Location:



REGIONAL TRANSPORTATION COMMISSION 1105 Terminal Way, 1st Floor Great Room, Reno, NV Date/Time: 9:00 A.M., Friday, February 21, 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 01/17/2025 RTC Board meeting. (For Possible Action)
 - 4.2. Reports
 - 4.2.1 Acknowledge receipt of the monthly Procurement Activity Report. (For Possible Action)

- 4.2.2 Acknowledge receipt of the monthly Engineering Activity Report. (For Possible Action)
- 4.2.3 Acknowledge receipt of the monthly Planning Activity Report. (For Possible Action)
- 4.2.4 Acknowledge receipt of the monthly Public Transportation and Operations report for January. (For Possible Action)
- 4.2.5 Acknowledge receipt of the Summary Report for the Technical, Citizens Multimodal, and Regional Road Impact Fee Advisory Committees. (For Possible Action)
- 4.2.6 Acknowledge receipt of the monthly Community Outreach and Media Activity Report. (For Possible Action)

4.3. Engineering Department

- 4.3.1 Approve an Interlocal Cooperative Agreement (ICA) with the Nevada Department of Transportation (NDOT) to establish funding commitments for the North Virginia Street Multimodal Improvements included in the US 395 North Valleys Phase 2 Project, in the amount of \$8,498,644. (For Possible Action)
- 4.3.2 Approve an Interlocal Cooperative Agreement with the Nevada Department of Transportation for funding, maintenance, and operations responsibilities on the Veterans Roundabout Modifications Project. (For Possible Action)
- 4.3.3 Approve Amendment No. 3 to the Interlocal Cooperative Agreement Amendment with the Nevada Department of Transportation for the Pyramid Highway/US 395 Connection Phase 1 Project, to authorize additional federal funds for construction. (For Possible Action)
- 4.3.4 Approve Amendment No. 1 to the Local Public Agency Agreement with the Nevada Department of Transportation for the use and reimbursement of federal funds on the Sparks Boulevard Capacity Improvement Project. (For Possible Action)
- 4.3.5 Approve the qualified list of consultants to provide civil engineering, design, and construction management services for the Traffic Engineering Program and the Intelligent Transportation Systems (ITS) Program. (For Possible Action)
- 4.3.6 Acknowledge receipt of an update regarding the McCarran Boulevard Safety and Operational Improvements Project. (For Possible Action)
- 4.3.7 Approve Amendment No. 2 to the contract with Kimley-Horn and Associates, Inc., for additional engineering during construction services needed in connection with the Veterans Roundabout Modifications Project, in the amount of \$351,135, for a new total not-to-exceed amount of \$680,500. (For Possible Action)
- 4.3.8 Approve Amendment No. 2 to the contract with AtkinsRealis USA, Inc., for additional design and engineering during construction services needed in connection with the Pyramid Highway Operations Improvements Project, in the amount of \$2,511,026, for a new total not-to-exceed amount of \$3,197,506. (For Possible Action)
- 4.3.9 Acknowledge receipt of the RTC's Intelligent Transportation Systems Strategic Master Plan. (For Possible Action)
- 4.3.10 Approve Amendment No. 3 to the contract with AtkinsRealis USA, Inc., for engineering during construction (EDC) services on the Sparks Boulevard Capacity Improvement Project in the amount of \$817,902, for a new total not-to-exceed amount of \$9,292,233. (For Possible Action)
- 4.3.11 Approve Amendment No. 1 to the contract with Lumos and Associates, Inc., for engineering during construction services needed in connection with the Arrowcreek Parkway and Wedge Parkway Rehabilitation Project, in the amount of \$665,840, for a new total not-to-exceed amount of \$1,550,860. (For Possible Action)

- 4.3.12 Approve a settlement between RTC and Alltaken, Inc., dba Wienerschnitzel store number 612, in the amount of \$450,000, to resolve any and all claims related to a business displaced by the Mill Street Capacity and Safety Project. (For Possible Action)
- 4.3.13 Approve an administrative settlement in the amount of \$79,286 authorizing RTC to acquire certain property interests related to APN: 037-020-42 from Marina Marketplace 2, LLC, for the Sparks Boulevard Capacity Improvement Project. (For Possible Action)
- 4.3.14 Approve an administrative settlement in the amount of \$373,023.67 authorizing RTC to acquire certain property interests related to APN: 012-211-28, 012-220-20, 012-220-37 from Gage Village Commercial Development LLC et al, AM-GSR Holdings, LLC, and AM-GSR Exchange, LLC, for the Mill Street Capacity and Safety Project. (For Possible Action)
- 4.3.15 Approve a Resolution of Condemnation authorizing RTC's legal counsel to commence condemnation proceedings to acquire a permanent easement and temporary construction easement on portions of APN 030-450-00 from the Owners of Springland Village 5 AMD, which are needed to construct the Sparks Blvd Capacity Improvement project. (For Possible Action)

4.4. Public Transportation/Operations Department

- 4.4.1 Approve a contract with Transportation Management & Design Inc., (TMD) for the Transit Optimization Plan Strategies (TOPS) Study, in an amount not-to-exceed \$355,053.95. (For Possible Action)
- 4.4.2 Acknowledge receipt of this quarterly Construction/Maintenance update on Transit Stops as presented to the Citizens Multimodal Advisory Committee on February 5, 2025. (For Possible Action)

4.5. Executive, Administrative and Finance Department

- 4.5.1 Approve a contract with Kaempfer Crowell, LTD, for Nevada government affairs services, in an amount not-to-exceed \$65,000 per year for two years. (For Possible Action)
- 4.5.2 Approval of market adjustments to the salaries of nine RTC employees pursuant to Personnel Rule 5.8.1.iv. (For Possible Action)

5. Public Hearing:

- 5.1. Conduct a public hearing regarding approval of the 2050 Regional Transportation Plan (RTP); adopt a resolution approving the RTP. (For Possible Action)
 - a. Staff Presentation
 - b. Public Hearing
 - c. Action
- 5.2. Conduct a public hearing regarding approval of Amendment No. 5 to the FFY 2023-2027 Regional Transportation Improvement Program (RTIP); adopt a resolution approving Amendment No. 5 to the RTIP. (For Possible Action)
 - a. Staff Presentation
 - b. Public Hearing
 - c. Action

6. Discussion Items and Presentations:

6.1. Approve the proposed new Fiscal Year 2026 Street & Highway Projects for the RTC Street & Highway Program; approve an Interlocal Cooperative Agreement with the City of Reno and Washoe County specifying responsibilities for delivering certain projects; approve an Interlocal Cooperative Agreement with the City of Sparks and Washoe County specifying responsibilities for delivering certain projects. (For Possible Action)

7. Reports (Information Only):

- 7.1. Monthly verbal update/messages from RTC Executive Director Bill Thomas no action taken.
- 7.2. Monthly verbal update/messages from Paul Nelson, RTC Government Affairs Officer on federal matters related to the RTC no action will be taken.
- 7.3. Monthly verbal update/messages from NDOT Director Tracy Larkin Thomason or designated NDOT Deputy Director no action will be taken.
- **8.** 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.
- **9. 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.

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Meeting Date: 2/21/2025 Agenda Item: 4.1.1

To: Regional Transportation Commission

From: Michelle Kraus, Clerk of the Board

SUBJECT: Draft Meeting Minutes for 01/17/2025

RECOMMENDED ACTION

Approve the meeting minuted for the 01/17/2025 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. January 17, 2025

PRESENT:

Ed Lawson, Chair, Mayor of Sparks
Mariluz Garcia, Washoe County Commissioner
Clara Andriola, Washoe County Commissioner (Alternate)
Devon Reese, Reno City Council
Bill Thomas, RTC Executive Director
Adam Spear, Legal Counsel
Sajid Sulahria, Deputy Director of NDOT (Alternate)

ABSENT:

Alexis Hill, Vice Chair, Washoe County Commissioner 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 Lawson. The Board conducted the following business:

Item 1 CALL TO ORDER

- 1.1 Roll Call
- 1.2 Pledge of Allegiance

Item 2 PUBLIC INPUT

Chair Lawson opened the meeting to public input and called on anyone wishing to speak on topics relevant to the Regional Transportation Commission (RTC) that are not included in the current agenda.

Heidi Soper, resident of Sun Valley for 37 years. I'm also the Vice Chair of the Sun Valley Cab. Commissioner Garcia has been wonderful keeping us updated on the grant situation for Sun Valley. I want to thank the staff of the RTC for submitting the Reconnect Community Grant. Unfortunately, we didn't get it, but they're finding project grants to apply for. I know that the that the application process is a lot of work, and I appreciate you all. Not many infrastructure improvements have been made during the past years, and we are growing so quickly. We are in desperate need of major improvements in Sun Valley and are thankful that this need has been recognized, and federal financial assistance is being sought. I know the RTC staff and Commissioner Garcia are working hard to bring the infrastructure needed to Sun Valley and on behalf of the Valley, I want to tell everyone thank you for your hard work and you are appreciated.

Item 3 APPROVAL OF AGENDA

Commissioner Reese noted that Item 5.1 should be changed to "informational only", as it was not possible for action at this time.

On Motion of Commissioner Reese to approve the change, seconded by Commissioner Mariluz Garcia, Chair Lawson ordered the change to Item 5.1 be approved.

Items 4 CONSENT ITEMS

Commissioner Andriola pointed out that since she did not attend the December 20, 2024 meeting, that she should be removed from making a motion on Item 4.1.1.

Commissioner Reese motioned to remove Item 4.1.1 from the Consent Agenda and then to approve all remaining items, which was seconded by Commissioner Garcia, which motion unanimously carried, Chair Lawson ordered that all remaining items by approved, less Item 4.1.1.

Commissioner Reese motioned that Item 4.1.1 be approved, with Commissioner Andriola abstaining from that agenda item, which was seconded by Commissioner Garcia, which motion unanimously carried, Chair Lawson ordered that Item 4.1.1 be approved.

4.1 Minutes

4.1.1 Approve the meeting minutes for the 12/20/2024 RTC Board meeting. (For Possible Action)

4.2. Reports

- 4.2.1 Acknowledge receipt of the monthly Procurement Activity Report. (For Possible Action)
- 4.2.2 Acknowledge receipt of the monthly Planning Activity Report. (For Possible Action)
- 4.2.3 Acknowledge receipt of the monthly Engineering Activity Report. (For Possible Action)
- 4.2.4 Acknowledge receipt of the monthly Public Transportation and Operations Activity Report. (For Possible Action)
- 4.2.5 Acknowledge receipt of the monthly Outreach Report from the Communications staff. (For Possible Action)
- 4.2.6 Acknowledge receipt of the monthly summary report for the Technical, Citizens Multimodal, and Regional Road Impact Fee Advisory Committees. (For Possible Action)

4.3 Planning Department

- 4.3.1 Acknowledge receipt of information on the fiscal year (FY) 2024 Safe Streets and Roads for All grant program award and execution of the grant agreement. (For Possible Action)
- 4.3.2 Approve the Coordinated Public Transit-Human Services Transportation Plan (CTP). (For Possible Action)

4.4 Engineering Department

- 4.4.1 Acknowledge receipt of information regarding an automatic annual increase of 4.3% to the Regional Road Impact Fees as allowed by NRS 278B.225 and required by ordinances adopted by Washoe County, the City of Reno, and the City of Sparks. (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 037-020-26 and 037-020-33 from Prime Park Vista, LLC, which are

- needed to construct the Sparks Blvd Capacity 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 permanent easement and a temporary construction easement interest on, portions of APN 036-540-08 from RJ Plaza, LLC, which are needed to construct the Sparks Blvd Capacity Improvement Project. (For Possible Action)
- 4.4.4 Approve a Resolution of Condemnation authorizing RTC's legal counsel to commence condemnation proceedings to acquire a fee simple in, and a temporary construction easement interest on, portions of APN 037-400-10 from Surf Thru, Inc., which are needed to construct the Sparks Blvd Capacity Improvement Project. (For Possible Action)
- 4.4.5 Approve a contract with HDR Engineering, Inc., to perform construction management services related to the Sparks Boulevard Capacity Improvement Project, in an amount not-to-exceed \$6,598,061. (For Possible Action)
- 4.4.6 Approve Amendment No. 2 to the contract with Jacobs Engineering Group, Inc., for engineering during construction and construction surveying for the Arlington Avenue Bridges Project, in the amount of \$609,891, for a new total not-to-exceed amount of \$5,005,639. (For Possible Action)
- 4.4.7 Approve a contract with Parametrix, Inc., for environmental and design services related to the Sixth Street for All Project, in an amount not-to-exceed \$2,720,536. (For Possible Action)
- 4.4.8 Approve a contract with Construction Materials Engineers, Incorporated for construction management services associated with the Mill Street Capacity and Safety Project, in an amount not-to-exceed \$2,340,788. (For Possible Action)

Item 5 DISCUSSION ITEMS AND PRESENTATIONS

5.1 Receive a presentation on the Draft 2050 Regional Transportation Plan Update (RTP). (Informational Only)

Vanessa Lacer, RTC Planning Director, gave a presentation and overview the draft 2050 Regional Transportation Plan (RTP).

This effort has been going on for about a year and a half, you've received several updates along the way, and we are now in draft. I just want to commend our RTC staff for all their hard work and dedication to this project and thank our community members and stakeholders for all of their time and energy that they've provided along the way. This is a guiding document of the RTC, and it is truly a team effort.

There are really four main reasons why we do this plan. RTC is a unique organization and we have three core services. We build roadways and transportation facilities, we run transit and we're also the Regional Planning Organization and the Metropolitan Planning Organization for our region. The majority of which is Washoe County and is also a federal designation. It's also required by state law, so our counterpart here in the region for land use planning is the Truckee Meadows Regional Planning Agency. They develop long range plans for land use and they are required to have a transportation element of that plan. This RTP is that transportation element. Third, this plan is required for us to be eligible to receive federal dollars for our region. Then finally, this plan is required for project implementation.

The RTIP is a five-year outlook, but it is updated every two years. All the projects included in RTIP must be in the RTP. Everything starts with a high level look that RTP. Another key consideration are the Street and Highway ICAs. While they are a two year look, they do get updated annually. So, while we're starting with this long range look out to 25 years. We do keep an eye on the projects and we are revising every single year.

We developed goals and we have a scoring tool. We're now ready to dig into the project development process and we started with our current RTP projects to see if any are ready to move forward or if we need to adjust any for today's current situation? We then had a call for projects from our member jurisdictions, that way they all had the same bite at the apple, the ability to submit projects to us that perhaps weren't on that draft list or had emerged since the current projects were created four years ago. We took all that information and created a very long draft list. We then developed a project scope and an estimated cost for each one of those projects to really understand what they were and how much potentially they would cost. We developed four broad categories of projects during this process and I would like to mention that NDOT projects are also included in this. We had freeway capacity, spot intersection and multimodal which multimodal is the bike and pedestrian project.

From the project list developed, we sent those projects through the scoring tool to develop a prioritized project list to understand which projects were going to best achieve our goals that we'd set out and the intention here is to get to a fiscally constrained project list. That is a required element of the plan. Basically, that means that the project list we're providing is not a wish list. These are projects that can actually be built with the money coming into the region.

