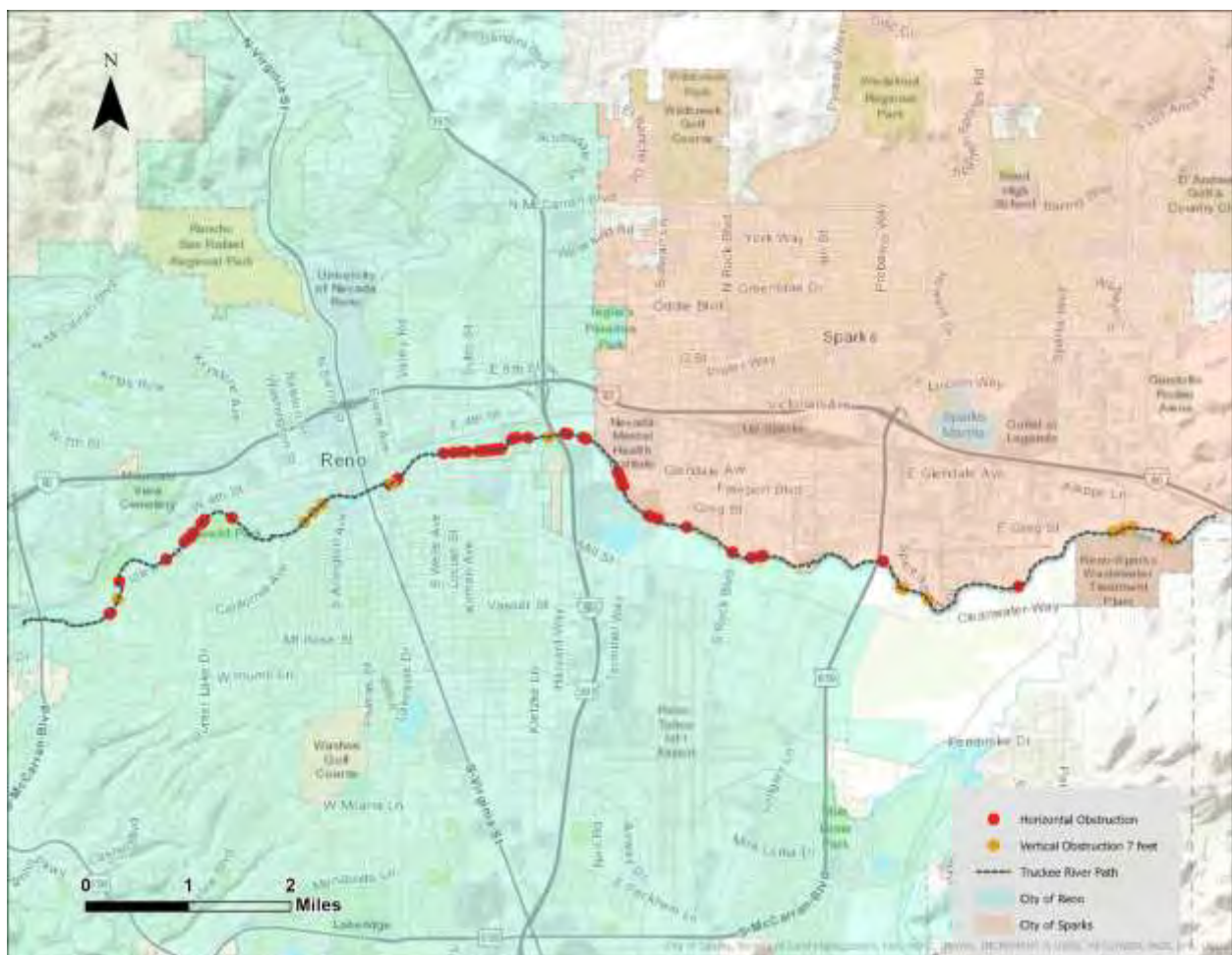


Figure 29-Vertical and Horizontal Obstruction Locations



Figure 30-Vertical Obstruction (Branch) and Horizontal Obstruction (Depression and Tree Root)

Signage

Signs along the path were found to serve two primary functions, wayfinding and hazard warnings. Wayfinding signs help users orient themselves by indicating the direction of travel, with some displaying approximate travel times to key locations along the trail and a map of the path (Figure 31). Tahoe Pyramid Trail signs, found throughout the path, are an example of a wayfinding sign. The other type of sign found along the path were hazard warning signs, which alert users to potential dangers, particularly related to overpass clearance heights. Other signs along the path notified path users of city ordinances and city boundaries.



Figure 31-Signage Along Path

Truckee River Path Inventory Study Report

Road Crossings

Two crossing types were observed at the eleven locations, at-grade crosswalks and grade-separated underpasses. The crosswalks had different styles of markings, which included standard and continental lines (Figure 32). The crosswalk on Sierra Street had signage on light poles to indicate to drivers the presence of a crosswalk. The underpasses varied in height, with high clearance on the underpass for I-580, and lower clearance on Glendale Avenue, which had a 7 feet -11 inches clearance (Figure 33). The path was found to cross over a roadway at 11 locations (Figure 34).



Figure 32-Crosswalk Styles (Standard and Continental Lines)



Figure 33-Low Bridge Underpass



Figure 34-Road Crossings Locations

Access Points

A total of 44 access points were observed along the path, with a high concentration located in the Riverwalk District of Reno (Figure 35). The access points included pedestrian walkways, curb ramps, paths, inclined ramps, stairways, and river access ramps (Figure 36). Several of these access points were connected to parking lots. The access points were distributed throughout the corridor and varied in surface material and condition.

A potential point of path segmentation was observed along the path within the downtown Reno corridor. Specifically, the segment between South Center Street and Lake Street included two fences with lockable gates controlled by the private property owner (Figure 37). If these gates were closed, users would need to detour via East 1st Street, resulting in an additional travel distance of approximately 600 feet.

Truckee River Path Inventory Study Report



Figure 35-Access Point Locations



Figure 36-Access Point Types

Truckee River Path Inventory Study Report



Figure 37-Privately Owned Parcel with Gate (AT&T Communications of Nevada)

Additional Observations

The presence of unhoused people and their belongings was observed on the path, particularly between the Grand Sierra Resort (GSR) and John Champion Memorial Park, near the Riverwood Apartments, and in Broadhead Memorial Park. Accumulations of personal items and debris were noted as potential obstacles and obstructed the path in some locations.



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 6/20/2025

Agenda Item: 5.2.

To: Regional Transportation Commission

From: Christian Schonlau, Director of Finance, CFO

SUBJECT: Regional Roads Maintenance Needs Study

RECOMMENDED ACTION

Acknowledge receipt of a report regarding regional road maintenance needs and available funding to perform roadway maintenance activities.

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



300 E 2nd Street, Suite 1210
Reno, NV 89501
NCE Project No. 173.51.25



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:

NCE

Janice Wang, PhD, Project Pavement Engineer

Becca Regalado, Senior Database Manager

Mei-Hui Lee, PhD, P.E., Associate Engineer

Kimley-Horn

Anabel Hernandez, P.E., PTOE, RSP

Jessica Rossi, AICP

Charity Thompson, E.I.T.

NCE

300 E 2nd Street, Suite 1210
Reno, NV 89501
(775) 329-4955

Kimley-Horn

6671 Las Vegas Blvd South, Suite 320
Las Vegas, NV 89119
(702) 862-3600

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 D6433 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
Revenues¹				
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 – 2024	35
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 1979¹, 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), including²:

- 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:

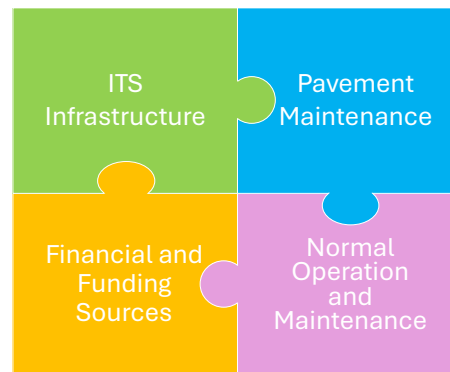
- Pavement preservation, including preventative maintenance, corrective maintenance, rehabilitation, and reconstruction.
- Normal operations and maintenance, including patching and crack sealing, snow removal, street sweeping, landscaping, lighting, sidewalks, signage, striping, etc.
- Traffic system 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 compiled 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.

Data Collection

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

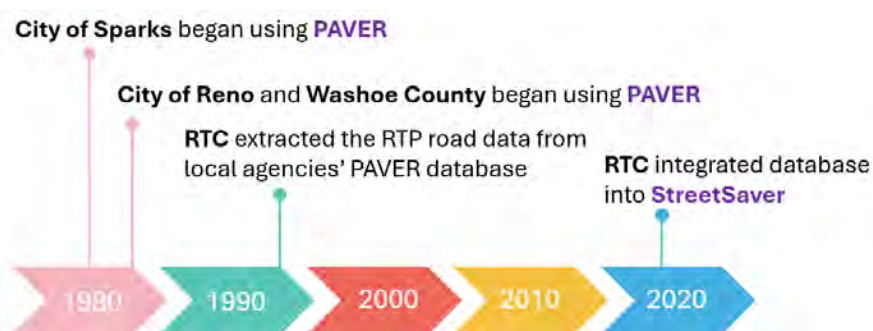
Draft data collection memorandums were sent to each agency on November 1, 2024, and responses were received throughout November 2024. To clarify the comments from the cities of Reno and Sparks and the Washoe County, follow-up meetings were held on November 21, December 12, and December 13, 2024, respectively. 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).

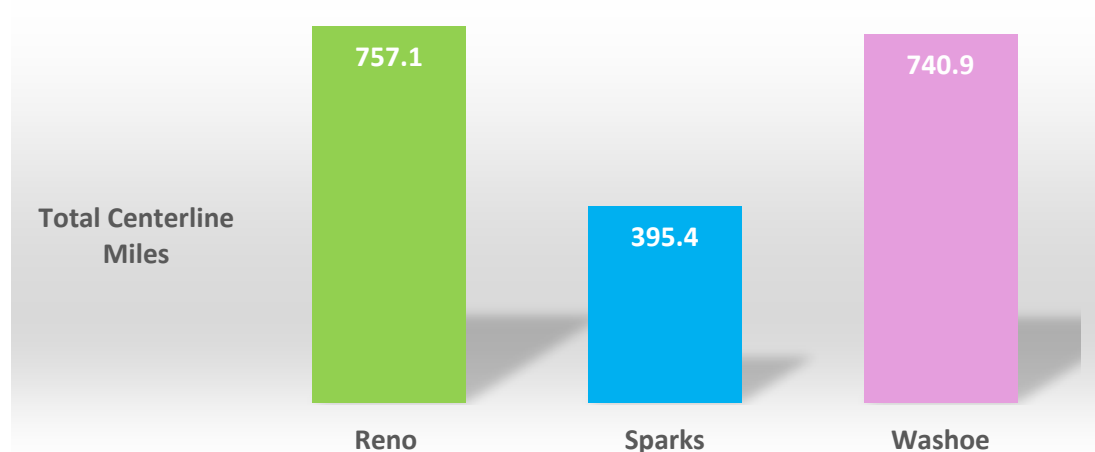


Figure 1. Centerline Miles in each Jurisdiction

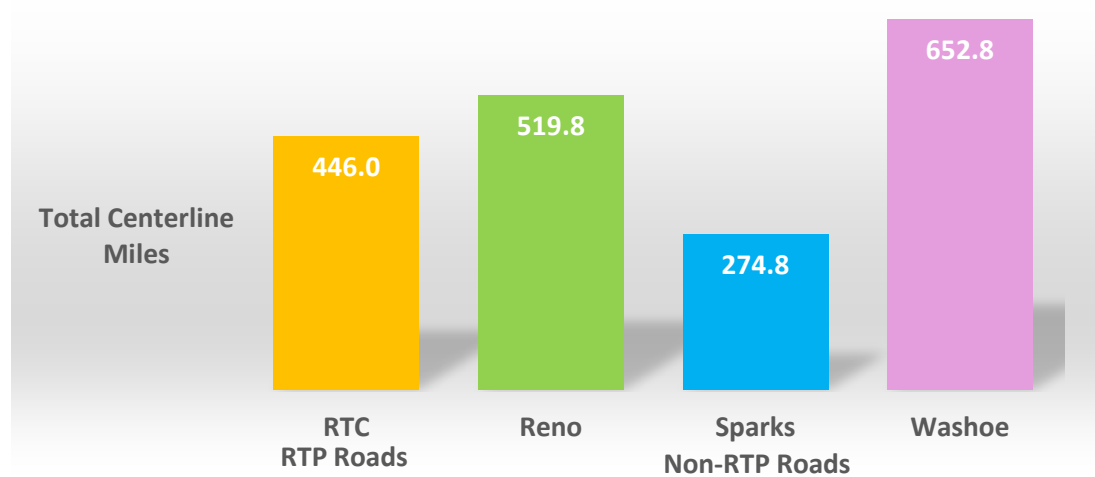


Figure 2. Centerline Miles Maintained by each Agency

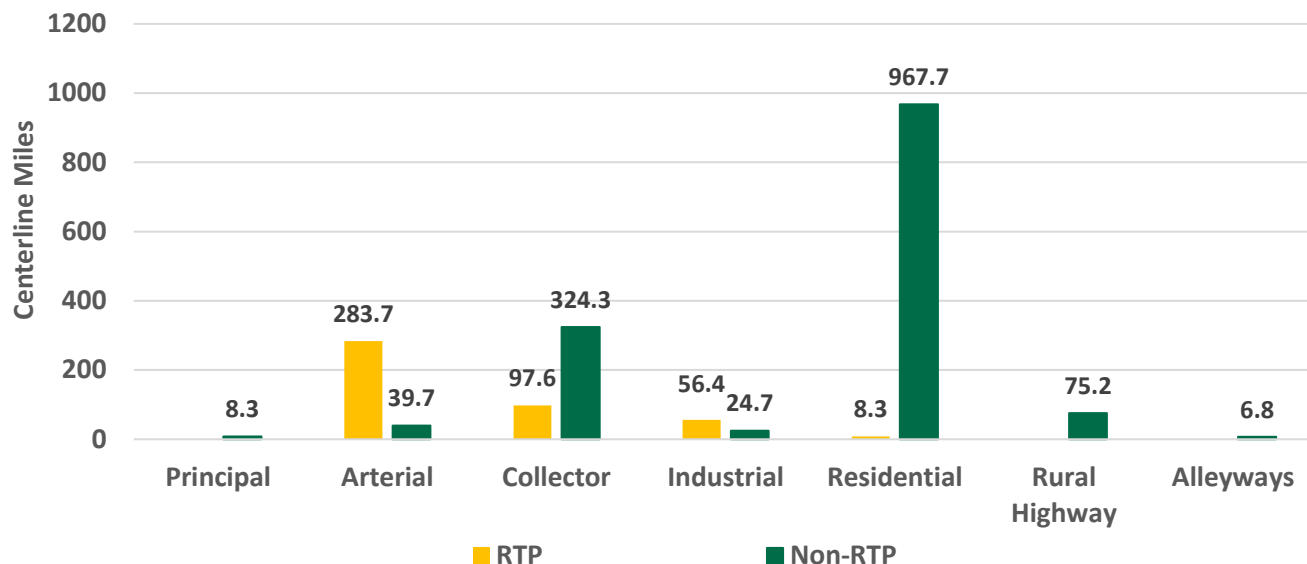


Figure 3. Centerline Miles of RTP and non-RTP roads of each Functional Classification

Pavement condition data is the “fuel” for any pavement management engine. The RTC, the cities of Reno and Sparks, and Washoe County adopted ASTM D6433³ 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.

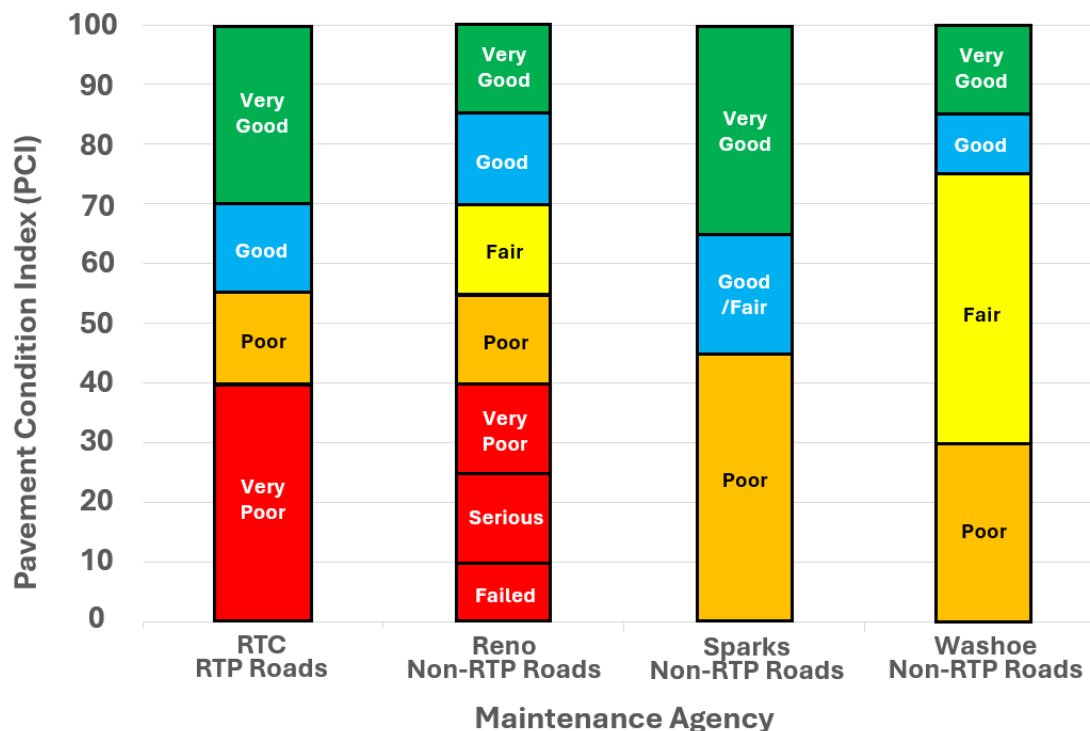


Figure 4. Pavement Condition Categories as Defined by each Maintenance Agency

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.

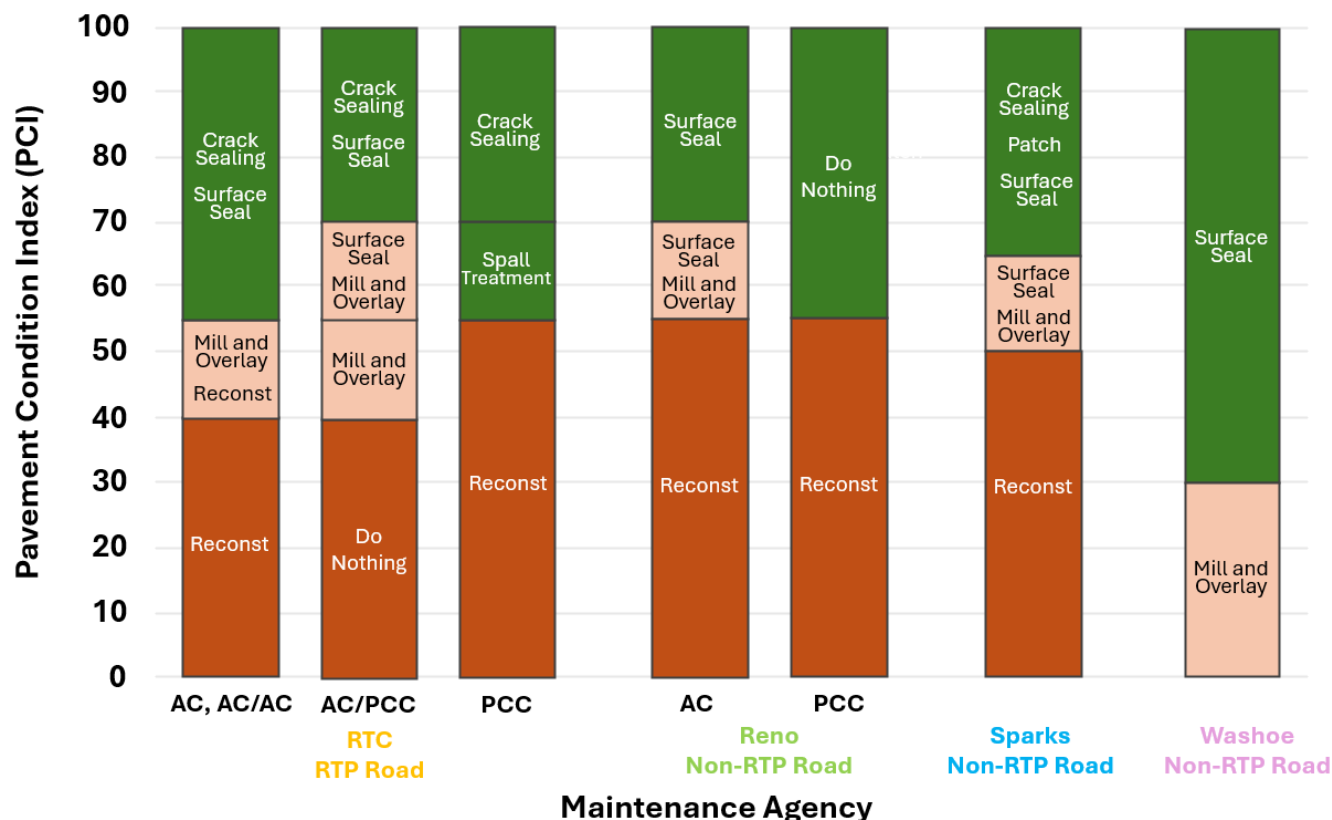


Figure 5. Pavement Strategies adopted by Maintenance Agency

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 \$4.00/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	208.5	151.3	14.4	76.3	0.0	0.5	0.0	0.0
2020	2.1	0.0	40.8	0.0	124.0	162.1	21.6	62.7	30.8	0.1	0.0	0.0
2021	0.0	0.0	27.9	0.0	99.5	126.9	19.5	82.7	49.6	0.1	0.0	0.0
2022	0.0	0.0	13.4	0.0	111.3	135.2	23.0	67.1	13.4	1.7	0.0	0.0
2023	165.6	0.0	0.0	0.0	144.6	59.0	16.0	52.2	4.6	0.0	0.0	0.0
Total	169.4	0.0	89.8	0.0	687.9	634.5	94.5	341.0	98.4	2.4	0.0	0.0
Total treated %	14.8%	0.0%	16.6%	0.0%	60.1%	61.0%	17.4%	26.1%	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.

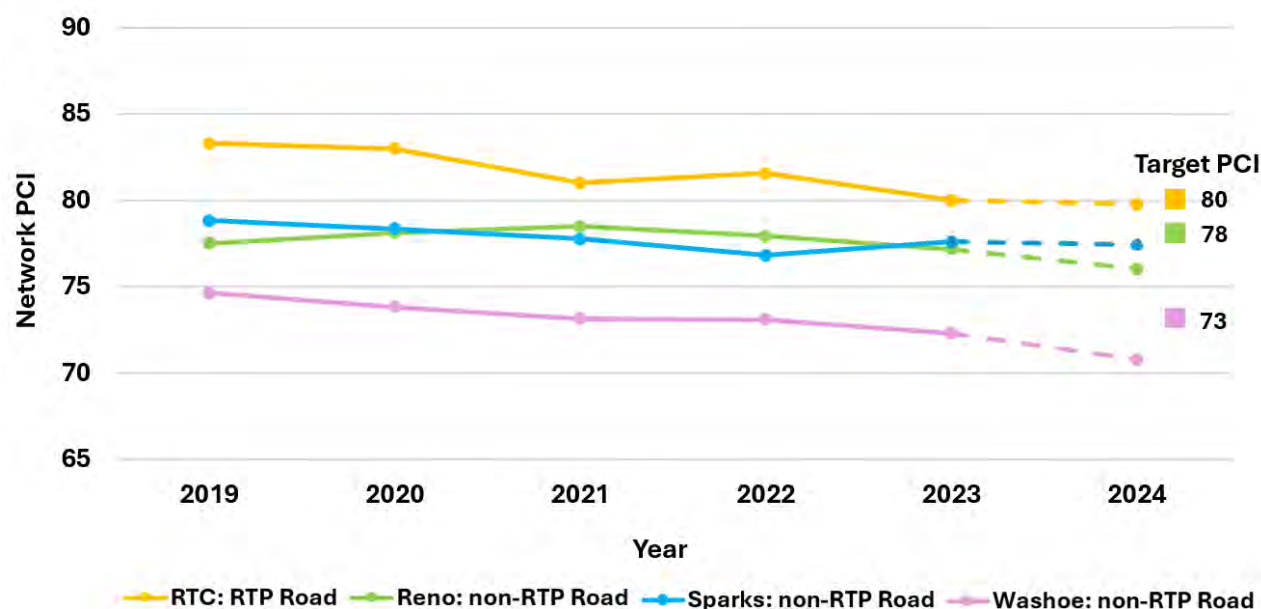


Figure 7. Historical average PCIs and Target PCI by Maintenance Agency

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>.

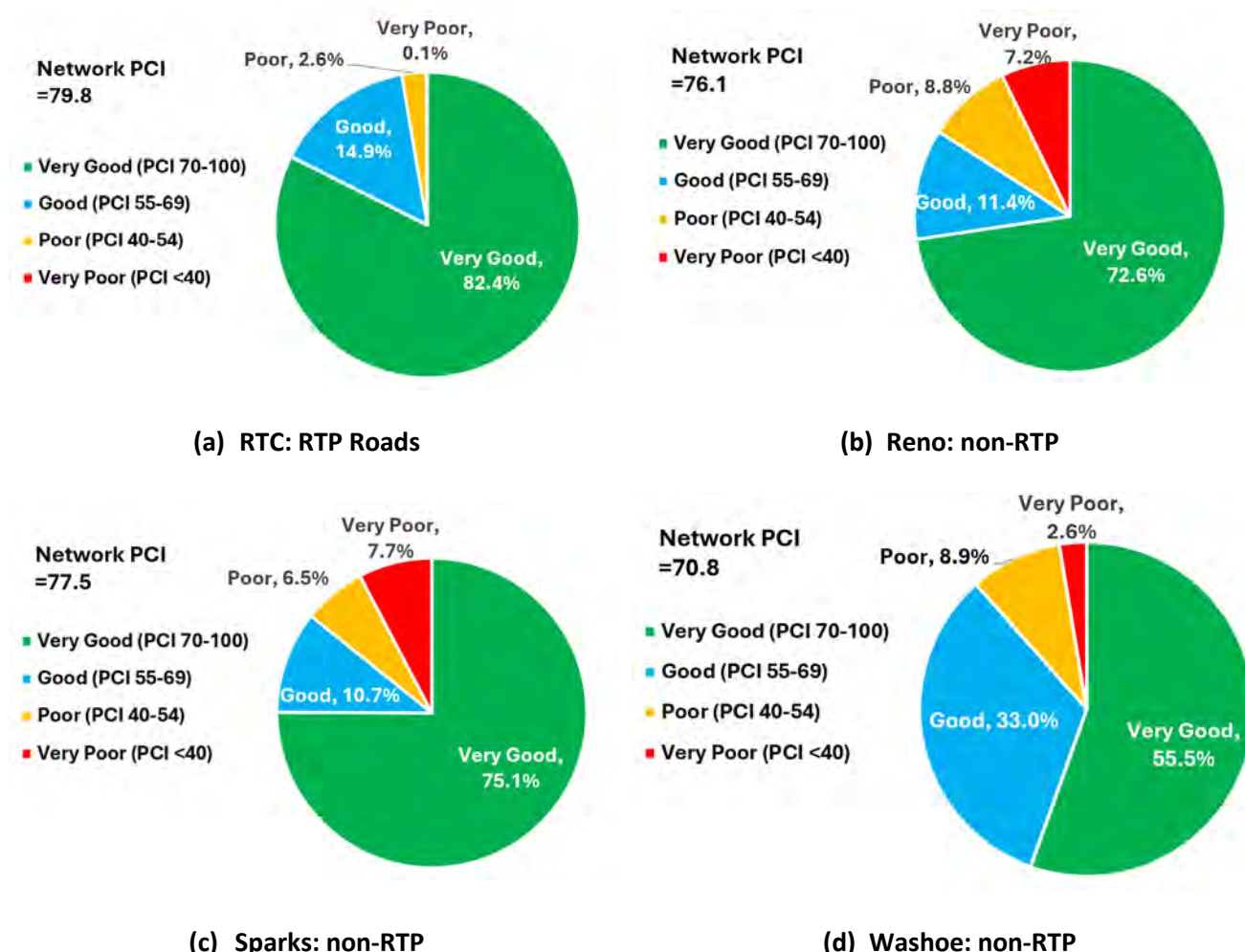


Figure 8. 2024 PCI by Condition Category for each Agency based on RTC's PCI scale

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 D6433³ 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<p>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:</p> <ul style="list-style-type: none"> • 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 Plan⁸ 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.

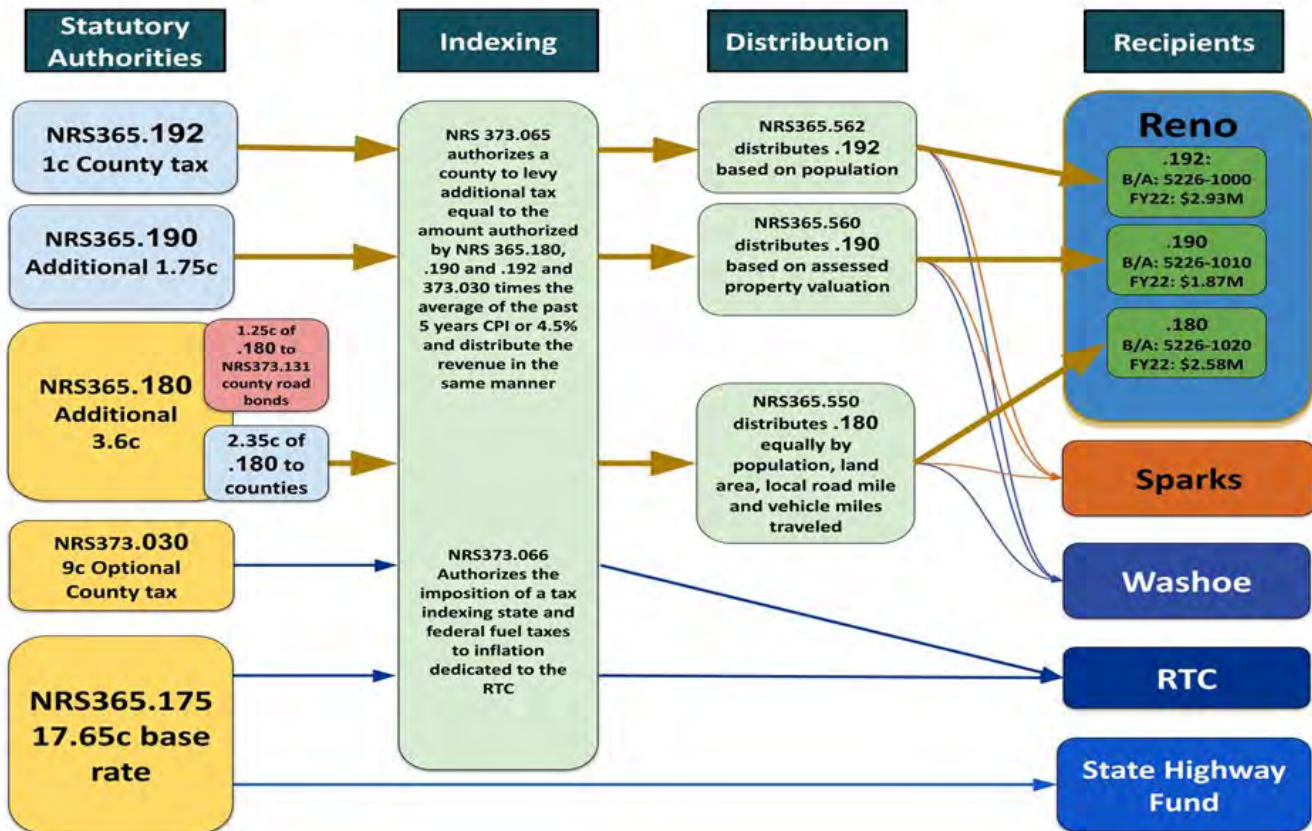


Figure 9. Nevada MVFT Tax Statutory Streams

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%).

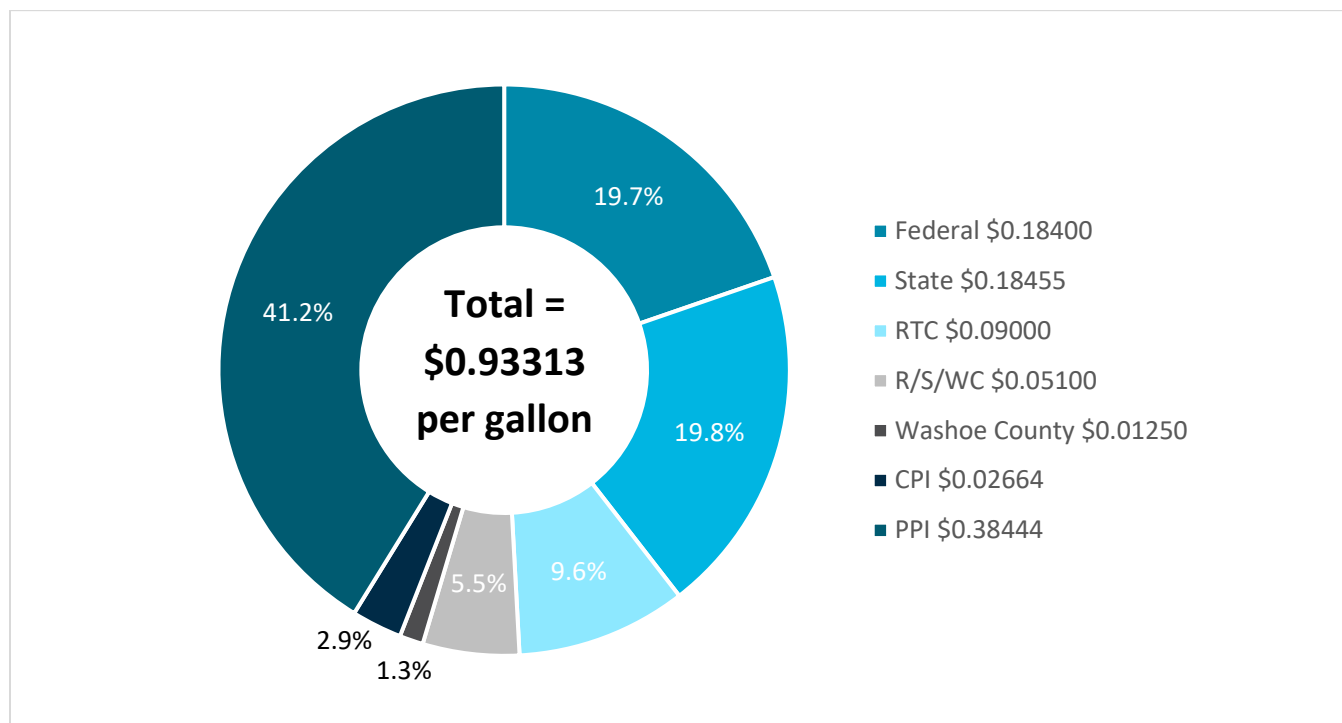


Figure 10. Washoe County Taxes Paid per Gallon of Gas for FY2023 – 2024

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.

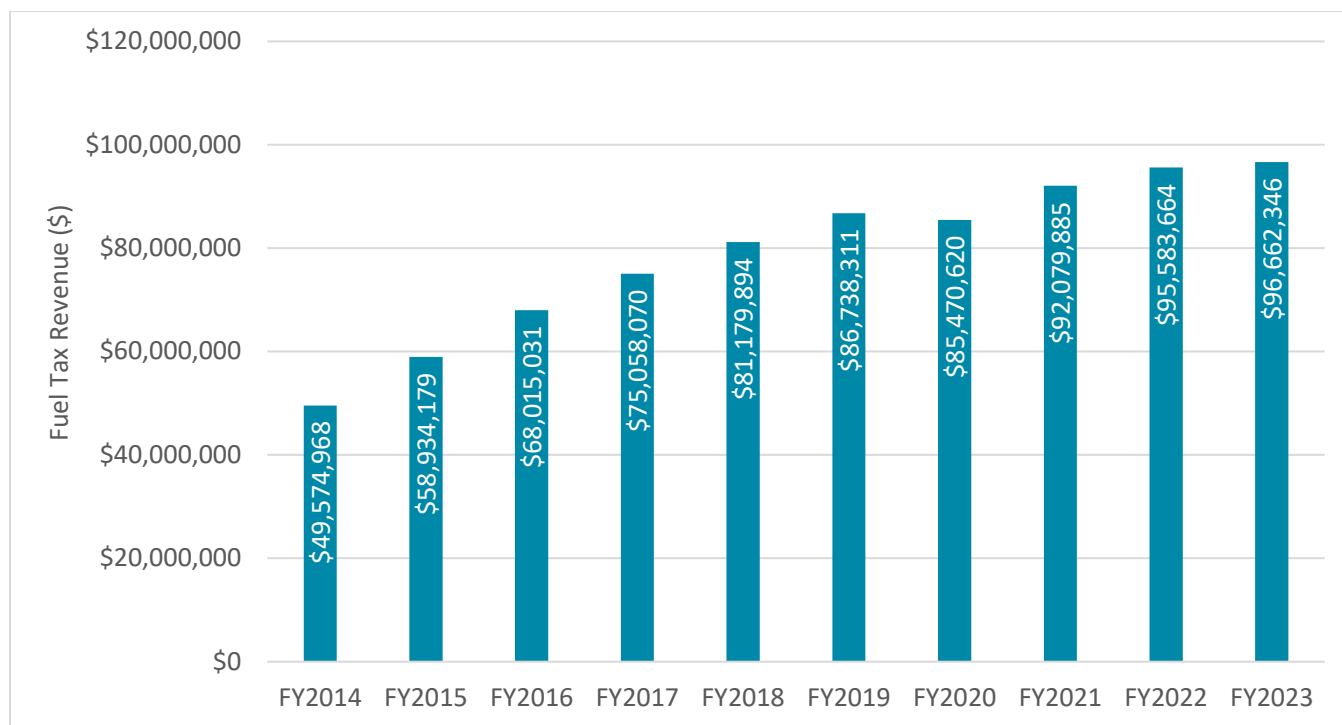


Figure 11. RTC MVFT Revenues for FY2014 – 2015 through FY2023 – 2024

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.

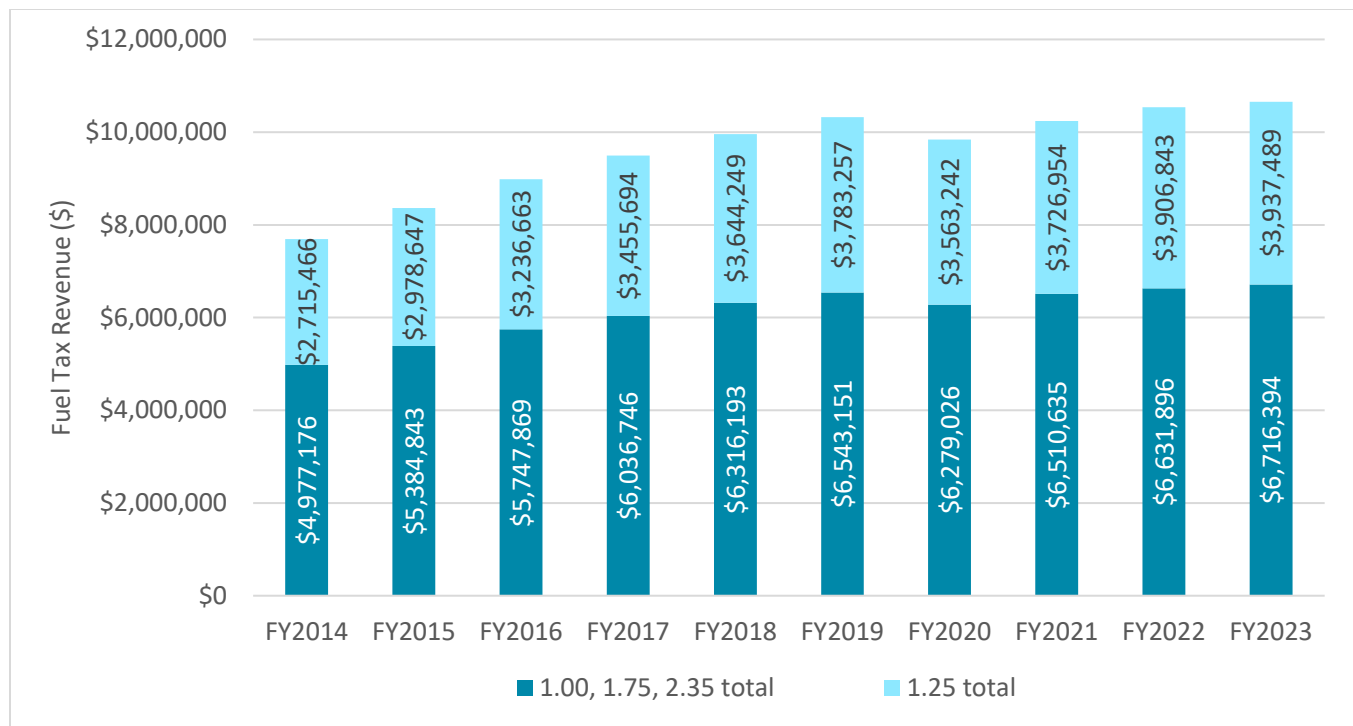


Figure 12. Washoe County MVFT Revenues for FY2014 – 2015 through FY2023 – 2024

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.

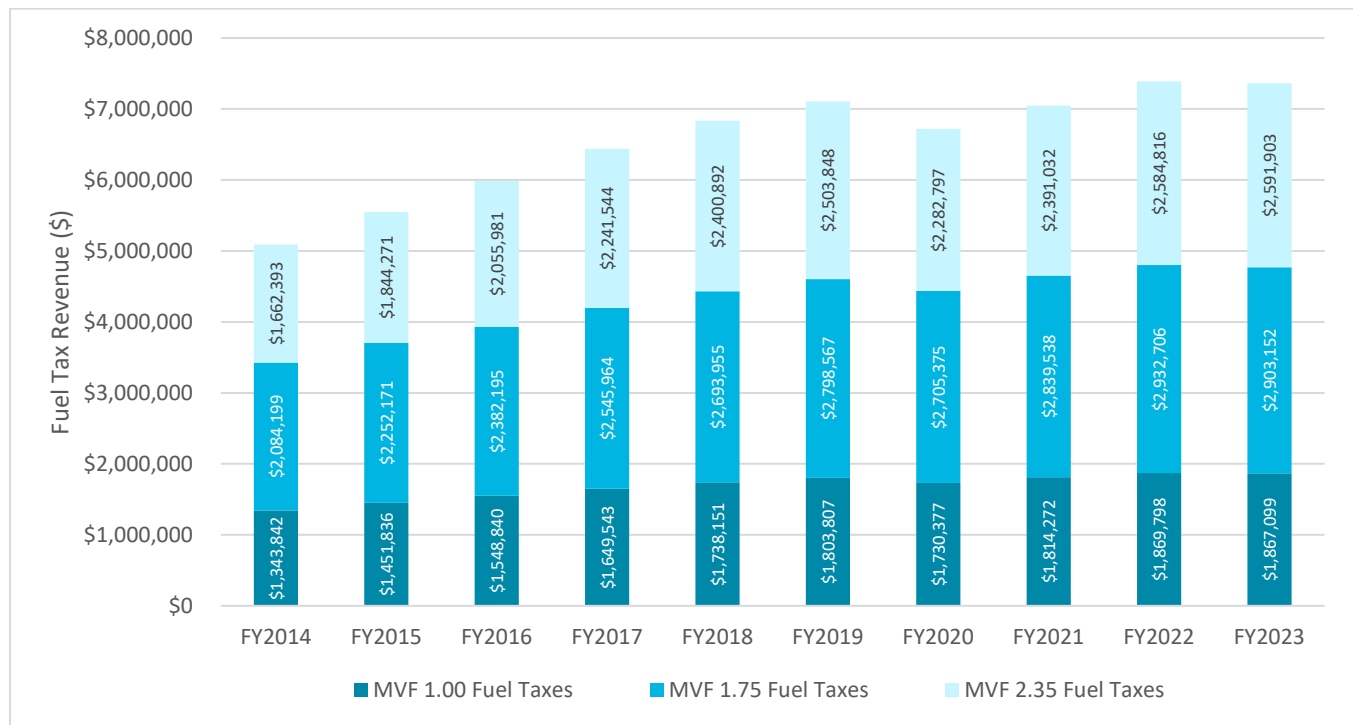


Figure 13. City of Reno MVFT Revenues for FY2014 – 2015 through FY2023 – 2024

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%.

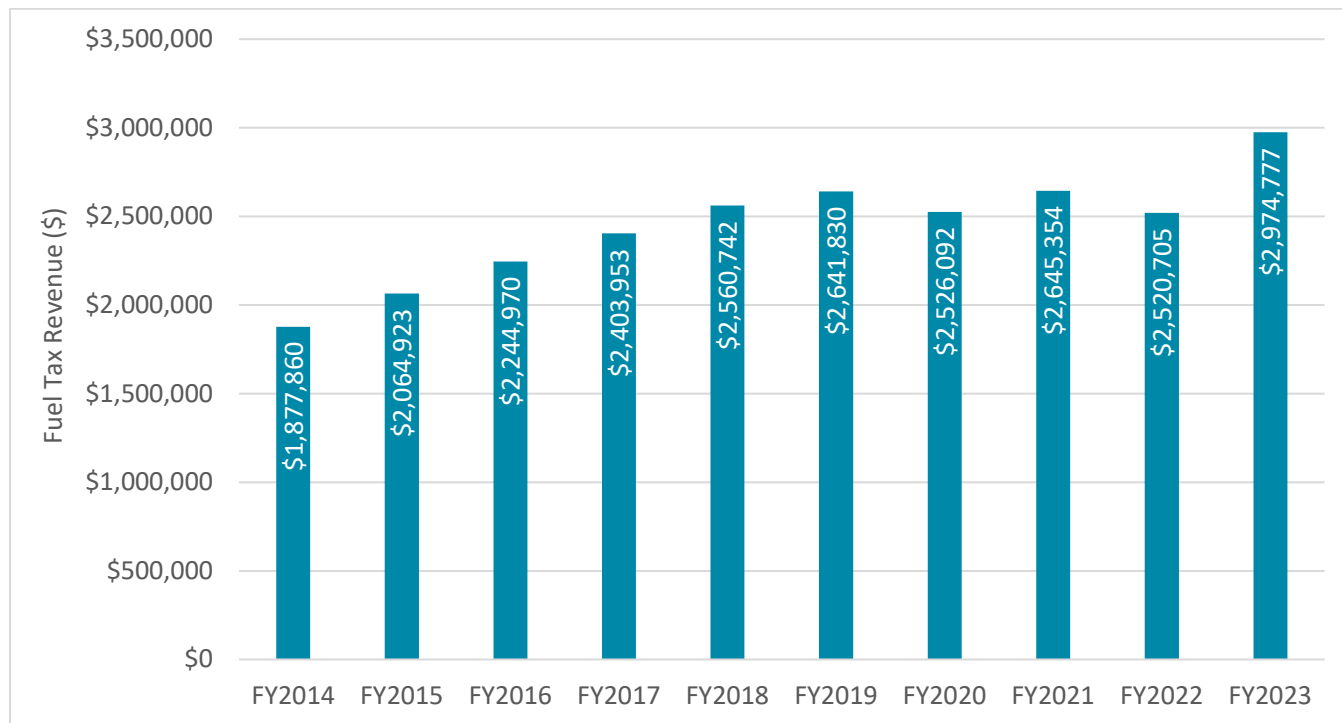


Figure 15. City of Sparks MVFT Revenues for FY2014 – 2015 through FY2023 – 2024

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.

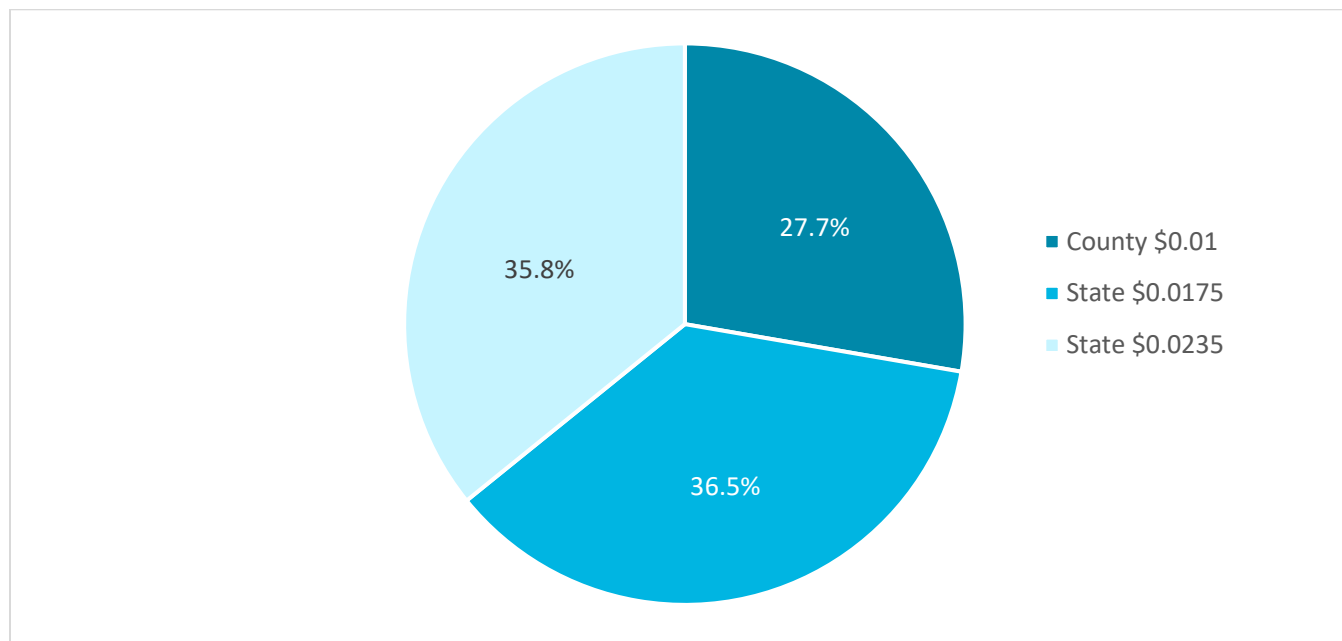


Figure 16. City of Sparks MVFT Revenue Breakdown for FY2023 – 2024

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.