The Draft Project List is in Appendix B of the draft plan. First the projects are going to be listed in two time frames. The first 10 years, 2025 to 2034 and then the next 15, 2035 to 2050, then there is a list of unfunded projects. I want to note that there are many needs in our community. We were not able to identify funding for all of them, however, we have included them in this plan as that unfunded project list. You can think of this as the short list should more funding become available or grants become available, then we can go to this unfunded list and know what's next. On our website https://rtcwashoe.com/planning/regional-planning/rtp/ there is a clickable map for folks to take a look at the projects. You can click on the dots and lines and see what kind of project they are, if they're funded, and if so, in what time frame. There is also a comment form where folks can leave some comments.

We're currently in our public engagement round two that concludes on February 1st. We also have the plan being reviewed by three advisory groups; our Plan Agency Working Group, our Technical Advisory Committee, and our Citizens Multimodal Advisory Committee are all going to provide comments. We'll take all of that information and put that into a final plan and then bring that back to you in February for adoption.

Commissioner Garcia, Thank you Vanessa. When you took the call for proposals and you did the scoring tool and applied the financial projections to it, what was the initial list and how many projects were listed?

Vanessa Lacer, the sort of laundry list of projects was quite long, being close to 200 or so and was drilled down to a little over 100. We were able to take a hard look at developing the scope of the projects and we were able to identify alternate funding for some and able to move some to our programs. So, all the projects that were moved up had alternate funding identified.

Bill Thomas, RTC Executive Director, there's two things that jumped out to me. The most overwhelming issue the majority of people had was with congestion. The other one was driver behavior. A lot of people were quite upset with the way people drive on the road. So that one's a little more challenging because we're talking about behavioral and not physical improvements, but certainly it does weave back into the safety component of the priorities and the goals. I just wanted to share that as kind of the overriding ones. I don't think this is shocking to anybody, but that's what the community told us were the most important concerns.

Commissioner Reese, thank you so much for the excellent presentation, the work has been incredibly well done. On behalf of the City of Reno and their staff, all of the staff level issues were addressed and all of them were answered and worked through. It wasn't that everyone always agreed at every moment, but I think there were ways to find room for agreement. So, I just want to thank you for that. I think it's important because when we sit on these bodies where we are regionally focused and therefore have three different jurisdictions, we also have at times different thoughts about roadway policies. One of the things I'm grateful for, though, is there is just a true sense of collegiality among the staffs. They are professionals towards one another, the work that they do and so I really just want to say thank you from me to you. It's really from them who are making those thanks, but also to my colleagues on the Board.

Everyone seems just focused on the goal, which is a greater transportation infrastructure, mobility for our bus users and our fixed route users, and some growth in the area of environmental sustainability, which I think has been very much a key to this Board's effort. These are important documents, and they will guide our decisions for many years.

5.2 Receive a presentation on the RTC Communications and Outreach Program. (Informational Only)

Josh McEachern, RTC Public Information Officer and Paul Nelson, RTC Government Affairs Officer gave a presentation and discussed the following.

Josh McEachern, we wanted to give a bird's eye view of the communications and outreach strategies/activities that we typically employ as the comms team.

Some of the highlights this year included the Arlington Bridges groundbreaking with Secretary Buttigieg. We do a lot of work with the media on ribbon cuttings, things like the Reno and Sparks events, public pop-ups and presentations. Many of you have attended these and I hope that you had a good time when you did. We work through these with the help of our FM Department and our Agency Services Department, and we did about 70 events in 2024, which is amazing.

Paul Nelson, when it comes to media availability, we have built a very good relationship with our local media. My realm was in the media for a long time, so once Josh started, we were able to schedule meetings with the three local TV stations. I was able to introduce Josh to the news directors, the assignment managers, and he has really taken that and ran with it. He's done a great job with the media, getting to know each and every one of them. They also like to call us impromptu and ask us to come over and do live interviews. So, we have a good relationship with them.

When it comes to presentations with Government Affairs, this was a pretty busy summer with growth and infrastructure. We did five presentations back to back talking about various issues. We also did a presentation in Carson City with the Silver Haired Committee talking about some of the programs we have for seniors. We are very proactive when it comes to getting out into our community to talk to the

different Citizen Advisory Boards, Neighborhood Advisory Boards, Citizen Advisory Committee and the Senior Citizen Advisory Committee. Between those, we did about 12 presentations, and then a couple of them invited us back to do some follow-ups as well.

We partner with a lot of people and we also have some very good community partnerships. The School District Safe Routes to School, we did the poster contest with them last year, which was a lot of fun seeing these kids that won these prizes, they were pretty excited. We did three Stuff-A-Bus events, one of them is strictly by RTC and that is the food drive we do every December. We also have one coming up next week with Washoe County for Foster Kids, and then the Food Bank of Northern Nevada, who are great partners. Vision Zero and Truckee Meadows, we are very active with them and we also do a lot of work with the Truckee Meadows Bicycle Alliance.

Josh McEachern, we do a lot of public meetings and pop ups. The Neighborhood Network plan is coming up on January 29th, and then on the 30th is our North Valleys North Virginia Project Public meeting, which is a very popular project. We partner with local news agencies, things like The Road Ahead with RTC, which you guys have probably seen or been asked to do by Paul on Channel 8. Those get great traction. They usually run about three times each on the news station. We have trade agreements with different news stations. So, when you see a KTVN ad on the side of the bus, that's usually in trade for a certain amount of airtime that we receive on those stations. We also have advertising contracts outside of those new station agreements.

Some of the things that were requested prior to me starting as the Public Information Officer was beginning the Spanish First campaign, a campaign focusing on ED Pass, which is our program that provides free rides for students and faculty at several campuses here in the area, and kind of an increase to our social media presence overall as RTC.

The ¡Sí RTC! campaign is, cross your fingers, soon to be award winning because we did submit for an APP to have the award. It focuses on Spanish speaking bus ridership. As a lot of us know, about 30% of the population here is primarily Spanish speaking. We were able to partner with Celtuce to make sure that we're creating authentic content, mostly in Spanish around Spanish family themes. Visiting areas that are more Spanish based in the Valley, we've seen just kind of unbelievable numbers at times. You can see the web stats, and you can see some of the social media reach.

Of course, my favorite part is we get a ton of positive comments from the Spanish community. They're very big RTC fans.

ED Pass is kind of a different campaign. A lot of it focuses on UNR/TMCC, I believe DRI as well, and its free rides. The whole point behind free rides for college students and faculty is a huge part of our community and the University of Nevada. The goal is to really get people introduced to the transit system early.

We have a higher reach that follows Facebook and Instagram more than Twitter and YouTube, because it's a more age appropriate demographic for a lot of our audience.

Commissioner Reese, excellent presentation and I think you're doing an outstanding job. I noticed this morning at about 7:00 a.m. someone responding to a rider on Twitter. I appreciate that, I mean we all answer texts, emails, those sort of things at inappropriate hours, but I'm hopeful that our staff is not doing that because that's a little early to be working the internet. In any event, I appreciate the response to the concerned resident and we communicate where we have to, so thank you and I think you're again doing an excellent job.

Commissioner Andriola, I really appreciate not only the planning, but also being really forward thinking. For instance, you've reached out to present at the February 5th Spanish Springs CAB, and it's not the first time, but certainly that's my district. It's very enthusiastically attended and being able to provide information and facts is really, really important. I also want to give you a huge amount of thanks for really representing the community to which we all are serving, whether it's Stuff-A-Bus, free rides, foster kids, Seniors or vulnerable populations, whoever it might be, you have a small but mighty team. To Commissioner Reese's point, I also see activity and I'm like, wow, those folks are on it. So, kudos to you, I hope you get some sleep. The fact that you really are trying to be proactive and trying to share information that's fact based so that people can actually understand what's coming or how their feedback can be considered as you're moving through with the planning that we've seen is fantastic.

5.3 Elect a Commissioner representing Washoe County to serve as RTC Chair for calendar years 2025 and 2026, and elect a Commissioner to serve as RTC Vice Chair for calendar years 2025 and 2026. (For Possible Action)

Commissioner Garcia, I wanted to say thank you Chair Lawson for your leadership and being so welcoming. I'm one of the newer RTC commissioners, and I just wanted to tell you what a joy it is to serve with you on all of these regional boards. Today as we hand off the torch, I would like to recommend that we nominate Alexis Hill as Chair and Devon Reese as Vice Chair. And that is my motion.

Chair Lawson, we have a motion, do I have a second?

Commissioner Andriola Seconded.

Chair Lawson, I got a second. Any further discussion? Seeing none. All those in favor signify by saying aye. All Aye. Motion carries unanimously.

Ed Lawson, before I hand over the gavel, I want to say thank you to the staff and everybody who works with us on the Board. I got almost two and a half years as chair, so it was a long time and you guys have been a joy to work with. Not that I'm going anywhere. I'm just not going to be in the hot seat anymore, but I can't thank you enough for all you do and the professionalism that you show to our community. So, thank you and with that, Vice Chair Reese, you have the gavel.

Vice Chair Reese, nothing like having to take over and fill those shoes. I'll echo some of the comments made by Commissioner Garcia and that is to say, Mayor Lawson, we have the privilege of serving on a number of boards together, and all of them are gracious and easy interactions. It's a privilege to serve with you and it's been a privilege to have you as the Chair of the RTC. Thank you so much.

Item 6 REPORTS (Informational Only)

6.1 RTC Executive Director Report

This is my chance to thank Mayor Lawson for all the help he's given me in the past. I hadn't realized, but you're right, it's been two and a half years. I think we've done a lot of good things, and a lot of that is really attributable to his leadership and you all working as a group. I appreciate Mayor Lawson's approach to all the more challenging issues I've brought to him. He's always been consistent about looking at what is the right thing for the community. He's been a great mentor and a guide to me. I am

really happy that he's still on the board. So that's even better, right? You have a change of leadership, but you also have the same people. I'm very blessed and I just wanted to start by thanking you, sir for your efforts.

- 1. First of all I want to congratulate Commissioner Hill in her new role as the RTC Board Chair.
 - We know her knowledge and experience will help us move forward and continue our success in regional transportation.
 - I also want to thank you, Mayor Lawson for your service over the last two years.
 - We have been very successful under your leadership and we've accomplished a lot of good things for our region.
 - Even though your term as chair has come to an end we are still very lucky to have you continue as one of our board members.
- 2. We are participating in Transportation Day at the legislative building on Tuesday, February 4th.
 - We are looking forward to discussing some of our legislative priorities with our state lawmakers.
 - We'll also be giving a presentation to at least one of the Growth and Infrastructure Committees.
 - We expect a good event with a lot of stakeholders attending.
 - Thank you to our partners and consultants for sponsoring this event.
- 3. We also met with some of our local legislators, earlier this week.
 - This was a great opportunity to give them a better understanding of what we do at the RTC and what our priorities are.
 - We had a very good discussion on some of the things that they can do during the legislative session to help us and improve transportation in our community.
 - They asked a lot of good questions and our directors were there to answer each one of them.
 - The legislative session begins two weeks from Monday.
- 4. As you know, many transit agencies are having challenges when it comes to hiring bus operators.
 - One of those challenges is that drivers have to pass a mechanical portion to get their Commercial Driver's Licenses.
 - It's called the "Under-the-hood" testing requirement.
 - That doesn't make a lot of sense for most transit agencies who have hired mechanics who can quickly respond when a bus breaks down.
 - The American Public Transportation Association is requesting a five-year exemption from this testing requirement to improve their ability to hire drivers.
 - We agree with this waiver, so Jim Gee is writing a letter on our behalf to make this request.
- 5. Once again, the RTC is partnering with Washoe County for a Stuff A Bus event.
 - Next Friday, we will have a bus at the Sparks Target from noon to 4 o'clock to collect donations of winter clothing for adoptive and foster children throughout the Truckee Meadows.
 - We know foster parents take on additional financial responsibilities, so this is a great way to help our neighbors and keep these kids warm during the winter months.
- 6. Our second annual Pedestrian Safety Message Poster Contest is underway.
 - This is a partnership with Safe Routes to School to encourage kids to think about pedestrian safety.
 - Washoe County students of all ages can participate in the contest.
 - Our staff will judge the posters and choose a winner from the elementary, middle and high school groups.
 - Safe Routes to School will provide an iPad and a new bike to each of the three winners.
 - We will enlarge those three winning posters to display on the side of a bus.

- We plan on bringing one of the buses to an upcoming board meeting and we'll announce the winners at an assembly at each of their schools.
- 7. Congratulations to Austin McCoy on his first anniversary with RTC.
 - Austin is one of our engineers and is the project manager of several of our active projects including the Pyramid/Highland Ranch interchange and the Military Road Capacity project.
 - He is off to a great start and we look forward to his continued success in the years to come.
- 8. The MTM Employee of the Month for December is Jerico White
 - Jerico has been part of the MTM team for a year, has a perfect safety record, doesn't call in, and his passengers like him. He enjoys driving and meeting new people so he says this job is just right for him. Outside of work he enjoys photography, gaming, and trying new foods. He's even prepared to travel to taste something new. Jerico enjoys watching motor sports and follows the Steelers and Raiders in the NFL.
- 9. The Keolis Driver of the Month is Harold Smith.
 - Harold is originally from San Francisco but moved to Reno in 2017. He started working as a RIDE bus operator back in August. His accomplishments in December consist of a 97 percent on-time performance, zero preventable accidents, and no customer complaints. Harold enjoys playing sports like basketball and football and he used to be a professional boxer. When he's not driving a bus, he works as a D.J.

6.2 RTC Federal Report

Paul Nelson, RTC Government Affairs Officer. The new Congress is officially in session and President Biden will be leaving office Monday when Donald Trump has his inauguration day. The Senate held confirmation hearings this week for many of the secretary nominees, including Sean Duffy for Secretary of the Department of Transportation. Duffy didn't receive a lot of push back from the Senate, but we did get a little more insight about how he plans his approach in the role. His main priority is highway safety, and a big part of that is because his wife survived a head on crash when a driver fell asleep at the wheel. Duffy did vote against Amtrak funding as a member of Congress, but he said he will work to continue funding and approve projects and expend money from the IIJA in the future. Trump has also picked Stephen Bradbury as Deputy Secretary. Congress will have three major priorities in the coming months. The first one is raising or suspending the debt limit, and Republicans will be passing 1 or 2 reconciliation bills as part of Trump's agenda, including extending the 2017 tax cuts, repealing parts of the Inflation Reduction Act, and bolstering border security.

Congress will also have to pass the appropriations bills by March 14th. The NOFO closes February 24th, and as you know, we are in the process of applying for that grant for the Sun Valley Community Gateway project for \$40 million.

6.3 NDOT Director Report

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

- Traffic Safety
- Interstate 80, West Reno Improvements anticipated for 2026
- Statewide Wildlife Infrastructure Evaluation. Feral Horses are not included, because they are managed by the Department of Wildlife
- Honorary Highway Signs for Washoe County Deputy Sheriff Frank Minnie, Sr. and Pyramid Lake Tribal Officer Anthony Francone.

Item 7 COMMISSIONER ANNOUNCEMENTS AND UPDATES

None

Item 8 PUBLIC INPUT

Vice Chair Reese opened the meeting to public input and called on anyone wishing to speak on topics relevant to the Regional Transportation Commission (RTC) that are not included in the current agenda.

Ms. Cynthia Cooper, local resident, I just had a couple of ideas about Outreach for bus riders that may be helpful. Don't forget about your radio audience. After all, when we're driving in our cars, many of us listen to the radio stations. Maybe you can get UNR and some of the commercial radio stations to participate in encouraging ridership. I am aware that the Truckee Meadows Bike Alliance have been initiating communications with the Aces staff for Aces Baseball games and suggesting that maybe they can provide an incentive for people to attend the Aces Baseball games. With Aces games you could address congestion, protect air quality, and potentially expand your ridership. I bet everybody drove their car to this meeting this morning, right? Also, we have 25,000 employees, something like that out at TRIC. I don't know what the current statistics are, but I would love to see ridership increased by carpooling, van pooling, and also the bus lines.