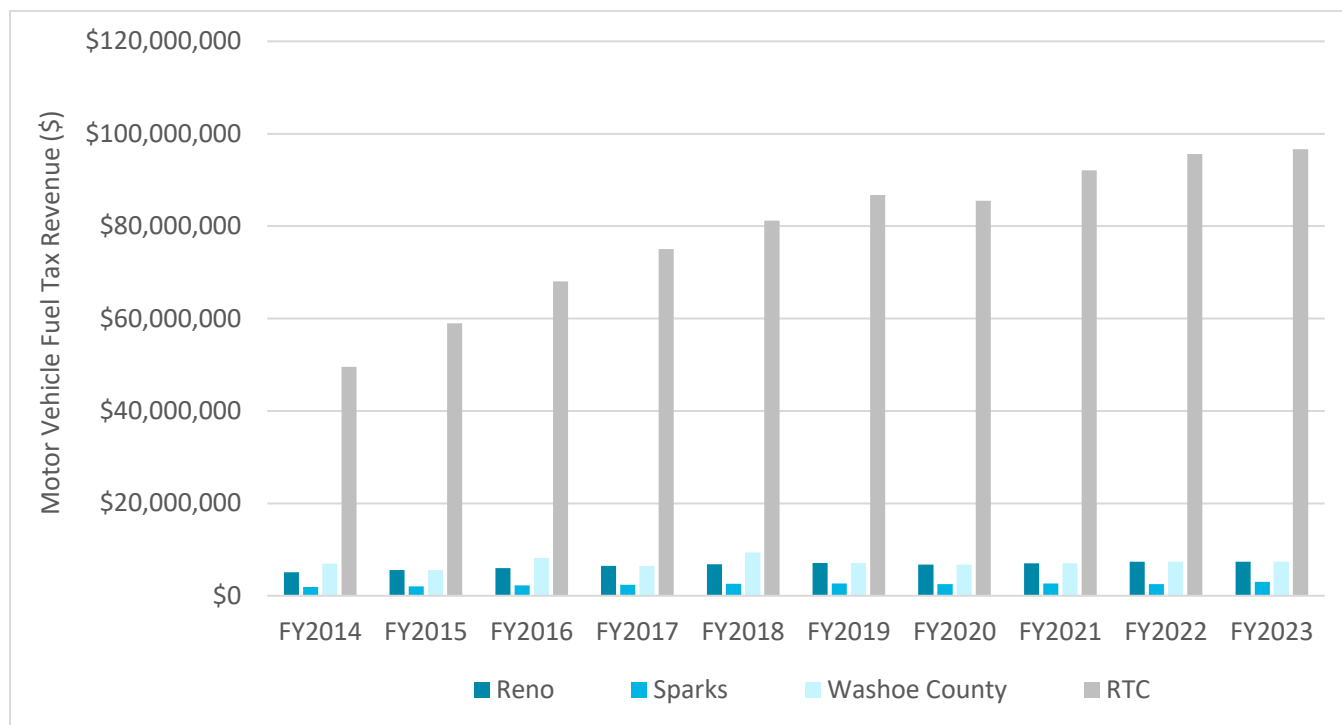


Figure 17. Annual MVFT Revenues for each Agency for FY2014 – 2015 through FY2023 – 2024

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.

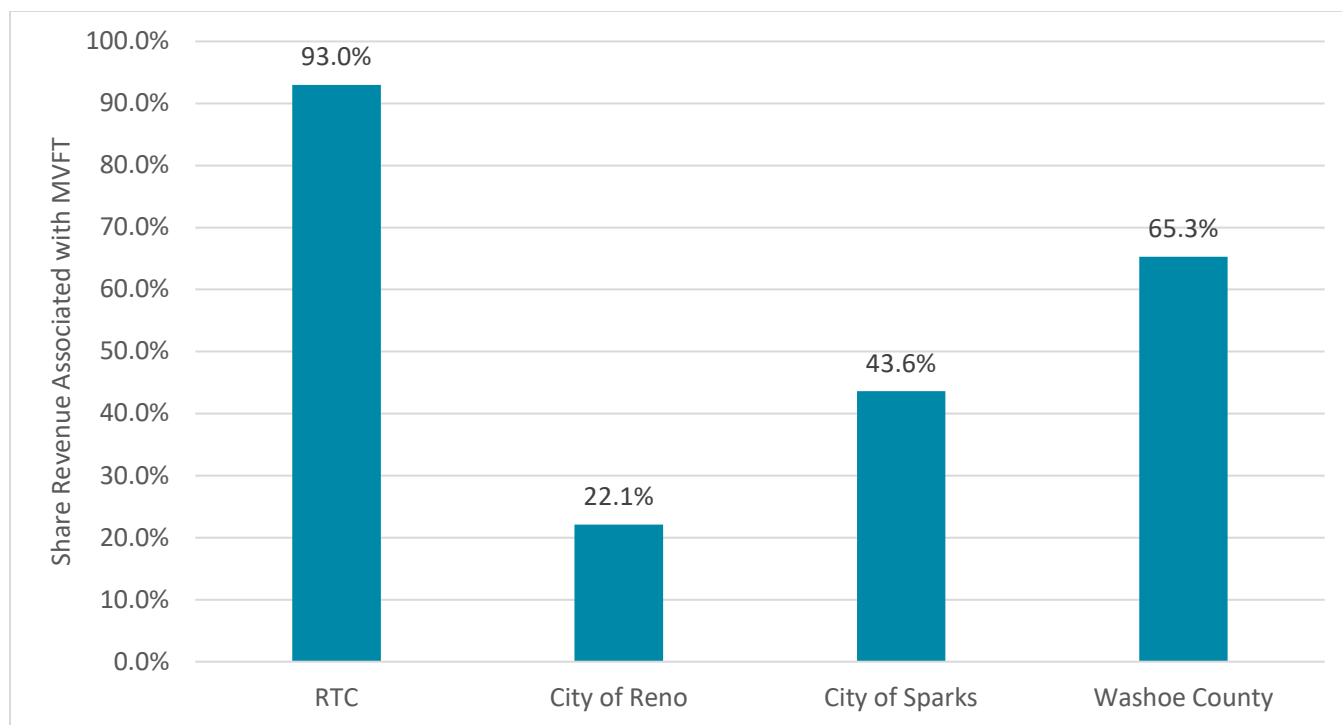


Figure 18. Shares of Revenue Associated with MVFT for FY2023 – 2024

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.

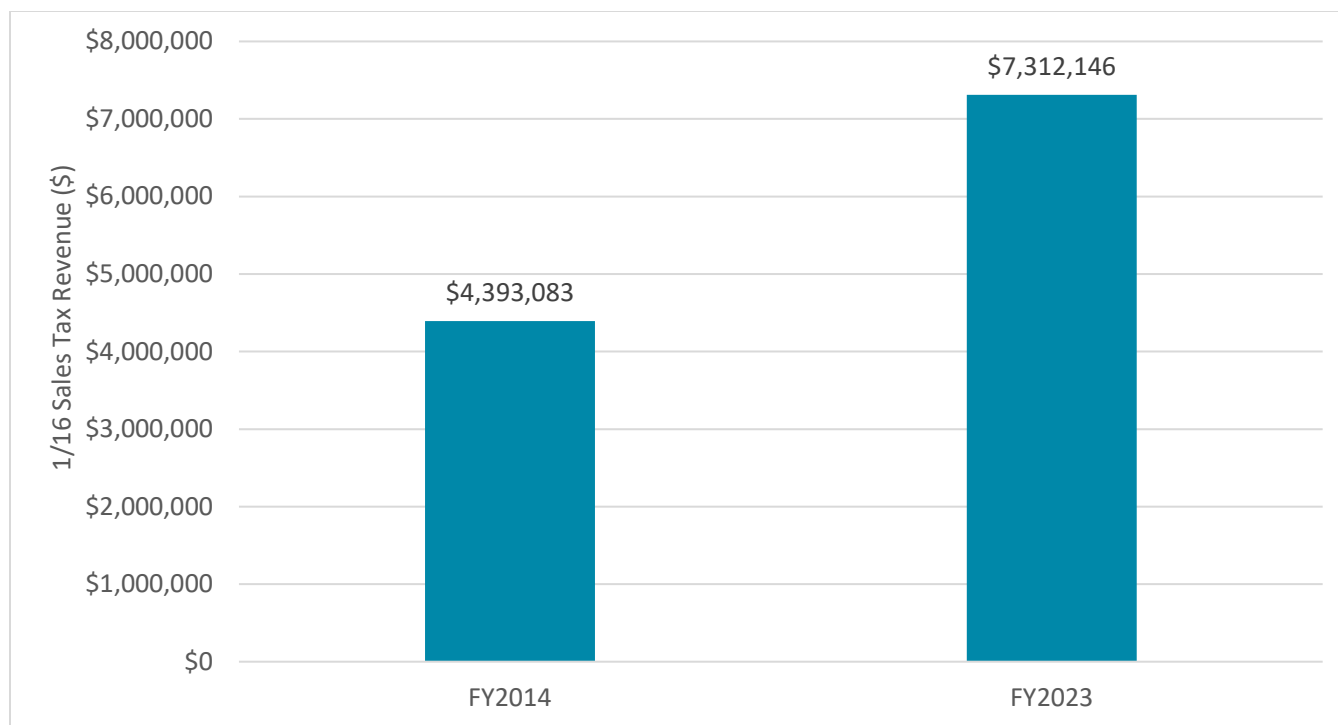


Figure 19. RTC 1/16% Sales Tax Revenues in FY2014 – 2015 and FY2023 – 2024

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.

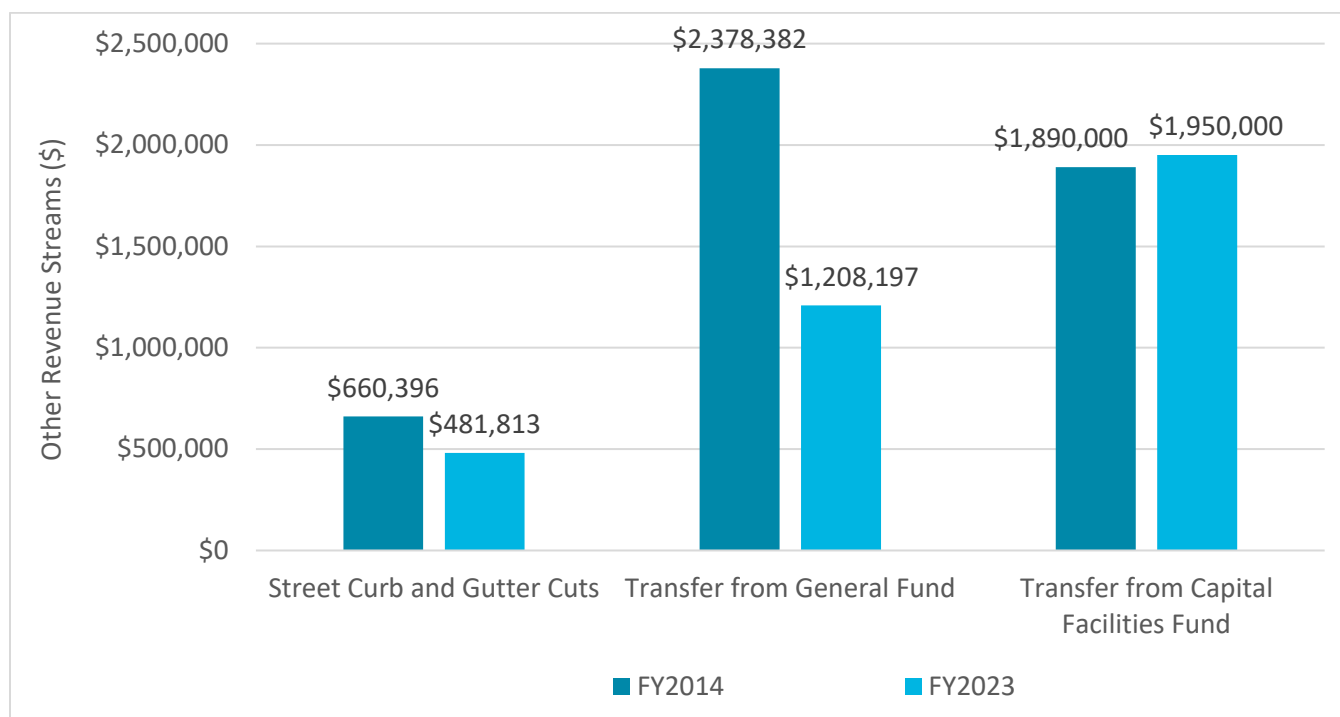


Figure 20. Washoe County Other Revenue Streams in FY2014 – 2015 and FY2023 – 2024

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.

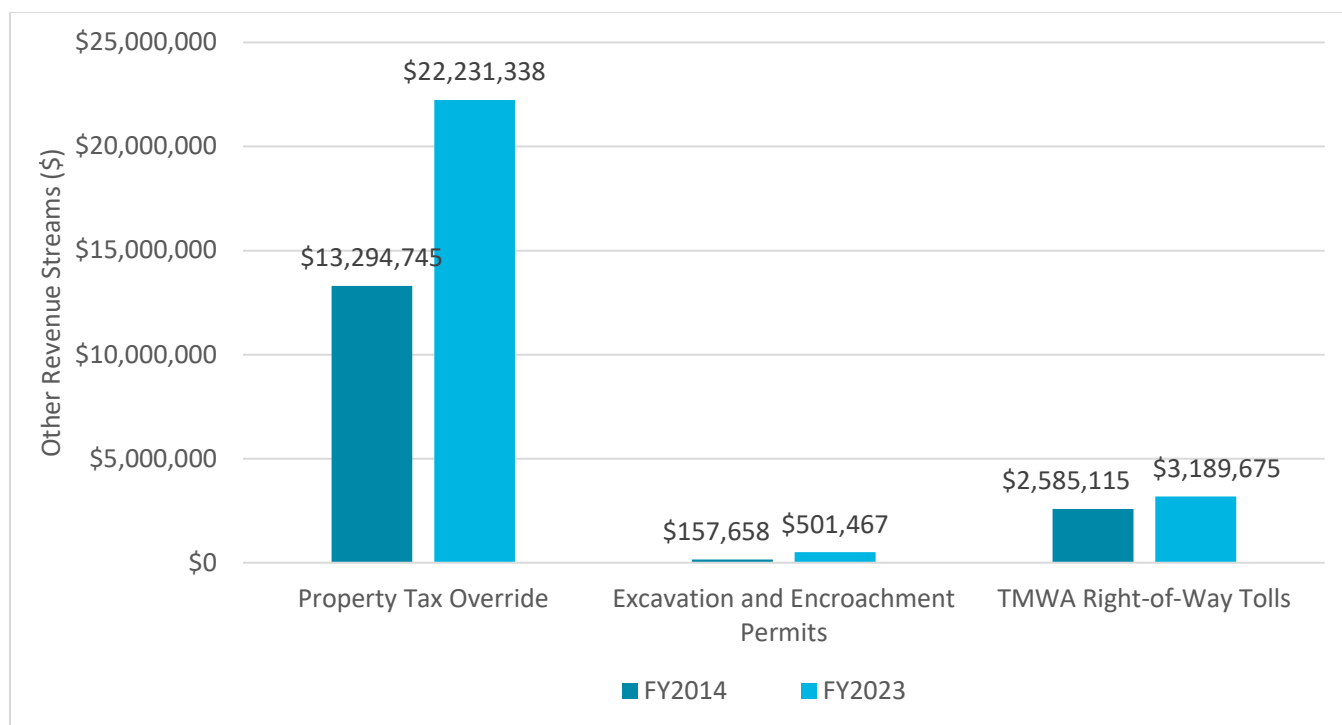


Figure 21. City of Reno Other Revenue Streams in FY2014 – 2015 and FY2023 – 2024

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.

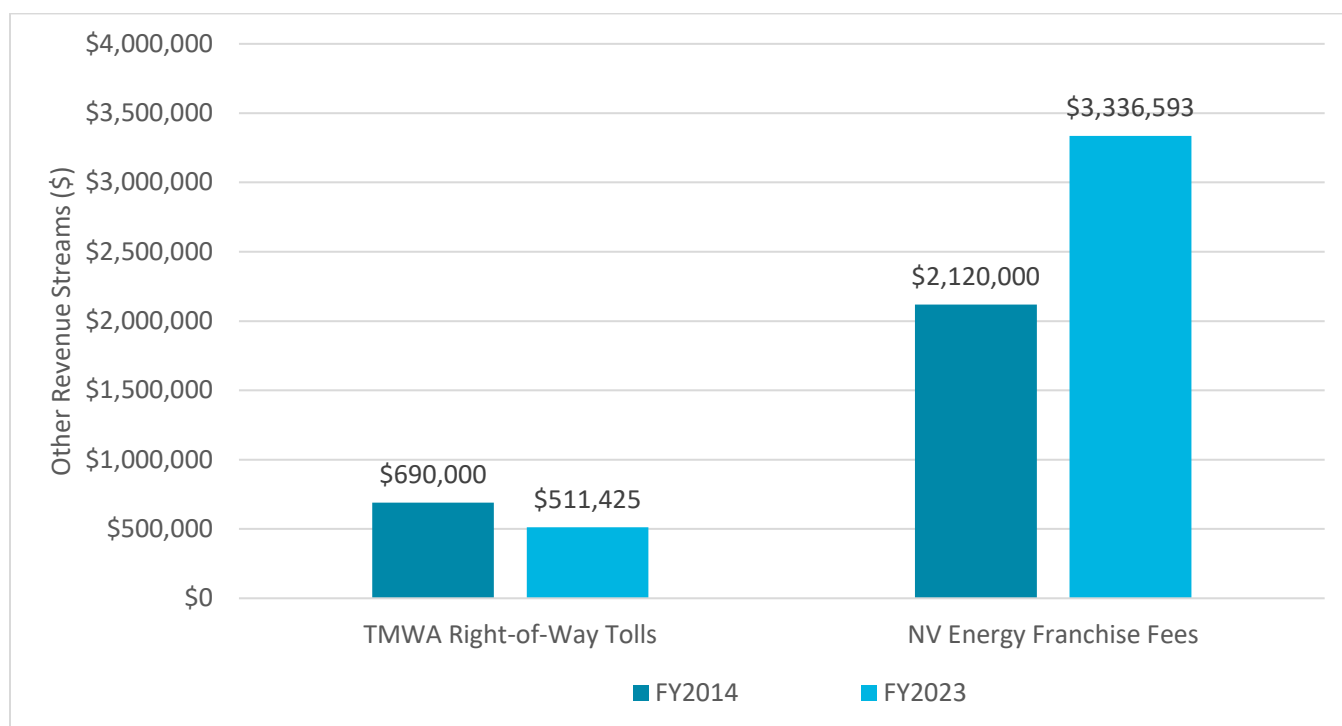


Figure 22. City of Sparks Other Revenue Streams in FY2014 – 2015 and FY2023 – 2024

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.

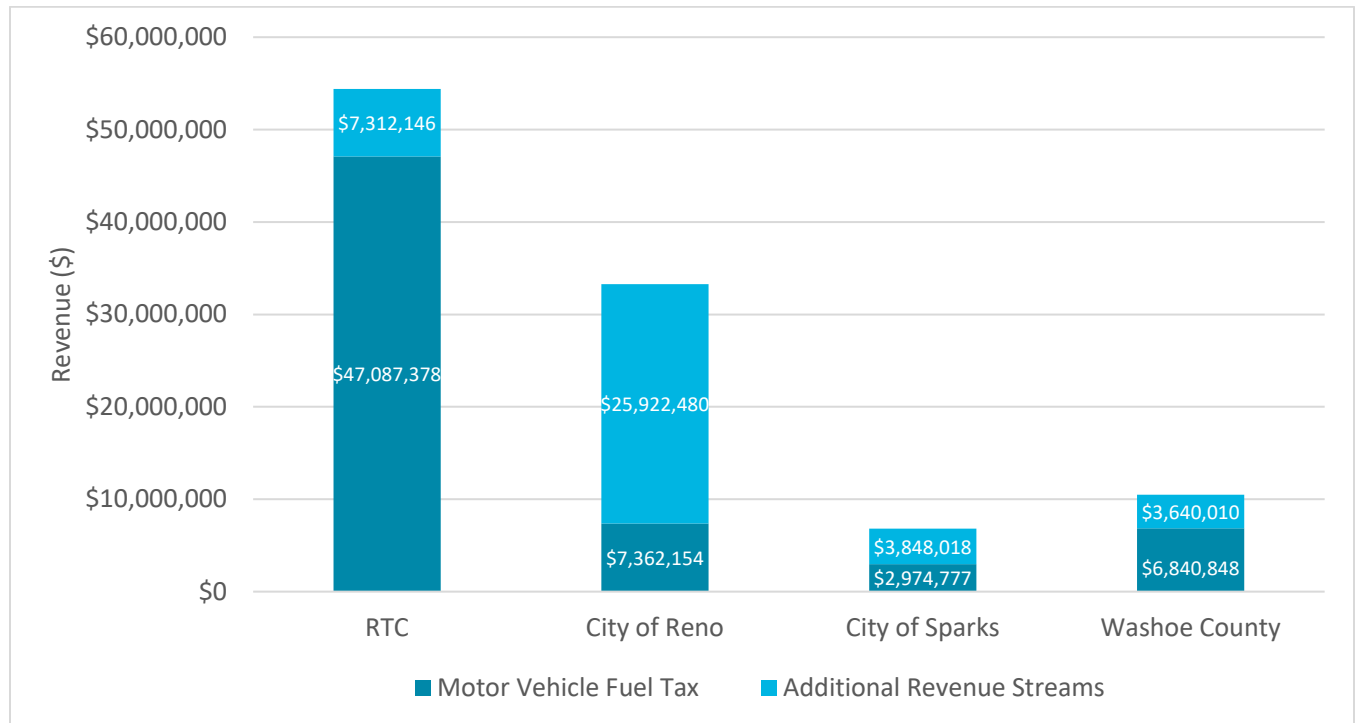


Figure 23. Comparison of Revenue Streams for each Agency for FY2023 – 2024

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 D6433³ 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 be 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 preservation 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 Full Depth Reclamation on our reconstruction projects and have done some CIR and Warm Mix in the past. We are researching Warm Mix additives to 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 roads 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

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)	<table border="1"> <thead> <tr> <th></th><th>mi</th><th># of sect</th></tr> </thead> <tbody> <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> </tbody> </table>		mi	# of sect	Alley	22.01	422	Utility	12.51	69	Arterial	158.54	404	Collector	99.43	362	Industrial	46.57	231	Local	449.62	3415	Parking		127	
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Parking		127																									
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 – Contact Greg Johnson johnsongr@reno.gov																									
5	How often does your agency update pavement inspections?	Every 3 years, 1/3 of the network each year																									
6	How does your agency update pavement condition? (walking, windshield or automated?) (in-house or by contractor)	Manual - (Local/Alley/Etc) In-house & contractor Automated - (Regional) contractor																									
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)	<table border="1"> <thead> <tr> <th></th><th>PCI</th></tr> </thead> <tbody> <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> </tbody> </table>		PCI	Network	75.6	Alley	38.68	Utility	60.32	Arterial	79.22	Collector	72.77	Industrial	71.36	Local	76.75	Parking	55.17							
	PCI																										
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Industrial	71.36																										
Local	76.75																										
Parking	55.17																										

No.	Item	Agency Response			Comments/Notes
9	How does your agency setup condition categories in PMS? (ex. PCI 70 to 100 – Very Good)	Very Good 86-100 Good 71-85 Fair 56-70 Poor 41-55 Very Poor 26-40 Serious 11-25 Failed 0-10			
10	Does your agency have PCC pavement in your network?		mi	# of sec	
		Alley	17.59	320	
		Utility	0.02	1	
		Arterial	4.30	34	
		Collector	0.35	4	
		Industrial	0.00	0	
		Local	0.12	2	
		Parking		11	
11	What pavement strategies/ treatments does your agency apply on various conditions of pavement? (treatment by PCI range)	Slurry/Microsurfacing PCI 70-100 Mill and Overlay PCI 56-70 Cape Seal PCI 56-70 Asphalt Patching PCI Varies Rehab/Reconstruct <55			PCI ranges for treatments generally fall within these limits. Treatments also selected by distress type and years between last treatment
12	What factors/items are included in the treatment costs? (ex. paving materials, labor, concrete repairs, striping, traffic control, etc.)	All Construction Activities: Materials, Labor, Striping, Traffic Control			
13	How often does your agency update the treatment costs in your PMS?	Annually			
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)	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			