Item 9 ADJOURNMENT

There being no further business to come before the Board, the meeting was adjourned at 10:05 a.m.

DEVON REESE, Vice Chair Regional Transportation Commission

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

Meeting Date: 2/21/2025 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 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.

ATTACHMENT A

PROJECTS CURRENTLY ADVERTISED

Invitations for Bids (IFB)				
Project	Due Date			
Mill Street Construction	February 13, 2025			
Vista-Prater Way Signal Fiber Connection Project	February 27, 2025			
Vista Boulevard/Disc Drive Intersection Improvement Project	February 27, 2025			

Request for Proposals (RFP)				
Project	Due Date			
RTC Civil and Construction Management Services for the Street and Highway Program	February 28, 2025			

REPORT ON INVITATION FOR BID (IFB) AWARDS

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

Project	Contractor	Award Date	Contract Amount
N/A			

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
Specialized Legal Services	Ogletree Deakins	\$49,500

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

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

Meeting Date: 2/21/2025 Agenda Item: 4.2.2

To: Regional Transportation Commission

From: Dale Keller, 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 with this action.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.



RTC Engineering Monthly Report

Active Transportation Projects

Biggest Little Bike Network

Sara Going, Project Manager

https://rtcwashoe.com/projects/biggest-little-bike-network/

Status: The project is currently working on developing the 60% level 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.

Capacity/Congestion Relief Projects

Buck Drive Circulation

Maria PazFernandez, Project Manager

https://rtcwashoe.com/projects/buck-drive-circulation/

Status: Kimley Horn & Associates is the selected firm for design and construction engineering services.

Ongoing coordination with City of Reno staff. Sixty percent (60%) design plans have been shared with City of Reno.

Construction is tentatively scheduled for spring 2025.

Butch Cassidy Drive Extension

Kimberly Diegle, Project Manager

https://rtcwashoe.com/projects/butch-cassidy-drive-extension/

Status: Sixty percent (60%) design plans were received in January and are currently under review.

Geiger Grade Road Realignment

Kimberly Diegle, Project Manager

https://rtcwashoe.com/projects/geiger-grade-road-realignment/

Status: RTC has begun the feasibility study for the project.

Military Road Capacity & Safety

Austin McCoy, Project Manager

https://rtcwashoe.com/projects/military-roadcapacity-safety/

Status: The RTC, in cooperation with the City of Reno, is in the final design phase for the project.

North Valleys North Virginia Street Capacity

Garrett Rodgers, Project Manager

https://rtcwashoe.com/projects/north-valleysnorth-virginia-street-capacity/

Status: A public meeting was held on January 30th to review the preliminary design with the public. Currently the project team is performing survey, geotechnical investigations, hydrology/hydraulics analysis, traffic modeling and preliminary engineering. Preliminary engineering has progressed to 30% Design.

Pembroke Drive Capacity & Safety

Maria PazFernandez, Project Manager

https://rtcwashoe.com/projects/pembroke-drive-capacity-safety/

Status: Nichols Consulting Engineers (NCE) was the selected design consultant. Preliminary design alternatives were updated to include widening to two (2) lanes in each direction.

Sixty percent (60%) design plans are expected to be submitted to the City of Reno in January 2025.

Pyramid Highway Operations Improvements

Jessica Dover, Project Manager

https://rtcwashoe.com/projects/pyramid-highway-operations-improvements/

Status: 60% design 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 is anticipated to take approximately 2 years to complete. Information regarding public meetings, project details, and construction updates can be found on the project website www.pyramidhighway.com. Additionally information can be found on either the RTC or NDOT websites.

Pyramid Wy, Sparks Blvd, Highland Ranch Pkwy Intersection

Austin McCoy, Project Manager

https://rtcwashoe.com/projects/pyramid-waysparks-boulevard-highland-ranchintersection/

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

Maria PazFernandez, Project Manager

https://rtcwashoe.com/projects/southvirginia-street-and-i-580-exit-29-capacityand-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/sparksboulevard-capacity-improvement-gregstreet-to-baring-boulevard/

Status: The Federal Highway Administration (FHWA) approved a Finding of no Significant Impact (FONSI) in March 2024 regarding the Environmental Assessment (EA) for this project. Project team is advancing design for the segment of the project between I-80 and Baring Blvd (Phase 2).

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

Status: Project design completed and right of way acquired. Construction contract will bid in February 2025 with construction beginning in Spring 2025.

Corridor Improvement Projects

Arlington Avenue Bridges NEPA/Design/EDC

Bryan Byrne, https://rtcwashoe.com/construction-projects/arlington-avenue-

Project Manager | bridges-project/

Status: Project is tentatively scheduled for construction to begin May of 2025.

For additional information please visit: ArlingtonBridges.com

Keystone Ave Bridge Replacement

Sara Going, https://rtcwashoe.com/projects/keystone-avenue-bridge-

Project Manager | replacement/

Status: The team began preliminary design of the project in January 2025.

Lemmon Drive Traffic Improvements and Resiliency

Bryan Byrne, https://rtcwashoe.com/projects/lemmon-drive-traffic-

Project Manager <u>improvements-and-resiliency/</u>

Status: The project is actively advancing in completing the necessary NEPA studies. The project team is working to address public input into the design. Team is

progressing into the 60% design phase of the project. More information can be found on the projects website at https://northvalleysimprovements.com/

McCarran Boulevard Safety and Operational Improvements

Jessica Dover,
Project Manager

https://rtcwashoe.com/projects/mccarran-boulevard-safety-and-operational-improvements/

Status: Project Prioritization Phase underway. The Prioritization Working Group (PWG) has been established to assist in coordination efforts between RTC, NDOT and Local Agencies. The PWG is currently reviewing prioritization model criteria.

Conceptual Engineering anticipated Spring 2025. Preliminary design for (2) segments to start Summer 2025.

Mill Street Capacity & Safety

Kimberly Diegle, https://rtcwashoe.com/projects/mill-street-capacity-and-safety/
Project Manager

Status: Final design is complete and the project will advertise for construction in January 2025 for the Mill Street improvements. Please visit www.MillStreetWidening.com for additional information.

Oddie / Wells Corridor Multi-Modal Improvements

Maria https://www.senserasystems.com/public/cameras/oddiewellsproject
PazFernandez,

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. 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 preliminary design efforts; 30% design is anticipated Spring 2025

West Fourth Street Downtown

Scott Gibson,
Project Manager

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

Status: Wood Rodgers is responding to 60% design comments and is working on their 90% design submittal. ROW activities are underway.

West Fourth Street Safety

Scott Gibson, https://rtcwashoe.com/projects/west-fourth-street-safety/
Project Manager

Status: 90% design plans have been completed and NDOT has completed and approved the environmental review. ROW activities are also underway.

Pavement Preservation Projects

2025 Bridge Maintenance

Scott Gibson, Project Manager

https://rtcwashoe.com/projects/2025-bridge-maintenance/

Status: A field visit with he City of Reno was held to identify design issues for each bridge. HDR is working on 60% plans for this project. Construction is anticipated in Summer 2025.

Arrowcreek/Wedge Rehabilitation

Jessica Dover, Project Manager

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

Status: 90% design anticipated February 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.

Las Brisas and Los Altos Resurfacing

Jessica Dover, Project Manager

https://rtcwashoe.com/projects/las-brisasand-los-altos-resurfacing/

Status: Work on Las Brisas BLVD and Los Altos PKWY has reached Final Completion. Project Close out activities underway

Meadowood Rehab

Garrett Rodgers, Project Manager

https://rtcwashoe.com/projects/meadowood-rehab/

Status: Team progressing the final design submittal. Right-of-Way process is ongoing.

Prater Way Rehabilitation				
IKIMberly Diegle Project Manager	https://rtcwashoe.com/projects/prater-way-rehabilitation/			

Status: Data collection of the existing conditions is underway. Analysis of corridor configuration alternatives will follow in the fall/winter.

Raleigh Heights Rehabilitation				
IALISTIN MICLOV PROJECT Manager	https://rtcwashoe.com/projects/raleigh- heights-rehabilitation/			
Status: Sierra Nevada Construction and the RTC have completed major construction items.				

Traffic Engineering/ITS

Veterans Parkway ITS				
IAUSTIN MCC.OV	https://rtcwashoe.com/projects/veterans- parkway-its/			

The project was awarded to Titan Electrical Contracting. Construction is anticipated to begin the spring.

Veterans Roundabout Modifications				
Jessica Dover	https://rtcwashoe.com/projects/veterans- roundabout-modifications/			
Final design anticipated early 2025				

Traffic Signal Timing 7	
AIEX WOITSON	https://rtcwashoe.com/projects/traffic-signal-timing-7-project/

New timing plans are in progress for the following corridors:

- Wells Avenue between Interstate 80 and Sutro Street
- Oddie Boulevard between Sutro Street and Pyramid Way

The next corridors planned for retiming will be:

- South McCarran Blvd between Skyline Blvd and Airway Dr
- Sparks Blvd between Greg St and Los Altos Pkwy (adaptive signal timing test)
- South Virginia St between Longley Ln and US-395

Legends Roundabouts	
Sara Going	https://rtcwashoe.com/projects/legends- roundabouts/
The project is currently under fina	al design.

Traffic Signal Modifications 24-01		
ISara (10Ind	https://rtcwashoe.com/construction- projects/traffic-signal-modifications-24-01/	

Sierra Nevada Construction has completed work on the Midtown portion of the project. Construction will resume in the spring on McCarran & 7th Street and Sparks sites.

Traffic Signal Modifications (TSM) 25-01		
II a Shonn Ford	https://rtcwashoe.com/projects/traffic-signal-modifications-25-01/	
Final design is underway.		

Sparks Intelligent Corridors	
IAIEX WOITSON	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://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		
IL-ATTATT ROMODES	https://rtcwashoe.com/projects/vista- boulevard-prater-way-its/	
Final Design is complete. Team is advan- advertisement.	cing necessary permits for project	

Sparks/lon Traffic Signal		
LaShonn Ford	https://rtcwashoe.com/projects/sparks- boulevard-ion-drive-traffic-signal/	
Preliminary design is underway.		

Traffic Signal Fiber 25-01		
IALISTIN MICL OV	https://rtcwashoe.com/projects/traffic-signal-fiber-25-01/	
RTC's consultant, Kimley-Horn and Asso	ciates, Inc., is working through final design.	

Other Projects

Virginia Line BRT Improvements	
IKIMPERIVI DIEGIE 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 2025.

REPORT ON NEGOTIATED SETTLEMENT AGREEMENTS FOR THE ACQUISITION OF PROPERTY

Project	Property Owner	Purchase Amount	Amount Over Appraisal	
Legends Roundabouts	Amazing Ace Holdings	\$32,103.00	\$0	
Meadowood Rehabilitation	RFG-Bamboo LLC	\$1,000.00	\$0	
Mill Street Capacity & Safety	Pestana Family Partnership LP	\$52,407.00	\$0	
Sparks Boulevard Improvement	Marina Marketplace 2 LLC	\$186,715.00	\$0	
Sparks Boulevard Improvement	Smith's Food & Drug Centers	\$44,750.00	\$0	
Traffic Signal Modifications 24-01	Burgerland & Rose Med Triangle	\$5,479.00	\$0	

CONTRACTS UP TO \$100,000

Project	Vendor	Scope	Amount

Meeting Date: 2/21/2025 Agenda Item: 4.2.3

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	https://rtcwashoe.com/planning/active-transportation-plan/	
Manager		

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) underway with public events scheduled for February and March 2025.

RTC Regional Travel Demand Model Update				
Xuan Wang, Project Manager	https://www.rtcwashoe.com/mpo-reports/model2023/			
Status: The project team completed the model calibration. Model runs were conducted for RTP				
analysis.				

RTC Regional Transportation Plan Update		
Vanessa Lacer, Project Manager	https://rtcwashoe.com/planning/regional-planning/rtp/	
Status: The draft plan was available for review and public comment from January 3 to February 1,		
2025 at https://rtcwashoe.com/planning/regional-planning/rtp/ . The final plan is scheduled to go		
before the RTC Board for approval at the February RTC Board Meeting.		

ONGOING PROGRAMS

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

Active Transportation Program		
RTC Planning and Engineering	https://www.rtcwashoe.com/metropolitan-planning/	
Staff		
Status: First Active Transportation Technical Advisory Committee (AT-TAC) meeting scheduled		
tentatively for February 2025.		

Vision Zero Truckee Meadows	
RTC Planning Staff	https://visionzerotruckeemeadows.com/

Status: SS4A planning funds totaling \$1.2 million in federal dollars awarded with draft agreement sent to FHWA 2/4/25. 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. Next Vision Zero Truckee Meadows Task Force meeting scheduled for spring 2025.

Meeting Date: 2/21/2025 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 January.

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

Highlights -

<u>RTC New Hire Facilities Tour</u> – PTO Director, James Gee and Safety Security Administrator, Jamie Borino led a tour of RTC



facilities for new hire staff. The tour was intended to provide staff an overview of the facilities and understanding of the operational aspects of Public Transportation.



<u>Keolis Town Halls</u> – PTO Director, James Gee and Alex Cruz, Senior Transit Planner hosted three townhall meetings open to all employees of Keolis to discuss items related to transit services, facilities and vehicles. Feedback from Keolis staff was very positive and some suggestions will be incorporated during upcoming service changes.



RTC RIDE Key Highlights – January

- 5 trainees released to Operations for revenue service
- New Year's Day Sunday-level service
- January 4, 2025, Service Change
- Bus Request: RTC Ed-Pass Commercial filming at UNR
- Driver of the Month: Harold Smith
- 99% service hours and trips delivered
- Stuff a Bus for Children, January 24, 2025
- RTC Safety Tour at Keolis
- Employee Engagement:
 - o Taco Truck ~ January 28th
 - o Town Hall Meetings with Keolis & RTC
- 0 new Grievances filed, no new ULP's dropped or withdrawn



Position	Total Employed	#Needed
Coach Operator Trainees	Employeu Δ	5
Coach Operators	171	4
Dispatchers	6	0
Road Supervisors	4	0
Mechanic A	5	0



Position	Total Employed	#Needed
Mechanic B	4	0
Mechanic C	3	1
Facilities Technician	2	0
EV Technician	1	0
Utility Worker	11	0
Electronics Tech	2	0
Body Technician	1	0

RTC ACCESS Key Highlights - January

Classes: 1-7-2025 class of 5-2 of 5 are in service and 1-21-2025 class of 4-3 of 4 are in training

Safety:

- Accidents:
 - o 2 Preventable
 - o 0 Non-preventable
- Incidents
 - o 5 (4 Non-preventable passenger incidents, 1 Preventable passenger incident)
- Injuries:
 - 0
- YTD Preventable Accident Count: 2
- YTD Injury Count: 0
- January Safety Blitz'
 - o Slips, Trips and Falls
- January Safety Meeting
 - o Slips, Trips and Falls

MTM represented staffing headcount as of January 31, 2024:

Position	Total Employed	#Needed
Drivers	51FT – 2PT	11FT – 0 PT
Dispatchers	4 FT	0
Reservationists	4.5 FTE's	0
Mechanic A	3.5 FT	0
Maintenance Technician	1	0
Utility Worker	1	0

TRANSIT DEMAND MANAGEMENT (TDM) Update

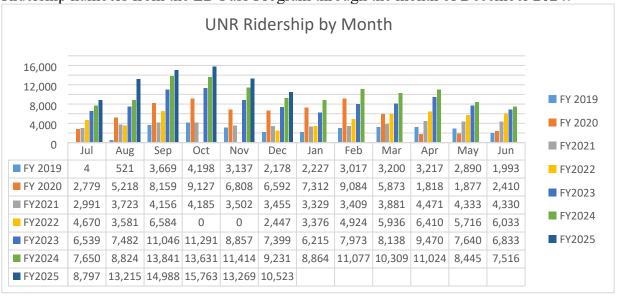
• Vanpools remained at 333. Staff has promising leads on starting more vanpools at Lake Tahoe. Both the Truckee North Tahoe TMA (Transportation Management Association) and

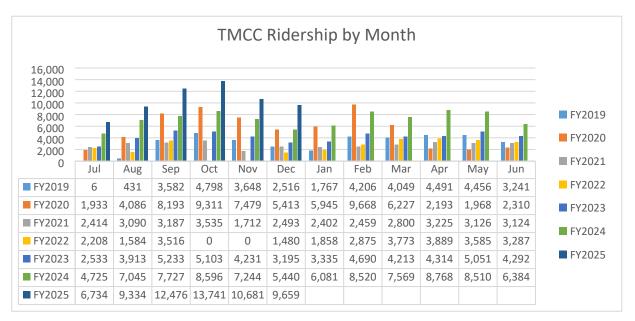
South Shore TMA have received grants to give further subsidies to support the addition of 4 vans. Currently, 27 vans service the Lake Tahoe area.

- Staff meets weekly with Celtis, RTC's marketing company.
- RTC met with Reno Earth Day staff on January 13. This year's event will be held on April 19.
- On January 21, staff worked with Celtis on new User Generated Content videos.
- Tabled the UNR men's basketball game on January 25.



Ridership numbers from the ED Pass Program through the month of December 2024:





Once again, we hit all times highs for the month of December with almost 20,000 trips!

DECEMBER 2024 TRANSIT PERFORMANCE

RTC RIDE







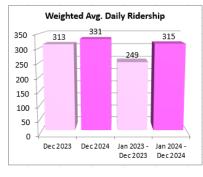
RTC ACCESS

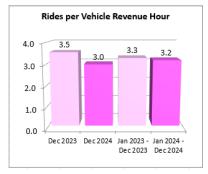






RTC FlexRIDE

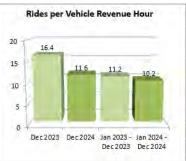






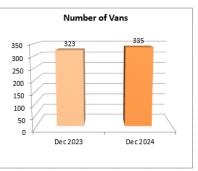
TART





RTC VANPOOL





Meeting Date: 2/21/2025 Agenda Item: 4.2.5

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 February 5, 2025, and were presented with two items for consideration: the quarterly bus stops and service updates report and a formal amendment to the FFY 2023-2027 Regional Transportation Improvement Program (RTIP). Questions about the bus stop item were operational in nature, with members interested in changes to the text on bus destination signs to the location of certain loading zones around town. On the RTIP item, members sought a better understanding of the RTIP and the amendment process, and also expressed concerns regarding several projects, including the I-80 widening. Additionally, Jim Gee, Director of Public Transportation, discussed a serious incident involving a bus driver earlier in the week, and confirmed that safety measures including driver barriers will be installed in all vehicles. More information can be found in the meeting minutes.

The TAC met on February 6, 2025, and RTC Planning Director, Vanessa Lacer, provided a presentation on the 2050 Regional Transportation Plan (RTP) Update. She outlined the plan's role in meeting federal and state requirements, public participation, the plan's goals, the project development process, and prioritization criteria. The final draft plan, along with a comment matrix, will be presented to the RTC Board on February 21st for adoption. RTC Planning Manager Graham Dollarhide provided an overview of the RTC's FFY 2026-2027 Unified Planning Work Program (UPWP) call for proposals and the 5th Amendment to the FFY 2023 - 2027 RTIP. A special TAC meeting was scheduled for February 12, 2025, which focused on the actions of the recommended approvals of the 2050 RTP Update and the Proposed Amendment No. 5 to the FFY 2023-2027 RTIP. Questions about the RTP item included the remaining steps for RTP adoption, public accessibility of the final draft, and TAC access to comments from other members during the RTP process. Concerns were raised regarding limited time for collaboration, changes without adequate review, and a desire for more public engagement throughout the planning process. Despite these concerns, the committee approved unanimously, recommending approval of the 2050 RTP Update and the RTIP amendment.

A meeting for the RRIF TAC was held on Thursday January 23, 2025. The meeting agenda included approval of consent items (which included minutes from prior meeting, dated November 21, 2024) and two discussion items were included in the agenda: Acknowledge receipt of a report on the Year 3 Indexing of the 7th Edition Regional Road Impact Fee (RRIF) General Administrative Manual (GAM) and the RRIF Capital Improvement Plan (CIP); and RTC staff presentation on the update to the 8th Edition RRIF CIP Draft Project List (No Action). There was no public comment during the meeting. The technical advisory committee members received the report and held discussion on items within the GAM that could be reviewed and updated. RTC staff asked the RRIF TAC to review the draft project list in the CIP and provide comments by February 21, 2025.

FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

Meeting Date: 2/21/2025 Agenda Item: 4.2.6

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 January 1-31, 2025



www.rtcwashoe.com

> Outreach Activities

Josh MacEachern, Project Manager

Press Releases:

- 1.27.25 Neighborhood Network Plan Public Meeting
- 1.30.25 North Valleys North Virginia Public Meeting

Earned Media Mentions:

- 1.27.25 (News 4) Neighborhood Network Plan Meeting
 - Potential Audience Reach: 162k
 - · Advertising Value Equivalency: \$223
- 1.27.25 (KOLO 8) Neighborhood Network Plan Meeting
 - Potential Audience Reach: 371k
 - Advertising Value Equivalency: \$510
- 1.28.25 (2 News) Neighborhood Network Plan Meeting
 - Potential Audience Reach: 263k
 - · Advertising Value Equivalency: \$361
- 1.29.25 (2 News) Neighborhood Network Plan Meeting
 - Potential Audience Reach: 260k
 - · Advertising Value Equivalency: \$150
- 1.29.25 (Fox 11) Neighborhood Network Plan Meeting
 - Potential Audience Reach: 8.3k
 - Advertising Value Equivalency: \$94
- 1.29.25 (News 4) Neighborhood Network Plan Meeting
 - Potential Audience Reach: 987k*
 - Advertising Value Equivalency: \$35k*
- 1.30.25 (News 4) Neighborhood Network Plan Meeting
 - Potential Audience Reach: 13k
 - · Advertising Value Equivalency: \$124

Outreach Activities

Josh MacEachern, Project Manager

Earned Media Mentions Continued:

- 1.31.25 (News 4) North Virginia North Valleys Public Meeting
 - Potential Audience Reach: 10k
 - · Advertising Value Equivalency: \$90
- 1.31.25 (News 4) North Virginia North Valleys Public Meeting
 - Potential Audience Reach: 14k
 - Advertising Value Equivalency: \$132
- 1.31.25 (News 4) North Virginia North Valleys Public Meeting
 - Potential Audience Reach: 10k
 - Advertising Value Equivalency: \$90







Outreach Activities

Josh MacEachern, Project Manager

Public Outreach:

- 1.9.25 Presentation for First Centennial Title (Paul/Josh)
- 1.15.25 Washoe Delegation Presentation (Paul/Directors)
- 1.16.25 Sparks High Site Tour (Marquis/Josh)
- 1.16.25 Truckee Meadows Trails Presentation (Paul)
- 1.21.25 Ed-Pass Filming at UNR (Josh/Paul/Scott)
- 1.21.25 APTA Emerging Leaders Presentation (Alex)
- 1.23.35 Reno Access Advisory Committee Meeting (Kim)
- 1.24.25 Stuff-A-Bus for Kids in Care (Paul/Josh)
- 1.25.25 Smart Trips Outreach at SDSU/Nevada Basketball (Paul/Scott)
- 1.29.25 Neighborhood Network Plan Public Meeting (Marquis/Josh/Graham)
- 1..29.25 Channel 8 Face the State In-Studio (Josh/Paul)
- 1.30.25 North Valleys North Virginia Project Public Meeting (Garrett/Jeff/Dale/Josh/Paul)





> Video Production

Paul Nelson, Project Manager

The Road Ahead:

- 1.7.25 Pedestrian Safety Art Contest
- 1.14.25 RTP Update
- 1.21.25 Stuff A Bus for Children in Care
- 1.28.25 I80 Project

2:01	The Road Ahead: 180 Project The Nevada Department is making some improvements to Interstate 80 between McCarran Blvd. and Keystone Ave. The project includes the	⊗ Public	None	Jan 28, 2025 Published
2:00	The Road Ahead: Stuff A Bus for Children in Care Washoe County and RTC are teaming up to collect winter clothing and other items for foster and adoptive families. The event is happening at the Sparks	⊕ Public	None	Jan 21, 2025 Published
2:01	The Road Ahead: RTP Update The RTC is updating its 2050 Regional Transportation Plan. This is the guiding document for our transportation projects, services, and needs for the next 2	Public	None	Jan 14, 2025 Published
PER ROAD AHEA	The Road Ahead: Pedestrian Safety Art Contest Once again, students in Washoe County can participate in an art poster contest to promote safety on our roads. The deadline for entries is February	Public	Made for kids	Jan 7, 2025 Published

Social Media

Josh MacEachern, Project Manager

Facebook

• Reach: 93.5k

Content Interactions: 447

Followers: 4.6k

Instagram

· Reach: 6.9k

Content Interactions: 133

Followers: 2k

X (Formerly Twitter)

Followers: 2.2k

YouTube

Views: 732

Watch time (hours): 45.8

Subscribers: 458

Email Marketing

Subscribers: 1.4k

Meeting Date: 2/21/2025 Agenda Item: 4.3.1

To: Regional Transportation Commission

From: Amanda Callegari, Engineering Manager

SUBJECT: NDOT Interlocal Cooperative Agreement: North Virginia Street Multimodal Improvements

RECOMMENDED ACTION

Approve an Interlocal Cooperative Agreement (ICA) with the Nevada Department of Transportation (NDOT) to establish funding commitments for the North Virginia Street Multimodal Improvements included in the US 395 North Valleys Phase 2 Project, in the amount of \$8,498,644.

BACKGROUND AND DISCUSSION

In May of 2022, NDOT, in partnership with the RTC, submitted a FY 2022 Multimodal Discretionary Grant Application (INFRA Grant) for the US 395 North Valleys Phase 2 Project. The Project includes a 2.5-mile segment of multimodal improvements on North Virginia Street (US 395 Business Route) between North McCarran Boulevard and Panther Drive. The purpose of this ICA is to establish the funding commitments between NDOT and the RTC in support of the commitments made in the FY 2022 Multimodal Project Discretionary Grant (INFRA Grant) Application. This ICA will also establish the roles and responsibilities between NDOT and RTC regarding completion of Final Design and Construction of the North Virginia Street Multimodal Improvements.

Through this ICA, the RTC commits to contributing a total amount of \$8,498,644.00 to the Project, including \$2,182,314 of RTC Local Fuel Tax Funds, and \$6,316,330 of RTC Federal Surface Transportation Block Grant (STBG-WA) Funds. The anticipated construction cost of this project is currently \$16,246,400, with NDOT committed to funding all costs within the current scope, as identified in the grant application, minus the amounts of the RTC's contribution identified in Article 1, Paragraph 1 of the ICA.

Construction is expected to begin in 2026 and continue through 2029.

FISCAL IMPACT

Local Fuel Tax funding for preliminary engineering was included in FY 2025 Budget. Costs identified in the ICA for remaining preliminary engineering, right-of-way, and construction will be included in future fiscal year Engineering budgets.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

INTERLOCAL AGREEMENT

This Agreement made and entered into on , by and between the State of Nevada, acting by and through its Department of Transportation, hereinafter called the "DEPARTMENT", and the Regional Transportation Commission of Washoe County, 1105 Terminal Way, Reno, Nevada 89502, hereinafter called the "RTC" (collectively 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 agreement is authorized by law to perform and refers to such as an interlocal contract; and

WHEREAS, the DEPARTMENT sponsored, with the RTC as a project partner, the submission of a FY 2022 Multimodal Project Discretionary Grant Application (Attachment B, attached hereto and incorporated herein) for the US 395 North Valleys Phase 2 Project, hereinafter called the "PROJECT" consisting of two elements: a DEPARTMENT two point nine (2.9) mile segment of US 395 between Golden Valley Road and Lemmon Drive ("Department PROJECT Element"); and a RTC two point five (2.5 mile) segment of North Virginia Street (US 395 Business Route) between North McCarran Boulevard and Panther Drive ("RTC PROJECT Element") in Washoe County, as identified in Attachment A – Project Description, attached hereto and incorporated herein); and

WHEREAS, the U.S. Department of Transportation notified the DEPARTMENT that the PROJECT was selected to receive a FY 2022 INFRA grant to cover a portion of the costs of construction of the PROJECT (Attachment C – FY 2022 INFRA Grant Selection Notice, attached hereto and incorporated herein); and

WHEREAS, the DEPARTMENT must enter into a U.S. Department of Transportation Grant Agreement Under the Fiscal Year 2022 Infra Program to receive the INFRA Grant funding for the PROJECT; and

WHEREAS, the DEPARTMENT is willing to provide all services necessary to prepare final plans, specifications, and cost estimates for the PROJECT, hereinafter called the "Final PS&E Package"; and

WHEREAS, the purpose of this agreement is to establish the funding commitments between the DEPARTMENT and the RTC in support of the commitments made in the FY 2022 INFRA Grant Application for the PROJECT, and to establish the roles and responsibilities between the parties regarding completion of the Final Design and Construction of the RTC PROJECT Element; and

WHEREAS, the parties shall work together on the negotiation of an agreement to determine and assign the responsibility for the long-term maintenance costs of the multiuse path and related lighting constructed as part of the PROJECT; and

WHEREAS, the PROJECT is an important capacity and Multimodal Transportation Project prioritized in the Regional Transportation Plan; and

WHEREAS, the parties will work together to construct a Project that not only meets engineering criteria, but is also fiscally responsible, environmentally sound, and aesthetically pleasing; and

WHEREAS, the services of the DEPARTMENT shall be of benefit to the RTC and to the people of the State of Nevada; and

WHEREAS, the DEPARTMENT is willing and able to perform the services described herein.