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.	<p>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.</p> <p>Ad Valorem (Property Tax Override): FY23 \$22,231,338</p> <p>Excavation and encroachment permits: FY23 \$501,467</p> <p>TMWA Right of Way Tolls: FY23 \$3,189,675</p>	
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.	<p>FY25 State Budget Documents: FY25 FINAL STATE DOCUMENT.xls (reno.gov) (budget book not yet available)</p> <p>FY24 Budget Book: 638265584834570000 (reno.gov)</p> <p>FY23 Budget: City Manager's Budget Message FY23 Budget Book (Locked) (cleargov.com)</p> <p>FY22 Budget: 637969408415900000 (reno.gov)</p>	
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.	<p>FY20 ACFR 637499434841300000 (reno.gov)</p> <p>FY21 ACFR A-010 - Issued Report and Financial Statements (797225 - June 2021 - Audit 797225 [6/30/2021] (In Process)) (reno.gov)</p> <p>FY22 ACFR Microsoft Word - {096AC6CF-923C-4E8F-9B91-F8437604368C}.docx (reno.gov)</p>	

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: <ol style="list-style-type: none"> 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) Storm 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)	<table><tr><td># of Sections (Total 3,096)</td></tr><tr><td>Non-RTP = 2,962</td></tr><tr><td>RTP = 134</td></tr><tr><td># of Sections By FC (Non-RTP)</td></tr><tr><td>A-Arterial = 8</td></tr><tr><td>B-Collector = 88</td></tr><tr><td>C-Residential = 2,819</td></tr><tr><td>D-Industrial = 9</td></tr><tr><td>E-Rural Highway = 38</td></tr><tr><td>Centerline Miles by FC (Non-RTP)</td></tr><tr><td>A-Arterial = 11.62</td></tr><tr><td>B-Collector = 39.63</td></tr><tr><td>C-Residential = 519.39</td></tr><tr><td>D-Industrial = 7.04</td></tr><tr><td>E-Rural Highway = 75.23</td></tr></table>	# 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	
# 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
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 agancies 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		
					Yes, RTP	Yes, RTP	No, RTP
10	Does your agency have PCC pavement in your network?	Yes (Reno and Sparks)			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.	<p>Reno owns & maintains:</p> <ul style="list-style-type: none"> - 191 traffic signals - 191 traffic cabinets - 46 traffic cameras (PTZ) <p>Reno maintains on behalf of Washoe County:</p> <ul style="list-style-type: none"> - 23 traffic signals - 23 traffic cabinets <p>Reno maintains on behalf of NDOT:</p> <ul style="list-style-type: none"> - 87 traffic signals - 87 traffic cabinets 	<p>Sparks own & maintains:</p> <ul style="list-style-type: none"> - 73 traffic signals - 73 traffic cabinets - 31 traffic cameras (PTZ) <p>Sparks maintains on behalf of NDOT:</p> <ul style="list-style-type: none"> - 43 traffic signals - 43 traffic cabinets <p>There is one (1) NDOT owned signal that is primarily maintained by Reno, but the timing is maintained by Sparks.</p>	N/A	<p>Washoe County owns:</p> <ul style="list-style-type: none"> - 24 traffic signals - 24 traffic cabinets <p>Signals are maintained by City of Reno, per traffic signal maintenance agreement.</p>
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.	<p>Signal Timing Budgets:</p> <p>FY2021: \$443,276.42</p> <p>FY2022: \$336,777.76</p> <p>FY2023: \$261,600.57</p> <p>FY2024: \$303,936.42</p> <p>FY2025: \$420,000</p> <p>FY2026: \$420,000</p>	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?	<p>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.</p> <p>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.</p> <p>For grant and time-limited funding, we identify where the funds would have the greatest impact. Two examples of this being:</p> <ol style="list-style-type: none"> 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.	<i>Provided</i> FY25 State Budget Documents <i>Provided</i> FY2424 Budget Book <i>Provided</i> FY23 Budget Book <i>Provided</i> FY22 Budget Book	All budget documents (past and current) can be found on the City's website. <i>Provided</i> link to website	<i>Provided</i> 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.	<i>Provided</i> 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. <i>Provided</i> link to website	<i>Provided</i> 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?	<i>Provided</i> "White Paper – Status of Pavement Condition and Funding Needs March 2015" <i>Provided</i> Summary Fuel Tax PowerPoint	No.	No.	Being prepared currently with NCE. Expect deliverables in December 2024.
7	Please provide the current CIP.	<i>Provided</i> FY25 CIP	The CIP for FY25 (and prior years if desired) can be found on the City's website. <i>Provided</i> link to website	<i>Provided</i> link to website	<i>Provided</i> 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 include¹:

- 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	<p>What normal operations and maintenance does your agency perform?</p> <ul style="list-style-type: none"> 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 route) 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 D6433² 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 route) 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” or “Very Poor” condition with PCI less than 55.

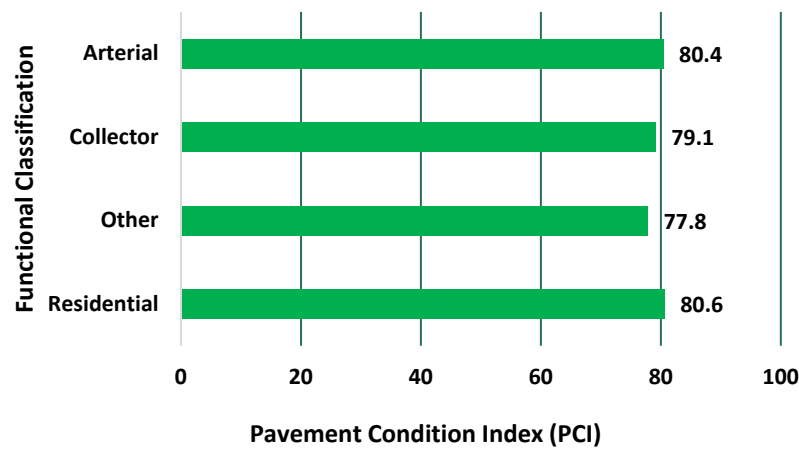


Figure 1. Average PCIs by Functional Classification

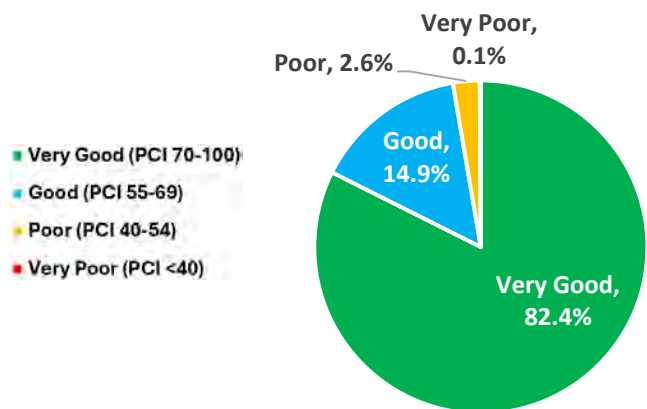


Figure 2. Area Percentage by Condition Category

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.

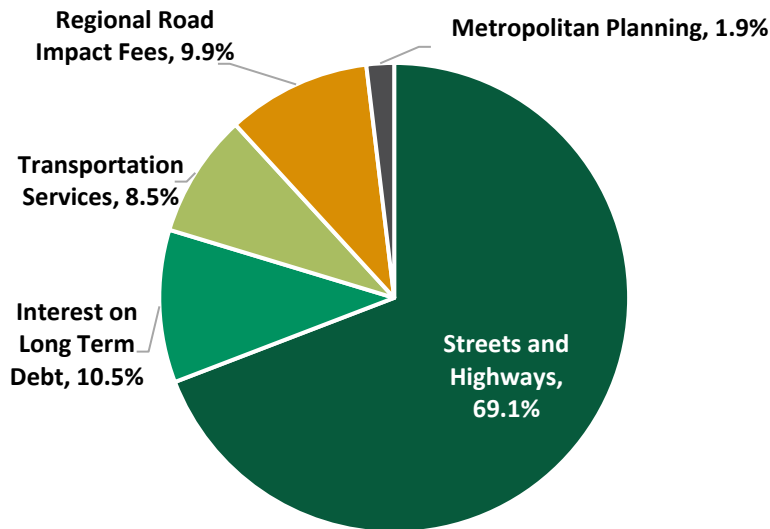


Figure 3. Governmental Activity Expenses by Function in 2023⁴

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>

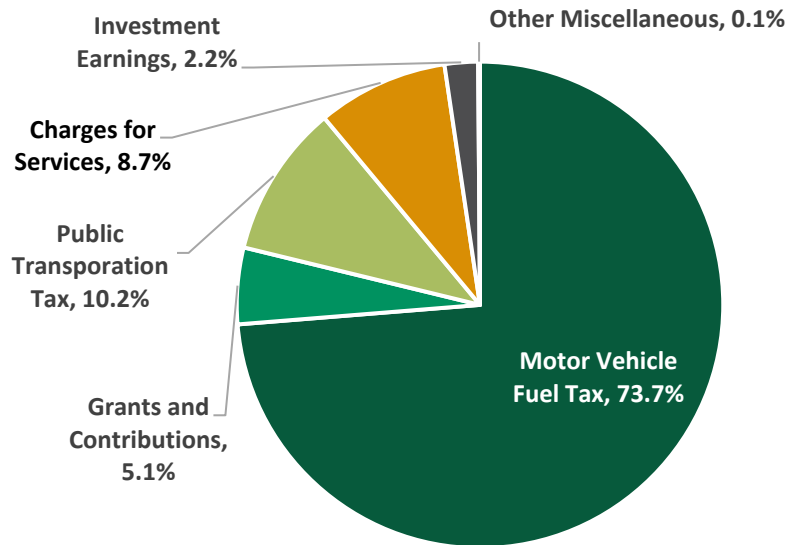


Figure 4. Governmental Activity Revenues by Function in 2023⁴

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 D6433² 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.

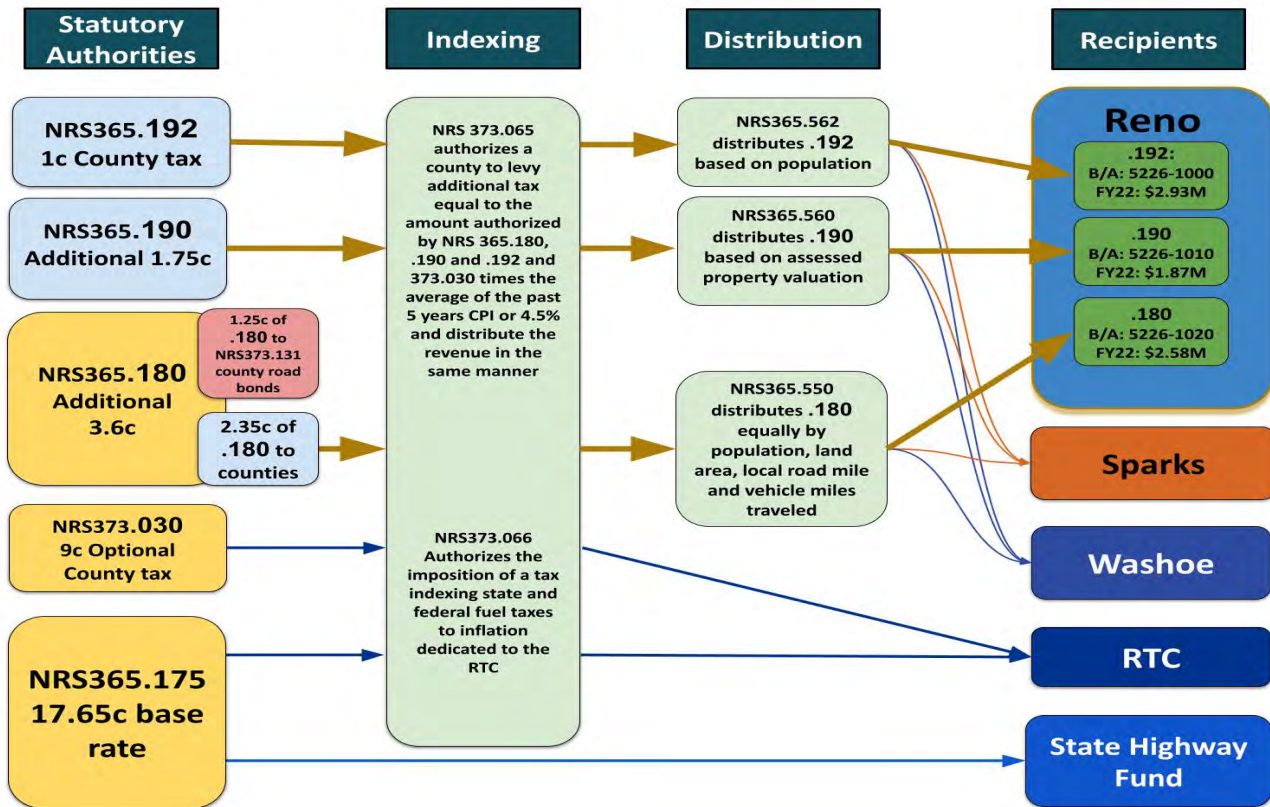


Figure 5. Nevada Motor Vehicle Fuel Tax

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%).

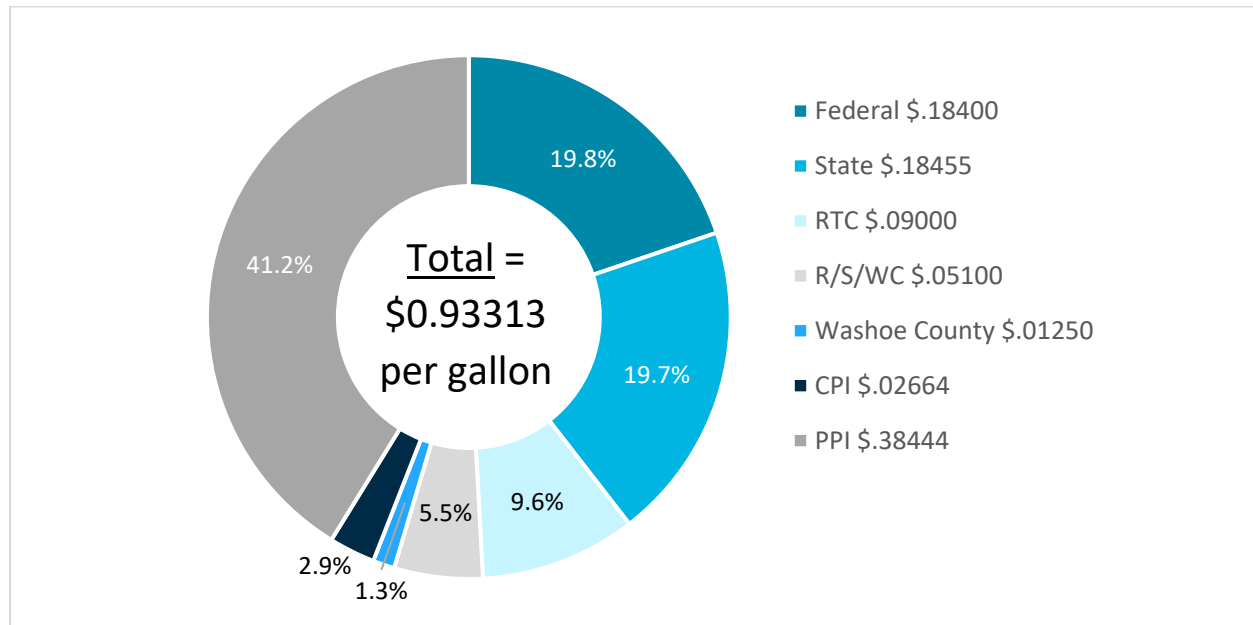


Figure 6. Washoe County Taxes Paid per Gallon of Gas, FY2023-2024

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.

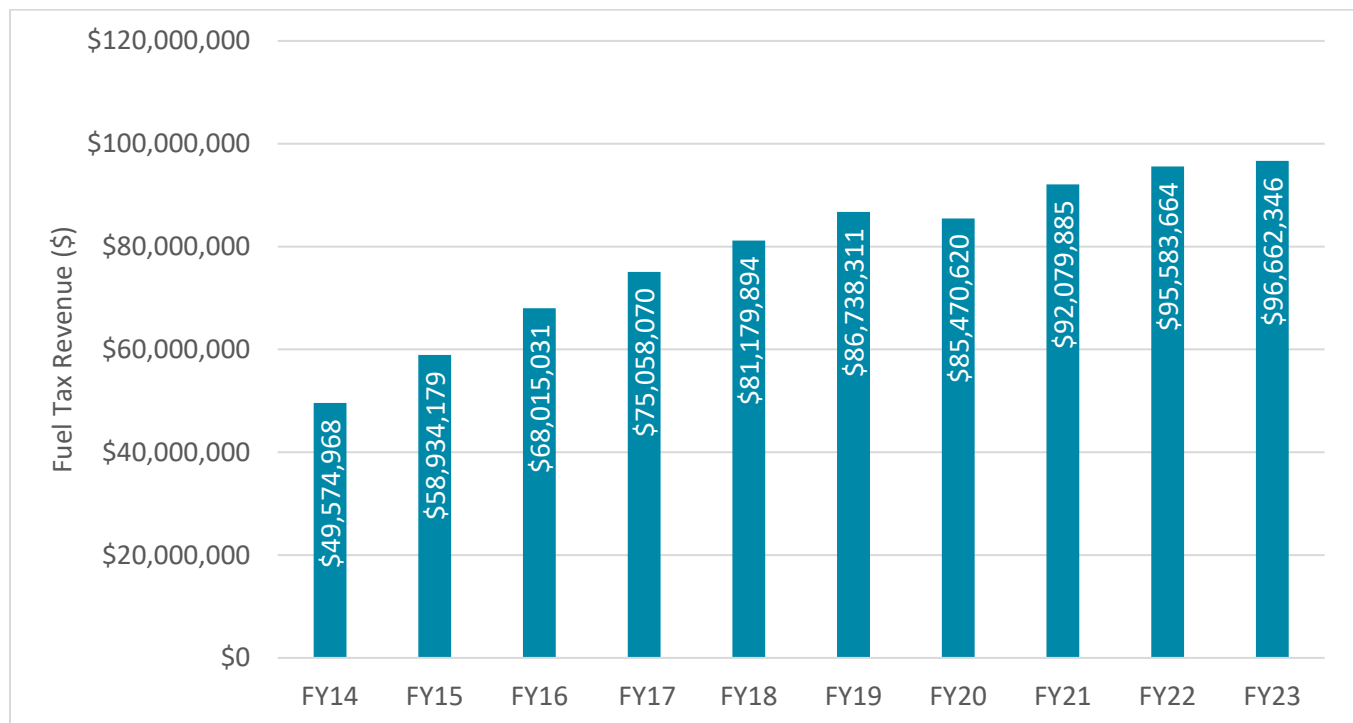


Figure 7. RTC Fuel Tax Revenues, FY 2014-2015 (FY14) to FY 2023-2024 (FY23)

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.

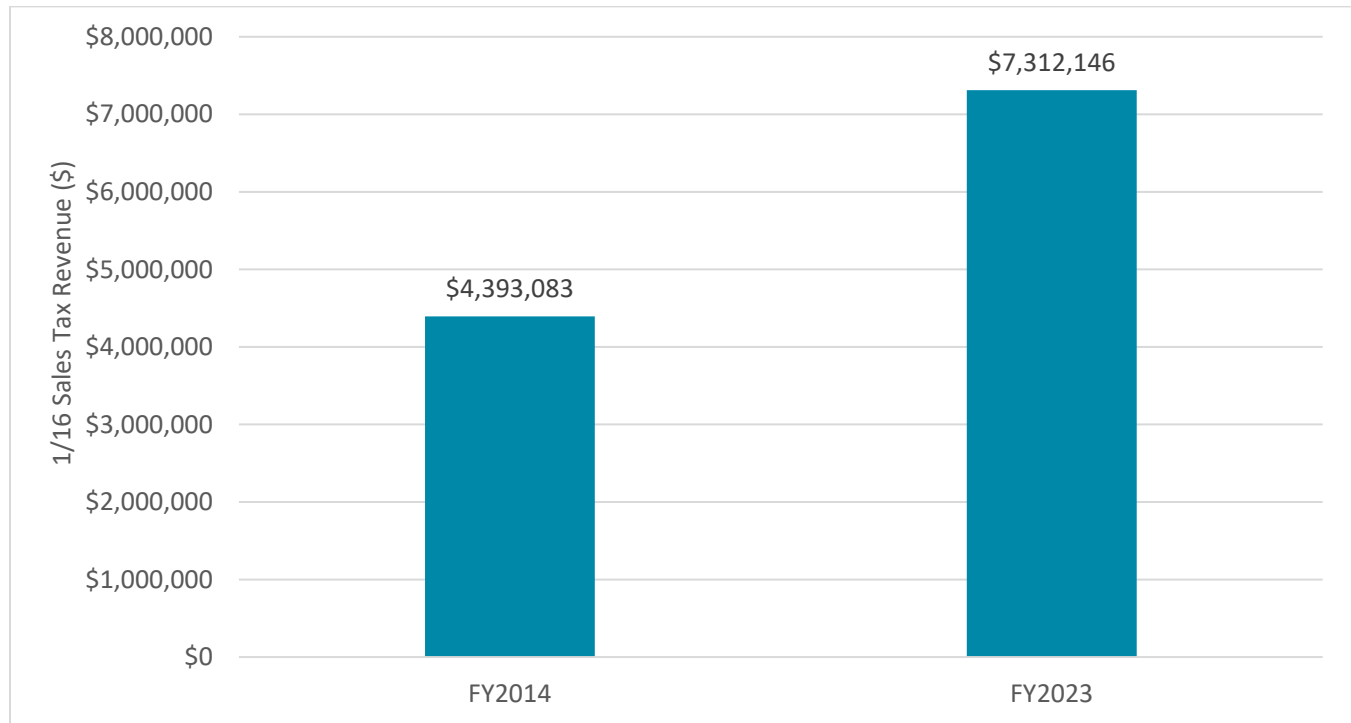


Figure 8. RTC 1/16-% Sales Tax Revenues, FY 2014-2015 (FY2014) to FY-2023-2024 (FY2023)

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.

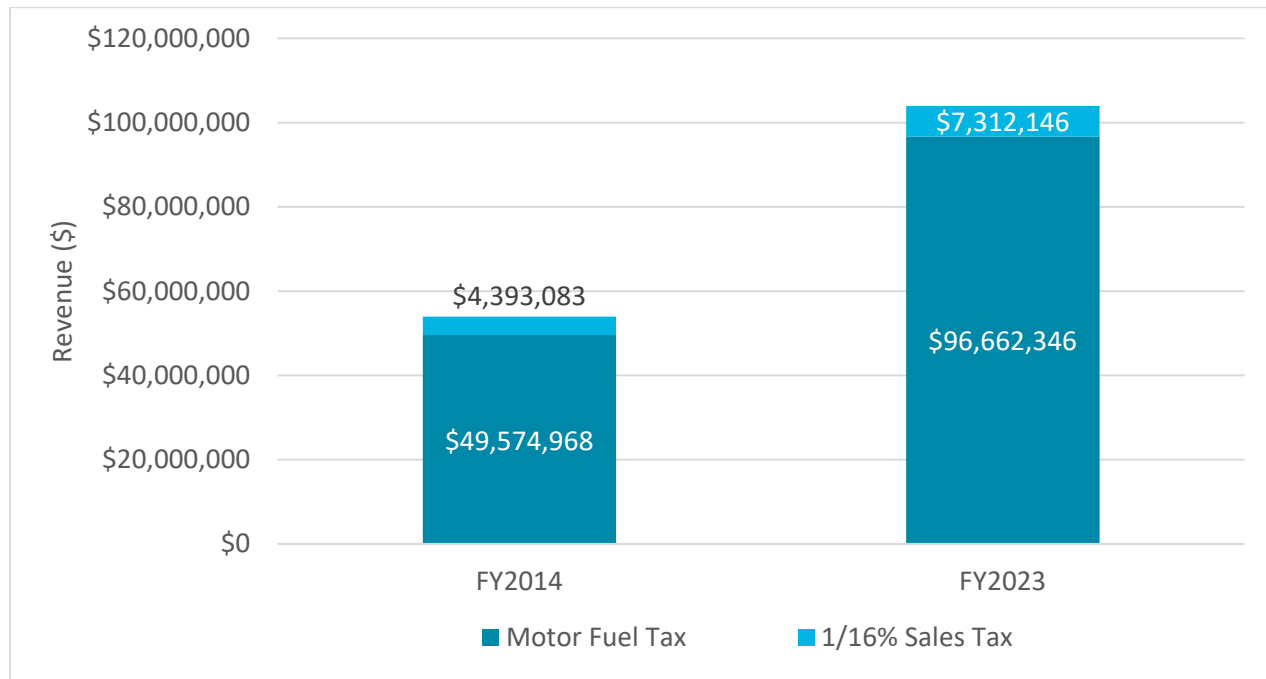


Figure 9. RTC Revenue Available for Street Maintenance and Repair, FY 2014-2015 (FY2014) to FY 2023-2024 (FY2023)

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 preservation 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 Full Depth Reclamation on our reconstruction projects and have done some CIR and Warm Mix in the past. We are researching Warm Mix additives to 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 roads 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	<p>What normal operations and maintenance does your agency perform?</p> <ul style="list-style-type: none"> 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 D6433¹ 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, residential 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.