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

ARTICLE I - RTC AGREES

Funding

1. To fund Eight Million Four Hundred Ninety-Eight Thousand Six Hundred Forty-Four and No/100 Dollars (\$8,498,644.00) of the RTC PROJECT Element, hereinafter called the RTC CONTRIBUTION. The following is a summary of the RTC CONTRIBUTION with identified funding sources:

RTC CONTRIBUTION TO THE PROJECT:	\$8,498,644.00
Preliminary Engineering RTC Local Fuel Tax Funds:	\$967,160.00
Right-of-Way RTC Local Fuel Tax Funds:	\$107,149.00
Construction Federal STBG-WA Funds: RTC Local Fuel Tax Funds:	\$4,870,839.00 \$900,254.00
Contingency Federal STBG-WA Funds: RTC Local Fuel Tax Funds:	\$1,445,491.00 \$207,751.00

Federal STBG-WA Funds to be expended in the following years at the amounts identified below:

TOTAL FUNDING FOR RTC CONTRIBUTION

FFY29 = \$6,017,684.00 FFY30 = \$298,646.00

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\$8,498,644.00

- 2. To provide the local funding identified in Attachment D US 395 North Valleys Widening Project Cost Breakdown, attached hereto and incorporated herein, for the RTC PROJECT Element. If changes are made to the "RTC ELEMENT" which are requested by the RTC, the RTC agrees to provide the required local funding in an amount sufficient to maintain the local funding at not less than the six and 82/100 percent (6.82%) "Local Match" required by the INFRA Grant.
- 3. To reimburse the DEPARTMENT quarterly, within thirty (30) calendar days after receipt of the DEPARTMENT's invoice, for the costs incurred by the DEPARTMENT each quarter for the design and Right-of-Way of the RTC PROJECT Elements, which includes the DEPARTMENT's direct costs and the costs of its Design Consultants, not to exceed One Million Seventy-Four Thousand Three Hundred Nine and No/100 Dollars (\$1,074,309.00).
- 4. To reimburse the DEPARTMENT quarterly, within thirty (30) calendar days after receipt of the DEPARTMENT's invoice, for the costs incurred by the DEPARTMENT each quarter for the construction of the RTC PROJECT Elements, which includes the DEPARTMENT's direct costs and the costs of its Construction Contractor, not to exceed One Million One Hundred Eight Thousand Four and 48/100 Dollars (\$1,108,004.00) of RTC Local Fuel Tax Funds. And to allow the DEPARTMENT to obligate and utilize, an amount not to exceed Six Million Three Hundred Sixteen Thousand Three Hundred Thirty and 52/100 Dollars (\$6,316,330.00) of RTC Federal STBG-WA Funds as depicted in ARTICLE I, Paragraph 1, of this Agreement for the costs incurred by the DEPARTMENT for the construction of the RTC PROJECT Elements, which includes the DEPARTMENT's direct costs and the costs of its Construction Contractor.

Project Administration

- 5. To assign a representative and designated Point of Contact (POC) for grants management and finance/accounting matters.
- 6. To assign a representative and designated POC for PROJECT Management matters involved with right-of-way acquisition, utility relocation, construction, and construction management.
- 7. To assist the DEPARTMENT in obtaining the necessary permits, coordinating with other agencies, and conducting public outreach upon the DEPARTMENT's request.
- 8. To provide the DEPARTMENT any and all assistance and/or information reasonably available to the RTC necessary for the DEPARTMENT to comply with the requirements under the "U.S. Department of Transportation Grant Agreement Under the Fiscal Year 2022 Infra Program" related to the PROJECT.

Design

9. To review and provide written comments to the DEPARTMENT for the design of the RTC PROJECT Element at thirty percent (30%), sixty percent (60%), and ninety percent (90%) design levels within twenty-one (21) calendar days after receipt.

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NDOT Rev. 09/2024

Construction

- 10. To review the Bid Proposal from the lowest responsive and responsible bidder prior to the DEPARTMENT's award of the Construction Contract.
 - 11. To review and approve change orders, as requested.
- 12. To observe, review, and inspect work on the RTC PROJECT Element, as requested, with the understanding that any and all items of concern shall be reported to the DEPARTMENT's Resident Engineer (RE), and not to the contractor.
- 13. The DEPARTMENT plans to provide all services necessary to complete right-of-way acquisition for the PROJECT, unless the parties agree that it is deemed more advantageous from a timing standpoint for the RTC to provide all service necessary to complete the right-of-way acquisition. In the event the RTC is to complete the right-of-way acquisition, it shall comply with all laws applicable to completing the right-of-way acquisition and shall follow the DEPARTMENT's Right-of-Way Manual which outlines the DEPARTMENT's procedure and policies for right-of-way work.

ARTICLE II - DEPARTMENT AGREES

<u>Funding</u>

- 1. To fund and administer the PROJECT (less the programmed amounts as set forth in Article I, Paragraph 1) which includes, but is not limited to, right-of-way acquisition, engineering, utility relocations, preparation of plans, special provisions, construction estimates, construction, construction management, quality control, quality control testing, and materials testing.
- 2. To obligate federal funding, including Surface Transportation Block Grant (STBG) funds and INFRA Grant funds for the PROJECT, as outlined in Article 1, Paragraph 1.
- 3. To invoice the RTC quarterly for the RTC CONTRIBUTION portion of authorized costs of the RTC PROJECT Element, as set forth in Article 1, Paragraph 1.
- 4. To provide the DEPARTMENT's grant submittals to the RTC so that the RTC can track the schedule, progress, costs/expenditures for the PROJECT, and compliance with the requirements of the "INFRA Grant."

Project Administration

- 5. To establish a project identification number(s) by which to track all PROJECT costs/expenditures.
- 6. To invoke any DEPARTMENT authority necessary to administer and complete the PROJECT including, but not limited to, construction plans, specifications, estimates, right-of-way acquisition, utility relocation, procurement, construction, construction management, quality control, and quality and control testing and materials testing in accordance with federal, state, and local laws, regulations, and policies.
- 7. To ensure all PROJECT activities are in compliance with NEPA and applicable environmental laws and regulations.

- 8. To invite the RTC to PROJECT meetings, including, but not limited to, coordination meetings, field reviews, utility relocation meetings, right-of-way settings, review meetings, and the pre-construction conference.
- 9. To prepare and submit all other reports and submittals to FHWA as required to ensure the reporting meets the requirements of the "INFRA Grant" and all other grant requirements and approvals.
- 10. To work with the Federal Highway Administration to complete the required National Environmental Policy Act (NEPA) compliance by preparing a Categorical Exclusion.

<u>Design</u>

11. To provide copies of the following deliverables to the RTC for the RTC PROJECT Element within the anticipated timeframes at a quality that meets DEPARTMENT design standards.

30% Design Plans	July, 2023
60% Design Plans and Specifications and Estimates	May,2025
90% Design Plans and Specifications and Estimates	January, 2026
Final PS&E Package	February, 2026

- 12. To provide the RTC with two (2) copies of the thirty percent (30%) design, sixty percent (60%) design, ninety percent (90%) design, and final PS&E Plans and Specifications for the RTC PROJECT Element for review and comment, and to invite the RTC to the specification review meetings to address such comments.
- 13. To furnish a quarterly statement to the RTC for those costs for design services incurred by the DEPARTMENT for the design of the RTC PROJECT Element. Quarterly statements shall include itemized costs for the DEPARTMENT's design services and its Design Consultant's design services.
- 14. To perform, or have performed by consultants, all services necessary to complete the deliverables (including the development of the construction plans, specifications, estimates, and notes to specifications) in a manner that meets all permitting agencies' requirements and applicable design standards.

Right-of-Way

- 15. To provide all services necessary to complete right-of-way acquisition for the PROJECT. provided the DEPARTMENT can provide those services as the most efficient delivery. However, if the parties agree itis more advantageous from a timing standpoint, the RTC shall provide all services necessary to complete the right-of-way acquisition. In the event the RTC is to complete the right-of-way acquisition, it shall comply with all laws applicable to completing the right-of-way acquisition and shall follow the DEPARTMENT's Right-of-Way Manual which outlines the DEPARTMENT's procedure and policies for right-of-way work.
- 16. To ensure all applicable right-of-way laws and regulations are met and to document those actions with the DEPARTMENT's administrative requirements.

17. To invoke the DEPARTMENT's authority under NRS 408.210(4) to require relocation or adjustment of any encroachments, including utility facilities occupying the DEPARTMENT's Right-of-Way, pursuant to DEPARTMENT permits issued pursuant to NRS 408.210 and/or NRS 408.423, in order to accommodate the construction of the PROJECT.

Construction

- 18. To allow the RTC to review the bid proposal from the lowest responsive and responsible bidder to verify the correctness of the bid for the "RTC PROJECT Element" prior to the DEPARTMENT's award of the Construction Contract.
- 19. To provide all services necessary to complete construction of the PROJECT pursuant to the Final Plans and Specifications approved by the RTC.
- 20. To allow the RTC to observe, review, and comment on construction work related to the "RTC PROJECT Element". Any such comments shall be immediately directed to the DEPARTMENT's Resident Engineer only and shall not interfere with the Contractor's construction activities.
- 21. To request the RTC to review, comment, and approve PROJECT change orders related to the "RTC PROJECT Element" as well as other changes to the Contract Documents, Plans, and Specifications.

ARTICLE III - IT IS MUTUALLY AGREED

- 1. The term of this Agreement shall be from the date first written above through and including December 31, 2030, or until the construction of all improvements contemplated herein have been completed and accepted by the DEPARTMENT, save and except the responsibility for maintenance as specified herein, whichever occurs first.
- 2. The funding sources and amounts identified in Attachment D are the only funding sources and amounts currently anticipated to be necessary and available for the PROJECT. Attachment D shall be amended to include any additional funding sources or amounts that may be necessary and available in the future.
- 3. The parties agree that no federal funding shall be used for the costs of the environmental, right-of-way acquisitions, and the design of the project elements to be performed under the terms of this Agreement. Instead, local funding shall be used for these costs. Federal funding shall be preserved to pay for the costs of construction which shall be described in an amendment to this Agreement. Both parties also agree that the amount of local/state funding provided for the PROJECT shall not be less than the INFRA Grant defined limit of six and 82/100 percent (6.82%) as shown in Attachment B.
- 4. Except as otherwise expressly provided within this Agreement, all or any property presently owned by either party shall remain in such ownership upon termination of this Agreement, and there shall be no transfer of property between the parties during the course of this Agreement.
- 5. The RTC shall provide additional funding (in addition to the amounts in Attachment D) to pay for one hundred percent (100%) of costs associated with change orders that are not deemed necessary by the DEPARTMENT.
 - 6. The DEPARTMENT shall provide additional funding (in addition to the amounts in

Attachment D) to pay for one hundred percent (100%) of costs associated with change orders that are not deemed necessary by the RTC.

- 7. The improvements to be designed pursuant to this Agreement are generally described within the FY 2022 Multimodal Project Discretionary Grant Application (Attachment B). Changes to the scope of the improvements that may occur may require an amendment(s) to this Agreement. The RTC's maximum funding responsibility (RTC CONTRIBUTION) is outlined herein, in Article 1, Paragraph 1, unless the RTC requests additional improvements to those improvements addressed in the original grant application or changes to the final bid plan-set at which time the RTC shall be responsible for all costs associated with any change order(s) they initiate. The RTC shall request a cost estimate for the change order(s) to be performed by the DEPARTMENT's service provider or contractor and included in the PROJECT. In the event the RTC approves, in writing, the cost estimate for the additional improvements, an amendment(s) to this Agreement shall be executed by both parties prior to authorization of the change order and any additional contributions by the RTC in excess of the amount specified herein. In the event the RTC's governing body does not approve allocation of sufficient funds, the change order shall not be issued, and such work shall not be completed.
- 8. The parties agree to allow each other to observe, to inspect project construction, and to review applicable change orders in a timely manner which prevents PROJECT delay. All change order requests shall be made in writing. Each party shall complete its review of all change orders submitted to it by the other party, within five (5) working days after service of such change orders. In the event the RTC does not provide the DEPARTMENT with a written response to the DEPARTMENT's change orders within five (5) working days following the DEPARTMENT's service of such change orders, the DEPARTMENT shall proceed with the change orders so as not to delay the PROJECT and shall assume no liability therefore. No response from RTC within the time frame shall constitute the RTC's consent to and acceptance of such change orders. The RTC shall be responsible for all costs associated with change orders requested by the RTC, which cannot be foreseen at this time. The DEPARTMENT shall be responsible for all costs associated with change orders requested by the DEPARTMENT, which cannot be foreseen at this time. It is the intention of the parties that this review does not constitute a joint exercise of powers pursuant to NRS 277.080 to 277.170.
- 9. In the event the parties jointly agree a change order is necessary to meet the intent of the PROJECT design or is necessary for the constructability of the design and the change order would result in the PROJECT cost exceeding the funding identified in Attachment D, each party agrees to provide additional funding (in addition to the amounts in Attachment D) to pay for fifty percent (50%) of the excess cost.
- 10. 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, provided that the terminating party shall reimburse the other party for all costs incurred up to the point of termination together with all costs incurred by the other party because of the termination. 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.
- 11. The parties agree to work cooperatively to avoid and resolve conflicts at the lowest possible level. If conflicts cannot be resolved at those levels, conflicts shall be elevated to, and resolved by, the Director of the DEPARTMENT and the Executive Director of the RTC.
- 12. 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: Tracy Larkin Thomason, P.E., Director

Attn.: Nanette Maxwell, P.E.

Nevada Department of Transportation

Division: Project Management 1263 South Stewart Street Carson City, NV 89712 Phone: (775) 888-7742

E-mail: nmaxwell@dot.nv.gov

FOR RTC: Bill Thomas, Executive Director

Attn.: Amanda Callegari, P.E.

Regional Transportation Commission of Washoe County

1105 Terminal Way Reno, NV 89520 Phone: (775) 335-1881

E-mail: acallegari@rtcwashoe.com

- 13. 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, or longer if required for receipt of the funding sources identified in Attachment D.
- 14. 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, the recovery of actual damages and the prevailing party's reasonable attorney's fees and costs.
- 15. The parties do not waive and intend to assert available NRS Chapter 41 liability limitations in all cases. Agreement liability of both parties shall not be subject to punitive damages. Actual damages for any DEPARTMENT breach shall never exceed the amount of funds which have been appropriated for payment under this Agreement, but not yet paid, for the fiscal year budget in existence at the time of such breach.
- 16. 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.
- 17. 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

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- to, reasonable attorneys' fees and costs, caused by the negligence, errors, omissions, recklessness, or intentional misconduct of its own officers, employees, and agents. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described herein. This indemnification obligation is conditioned upon the performance of the duty of the party seeking indemnification (indemnified party) to serve the other party (indemnifying party) with written notice of an actual or pending claim, within thirty (30) calendar days of the indemnified party's notice of such actual or pending claim or cause of action. The indemnifying party shall not be liable for reimbursement of any attorney's fees and costs incurred by the indemnified party due to said party exercising its right to participate with legal counsel.
- 18. 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.
- 19. 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, including another breach of the same provision.
- 20. 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.
- 21. Neither party shall assign, transfer, or delegate any rights, obligations, or duties under this Agreement without the prior written consent of the other party.
- 22. Pursuant to NRS Chapter 239, information or documents may be open to public inspection and copying. The parties shall have the duty to disclose unless a particular record is confidential by law or a common law balancing of interests.
- 23. 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.
- 24. 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.
- 25. 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.
- 26. The actual PROJECT costs shall be determined by adding together the total costs incurred by the DEPARTMENT for preliminary engineering, right of way engineering, right of way acquisition, the relocation of utilities, construction engineering, and construction costs.