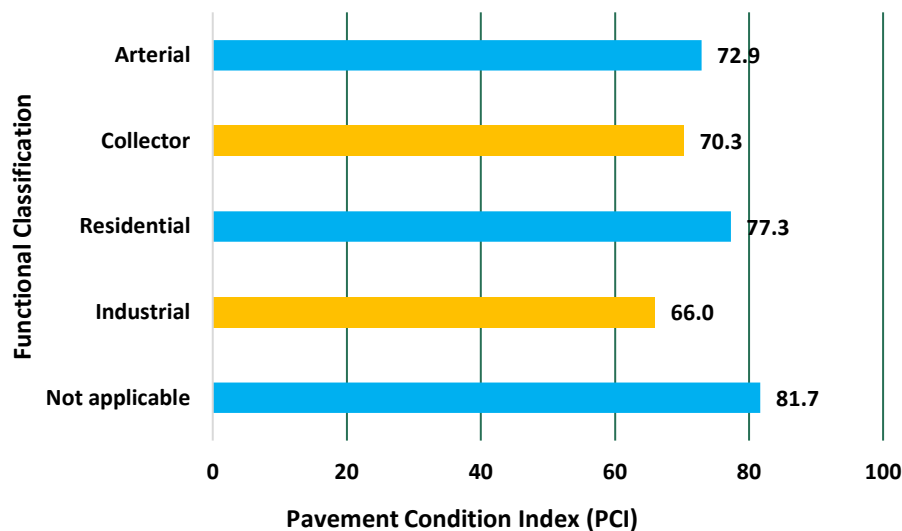


Figure 1. Current PCI by Functional Classification

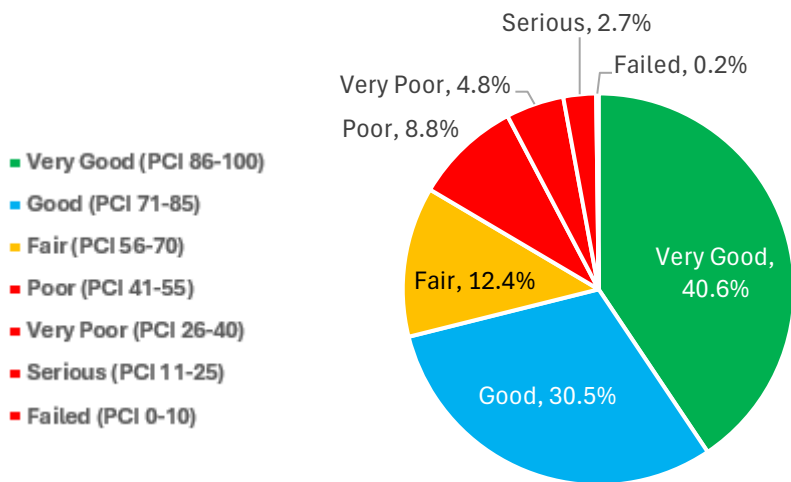


Figure 2. Area Percentage by Condition Category

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
	Good PCI 71 – 85	Do nothing
	Fair PCI 56 – 70	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 City³, 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 D6433¹ 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.

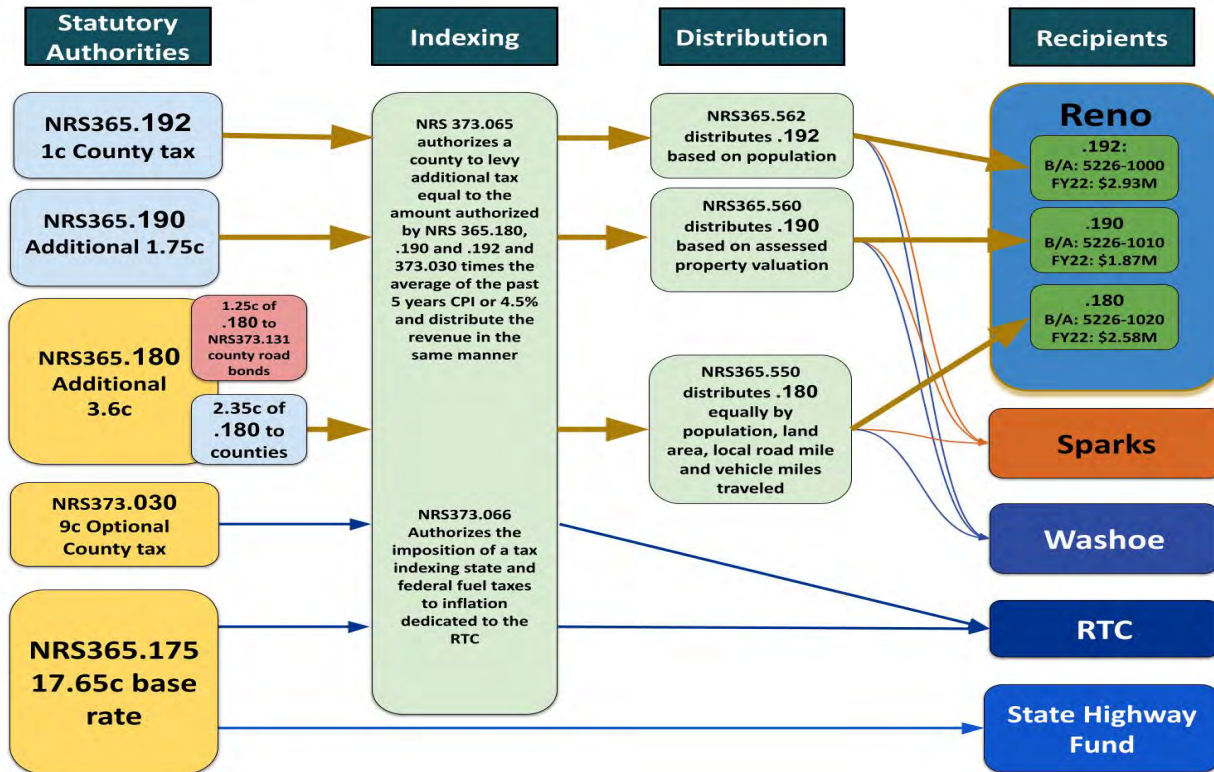


Figure 3. Nevada Motor Vehicle Fuel Tax

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%).

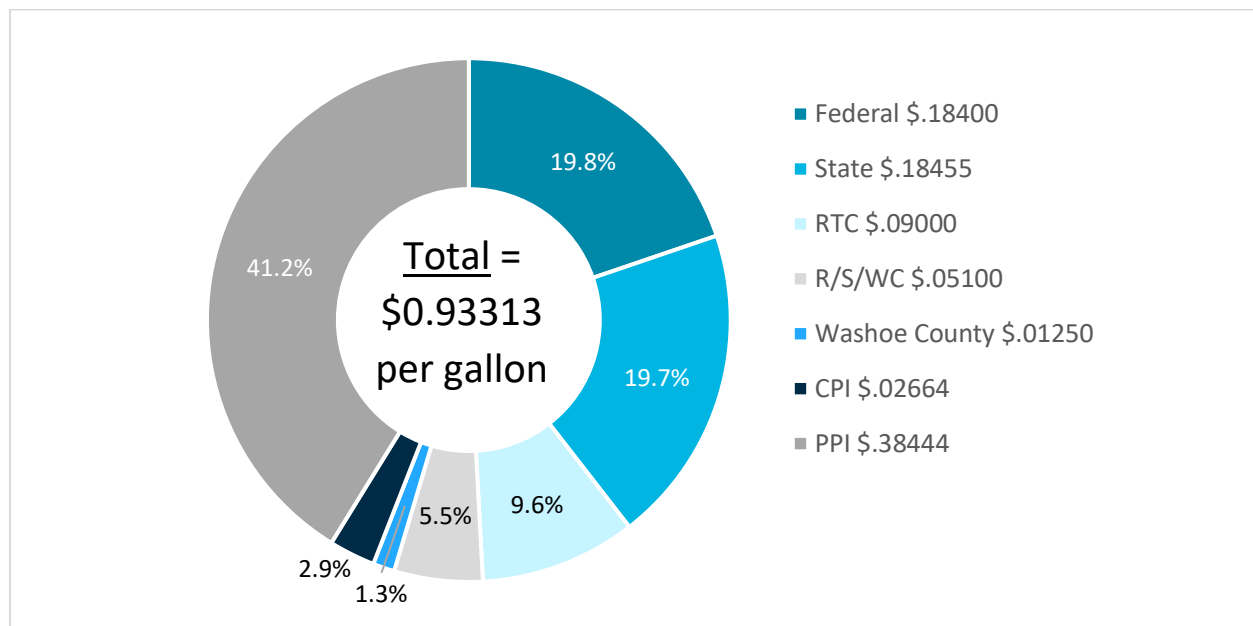


Figure 4. Washoe County Taxes Paid per Gallon of Gas, FY 2023-2024

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.

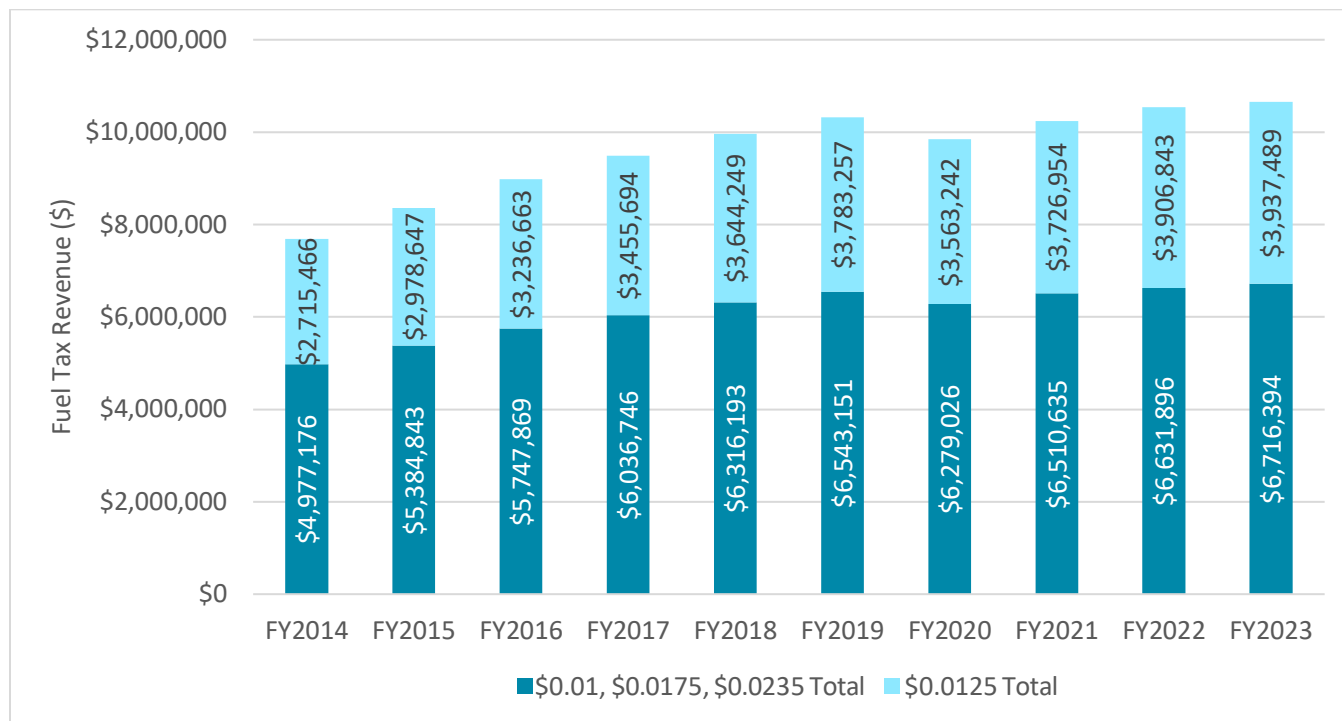


Figure 5. Washoe County Fuel Tax Revenues, FY 2014-2015 (FY2014) to FY 2023-2024 (FY2023)

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.

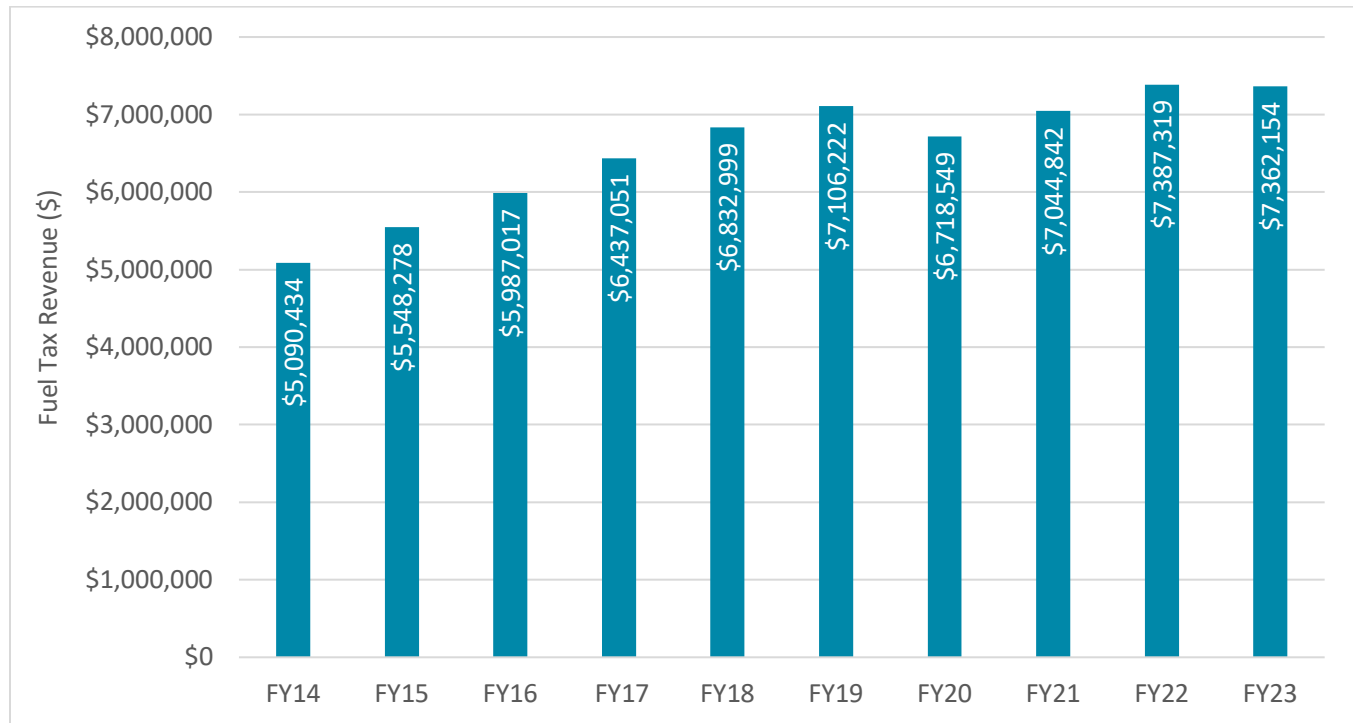


Figure 6. City of Reno Fuel Tax Revenue, FY2014-2015 (FY14) to FY 2023-2024 (FY23)

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

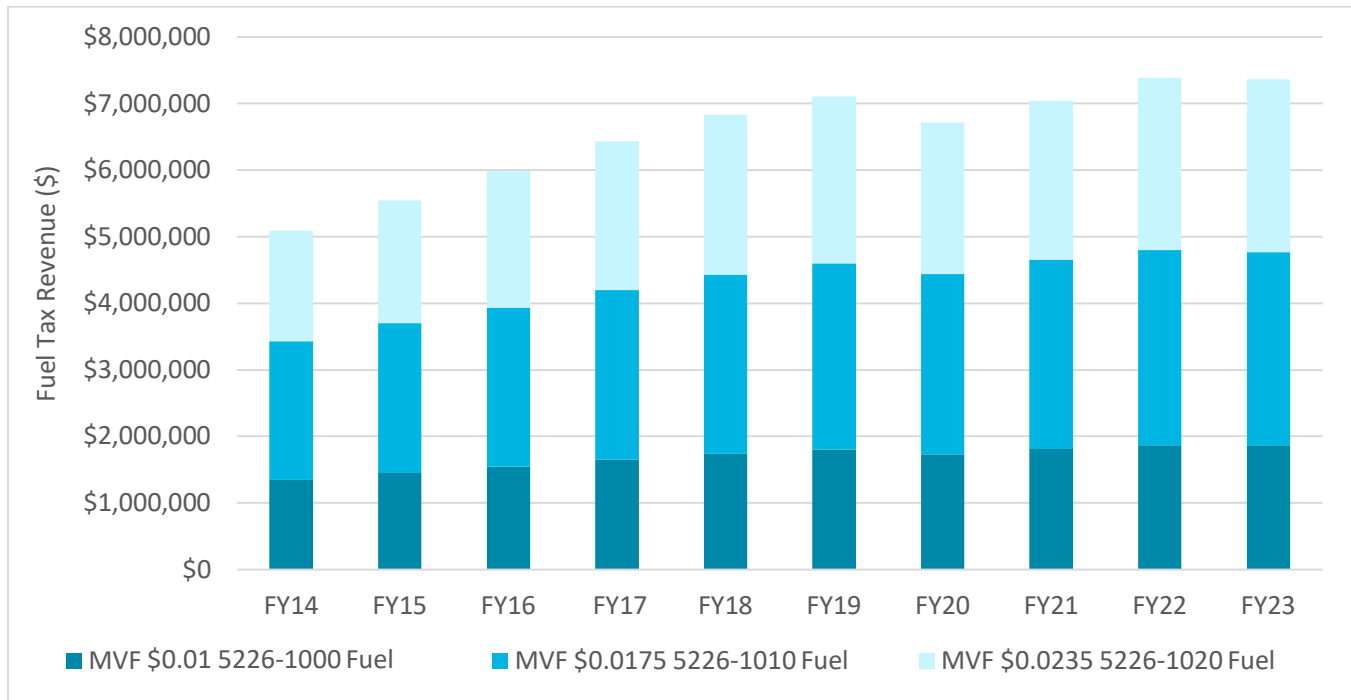


Figure 7. City of Reno Fuel Tax Revenue by Statutory Authority, FY 2014-2015 (FY14) to FY2023-2024 (FY23)

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.

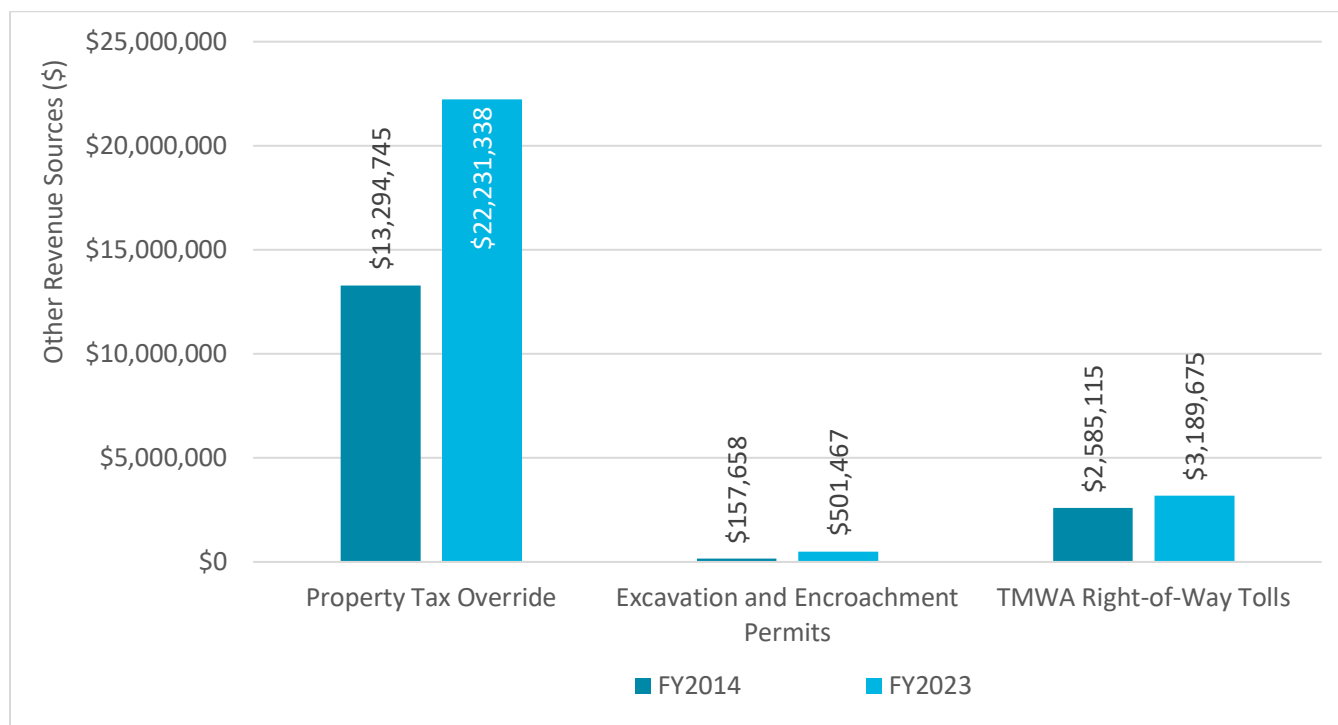


Figure 8. City of Reno Other Revenue Streams, FY-2014-2015 (FY2014) to FY 2023-2024 (FY2023)

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.

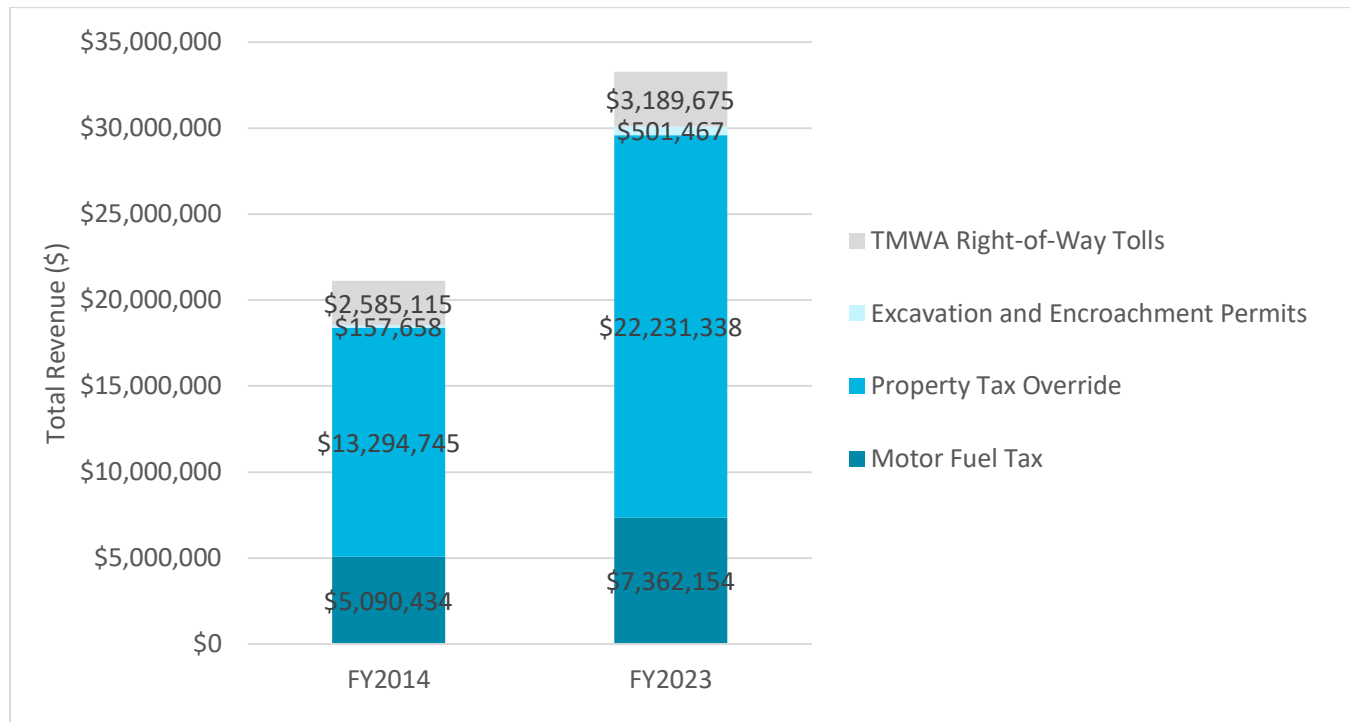


Figure 9. City of Reno Revenue Available for Street Maintenance and Repair, FY 2014-2015 (FY2014) to FY 2023-2024 (FY2023)

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

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)		mi	# of sect	
		Alley	22.01	422	
		Utility	12.51	69	
		Arterial	158.54	404	
		Collector	99.43	362	
		Industrial	46.57	231	
		Local	449.62	3415	
		Parking		127	
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 – Contact Greg Johnson johnsongr@reno.gov			
5	How often does your agency update pavement inspections?	Every 3 years, 1/3 of the network each year			
6	How does your agency update pavement condition? (walking, windshield or automated?) (in-house or by contractor)	Manual - (Local/Alley/Etc) In-house & contractor Automated - (Regional) contractor			
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)		PCI		
		Network	75.6		
		Alley	38.68		
		Utility	60.32		
		Arterial	79.22		
		Collector	72.77		
		Industrial	71.36		
		Local	76.75		
		Parking	55.17		

No.	Item	Agency Response			Comments/Notes
9	How does your agency setup condition categories in PMS? (ex. PCI 70 to 100 – Very Good)	Very Good 86-100 Good 71-85 Fair 56-70 Poor 41-55 Very Poor 26-40 Serious 11-25 Failed 0-10			
10	Does your agency have PCC pavement in your network?		mi	# of sec	
		Alley	17.59	320	
		Utility	0.02	1	
		Arterial	4.30	34	
		Collector	0.35	4	
		Industrial	0.00	0	
		Local	0.12	2	
		Parking		11	
11	What pavement strategies/ treatments does your agency apply on various conditions of pavement? (treatment by PCI range)	Slurry/Microsurfacing PCI 70-100 Mill and Overlay PCI 56-70 Cape Seal PCI 56-70 Asphalt Patching PCI Varies Rehab/Reconstruct <55			PCI ranges for treatments generally fall within these limits. Treatments also selected by distress type and years between last treatment
12	What factors/items are included in the treatment costs? (ex. paving materials, labor, concrete repairs, striping, traffic control, etc.)	All Construction Activities: Materials, Labor, Striping, Traffic Control			
13	How often does your agency update the treatment costs in your PMS?	Annually			
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)	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			

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.	<p>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.</p> <p>Ad Valorem (Property Tax Override): FY23 \$22,231,338</p> <p>Excavation and encroachment permits: FY23 \$501,467</p> <p>TMWA Right of Way Tolls: FY23 \$3,189,675</p>	
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.	<p>FY25 State Budget Documents: FY25 FINAL STATE DOCUMENT.xls (reno.gov) (budget book not yet available)</p> <p>FY24 Budget Book: 638265584834570000 (reno.gov)</p> <p>FY23 Budget: City Manager's Budget Message FY23 Budget Book (Locked) (cleargov.com)</p> <p>FY22 Budget: 637969408415900000 (reno.gov)</p>	
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.	<p>FY20 ACFR 637499434841300000 (reno.gov)</p> <p>FY21 ACFR A-010 - Issued Report and Financial Statements (797225 - June 2021 - Audit 797225 [6/30/2021] (In Process)) (reno.gov)</p> <p>FY22 ACFR Microsoft Word - {096AC6CF-923C-4E8F-9B91-F8437604368C}.docx (reno.gov)</p>	

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: <ol style="list-style-type: none"> 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) Storm 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 24 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.

6.C.5.

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 Whereof, the Parties have executed this Agreement as of the date and year appearing herein.

CITY OF RENO,

COUNTY OF WASHOE



Hillary L. Schieve, Mayor


Bob Lucey, Chair
Board of County Commissioners

ATTEST:

ATTEST:


Ashley D. Turney, Reno City Clerk


Janis 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/2nd 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	8	9	9	8	8	9	8	7	8		
Performed annually - following check list. - may be affected by weather.														
RESOURCE REQUIREMENTS		WORK METHOD						CHECK POINTS						
<u>Personnel</u>	<u>Qty</u>	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)						- 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						
TRF SIG MECH	1.25													
<u>Equipment</u>	<u>Qty</u>													
BOOM TRUCK	1.00													
<u>Materials</u>	<u>Qty</u>													
SS LENS	1.0 EA													
RAILS	2.0 PO													
HAND HOLE CVR	0.1 EA													
PULL BX LD 5	1.0 EA													
PULL BOX 6	1.0 EA													
BACKPLATE	1.0 EA													
FEATURE INVENTORY ITEM		EFFECTIVE						SUPERCEDES						
227.00 SIGNALS														
AVERAGE DAILY PRODUCTION		APPROVAL												
1.60 INTSECT														

ACTIVITY GUIDELINE **MAINTENANCE MANAGEMENT SYSTEM**

City of Reno
Management Unit : 0000122 - SIGNALS

WORK ACTIVITY	CABINET PM	CODE	202
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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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	06/30
	0	0	0	0	0	10	0	0	0	0	0	0

Perform semi-annually following checklist and includes one operational observation check to be conducted with at least four months between PM and operational check.. May be affected by weather.

RESOURCE REQUIREMENTS	WORK METHOD	CHECKPOINTS
-----------------------	-------------	-------------

Personnel **Qty**
TRF SIG TECH 0.85

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

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.

-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

227.00 SIGNALS

AVERAGE DAILY PRODUCTION

6.00 CABINETS

EFFECTIVE

SUPERCEDES

APPROVAL

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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	10	10	9	8	7	7	7	7	8	8	8	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
TRF SIG TECH 0.85

Equipment Qty
PICKUP/UTILITY TRUCK 1.00

Materials Qty
FLICIT MONITOR 0.3 EA

- PRE-DEPARTURE**
1. Stock truck with supplies and tested units.
- AT WORK SITE**
2. Place signal on flash
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.

- Appropriate PPE
- Observe traffic flow

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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	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	WORK METHOD	CHECKPOINTS
Personnel Qty TRF SIG MECH 1.25 Equipment Qty BOOM TRUCK 0.50 PICKUP/UTILITY TRUCK 0.50 Materials Qty 8V 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	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.	- 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 CATEGORY	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 ORIGIN	07/01	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/01	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	7	7	7	7	7	12	12	0	0	0	0	0

Communications problems are reported and logged by the computer system.
City has 3 cables, 26 pair, 18 pair and 12 pair branching throughout the City.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
<u>Personnel</u>	<u>Qty</u>	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.	- 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
TRF SIG MECH	1.50		
TRF SIG TECH	0.50		
<u>Equipment</u>	<u>Qty</u>		
PROM TRUCK	0.05		
CU/UTILITY TRUCK	0.95		
<u>Materials</u>	<u>Qty</u>		
CABLE	100.0 FO		
SPLICE KIT	5.0 EA		
TAPE	2.0 RO		
TERMINAL LUGS	10.0 EA		

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCODES
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
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DESCRIPTION OF WORK

Enter or modify system parameters 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 parameters monthly. Troubleshoot system failures. Check ITMS.

PLANNING CRITERIA	02/01	03/01	04/01	05/01	06/01	07/01	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	8	8	9	7	8	8	8	8	8	8	8	8	8	9	9	8	9

This work is performed routinely on a daily basis.

RESOURCES REQUIREMENTS		WORK METHOD	CHECKPOINTS
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<u>Personnel</u>	<u>Qty</u>
TRF SIG TECH	0.85

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

FEATURE INVENTORY ITEM

181.00 SIGNALS

EFFECTIVE

SUPERCEDES

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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/01	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	0	0	0	0	0	0	7	0	10	10	7	7

Performed as required in response to service requests and/or as needed

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
<u>Personnel</u>	<u>Qty</u>	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.	- Traffic Control - Appropriate PPE - Check for voltage - Check buttons - Check fuses and wiring - Check signal components
TRF SIG MECH	1.25		
TRF SIG TECH	0.20		
<u>Equipment</u>	<u>Qty</u>		
VAN	1.00		
<u>Materials</u>	<u>Qty</u>		
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		

FEATURE INVENTORY ITEM	EFFECTIVE	SUPERCEDES
1758 4010.00 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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	06/30
	10	10	8	9	8	7	7	7	8	8	9	9

Performed as required.

RESOURCE REQUIREMENTS	WORK METHOD	CHECKPOINTS
Personnel TRF SIG TECH Qty 0.85	AT BENCH 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.	- ID tag - 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
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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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	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	WORK METHOD	CHECK POINTS
Personnel TRF SIG MECH 1.00 TRF SIG TECH 0.40 Equipment PICKUP/UTILITY TRUCK 1.00 Materials AMPLIFIER 0.1 EA CABLE 4.0 FO NUTS/LUGS 10.0 EA SEALING PACS 2.0 EA WIRE NUTS 5.0 EA	PRE-DEPARTURE 1. Ready equipment and perform CDL Inspection 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.	- 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	SUPPERCEDES
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 DETECTORS	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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	06/30
	8	8	8	8	8	8	8	8	10	8	8	8

Performed as required in response to service requests or as needed.

RESOURCE REQUIREMENTS	WORK METHOD	CHECK POINTS
Personnel TRF SIG MECH 1.75 TRF SIG TECH 0.40 Equipment ROOM TRUCK 1.00 IMPRESSOR 1.00 CONCRETE SAW 1.00 PICKUP/UTILITY TRUCK 1.50 Materials LOOP WIRE 500.0 FO SEALANT (LOOPS) 24.0 PO	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.	- 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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	06/30
	7	8	9	10	9	9	8	8	9	8	8	7

Performed as needed.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
<u>Personnel</u>	<u>Qty</u>	PRE-DEPARTURE 1. Ready and perform CDL Inspection check. 2. Pick up boom truck. 3. Load LEDs AT WORK SITE 4. Replace LED END OF SHIFT 5. Document work	- Appropriate PPE - Follow current NV Work Zone Traffic Control Handbook and MUTCD - Check head alignment and tightness. - Check backplate for looseness
TRF SIG MECH	1.25		
<u>Equipment</u>	<u>Qty</u>		
BOOM TRUCK	1.00		
<u>Materials</u>	<u>Qty</u>		
LED LAMP LED	11.0 EA		

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
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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	07/01	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	06/30
	8	8	9	8	8	9	7	8	9	8	8	10

Work is performed as needed.

RESOURCE REQUIREMENTS	WORK METHOD	CHECKPOINTS
Personnel TRF SIG MECH 1.76 Equipment BOOM TRUCK 0.76 PICKUP/UTILITY TRUCK 0.25 Materials DOG HOUSE SIGNAL HE 2.0 EA	PRE-DEPARTURE 1. Pick up boom truck and perform CDL inspection AT WORK SITE 2. Set up work zone 3. Perform repair as needed. END OF SHIFT 4. Document work.	- Appropriate PPE - Follow current NV Work Zone Traffic Control Handbook and MUTCD

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
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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	01/01	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	02/01	03/01	04/01	05/01	06/01	07/01	08/01	09/01	10/01	11/01	12/01	01/01
	0	0	0	0	0	0	0	0	0	0	0	0

Performed in response to service requests or as reported in quarterly street light survey and every 36 months per local standards.

RESOURCE REQUIREMENTS	WORK METHOD	CHECK POINTS
Personnel TRF SIG MECH 1.25 TRF SIG TECH 0.20 Equipment BOOM TRUCK 1.00 Materials 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	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.	- 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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	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
<u>Personnel</u>	<u>Qty</u>	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.	- Set up route
TRF SIG MECH	1.00		- Appropriate PPE
TRF SIG TECH	0.40		- Follow current NV Work Zone Traffic Control Handbook and MUTCD
<u>Equipment</u>	<u>Qty</u>		- Check for incoming voltage
BOOM TRUCK	1.00		- Check fuses
<u>Materials</u>	<u>Qty</u>		- Trouble shoot sockets and ballasts
BALLAST	1.0 EA		- Replace or repair as needed
FLOURES TUBES	20.0 EA		
PHOTOCELLS	2.0 EA		

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 Maintenance & 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	<p>What normal operations and maintenance does your agency perform?</p> <ul style="list-style-type: none"> Crack sealing Patching Sweeping Snow removal Landscaping Roadway striping Concrete repairs (sidewalk, curb and gutter, curb ramp, etc.) Storm 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 D6433¹ 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.

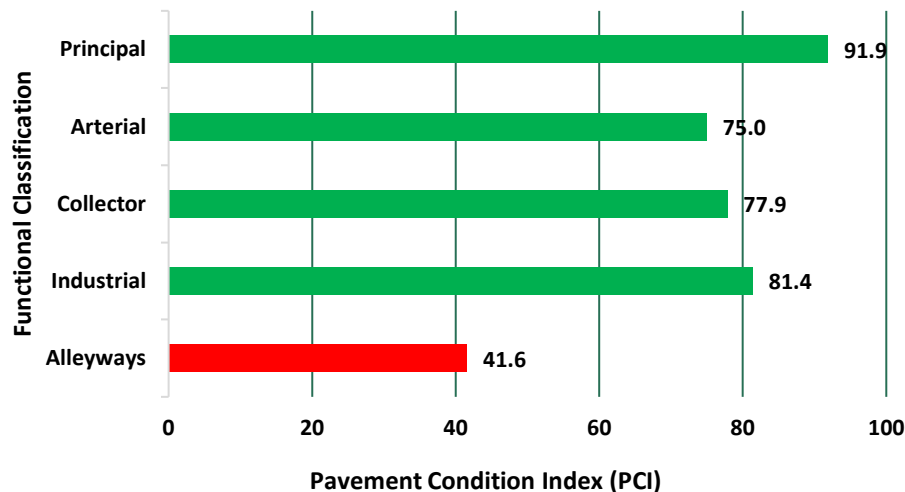


Figure 1. Current PCI by Functional Classification

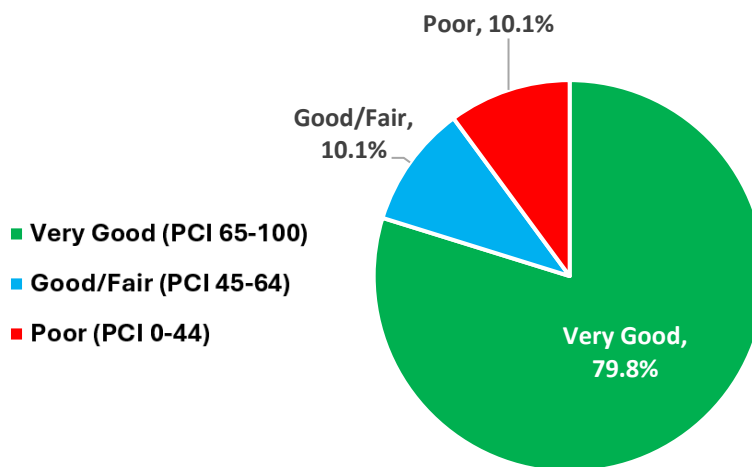


Figure 2. Area Percentage by Condition Category

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 D6433¹ 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.

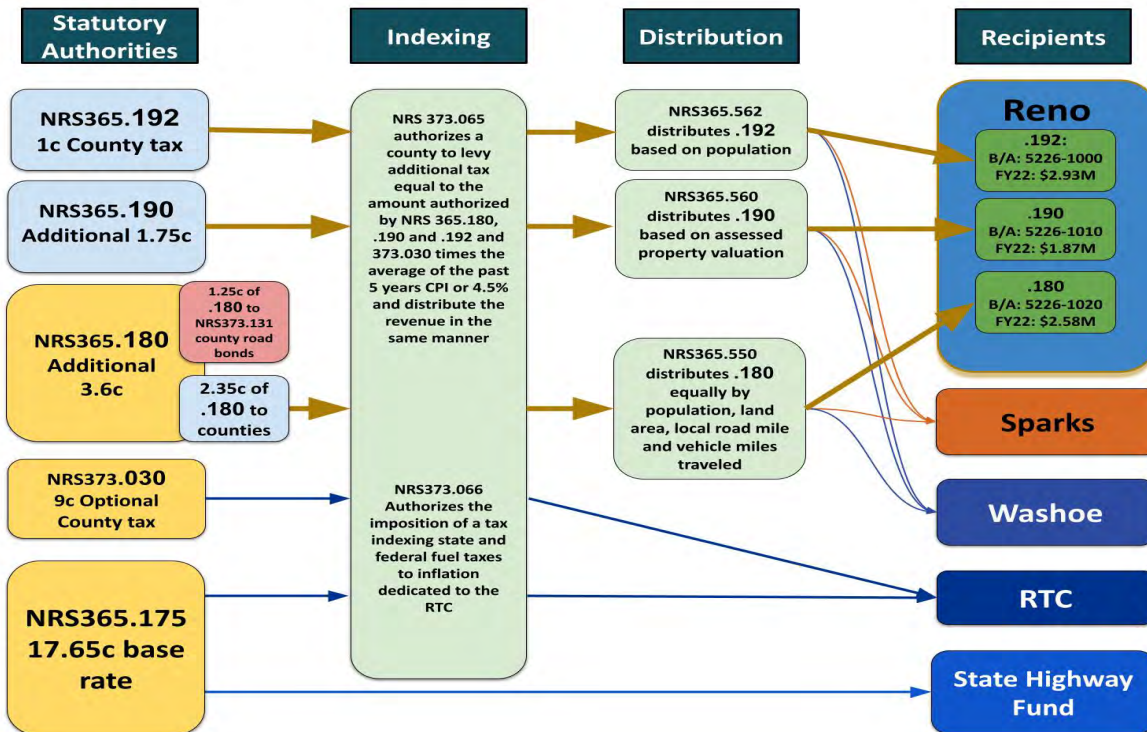


Figure 3. Nevada Motor Vehicle Fuel Tax

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%).

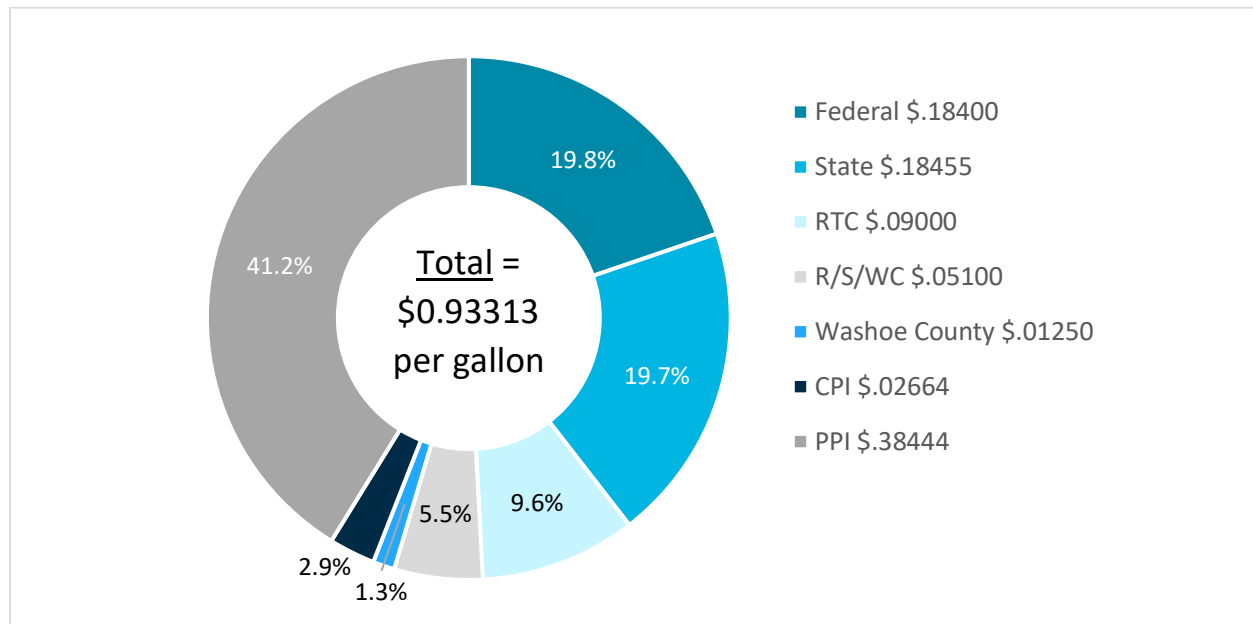


Figure 4. Washoe County Taxes Paid per Gallon of Gas, FY 2023-2024

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%.

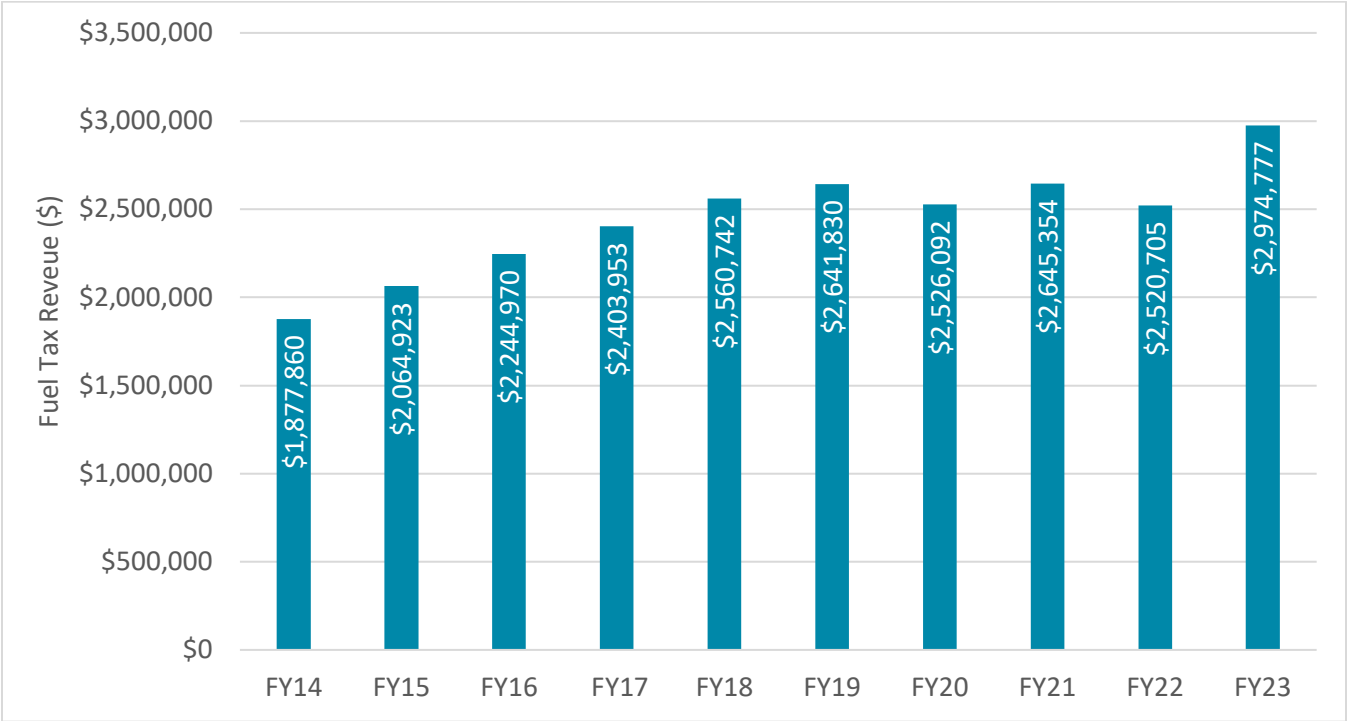


Figure 5. City of Sparks Fuel Tax Revenue, FY 2014-2015 (FY14) to FY 2023-2024 (FY23)

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.

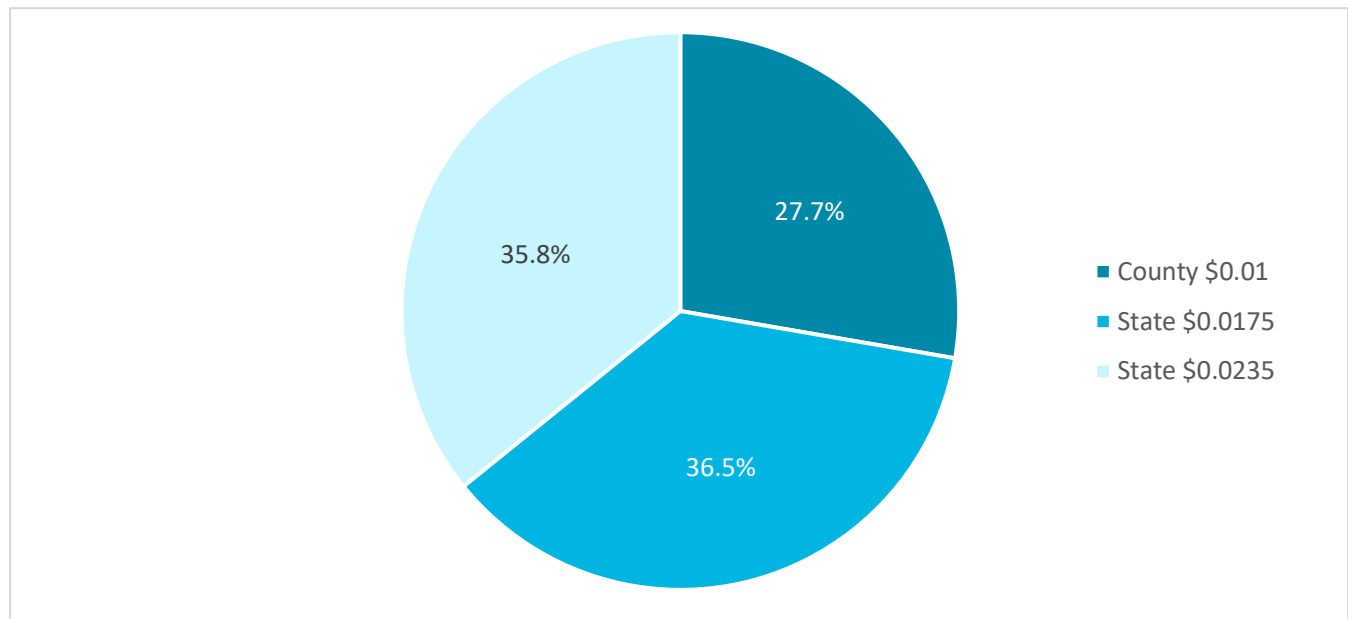


Figure 6. City of Sparks Fuel Tax Revenue Breakdown, FY 2023-2024

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.