- 27. Costs associated with this Agreement shall be administered in accordance with the cost principles contained in Office of Management and Budget (OMB) Circular A-87.
- 28. The DEPARTMENT does not provide any warranty that the estimate of the PROJECT cost is an accurate reflection of the final cost. The DEPARTMENT disclaims any such warranty. The final costs may vary widely depending on the Contractor's bid prices. The RTC shall be wary in its reliance on the estimates set forth in this Agreement.
- 29. The DEPARTMENT shall award the construction contract in accordance with its rules and procedures under the Standard Specifications for Road and Bridge Construction to the lowest responsive and responsible bidder. The DEPARTMENT has the right to reject any and all bid proposals determined not to be in the best interest of the State.
- 30. Construction engineering costs shall be the actual construction engineering costs incurred by the DEPARTMENT during the construction of the PROJECT.
- 31. Any alteration considered extra work shall be addressed through a written amendment to this Agreement. The amount and payment for extra work, as well as designation of responsibility for payment of such work, shall be specified in such amendment.
- 32. Any recipient or subrecipient of funds under this Agreement agrees to comply with the Federal Funding Accountability and Transparency Act and implementing regulations at 2 CFR Part 170, including Appendix A, available at http://edocket.access.gpo.gov/2010/pdf/2010-22705.pdf.
- 33. 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.
- 34. In connection with the performance of work under this Agreement, the parties agree not to discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity or expression, age, disability or national origin, including, without limitation, with regard to employment, upgrading, demotion, or transfer, recruitment or recruitment advertising, layoff, or termination, rates of pay or other forms of compensation, and selection for training, including, without limitation, apprenticeship. The parties further agree to insert this provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.
- 35. This Agreement shall not become effective until and unless approved by appropriate official action of the governing body of each party.
- 36. 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.

Regional Transportation Commission of Washoe County	State of Nevada, acting by and through its DEPARTMENT OF TRANSPORTATION
Executive Director	On behalf of Director
Bill Thomas	
Name (Print)	Name (Print)
	Approved as to Legality and Form:

Attachment A

Project Description (Figure 1)

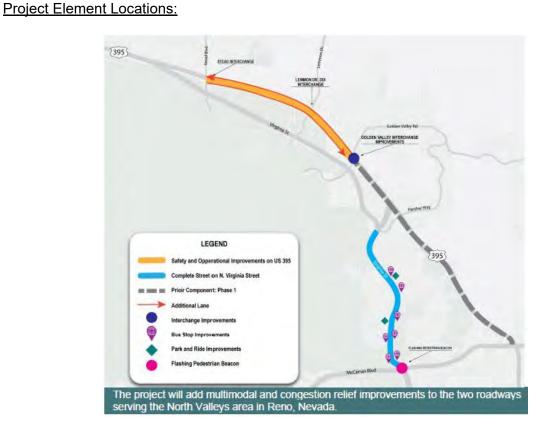
The US 395 North Valleys Improvements Projects consist of two key elements: the Phase 2 widening of US 395 as part of the Department Project Element and multimodal improvements on North Virginia Street as part of the RTC Project Element. Both projects are located in Washoe County.

The <u>Department Project Element</u> focuses on enhancing US 395 by adding an additional southbound lane between Golden Valley Road and Lemmon Drive, as well as an additional northbound and southbound lane between Golden Valley Road and Stead Boulevard. The project also includes the construction of designated merge lanes or auxiliary lanes between each freeway ramp in both directions on US 395 between Golden Valley Road and Lemmon Drive. Additional improvements incorporated in this project include repaving US 395 between Golden Valley Road and Stead Boulevard, improving traffic control at the Golden Valley interchange, upgrading interchange lighting, constructing soundwalls, implementing Intelligent Transportation Systems (ITS) elements, and enhancing drainage infrastructure.

The <u>RTC Project Element</u> aims to transform North Virginia Street (US 395 Business Route) into a complete street over a 2.5-mile stretch between North McCarran Boulevard and Panther Drive. This project includes the addition of sidewalks and buffered bike lanes and/or a shared-use path, pedestrian crossings with rectangular rapid flashing beacons (RRFBs), and improved transit stops and park-and-ride facilities. (Figure 2)



Figure 1 con't: US 395 and Virginia Street North Valleys Project Improvements



Regional Context:



Barrier Rail Protected North 0.3 Miles MUP North 1.2 Miles Parr Blvd Barrier Rail Protected Central 0.3.2 Miles MUP Barrier Rail 1.3 Miles Protected South 0.2 Miles LEGEND Bus Stop Improvement RREB Park and Ride Improvement Multiuse Path (MUP) McCarran Blvd. Protected Barrier Rail

Figure 2: Multimodal Improvements along North Virginia Street

Multimodal improvements along North Virginia Street include bus stop improvements, RRFBs, park and ride improvements, shareduse paths, and protected barrier rails.



FY 2022 MULTIMODAL PROJECT DISCRETIONARY GRANT APPLICATION

May 23, 2022



US 395 AND VIRGINIA STREET NORTH VALLEYS PROJECT



FY 2022 MULTIMODAL PROJECT DISCRETIONARY GRANT APPLICATION US 395 AND VIRGINIA STREET NORTH VALLEYS PROJECT

Basic Project Information

What is the Project Name?	US 395 and Virginia Street N	North Valleys Project
Who is the Project Sponsor?	Nevada Department of Transportation (NDOT). Regional Transportation Commission of Washoe County (RTC Washoe) is a project partner.	
Was an application for USDOT discretionary grant funding for this project submitted previously?	No	
A project will be evaluated for eligibility for consideration for all three programs, unless the applicant wishes to opt-out of being evaluated for one or more of the grant programs.	Opt-out of Mega? Yes Opt-out of INFRA? No Opt-out of Rural? Yes	
Project Costs	in the second second second	
MPDG Request Amount	Exact Amount in year-of-exp	
Estimated Other Federal funding (excl. MPDG)	Estimate in year-of-expendit	ure dollars: \$51,423,353
Estimated Other Federal funding (excl. MPDG) further detail	Other Federal funding from Federal Formula dollars: \$51,423,353 Surface Transportation Block Grant. Other Federal funding being requested from other USDOT grant opportunities?: \$0 From What Program(s)?:	
Estimated non- Federal funding	Estimate in year-of-expenditure dollars: \$10,278,468	
Future Eligible Project Cost (Sum of previous three rows)	Estimate in year-of-expenditure dollars: \$150,618,951	
Previously incurred project costs (if applicable)	Estimate in year-of-expenditure dollars: N/A	
Total Project Cost (Sum of 'previous incurred' and 'future eligible')	Estimate in year-of-expenditure dollars: \$150,618,951	
INFRA: Amount of Future Eligible Costs by Project Type	A highway project on the National Highway System: \$150,618,951	
Project Location		
State(s) in which project is located	Nevada	
INFRA: Small or Large project	Large	
Urbanized Area in which project is located, if applicable	Reno, NV Urbanized Area Geographic Identifier Name Urban Area Code Base Name	74179 Reno, NVCA Urbanized 74179 Reno, NVC
Population of Urbanized Area (According to 2010 Census)	Yes; Population = 392,141	



FY 2022 MULTIMODAL PROJECT DISCRETIONARY GRANT APPLICATION US 395 AND VIRGINIA STREET NORTH VALLEYS PROJECT

Is the project located (entirely or partially) in Area of Persistent Poverty or Historically Disadvantaged Community?	List census tracts that qualify as within these areas: 15.02 is proximate to the project area and meets the definition of Area of Persistent Poverty. Census Tracts 26.18. 26.17 lie partially in the project area and are meet the definition of Historically Disadvantaged. Census Tracts 26.11 and 15.02 are proximate to the project and are considered Historically Disadvantaged
Is the project located (entirely or partially) in Federal or USDOT designated areas	Adjacent to Census Tract 15.02, which is identified as an Opportunity Zone
Is the project currently programmed in the: TIP STIP? MPO Long Range Transportation Plan State Long Range Transportation Plan State Freight Plan	Yes Preliminary engineering is programmed in the RTIP and STIP: US 395 ID # WA20180057 North Virginia Street ID # XS20220010 Both projects are in the 2050 Regional Transportation Plan (MPO Plan): US 395: 2026-2030 Freeway. Project ID 1 North Virginia Street: 2026-2030 Multimodal. Project ID 31

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FY 2022 MULTIMODAL PROJECT DISCRETIONARY GRANT APPLICATION US 395 AND VIRGINIA STREET NORTH VALLEYS PROJECT

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I. PROJECT DESCRIPTION

I.1. Project Elements

The US 395 and Virginia Street (SR430, US 395 Business Route) North Valleys project (Figure 1) is composed of two elements. Both corridors are part of the National Highway System:

- Added northbound and southbound lanes on US 395 for 2.9 miles between Golden Valley Road and Stead Boulevard, added auxiliary lanes between Golden Valley Road and Lemmon Drive, improved traffic control at the Golden Valley interchange, interchange lighting upgrades, sound walls, Intelligent Transportation Elements (ITS) elements, and improved drainage infrastructure (Figure 2).
- Implementing a complete street on North Virginia Street (US 395 Business Route) for 2.5 miles between North McCarran Boulevard and Panther Drive with added sidewalks and buffered bike lanes and/or a shared-use path, pedestrian crossing with rectangular rapid flashing beacons (RRFB), and improved transit stops and park and rides (Figure 3).

Figure 1. US 395 and Virginia Street North Valleys Project Improvements



The project will add multimodal and congestion relief improvements to the two roadways serving the North Valleys area in Reno, Nevada.

FY 2022 MULTIMODAL PROJECT DISCRETIONARY GRANT APPLICATION US 395 AND VIRGINIA STREET NORTH VALLEYS PROJECT

Figure 2. Cross Section of US 395 Improvements



The new cross section on US 395 includes general purpose lanes between Golden Valley Road and Lemmon Drive.

Figure 3. Cross Section of North Virginia Street Improvements

Topographic Constraints—Proposed Widen—Proposed



The new cross section on Virginia Street includes added sidewalks and buffered bike lanes and/or a shared-use path.

I.2. Challenges Addressed by the Project

Table 1. Challenges Addressed by the Project

Challenges	How Project Addresses
Lack of sidewalks on North Virginia Street	Installation of sidewalks or a shared-use path on North Virginia Street
Unsafe conditions for bicyclists on North Virginia Street	Added buffered bicycle lanes or a shared-use path on North Virginia Street
Unsafe pedestrian crossings of North Virginia Street	Placement of pedestrian activated rectangular rapid flashing beacon at North Virginia Street and McCarran Boulevard
Deficient conditions for transit patrons	Installation of shelters and Americans with Disabilities Act (ADA) compliant bus stops
Congestion on US 395	One added lane in each direction on US 395
Aging and deficient pavement of US 395	Full reconstruction of existing roadway
Lack of accommodation of future growth and increased traffic	Traffic Operations improvements at interchange
Noise impacts to adjacent neighborhoods to US 395	Construction of sound walls along US 395
Unsafe conditions due to high winds	High-wind weather messaging signs, dynamic speed limit signs
Lack adequate shoulder widths and congestion resulting in crashes along US 395	Added general purpose lanes, added auxiliary lanes and widened shoulders
Risk of flooding from climate change and extreme weather events in the three hydraulically closed basins	Upgraded drainage infrastructure including extending culverts and retention basins





Congestion on US 395 south of Golden Valley Road (Source: RTC Washoe)



I.3. Previously Completed Components

The improvements to US 395 are Phase 2 of the Nevada Department of Transportation (NDOT) US 395 North Valleys project. Phase 1A replaced the East Parr Boulevard/Dandini Boulevard bridge over US 395 and was completed in Spring 2021, with a construction cost of \$8.4 million. The Lemmon Drive interchange is currently being reconstructed as a diverging diamond and is anticipated for completion in June 2022. Phase 1B has \$94.75 million programmed in the STIP, which includes adding a southbound lane plus auxiliary lanes between McCarran Boulevard and Golden Valley Road and adding a northbound braided ramp between Panther Valley and Golden Valley Road; it is anticipated to begin construction in 2023. The NDOT website has a page on the US 395 North Valleys Phase 2 component.

Media coverage has identified the traffic problem on US 395, "It's something most North Valleys residents can't get around, traffic on US 395. But Nevada Department of Transportation (NDOT) says it is slowly moving toward fixing that issue." More media coverage can be found on the KoloTV website (KoloTV, 2019).

I.4. Impact on Project Scope, Schedule, & Budget if MPDG Funds Are Not Received

The lack of transportation funding stalled the proposed improvements in the North Valleys. In 2017, NDOT's initial plan was to construct the US 395 North Valleys project from North McCarran Boulevard to Lemmon Drive as one construction project. The insufficient funding required NDOT to repackage the project into three constructions phases, Phase 1A, Phase 1B, and Phase 2.

NDOT is seeking MPDG funds to complete the final construction package of improvements (Phase 2 and North Virginia Street). Without this discretionary funding, NDOT has insufficient funds to implement Phase 2 at this time, and RTC Washoe would not have funds for the North Virginia Street component until the 2026-2030 timeline, as identified in the 2050 Regional Transportation Plan (RTC Washoe, 2021).

II. PROJECT LOCATION

US 395 and North Virginia Street serve the high growth North Valleys area of Reno in Washoe County, Nevada. There is a mix of warehouses, distribution centers, and light industrial commercial activity. Truckee Meadows Community College and the University of Nevada, Reno are located in or near the North Valleys. The area is also home to residents of diverse demographics and socioeconomic characteristics.

Both US 395 and North Virginia Street are on the National Highway System. US 395 connects rural northeastern California and south-central Oregon to Reno, which is the largest metropolitan area within a range of over 200 miles.

North Virginia Street is the former alignment of US 395 through Reno before the construction of the current freeway alignment of US 395 and is now the US 395 Business Route. North Virginia Street serves as the primary arterial access to the residential, commercial, and higher education centers of the North Valleys area.

Figure 4. Project State Context



US 395 is the main route from northeastern California and south-central Oregon to the Reno metropolitan area.

Figure 5. Project Regional Context



The project, north of downtown Reno, provides access to rural and recreational areas in the mountains of western Nevada

While the project area is not an Area of Persistent Poverty it is adjacent to census Tract 15.02 which is identified as an Area of persistent Poverty. The project is also partially located in two Historically Disadvantaged Communities to the North East and adjacent to one in the south. The project improvements directly serve the Historically Disadvantaged Community in the Census Tract 26.11, 26.18, 26.17, and 15.02 as a vital connection between residential areas and employment centers (USDOT, 2022).

The project area is within the Reno Urbanized Area. This area is not considered to be in any of the four federally designated community development zones.

Additional information is included in Section V.5.

Figure 6. Historically Disadvantaged Communities



III. PROJECT PARTIES

NDOT is the project sponsor. RTC Washoe is a project partner providing supporting funds. Both NDOT and RTC Washoe have successfully implemented many projects with federal funds, as described in Section VII.

IV. GRANT FUNDS, SOURCES, AND USES

NDOT is requesting \$88.9 million in INFRA program funds for the \$150.6 million transportation project in the North Valleys area. This request is 59% of the total project cost. Appendix A *Letter of Commitment* contains a letter from RTC Washoe stating its commitment to the funding match.