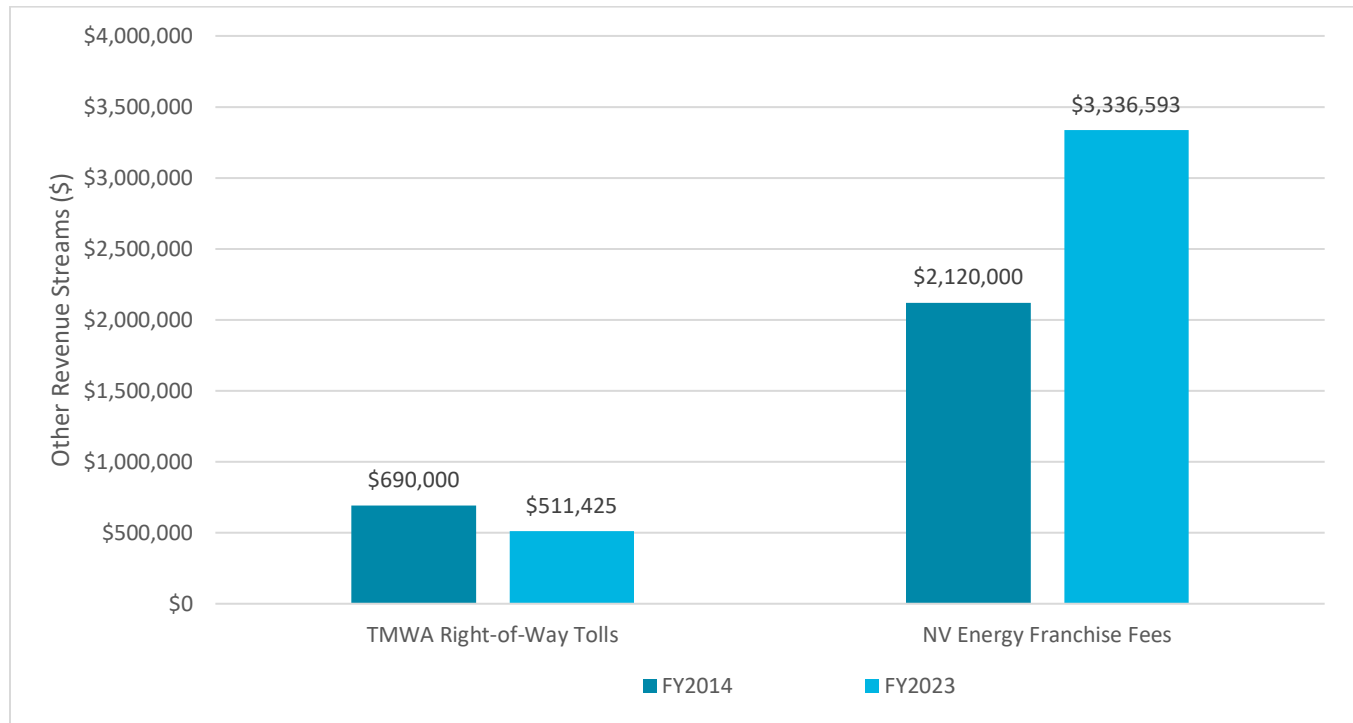


Figure 7. City of Sparks Other Revenue Streams, FY 2014-2015 (FY2014) to FY 2023-2024 (FY2023)

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.

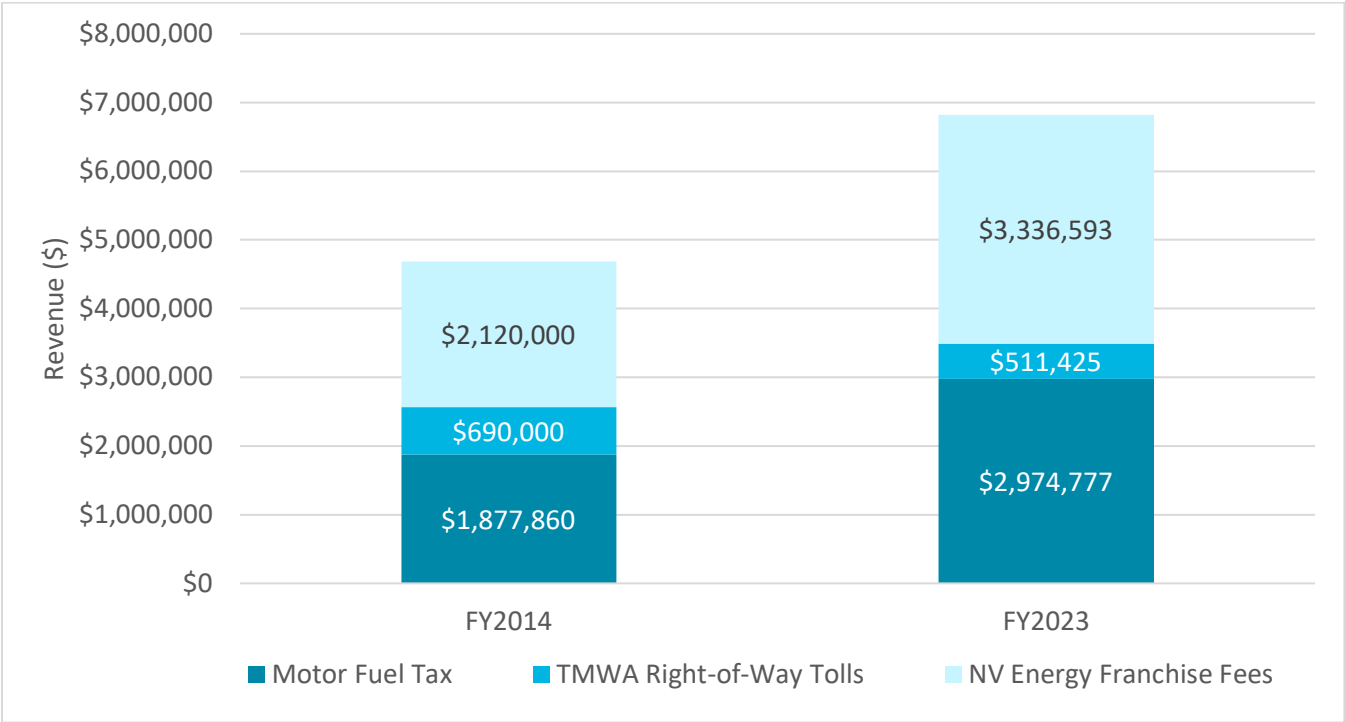


Figure 8. City of Sparks Revenue Available for Street Maintenance and Repair, FY 2014-2015 (FY2014) to FY 2023-2024 (FY2023)

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

AC-5591

07/08/19

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 execution 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)

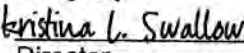
Acting City Clerk
 Title (Print)

Approved as to Form:


 Attorney

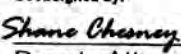
State of Nevada, acting by and through its
 DEPARTMENT OF TRANSPORTATION

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

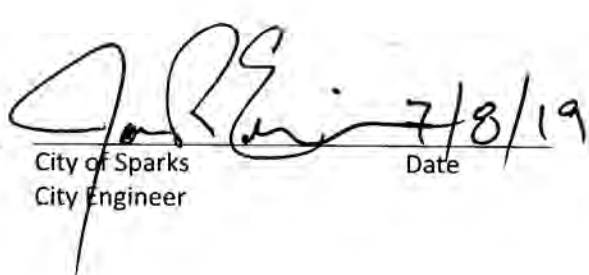
I 80 Eastbound Ramps
I 80 Westbound Ramps

Intersections along N. Kietzke Ln

Galletti Way
Victorian Avenue

District 2 Engineer

Date



City of Sparks
City Engineer

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	<p>What normal operations and maintenance does your agency perform?</p> <ul style="list-style-type: none"> 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 D6433¹ 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.

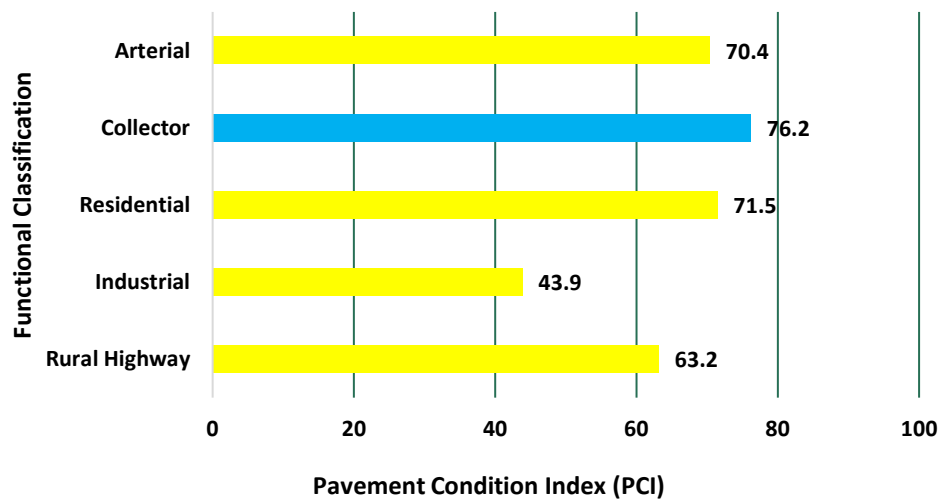
Pavement condition is typically quantified using the pavement condition index (PCI), which ranges from 0 (worst) to 100 (best). Pavement condition is affected by the environment, traffic loads and volumes, construction materials, and age. The County divides the PCI scale into 4 condition categories (Table 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**

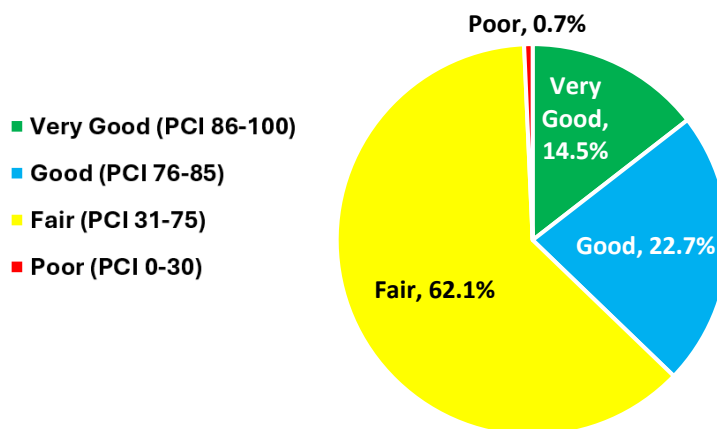


Figure 2. Area Percentage by Condition Category

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 D6433¹ 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.

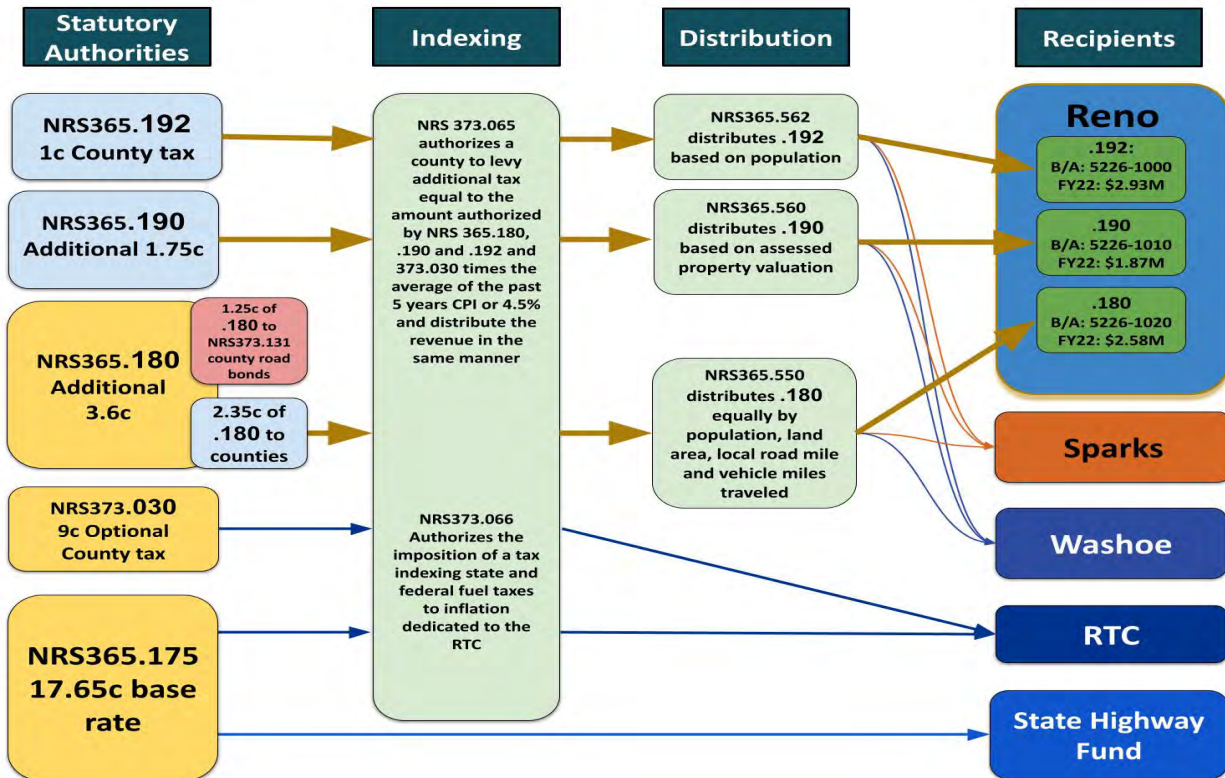


Figure 3. Nevada Motor Vehicle Fuel Tax

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%).

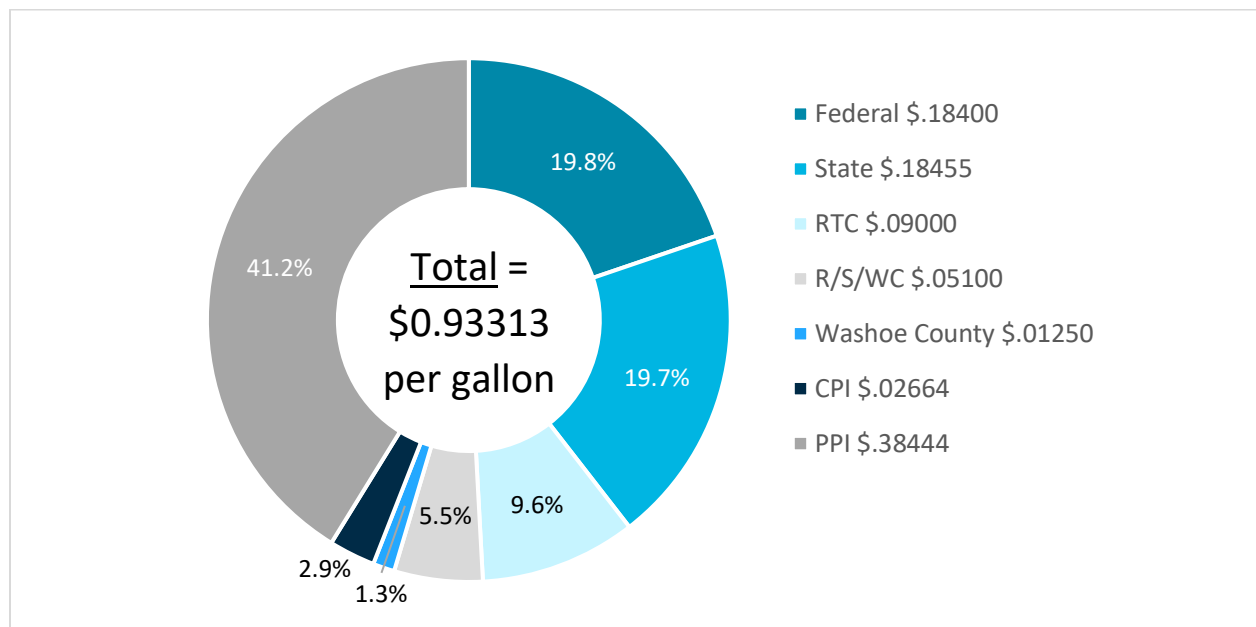


Figure 4. Washoe County Taxes Paid per Gallon of Gas, FY 2023-2024

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

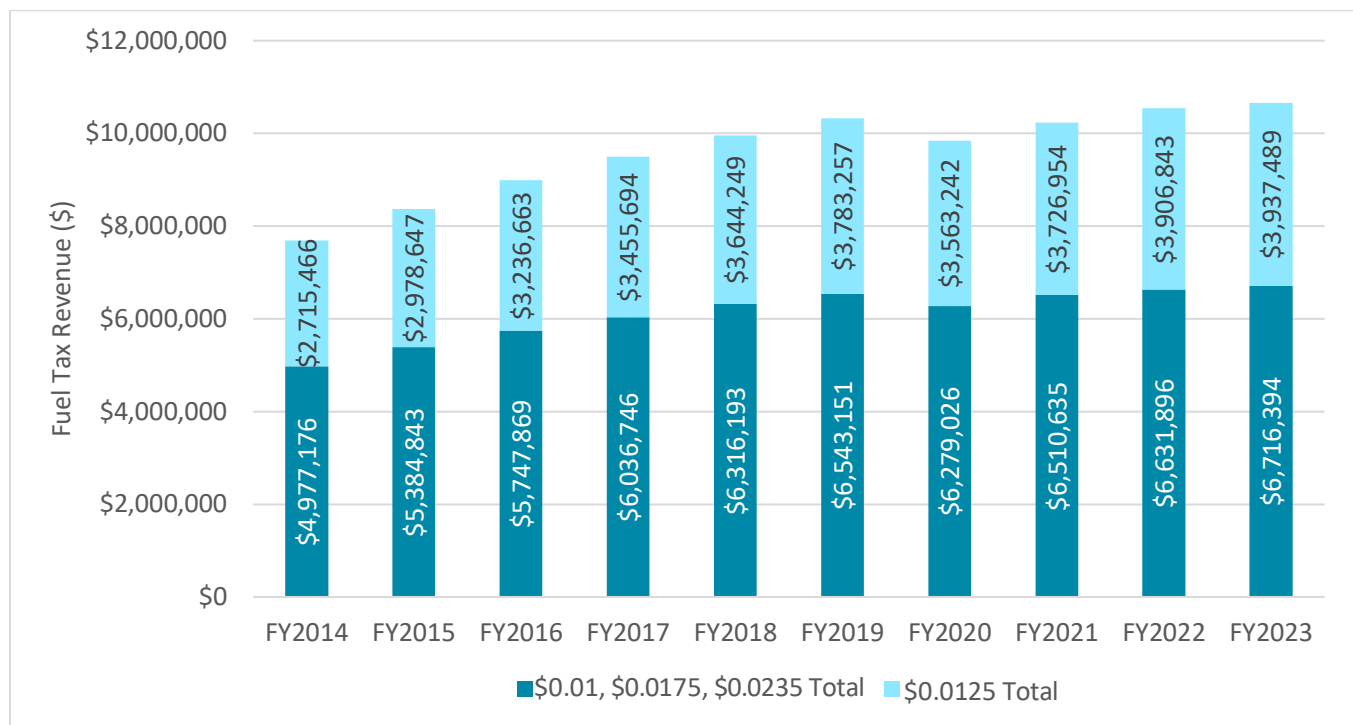


Figure 5. Washoe County Fuel Tax Revenues, FY 2014-2015 (FY2014) to FY 2023-2024 (FY2023)

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).

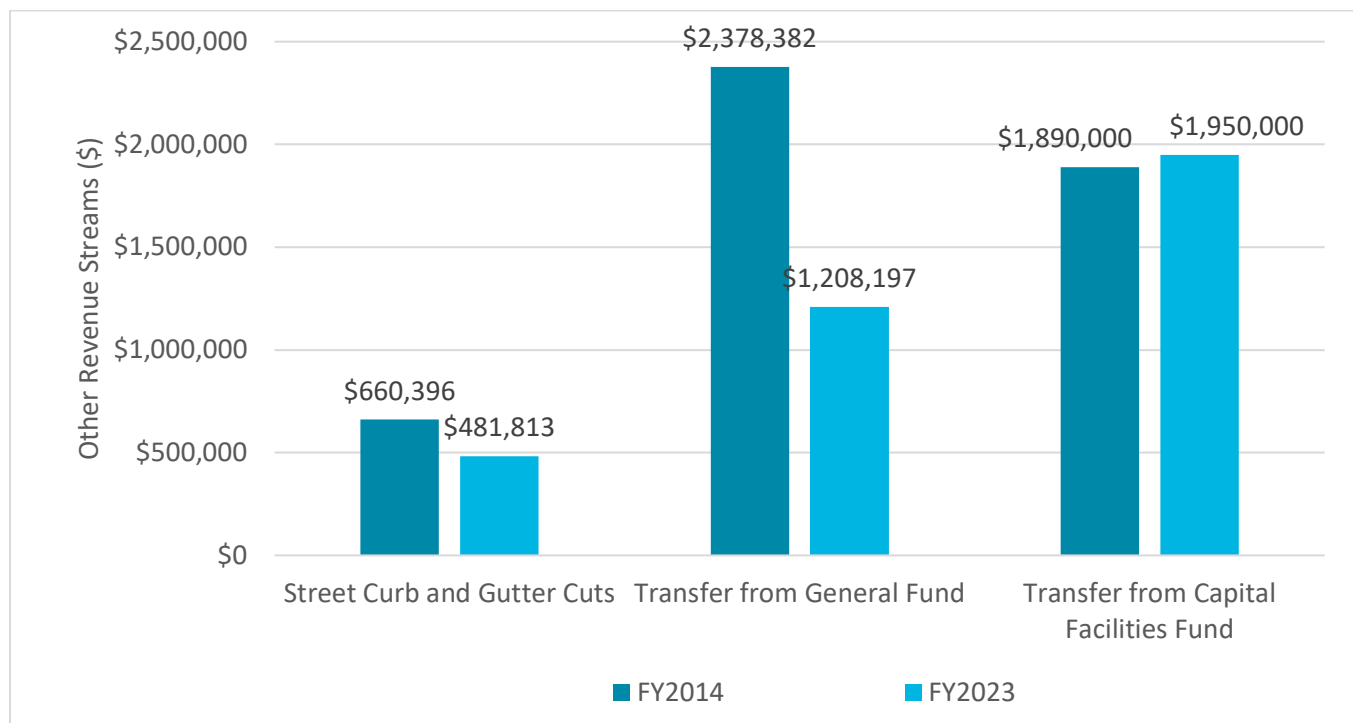
**Figure 6. Washoe County Other Revenue Streams, FY 2014-2015 (FY2014) to FY 2023-2024 (FY2023)**

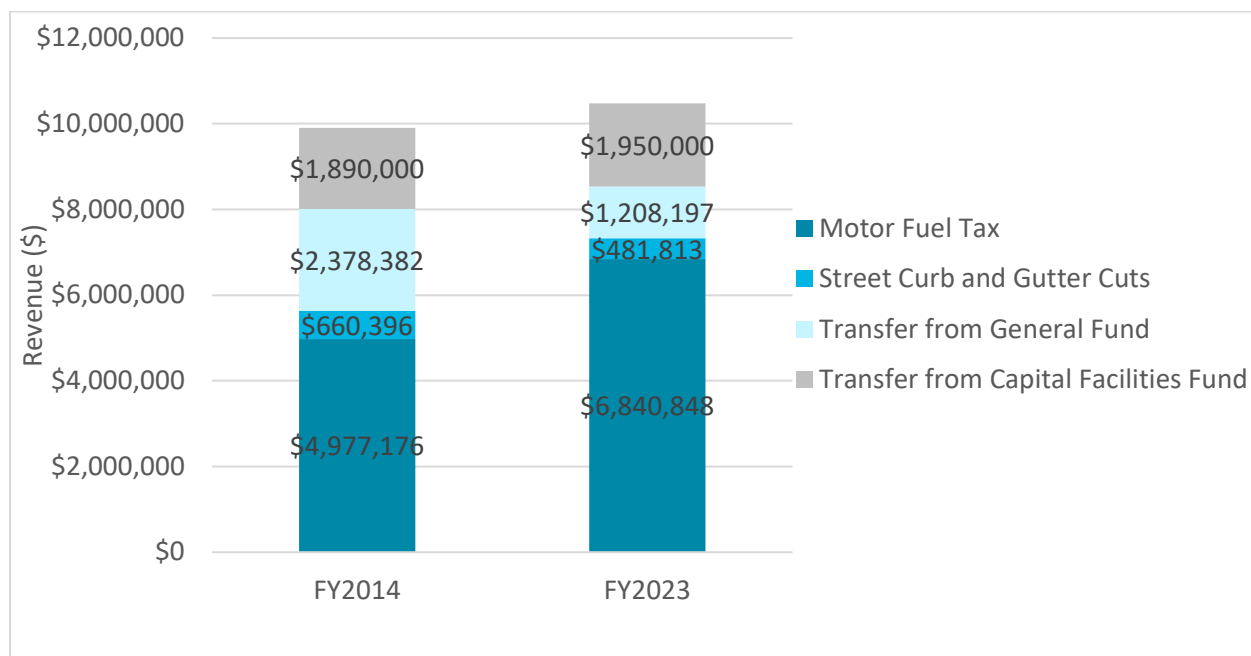
Table 10. Washoe County Other Revenue Streams, FY 2021-2022 (FY2021) to FY 2024-2025 (FY 2024)

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)	<table><tr><td># of Sections (Total 3,096)</td></tr><tr><td>Non-RTP = 2,962</td></tr><tr><td>RTP = 134</td></tr><tr><td># of Sections By FC (Non-RTP)</td></tr><tr><td>A-Arterial = 8</td></tr><tr><td>B-Collector = 88</td></tr><tr><td>C-Residential = 2,819</td></tr><tr><td>D-Industrial = 9</td></tr><tr><td>E-Rural Highway = 38</td></tr><tr><td>Centerline Miles by FC (Non-RTP)</td></tr><tr><td>A-Arterial = 11.62</td></tr><tr><td>B-Collector = 39.63</td></tr><tr><td>C-Residential = 519.39</td></tr><tr><td>D-Industrial = 7.04</td></tr><tr><td>E-Rural Highway = 75.23</td></tr></table>	# 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	
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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 24 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 Whereof, the Parties have executed this Agreement as of the date and year appearing herein.