Table 2. Project Sources and Uses (Year-of-Expenditure Dollars)

Description	Project Cost	Federal MPDG Grant	Other Federal STBG	State/Local Fuel Tax	Use Percent
Preliminary Engineering					
US 395 North Valleys	\$523,355	\$0	\$0	\$523,355	0.3%
N. Virginia Street Multimodal	\$967,160	\$0	\$0	\$967,160	0.6%
Total PE:	\$1,490,515	\$0	\$0	\$1,490,515	1.0%
Right-of-Way					
US 395 North Valleys	\$107,149	\$0	\$0	\$107,149	0.1%
N. Virginia Street Multimodal	\$107,149	\$0	\$0	\$107,149	0.1%
Total ROW:	\$214,299	\$0	\$0	\$214,299	0.1%
Construction					
US 395 North Valleys	\$111,831,283	\$66,861,967	\$38,735,831	\$6,233,485	74.2%
N, Virginia Street Multimodal	\$12,478,579	\$7,429,107	\$4,294,953	\$754,519	8.3%
Total CONST:	\$124,309,862	\$74,291,075	\$43,030,783	\$6,988,004	82.5%
Contingency					
US 395 North Valleys	\$22,368,578	\$13,233,098	\$7,696,091	\$1,439,390	14.9%
N. Virginia Street Multimodal	\$2,235,697	\$1,392,958	\$696,479	\$146,261	1.5%
Total CONTINGENCY:	\$24,604,275	\$14,626,055	\$8,392,570	\$1,585,650	16.3%
Total Project Cost					
US 395 North Valleys	\$134,830,366	\$80,095,065	\$46,431,922	\$8,303,379	89.5%
N. Virginia Street Multimodal	\$15,788,585	\$8,822,065	\$4,991,432	\$1,975,089	10.5%
Total COST:	\$150,618,951	\$88,917,130	\$51,423,353	\$10,278,468	100.0%
Source Percent	100.00%	59.03%	34.14%	6.82%	

V. PROJECT OUTCOMES

V.1. Safety

The project will result in fewer crashes along US 395 and North Virginia Street. From Golden Valley Road to Stead Boulevard, there were 348 crashes in a 5-year period (from 2015 to 2019) on US 395. There were no fatal crashes and 111 injury crashes during this time period. Along North Virginia Street, there were 3 vehicle-pedestrian crashes from 2015-2019, including 1 fatal crash and 2 injury crashes (RTC Washoe, 2022).



Improvements to safety for motorized users

The project will protect motorized travelers from health and safety risks by reducing congestion along US 395 and implementing other safety improvements that will result in fewer crashes. These improvements along 2.9 miles of US 395 include:

- Additional northbound and southbound travel lanes along US 395 between Golden Valley Road and Stead Boulevard.
- Auxiliary lanes along US 395 between Golden Valley Road and Lemmon Drive.
- Signalized intersection controls replacing stop-controlled intersections at Golden Valley interchange.
- Interchange lighting upgrades along US 395 at two interchanges (Golden Valley Road and Stead Boulevard).
- Full-width shoulders on US 395 between Golden Valley Road and Stead Boulevard.
- Improvements to the Snow Chain Installation Area north of the Lemmon Drive Interchange including the installation of lighting and a larger paved pull-off area.
- Intelligent Transportation System (ITS) elements.

Improvements for non-motorized and vulnerable users

Currently, North Virginia Street is lacking sidewalks and bicycle facilities. In contrast, the project will protect non-motorized and vulnerable users from health and safety risks by emphasizing safety and Complete Streets bicyclist and pedestrian improvements along North Virginia Street. These improvements along 2.5 miles of North Virginia Street include:

- New and improved sidewalks.
- Buffered bike lanes and/or a shared-use path.
- One new pedestrian crossing with rectangular rapid flashing beacons (RRFBs).
- Improved transit stops, including separated bus pad removed from street and improved lighting.

New RRFBs will be located at the northwest quadrant of the North Virginia Street and North McCarran Boulevard intersection to mitigate a sweeping free right turn. In addition to the three existing RRFBs along the corridor, the east-west pedestrian connectivity and safety along the corridor will be improved.

Estimated impacts on number, rate, and consequences of crashes, fatalities, and serious injuries

Based on the FHWA Crash Modification Clearinghouse (CMF) database method for combining CMFs for projects with multiple safety measures, along US 395 from Golden Valley Road to Stead Boulevard, the project is anticipated to reduce fatal and injury crashes by about 48% and property damage crashes by about 20% on average. These improvements are due to several safety measures on US 395, including increasing from 4 to 6 lanes, increased shoulder width, increased lane width, and an added auxiliary

Supports Actions in the National Roadway Safety Strategy

The project along North Virginia Street follows the guidelines of the National Roadway Safety Strategy, including incorporating Complete Streets improvements along the corridor, such as shared-use paths, improved bus stops, and inclusion of RRFBs). Source: USDOT, 2022



lane in both directions, as well as traffic control improvements and lighting at the Golden Valley interchange. Along North Virginia Street from North McCarran Boulevard to Panther Drive, the project is expected to reduce vehicle-pedestrian crashes by 25 to 88% because of Complete Streets improvements (FHWA, 2022 and RTC Washoe, 2016). The BCA conservatively uses 25% crash reduction to quantify crash reduction benefits from North Virginia Street improvements.

V.2. State of Good Repair

Consistent with relevant asset management plans

This project addresses current and projected vulnerabilities on the roadway facilities to increase safety for local users, emergency responders, and through traffic. US 395 will be completely reconstructed because of the current state of the pavement. NDOT uses the Present Serviceability Index (PSI) condition rating method that measures pavement conditions (e.g., smoothness and safety) and distresses (e.g., cracking, raveling, rutting, and patching). Currently, the PSI rating for northbound US 395 is 2.82 and 2.55 for southbound US 395, which is defined in the Fully Compliant Transportation Asset Management Plan (NDOT, 2019) as mediocre and below a state of good repair. Mediocre PSI ratings are characterized as barely acceptable ride quality, longitudinal cracking, and structural deterioration is evident. US 395 qualifies for structural overlays or other rehabilitation. Additionally, fiber optic cable will be installed along US 395, which will support advanced technology, such as high-wind warning signs.



Addresses current and projected vulnerabilities that, if left unimproved, will threaten future transportation network efficiency, mobility of goods or accessibility and mobility of people, or economic growth

The North Valleys area has an array of warehouses, light manufacturing, and other industrial uses, in addition to residential neighborhoods and commercial centers. Both US 395 and North Virginia Street are on the National Highway System and serve as the main connection between the North Valleys area to the downtown core of Reno and to surrounding areas in both Nevada and California. North Virginia Street sees an average of about 390 daily truck trips (324 light truck and 68 heavy truck trips); US 395 sees an average of about 3,000 daily truck trips (1,363 light truck and 1,640 heavy truck trips) (NDOT, 2021). The use of US 395 for freight and access to the industrial uses in the North Valleys area has degraded the highway and created safety issues needing to be addressed through this project. If left unimproved, the continued deterioration of the highways will have negative economic impacts to the distribution and manufacturing industries in the area, and to the mobility and safety of the residential population who use these roadways to access jobs, education, and services (medical, entertainment, and recreation) in the Reno metropolitan area.



V.3. Economic Impacts, Freight Movement, and Job Creation

Improve system operations

The population in the North Valleys area is expected to increase from 2020 levels by 43% by 2050 and employment by 121% (Figure 7). Without the project, this growth will severely limit operations of the transportation system.

This project will help alleviate some of the congestion challenges experienced on this segment of US 395 that were identified in the Reno-Sparks Freeway Traffic Study (NDOT, 2017). The study found that US 395 northbound operated without

Figure 7. North Valleys Area Population & Employment

	NORTH VALLEYS			
2020	2050	% Increase		
Population 53,000	Population 76,000	Population 43%		
Employment 14,000	Employment 31,000	Employment 121%		

Source: RTC Washoe

congestion during AM peak hours; however, congestion worsened during PM peak hours between Golden Valley and Lemmon Drive off-ramps, with average speeds dropping to below 20 mph and performing below the threshold. US 395 southbound lanes operated in reverse, with congestion worsening between Stead Boulevard and Golden Valley on-ramps during peak AM hours and extending into Reno-proper. The Lemmon Drive off-ramp and Golden Valley on-ramp are key areas of congestion due to their high traffic volumes.

The addition of new northbound and southbound lanes on US 395 between Golden Valley Road and Stead Boulevard and auxiliary lanes between Golden Valley Road and Lemmon Drive will greatly improve congestion, especially during peak periods. The benefit-cost analysis (BCA) for the project (Appendix B Benefit-Cost Analysis (BCA)) shows that the travel time savings would equal \$65.1 million (discounted) over a 20-year period, or \$3.3 million annually. These improvements would also reduce vehicle hours by 24% in the opening year and 36% in the last year of the analysis according to the travel demand results for US 395 project improvements from RTC Washoe.

NDOT initiated an Intersection Control Evaluation at Golden Valley Road and US 395 in 2017 due to the influx of vehicle traffic. The installation of traffic signals at the interchange will elevate the current LOS from an F to either an A (northbound ramp) or B (southbound ramp) and reduce intersection delay (NDOT, 2017). Delay at the intersection will be reduced, amounting to about \$20.5 million in discounted travel time savings (just over \$1.0 million per year) for traffic through the intersection, according to the project BCA.

Increase Travel Time Reliability & Manage Travel Demand for Goods Movement

Nevada's economy depends on infrastructure that supports the reliable and efficient movement of people and goods. US 395 is a critical multistate freight corridor, providing a vital connection between California and Nevada and continues through southern Lassen County in California (US



The project will alleviate recurring congestion on US 395 near Lemmon Drive, improving overall system operations. (Source: RTC Washoe)



395 Coalition, 2022 and NDOT, 2022). Worsening congestion along US 395 creates potential for higher distribution costs and delays in delivery, which result in higher prices for goods and services.

The value of freight flow in Nevada was roughly \$169.4 billion in 2018 and increased by 3.2% from 2012 to 2018. California is Nevada's primary trading partner via the interstate with over 10 million tons of product moving in and out of the state. Idaho, Wyoming, Utah, and Arizona freight flows are between one to five million tons. The top five commodities shipped from Nevada include textiles/leather (\$12.7B), miscellaneous manufactured goods (\$12.4B), mixed freight (\$5.5B), electronic (\$4.2B), and coal (\$3.7B) (USDOT, 2022). Trucking remains a primary freight mode, accounting for roughly 32% of all domestic shipments from Nevada, 37% of all domestic shipments to Nevada, and 99% all shipments within the state. US 395 carries approximately 3,200 trucks per day, only second to I-80 truck volumes in the Reno-Sparks metropolitan area (NDOT, 2016). This is due to its proximity to the Union Pacific Sparks Intermodal Facility and the Reno-Stead Airport, major transport facilities that serve the region.

US 395 is a primary route to the Reno-Stead Airport (RSA) which is a general aviation airport in the North Valleys submarket of Reno. The RSA plans to develop the Reno AirLogistics Park beginning in late summer 2022 which will provide up to 39 million square feet of logistics, commercial, and aviation-related space within the next decade (email to Washoe RTC from Dermody Properties, 2022). This space is anticipated to attract thousands of businesses and generate thousands of new jobs in the logistics, e-commerce, aeronautic, and manufacturing industries. Addressing capacity constraints on US 395 today, will allow this sub-region to prosper in the future.

Based on the benefit-cost analysis, reconstruction of US 395 will increase speeds on US 395 from 32 mph to 47 mph on average and result in travel time savings of almost 648,000 person-hours annually performed. In addition, signalization of the Golden Valley Road and US 395 interchange will reduce delay on average for traffic volumes through the intersection. This amounts to more than 202,000 hours saved every year. Increased travel time reliability due to reduced congestion will benefit the movement of people and goods in the region by keeping the cost of transporting freight competitive nationally.

Improve multimodal transportation systems that incorporate affordable transportation options such as public transit to improve mobility of people and goods.

This project addresses the need for improved mobility options within the North Valley area. Currently, bike travel is prohibited along US 395 and is a barrier to non-motorized travel. There are currently no connecting bicycle facilities that extend south toward the University of Reno, Nevada. Sidewalks are not continuous along North Virginia Street. The Bicycle & and Pedestrian Master Plan (RTC Washoe, 2017) lists North Virginia Street as



high priority pedestrian improvements and medium priority for bicycle improvements. The Complete Streets amenities on North Virginia Street from McCarran Boulevard to Panther Drive include buffered bike lanes, wider sidewalks, safer crossings, shared-use path, and enhanced transit



stops, which will create an environment that improves multimodal connectivity (RTC Washoe, 2017).

RTC Washoe Bus Route 7 services North Virginia Street and extends from downtown Reno to the University of Reno, Stead Campus and operates every half hour. In October 2019, pre-COVID, Route 7 had an average of 1,642 weekday riders. FlexRIDE is a new transit option that provides direct service to select areas of the North Valleys area, including along North Virginia Street and US 395. Between May 2021 and March 2022, the FlexRIDE completed 18,063 boardings (email communication with Michael Dulude, 2022). RTC Washoe provides free transportation to University of Nevada, Reno and Truckee Meadows Community College students and reduced fares to seniors, 65 and up. This project would enhance the rider experience by providing updated transit stops.

Decrease transportation costs and improve access, through reliable and timely access, to employment centers and job opportunities.

US 395 is a primary corridor for workers commuting from Reno to the distribution centers and warehouses to the north. There are numerous distribution and fulfillment centers on either side of the highway, such as Amazon, JC Penny, Petco, OnTrac, and Sherwin Williams. Increasing congestion can lead to steeper travel costs for commuters, which may reduce local spending.

This is especially true for the surrounding area, which is designated as an Economically Disadvantaged Area by USDOT. Reconstruction of US 395 will create a more reliable and efficient route for workers to access jobs, and Complete Street enhancements along North Virginia Street will increase connectivity to these new employment centers for area residents and provide lower-cost transportation alternatives.

Economically Disadvattaged Areas as designated by USDO: Edentifies areas and populations with high powerly, flow wasth, fack of focal jobs, low homeownership, low edicational attainment, and high inequality. (CDC Social Wilmershilty Index, Census America Community Survey, FEMA Resilience Analysis & Planning Tool)

Complete Street on N. Virginia Street
Safety and Operational Improvements on US 395

The project will reduce transportation costs and improve access for residents in Economically Disadvantaged Areas designated by USDOT that encompass the northern,

eastern, and southern areas around the North Valleys area.

Moreover, this project would increase transportation options for the roughly 20,000 students at the University of Nevada, Reno and 10,000 students at Truckee Meadows Community College and help students better utilize the free public transit provided by RTC Washoe. Improvements to the bus stops will increase use of the existing bus system by creating comfortable and safer spaces for students to wait.

Offer significant regional and national improvements in economic strength by increasing the economic productivity of land, capital, or labor, and improving the economic strength of regions and cities.

The study area is experiencing an explosion of residential and industrial development that is bolstering Reno's economy. There are currently 21 approved projects surrounding the project area

that will add 5,298,000 square feet of warehousing, 498,000 square feet of commercial and retail space, and 11,134 residential units (City of Reno, 2017 and RTC Washoe, 2022). Investing in US 395 will increase the economic productivity of existing and future expansion in this region, creating more efficient freight access to these new facilities and to housing and job opportunities in the area.

Enhance recreational and tourism opportunities by providing access to Federal land, national parks, national forests, national recreation areas, national wildlife refuges, wilderness areas, or State parks.

Reno is well-known for its access to outdoor recreation. To the southwest of US 395 and North Virginia Street is the Humboldt-Toiyabe National Forest, which is the largest National Forest in the lower 48 states and spans 6.3 million acres. The forest features abundant hiking trails with access points along US 395 and North Virginia Street (US Forest Service, 2022). The Rancho San Rafael Regional Park is 580 acres and is located between US 695 and North Virginia Street (US 395 Business Route) with access to trails from the roadway, picnic areas, and community event spaces (Washoe County, 2022). This project will improve local multimodal access to recreational and tourism opportunities through Complete Streets amenities on North Virginia Street and improved regional accessibility by decreasing congestion on US 395.

Result in high quality job creation, workforce opportunities for historically underrepresented groups, and economic growth

NDOT has a history of using Project Labor Agreements (PLA) for construction projects. NDOT and RTC Washoe plan on utilizing these PLAs on this project. The PLAs establish terms with trade unions that encourage productive and efficient construction operations and reduced costs, and timely and economical completion of the project. The unions invest in training for members, contributing to a higher-skilled, better compensated construction workforce, which benefits traditionally marginalized construction workers with little training. A sample PLA can be found in Appendix C *Project Labor Agreement Example*. Additionally, NDOT has Disadvantage Business Enterprise (DBE) goals that they must meet for all projects conducted by the agency.