CITY OF RENO,

COUNTY OF WASHOE



Hillary L. Schieve, Mayor


Bob Lucey, Chair
Board of County Commissioners

ATTEST:

ATTEST:


Ashley D. Turney, Reno City Clerk


Janis 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 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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	06/30
	8	8	9	8	9	9	8	8	9	8	7	8

Performed annually - following check list. - may be affected by weather.

RESOURCE REQUIREMENTS	WORK METHOD	CHECK POINTS
Personnel TRF SIG MECH 1.25 Equipment BOOM TRUCK 1.00 Materials 3S LENS 1.0 EA RINGS 2.0 PO HAND HOLE CVR 0.1 EA PULL BX LD 5 1.0 EA PULL BOX 6 1.0 EA BACKPLATE 1.0 EA	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)	- 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	
1.60 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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	0	0	0	0	0	10	0	0	0	0	0	0

Perform semi-annually following checklist and includes one operational observation check to be conducted with at least four months between PM and operational check.. May be affected by weather.

RESOURCE REQUIREMENTS	WORK METHOD	CHECKPOINTS
<p><u>Personnel</u> <u>Qty</u></p> <p>TRF SIG TECH 0.85</p> <p><u>Equipment</u> <u>Qty</u></p> <p>PICKUP/UTILITY TRUCK 1.00</p> <p>SHOP VAC 1.00</p> <p><u>Materials</u> <u>Qty</u></p> <p>RAGS 2.0 PO</p> <p>WIRE 1.0 FO</p> <p>CLEANING MTL 1.0 CA</p> <p>MIS NUTS&BOLT 5.0 EA</p> <p>AIR FILTER 1.0 EA</p> <p>HAND HOLE CVR 1.0 EA</p> <p>FLASHER-REG 1.0 EA</p>	<p>PRE-DEPARTURE</p> <p>1. Ready equipment and perform CDL inspection check.</p> <p>AT WORK SITE</p> <p>2. Perform visual inspection, record findings per check list.</p> <p>3. Set up work zone.</p> <p>4. Carry out maintenance and repair as per check list.</p> <p>5. Clean up and vacate site.</p> <p>END OF SHIFT</p> <p>6. Document work.</p> <p>7. Refuel Vehicles.</p>	<p>-Observe operation and traffic flow</p> <p>-Follow current NV Work ZoneTraffic Control Handbook and MUTCD</p> <p>-Follow Checklist</p> <p>- Appropriate PPE</p> <p>-Move work zone signs/cones</p> <p>-Complete records</p>

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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	10	10	9	8	7	7	7	7	8	8	8	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
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Personnel Qty
TRF SIG TECH 0.85

Equipment Qty
PICKUP/UTILITY TRUCK 1.00

Materials Qty
FLICIT MONITOR 0.3 EA

PRE-DEPARTURE
1. Stock truck with supplies and tested units.

AT WORK SITE
2. Place signal on flash
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.

- Appropriate PPE
- Observe traffic flow

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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	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	WORK METHOD	CHECKPOINTS
Personnel Qty TRF SIG MECH 1.25 Equipment Qty BOOM TRUCK 0.50 PICKUP/UTILITY TRUCK 0.50 Materials Qty 8V 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	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.	- 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 CATEGORY	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 CRITERIA	07/01	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/01	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	7	7	7	7	7	12	12	0	0	0	0	0

Communications problems are reported and logged by the computer system.
City has 3 cables, 26 pair, 18 pair and 12 pair branching throughout the City.

RESOURCE REQUIREMENTS	WORK METHOD	CHECK POINTS
Personnel TRF SIG MECH 1.50 TRF SIG TECH 0.50 Equipment PROM TRUCK 0.05 CUP/UTILITY TRUCK 0.95 Materials CABLE 100.0 FO SPICE KIT 5.0 EA TAPE 2.0 RO TERMINAL LUGS 10.0 EA	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.	- 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	SUPERCODES
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
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DESCRIPTION OF WORK

Enter or modify system parameters 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 parameters monthly. Troubleshoot system failures. Check ITMS.

PLANNING CRITERIA	07/01	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	8	8	9	7	8	8	8	8	9	9	8	9

This work is performed routinely on a daily basis.

RESOURCE REQUIREMENTS		WORK METHOD	CHECKPOINTS
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<u>Personnel</u>	<u>Qty</u>
TRF SIG TECH	0.85

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

FEATURE INVENTORY ITEM

181.00 SIGNALS

EFFECTIVE

SUPERCEDES

AVERAGE DAILY PRODUCTION

8.00 LABOR HR

APPROVAL

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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/01	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	0	0	0	0	0	0	7	0	10	10	7	7

Performed as required in response to service requests and/or as needed

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
<u>Personnel</u>	<u>Qty</u>	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.	- Traffic Control - Appropriate PPE - Check for voltage - Check buttons - Check fuses and wiring - Check signal components
TRF SIG MECH	1.25		
TRF SIG TECH	0.20		
<u>Equipment</u>	<u>Qty</u>		
VAN	1.00		
<u>Materials</u>	<u>Qty</u>		
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		

FEATURE INVENTORY ITEM

1758 4010.00 EACH

EFFECTIVE

SUPERCEDES

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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	06/30
	10	10	8	9	8	7	7	7	8	8	9	9

Performed as required.

RESOURCE REQUIREMENTS	WORK METHOD	CHECKPOINTS
Personnel TRF SIG TECH Qty 0.85	AT BENCH 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.	- ID tag - 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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	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	WORK METHOD	CHECK POINTS
Personnel TRF SIG MECH 1.00 TRF SIG TECH 0.40 Equipment PICKUP/UTILITY TRUCK 1.00 Materials AMPLIFIER 0.1 EA CABLE 4.0 FO NUTS/LUGS 10.0 EA SEALING PACS 2.0 EA WIRE NUTS 5.0 EA	PRE-DEPARTURE 1. Ready equipment and perform CDL Inspection 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.	- 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	SUPPCEDES
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 DETECTORS	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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	06/30
	8	8	8	8	8	8	8	8	10	8	8	8

Performed as required in response to service requests or as needed.

RESOURCE REQUIREMENTS	WORK METHOD	CHECK POINTS
Personnel TRF SIG MECH 1.75 TRF SIG TECH 0.40 Equipment ROOM TRUCK 1.00 IPRESSOR 1.00 CONCRETE SAW 1.00 PICKUP/UTILITY TRUCK 1.50 Materials LOOP WIRE 500.0 FO SEALANT (LOOPS) 24.0 PO	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.	- 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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	06/30
	7	8	9	10	9	9	8	8	9	8	8	7

Performed as needed.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
<u>Personnel</u>	<u>Qty</u>	PRE-DEPARTURE 1. Ready and perform CDL Inspection check. 2. Pick up boom truck. 3. Load LEDs AT WORK SITE 4. Replace LED END OF SHIFT 5. Document work	- Appropriate PPE - Follow current NV Work Zone Traffic Control Handbook and MUTCD - Check head alignment and tightness. - Check backplate for looseness
TRF SIG MECH	1.25		
<u>Equipment</u>	<u>Qty</u>		
BOOM TRUCK	1.00		
<u>Materials</u>	<u>Qty</u>		
LED LAMP LED	11.0 EA		

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
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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	07/01	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	06/30
	8	8	9	8	8	9	7	8	9	8	8	10

Work is performed as needed.

RESOURCE REQUIREMENTS	WORK METHOD	CHECKPOINTS
Personnel TRF SIG MECH 1.76 Equipment BOOM TRUCK 0.76 PICKUP/UTILITY TRUCK 0.25 Materials DOG HOUSE SIGNAL HE 2.0 EA	PRE-DEPARTURE 1. Pick up boom truck and perform CDL inspection AT WORK SITE 2. Set up work zone 3. Perform repair as needed. END OF SHIFT 4. Document work.	- Appropriate PPE - Follow current NV Work Zone Traffic Control Handbook and MUTCD

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
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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	01/01	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	02/01	03/01	04/01	05/01	06/01	07/01	08/01	09/01	10/01	11/01	12/01	01/01
	0	0	0	0	0	0	0	0	0	0	0	0

Performed in response to service requests or as reported in quarterly street light survey and every 36 months per local standards.

RESOURCE REQUIREMENTS	WORK METHOD	CHECK POINTS
Personnel TRF SIG MECH 1.25 TRF SIG TECH 0.20 Equipment BOOM TRUCK 1.00 Materials 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	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.	- 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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	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
<u>Personnel</u>	<u>Qty</u>	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.	- 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
TRF SIG MECH	1.00		
TRF SIG TECH	0.40		
<u>Equipment</u>	<u>Qty</u>		
BOOM TRUCK	1.00		
<u>Materials</u>	<u>Qty</u>		
BALLAST	1.0 EA		
FLOURES TUBES	20.0 EA		
PHOTOCELLS	2.0 EA		

FEATURE INVENTORY ITEM

100.00 SIGNS

EFFECTIVE

SUPERCEDES

AVERAGE DAILY PRODUCTION

4.00 SIGNS

APPROVAL

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 24 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 Whereof, the Parties have executed this Agreement as of the date and year appearing herein.

CITY OF RENO,

COUNTY OF WASHOE



Hillary L. Schieve, Mayor


Bob Lucey, Chair
Board of County Commissioners

ATTEST:

ATTEST:


Ashley D. Turney, Reno City Clerk


Janis 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 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	8	9	9	8	8	9	8	7	8		
Performed annually - following check list. - may be affected by weather.														
RESOURCE REQUIREMENTS	WORK METHOD						CHECK POINTS							
Personnel TRF SIG MECH 1.25 Equipment BOOM TRUCK 1.00 Materials 3S LENS 1.0 EA RINGS 2.0 PO HAND HOLE CVR 0.1 EA PULL BX LD 5 1.0 EA PULL BOX 6 1.0 EA BACKPLATE 1.0 EA	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)						- 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													
1.60 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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	06/30
	0	0	0	0	0	10	0	0	0	0	0	0

Perform semi-annually following checklist and includes one operational observation check to be conducted with at least four months between PM and operational check.. May be affected by weather.

RESOURCE REQUIREMENTS	WORK METHOD	CHECKPOINTS
Personnel TRF SIG TECH 0.85 Equipment PICKUP/UTILITY TRUCK 1.00 SHOP VAC 1.00 Materials 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	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.	-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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	10	10	9	8	7	7	7	7	8	8	8	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
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Personnel Qty
TRF SIG TECH 0.85

Equipment Qty
PICKUP/UTILITY TRUCK 1.00

Materials Qty
FLICIT MONITOR 0.3 EA

PRE-DEPARTURE
1. Stock truck with supplies and tested units.

AT WORK SITE
2. Place signal on flash
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.

- Appropriate PPE
- Observe traffic flow

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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	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	WORK METHOD	CHECKPOINTS
Personnel Qty TRF SIG MECH 1.25 Equipment Qty BOOM TRUCK 0.50 PICKUP/UTILITY TRUCK 0.50 Materials Qty 8V 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	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.	- 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 CATEGORY	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 CRITERIA	07/01	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/01	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	7	7	7	7	7	12	12	0	0	0	0	0

Communications problems are reported and logged by the computer system.
City has 3 cables, 26 pair, 18 pair and 12 pair branching throughout the City.

RESOURCE REQUIREMENTS	WORK METHOD	CHECK POINTS
Personnel TRF SIG MECH 1.50 TRF SIG TECH 0.50 Equipment PROM TRUCK 0.05 CUP/UTILITY TRUCK 0.95 Materials CABLE 100.0 FO SPICE KIT 5.0 EA TAPE 2.0 RO TERMINAL LUGS 10.0 EA	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.	- 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	SUPERCODES
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
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DESCRIPTION OF WORK

Enter or modify system parameters 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 parameters monthly. Troubleshoot system failures. Check ITMS.

PLANNING CRITERIA	07/01	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	8	8	9	7	8	8	8	8	9	9	8	9

This work is performed routinely on a daily basis.

RESOURCES REQUIREMENTS		WORK METHOD	CHECKPOINTS
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<u>Personnel</u>	<u>Qty</u>
TRF SIG TECH	0.85

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

FEATURE INVENTORY ITEM

181.00 SIGNALS

EFFECTIVE

SUPERCEDES

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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/01	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	0	0	0	0	0	0	7	0	10	10	7	7

Performed as required in response to service requests and/or as needed

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
<u>Personnel</u>	<u>Qty</u>	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.	- Traffic Control - Appropriate PPE - Check for voltage - Check buttons - Check fuses and wiring - Check signal components
TRF SIG MECH	1.25		
TRF SIG TECH	0.20		
<u>Equipment</u>	<u>Qty</u>		
VAN	1.00		
<u>Materials</u>	<u>Qty</u>		
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		

FEATURE INVENTORY ITEM
1758 4010.00 EACH

AVERAGE DAILY PRODUCTION

7.00 PED SIGNA

EFFECTIVE

SUPERCEDES

APPROVAL

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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	06/30
	10	10	8	9	8	7	7	7	8	8	9	9

Performed as required.

RESOURCE REQUIREMENTS	WORK METHOD	CHECKPOINTS
Personnel TRF SIG TECH Qty 0.85	AT BENCH 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.	- ID tag - 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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	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	WORK METHOD	CHECK POINTS
Personnel TRF SIG MECH 1.00 TRF SIG TECH 0.40 Equipment PICKUP/UTILITY TRUCK 1.00 Materials AMPLIFIER 0.1 EA CABLE 4.0 FO NUTS/LUGS 10.0 EA SEALING PACS 2.0 EA WIRE NUTS 5.0 EA	PRE-DEPARTURE 1. Ready equipment and perform CDL Inspection 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.	- 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	SUPPCEDES
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 DETECTORS	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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	06/30
	8	8	8	8	8	8	8	8	10	8	8	8

Performed as required in response to service requests or as needed.

RESOURCE REQUIREMENTS	WORK METHOD	CHECK POINTS
Personnel TRF SIG MECH 1.75 TRF SIG TECH 0.40 Equipment ROOM TRUCK 1.00 IPRESSOR 1.00 CONCRETE SAW 1.00 PICKUP/UTILITY TRUCK 1.50 Materials LOOP WIRE 500.0 FO SEALANT (LOOPS) 24.0 PO	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.	- 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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	06/30
	7	8	9	10	9	9	8	8	9	8	8	7

Performed as needed.

RESOURCE REQUIREMENTS		WORK METHOD	CHECK POINTS
<u>Personnel</u>	<u>Qty</u>	PRE-DEPARTURE 1. Ready and perform CDL Inspection check. 2. Pick up boom truck. 3. Load LEDs AT WORK SITE 4. Replace LED END OF SHIFT 5. Document work	- Appropriate PPE - Follow current NV Work Zone Traffic Control Handbook and MUTCD - Check head alignment and tightness. - Check backplate for looseness
TRF SIG MECH	1.25		
<u>Equipment</u>	<u>Qty</u>		
BOOM TRUCK	1.00		
<u>Materials</u>	<u>Qty</u>		
LED LAMP LED	11.0 EA		

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
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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	07/01	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	06/30
	8	8	9	8	8	9	7	8	9	8	8	10

Work is performed as needed.

RESOURCE REQUIREMENTS	WORK METHOD	CHECKPOINTS
Personnel TRF SIG MECH 1.76 Equipment BOOM TRUCK 0.76 PICKUP/UTILITY TRUCK 0.25 Materials DOG HOUSE SIGNAL HE 2.0 EA	PRE-DEPARTURE 1. Pick up boom truck and perform CDL inspection AT WORK SITE 2. Set up work zone 3. Perform repair as needed. END OF SHIFT 4. Document work.	- Appropriate PPE - Follow current NV Work Zone Traffic Control Handbook and MUTCD

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
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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	01/01	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	02/01	03/01	04/01	05/01	06/01	07/01	08/01	09/01	10/01	11/01	12/01	01/01
	0	0	0	0	0	0	0	0	0	0	0	0

Performed in response to service requests or as reported in quarterly street light survey and every 36 months per local standards.

RESOURCE REQUIREMENTS	WORK METHOD	CHECK POINTS
Personnel TRF SIG MECH 1.25 TRF SIG TECH 0.20 Equipment BOOM TRUCK 1.00 Materials 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	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.	- 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

800.00 SIGNS

EFFECTIVE

SUPERCEDES

AVERAGE DAILY PRODUCTION

7.00 SIGNS

APPROVAL

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	08/01	09/01	10/01	11/01	12/01	01/01	02/01	03/01	04/01	05/01	06/01
	07/31	08/31	09/30	10/31	11/30	12/31	01/31	02/29	03/31	04/30	05/31	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
<u>Personnel</u>	<u>Qty</u>	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.	- 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
TRF SIG MECH	1.00		
TRF SIG TECH	0.40		
<u>Equipment</u>	<u>Qty</u>		
BOOM TRUCK	1.00		
<u>Materials</u>	<u>Qty</u>		
BALLAST	1.0 EA		
FLOURES TUBES	20.0 EA		
PHOTOCELLS	2.0 EA		

FEATURE INVENTORY ITEM

100.00 SIGNS

EFFECTIVE

SUPERCEDES

AVERAGE DAILY PRODUCTION

4.00 SIGNS

APPROVAL

Agreement Number P261-19-201

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

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 execution 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, 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.

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, relinquishment 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.

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,

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.

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, Director

Approved as to Legality & Form:

DocuSigned by:


Shane Chesney
Deputy Attorney General

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

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

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)

City of Reno Public Works Department

INTERLOCAL AGREEMENT

AC-5591

07/08/19

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 execution 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.

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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)

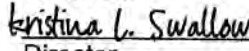
Acting City Clerk
 Title (Print)

Approved as to Form:


 Attorney

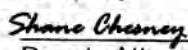
State of Nevada, acting by and through its
 DEPARTMENT OF TRANSPORTATION

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

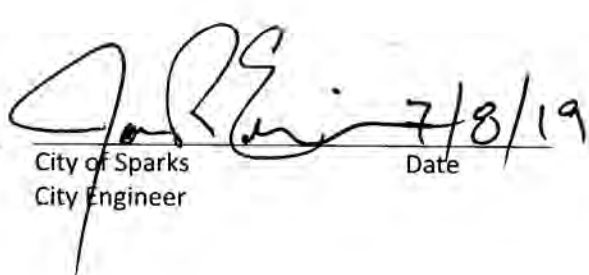
I 80 Eastbound Ramps
I 80 Westbound Ramps

Intersections along N. Kietzke Ln

Galletti Way
Victorian Avenue

District 2 Engineer

Date



City of Sparks
City Engineer

Date

NEVADA DEPARTMENT OF TRANSPORTATION
AGREEMENT SUMMARY SHEET



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: Interlocal
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 JK 01/05/2022

Dist./Div. Head Rodney Schilling

Legal LMS L/05/2022

Proj. Accting.

Required docs to start process:

(to be completed by Admin Services)

Summary Sheet (signed by Div. Head): ☒

Completed Form 2A: ☐

Electronic Draft of Agreement: ☒

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 Debarment

 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:

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

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

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

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

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.

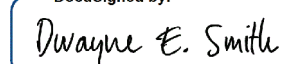
23. This Agreement and the rights and obligations of the parties hereto shall be governed by, and construed according to, the laws of the State of Nevada. The parties' consent to the exclusive jurisdiction of the Nevada district courts for enforcement of this Agreement.

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:

7DC118FBF7A04D5...
Dwayne E. Smith, P.E.,
Director of Engineering and Capital Projects

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

DocuSigned by:

C4B612FC2C1E4FB...
DIRECTOR

Approved as to Legality and Form:

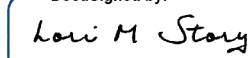
DocuSigned by:

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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/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.

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 Maintenance & 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: 6/20/2025

Agenda Item: 5.3.

To: Regional Transportation Commission

From: James 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 report.

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 multimodal transportation systems. RTC's fixed route fleet includes battery electric buses, hydrogen fuel cell vehicles, and hybrid electric buses, showcasing its dedication to reducing greenhouse gas emissions and improving air quality. This approach aligns with RTC's broader sustainability goals, such as promoting equity, environmental justice, and resilience in the transportation network.

RTC's proactive vehicle procurement strategy reflects its leadership in adopting cutting-edge technologies. For instance, RTC was an early adopter of battery electric buses, acquiring its first Proterra BE35 buses in 2014. Despite challenges with these first-generation vehicles, RTC has continued to explore innovative solutions, including hydrogen fuel cell buses and hybrid electric buses, to ensure operational reliability and environmental benefits. The agency's efforts to secure federal grants, such as the Low-No Emission Vehicle Program, further highlight its commitment to advancing sustainable transit options.

Most recently, due to several factors referred to below, the RTC is at a crossroads regarding its vehicle replacement strategy. After lengthy review, RTC 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 Vehicles (BEVs):**
RTC's experience with multi-generational Proterra BEVs 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 Vehicle (HFCV) 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 Vehicles (HEVs):

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: 6/20/2025

Agenda Item: 5.4.

To: Regional Transportation Commission

From: Bill Thomas, AICP, Executive Director

SUBJECT: RTC Strategic Roadmap for FY 2025-2027

RECOMMENDED ACTION

Acknowledge receipt of the updated RTC Strategic Roadmap for FY 2025-2027 and provide input and direction regarding next steps.

BACKGROUND AND DISCUSSION

At the Board's workshop in March 2025, the Board discussed the strategic plan for our community network experience. The attached document outlines workplans for staff to successfully accomplish the Board direction received to update these goals for FY 2026. These workplans include detailed outcomes, champions, approaches, objectives, and measures of success for all goals. Staff will return to the Board for additional policy decisions or with finalized reports.

Erica Olsen of OnStrategy will present the updates that have been made to the roadmap in order to receive direction from the Board.

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.



Sustainable Maintenance

Sustainable approach to maintenance.



Safety

Safe school zones, safe pedestrian walkways, and equal access for ADA communities.



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

Promote neighborhood mobility.

#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 | 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	Promote neighborhood mobility.
#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.	<p>Launch TMC.</p> <p>Complete the Regional Congestion Management Plan.</p>
Increase transportation options that connect to growth areas outside of Washoe County Metropolitan Area.	<p>Complete Reno-Sparks-TRIC Rail Alt. Modes Study.</p> <p>Complete the La Posada to TRI Center Feasibility Study.</p>



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 4 th 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: 6/20/2025

Agenda Item: 5.5.

To: Regional Transportation Commission

From: Bill Thomas, AICP, 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).

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

7/19/2024 Approved the RTC Goals for FY 2025.



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.

FY 2026 RTC GOALS

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: 6/20/2025

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

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

Meeting Date: 6/20/2025

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: 6/20/2025

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.