Support integrated land use, economic development, and transportation planning

The project has its basis in the integrated land use and transportation planning for the North Valleys area. In 2020, the communities of the North Valleys completed a North Valleys Area Plan (Washoe County, 2020) as part of Washoe County's Master Plan. Launched due to residents' desire, there was a need to identify, implement, and preserve the community character that has evolved throughout the North Valleys over time. Washoe County sponsored a series of public workshops to identify the distinguishing characteristics of the North Valleys communities. The result of this effort is the development of a comprehensive vision for the North Valleys planning area that establishes the existing and desired conditions for several character areas. The project support's the vision for the regional and local transportation system in the North Valleys planning area as a safe, efficient, multimodal system providing access to commercial services, public lands and recreational opportunities, and efficient connections to the greater region.

US 395 is a primary route to the Reno-Stead Airport (RSA), a general aviation airport in the North Valleys submarket of Reno, which includes the last large contiguous undeveloped piece of industrially zoned land located in Washoe County. Addressing capacity constraints on US 395 today will allow this submarket and its supporting workforce to prosper in the future. The RSA plans to develop the Reno AirLogistics Park beginning in late summer 2022, which will provide up to 39

million square feet of logistics, commercial, and aviation-related space within the next decade (email to Washoe RTC from Dermody Properties, 2022). This space is anticipated to attract thousands of businesses and generate thousands of new jobs in the logistics, e-commerce, aeronautic, and manufacturing industries. The North Valleys submarket has attracted such national companies as Urban Outfitters, General Motors, Arrow Electronics, Pentair, Marmot, K-2, Volvo, UPS Logistics, Sherwin Williams, Daimler Trucks, Hidden Valley Ranch, ULine and J.C. Penney, just to name a few. The submarket has approximately 61,000 residents within a 5-mile radius to the business park. More information can be found in Section V.3.

The RTC Washoe's North Valleys Multimodal Transportation Study (RTC Washoe, 2017) focuses on regional roadways and the most critical intersections on these arterials. Separate from, but concurrently with this study, NDOT prepared the Reno-Sparks Freeway Traffic Study (NDOT, 2017), which addresses US 395 through the North Valleys area and south to I-80, the Spaghetti Bowl, and the freeway related congestion and safety issues. Both studies have been prepared collaboratively with regular communication between RTC Washoe, NDOT, local agencies, and the consulting teams, to prepare a cohesive overall transportation improvement plan.

The project has broad public support, as indicated by the Letters of Support included in Appendix D Letters of Support.

V.4. Climate Change, Resiliency, and the Environment

Reduces pollution and greenhouse gas emissions:

The additional southbound and northbound lanes on US 395 will reduce traffic congestion and emissions caused by slowed traffic and idling vehicles. Currently, based on the EPA NEPAssist Web Tool, the project area is in the 80th to 90th percentile for Ozone, above the 70th percentile for 2.5 particulate, and 70th to 80th percentile for air toxin cancer risk (US EPA, 2022). This makes improving air quality in this area especially important.

Transportation is responsible for 43 percent of greenhouse gas (GHG) emissions in Washoe County; and as one of three major roads in Washoe County, US 395 is a major contributor to GHG emissions. The BCA shows that the project will reduce CO₂ emissions by nearly 31,700 tons over 20 years (approximately 1,600 tons per year). Furthermore, total emissions cost savings amount to \$1.8 million (discounted) due to the improved speeds and reduced congestion on US 395 (US EPA, 2022). The project would also result in a decrease in emissions from intersection delay reductions at the Golden Valley interchange, though these are not monetized in the BCA.

Ozone concentrations are correlated to population, employment, and vehicle miles traveled. As these factors increase, so do emissions and air pollutants, including ozone concentrations (RTC Washoe, 2017). Improved bike, pedestrian, and transit facilities will induce multimodal trips along North Virginia Street, reducing emissions and air pollutants caused by vehicles.

Noise pollution is an identified issue in the Clean Air Act. New sound walls within the project limits will reduce negative impacts caused by highway noise, including negative health impacts which typically disproportionately affect disadvantaged communities; as noted in the Section I, the project area is adjacent to an area of persistent poverty (US EPA, 1970).

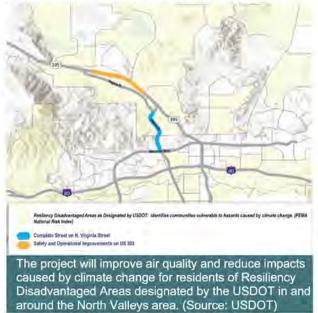


Explicitly considers climate change and environmental justice in the planning and design stage, particularly in communities that disproportionally experience climate change consequences

According to the USDOT, the project areas fall within Resiliency Designated Areas, which are defined as communities that are vulnerable to hazards caused by climate change. Census Tract 15.02 lies adjacent to the southeast corner of the project area and is considered environmentally disadvantaged, indicating that this area experiences disproportionately high levels of air pollutants. Limiting the amount of GHG emissions generated by vehicular travel and providing more accessible alternative transportation will help improve air quality and reduce the impacts to these communities that disproportionally experience climate change consequences.

NDOT's public involvement activities for Phase 1A and Phase 1B of the US 395 North Valleys Project targeted these populations during planning and design phases of US 395. NDOT worked with a diversity of populations and stakeholders within the project area, incorporated their needs, accounted for technical challenges, and combined traditional media with newer technologies to ensure a broad reach. Because the project was in an area with environmental justice populations and those that disproportionally experience climate change consequences, the public involvement process allowed RTC Washoe and NDOT to consider those specific needs during planning and project development of this project.

As part of the public involvement, NDOT engaged a Community Working Group that included representation from low-income and Figure 9. Resiliency Designated Areas



minority communities, Limited English Proficiency speakers, major businesses, chambers of commerce, homeowner associations, neighborhood liaisons, educational institutions, healthcare facilities, major employers, and other key stakeholder groups representing sectors of the community and applicable jurisdictions. A Technical Advisory Committee included representatives from key agency stakeholders in the project area, including engineers, planners, and technical representatives, as well as resource agency representatives from federal, state, and potentially affected tribes.

Stakeholder working groups represented a larger audience and acted as NDOT's liaison to the larger regional public. The targeted groups were tasked with sharing project information out and bringing back to NDOT valuable input from their constituents. This allowed NDOT to educate the public and identify issues, concerns, or project risks.

Results in a modal shift that reduces emissions and promote energy efficiencies:

Multimodal facilities and improvements along North Virginia Street will provide the community with more accessible alternative transportation options and improved transit stops that will make biking, walking, and transit more viable and desirable modes of travel. These improvements and



those on US 395 provide increased multimodal connectivity to recreational facilities and essential amenities, such as the nearby universities, schools, and workplaces, thus reducing the need to rely on personal vehicles for travel and reducing emissions related to vehicular travel. Further, the North Virginia multimodal improvements may result in a modal shift and induce new multimodal trips, which would reduce emissions in the project area. The BCA assumes that pedestrian and bicycle trips are induced (new) trips due to the project, conservatively assumes no change in the transit ridership due to the project, and does not estimate benefits due to modal shift and vehicle-mile reduction. Finally, while the project does not directly incorporate electrification or zero emission vehicular infrastructure, North Virginia Street transit stop improvements will promote more energy-efficient travel modes.

New drainage infrastructure improves infrastructure resiliency

Much of Nevada's landscape is characterized by hydraulically closed basins, meaning that water that flows through rivers, streams, and lakes does not flow to the sea, but ends up in terminal lakes. Three hydrological closed basins in the North Valleys area are the Swan Lake, Silver Lake, and White Lake areas (Figure 10). In late 2016 and early 2017, a series of storms during an unusual weather pattern of multiple atmospheric river events saturated the Swan Lake floodplain, causing the water level to rise approximately 8 feet, inundating the surrounding homes of the Historical Disadvantage Community of Lemmon Valley.

White Lake

Silver Lake

US 395 Project Area

Figure 10. Hydraulically Closed Basins in the North Valleys Area

The project will increase resiliency of drainage infrastructure that is experiencing floods in three hydraulically closed basins. (Source: RTC Washoe)

To address climate change and the increased frequency of extreme weather events, retention basins in Washoe County and the City of Reno require a 1.3:1 volumetric mitigation increase in size for mitigation purposes, over the size of the new pavement and embankment area. The project along US 395 will include new drainage infrastructure like extending culverts and retention basins that will comply with these requirements, which will help mitigate flood impacts for new pavement areas (NDOT, 2022).

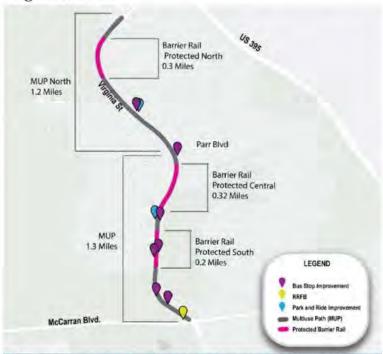
V.5. Equity, Multimodal Options, and Quality of Life

Increase affordable and accessible transportation choices

The Complete Street improvements on North Virginia Street for 2.5 miles between North McCarran Boulevard and Panther Way increase affordable and accessible multimodal transportation choices. The project includes adding sidewalks with buffered bike lanes for 0.6 mile and a shared-use path for 2.5 miles (Figure 11).

Improved bus transit stops, include ADA accessibility upgrades and stop amenities along North Virginia Street at northbound Hoge Road, northbound East Parr Boulevard, northbound Talus Way, northbound and southbound Moraine Way, southbound Reno Sports Complex, and northbound North McCarran Boulevard. The improvements shown in Figure 12 include connecting bus stops to sidewalks or shared use paths, installing concrete pads to make the stops ADA accessible, and installing benches and

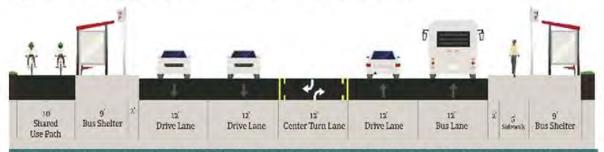
Figure 11. Complete Street Improvements along North Virginia Street



Multimodal improvements along North Virginia Street include bus stop improvements, RRFBs, park and ride improvements, shareduse paths, and protected barrier rails.

trash cans. Seven stops will have covered shelter in addition to the other amenities. These improvements will allow accessibility for all transit users, provide better multimodal connectivity to existing stops, and improve the overall transit experience along North Virginia Street. These improved facilities will provide attractive choices for multimodal transportation from the North Valleys area to the core of Reno, University of Nevada Reno, Truckee Meadows Community College, medical services, and nearby recreation.

Figure 12. Bus Stop Improvements on North Virginia Street



Bus stop improvements along North Virginia Street include bus shelters and ADA-accessible concrete pads. (Source: RTC Washoe)



Improve access to emergency care, essential services, healthcare providers, treatment and rehabilitation centers

Reducing the congestion, improving travel time, and expanding shoulders on US 395 will improve the local residents' access to medical facilities located in the Reno metropolitan area. While there are some smaller medical offices located in the North Valleys area, there are no emergency medical services. The Renown Regional Medical Center, located in the heart of Reno, is the only trauma center between Sacramento and Salt Lake City and is the region's only children's hospital. The widened shoulders along US 395 can be used by emergency services to access incidents along the corridor and move around congestion if needed.

Reduce transportation and housing cost burdens, by investing near public transportation, along rural main streets, or in walkable neighborhoods

This project is introducing multimodal transportation options to the area that currently do not exist. New bike lanes, sidewalks, shared-use paths, and bus stop enhancements will be available to area residents, workers, and those accessing amenities and services within the North Valleys area. These lower-cost transportation options become viable to those who live in the area and those who may be able to relocate to the North Valleys area with these new options. Additionally, students at University of Nevada, Reno and Truckee Meadows Community College can affordably traverse through the corridor.

Engage diverse people and communities and integrates equity into planning, development, and implementation

NDOT has conducted public involvement in this North Valleys area for Phases 1A and 1B of the US 395 North Valleys project and on planning studies related to this project. Additional information is in Section V.4.

The public outreach reached diverse populations because the North Valleys area is in an Equity Disadvantaged area (Figure 13). The North Valleys area is home to a variety of populations, including 7.2% Asian population and 24% Hispanic or Latino population. Over 25% of Reno's population speaks a language

Equity Disadvantaged Areas as Designated by USDOT encompass.

Figure 13. Equity Disadvantaged Areas

Equity Disadvantaged Areas designated by USDOT encompass both corridors and surrounding areas. (Source: USDOT)

other than English at home, 2% higher than Washoe County. Reno's median income is nearly 10% lower than the household median income of Washoe County, and the poverty rate of Reno is 2.4% higher than that of Washoe County. One Census track (15.01) in the North Valleys area is defined as an area with persistent poverty (US Census Bureau, 2022). Additionally, the US 395 and North Virginia Street corridors connect to other communities to the south and northwest that are defined as historically disadvantaged communities with four or more transportation disadvantage indicators (USDOT, 2022).

Outreach for planning studies that addressed US 395 and North Virginia Street has included:

North Valleys Workshop – 2/28/2017: Outreach for the recently completed RTC Washoe North Valleys Multimodal Transportation Study and update on the NDOT Reno Freeway Study with an emphasis on US 395; see the <u>public announcement</u>.

Washoe County's North Valleys Citizen Advisory Board Meeting – 9/09/2019: NDOT update on US 395 North Valleys Improvements Project. See Item #8 on the meeting minutes:

North Valleys Area Plan – 2020: Outreach included public meetings, social media and email blasts, project website, project hotline, and mailers. This plan included a coalition of interested and affected stakeholders, as described in Section V.4.

Promotes hiring of underrepresented populations and includes investments in high-quality workforce development programs

This topic is addressed in Section V.4.

Reduces physical barriers to transportation or creates new connections to opportunity

The new bike lanes and multimodal facilities along North Virginia Street will connect with existing bicycle networks within the area, such as the bike lanes on East Parr Boulevard that connect to Truckee Meadows Community College; marked bicycle shoulders on North McCarran Boulevard that allow for east-west access across north Reno; and bike lanes along North Sierra Street that provide north-south connections within Reno. The RTC Washoe Bicycle & Pedestrian Master Plan (RTC Washoe, 2017) identified North Virginia Street as a high-priority pedestrian project and medium-priority bicycle project. Projects were prioritized based on the previous planning, regional connectivity, locations in low-income communities, connections to transit, areas located near essential services, and dense residential and employment areas.

V.6. Innovation

Innovative Technology

New technologies along the corridor will improve performance of the transportation system and provide opportunities for the community. Improvements include the following:

- · Activated pedestrian signal (RRFBs) along North Virginia Street
- Twelve variable speed limit signs along US 395 (syncing with current wind warning signs)
- Three Dynamic Message Signs (DMS) at interchange locations along US 395
- Ramp-metering installation at southbound Golden Valley on-ramp and Stead Boulevard on-ramp
- Road Weather Information System replacement at Golden Valley interchange
- Solar powered "Chains or Snow Tires Required" sign flasher at Lemmon Driver interchange
- Southbound Travel Time Sign along US 395
- Replace the Wrong-Way Driver Detection Systems (WWD) on the off-ramps
- LED upgraded lighting at each interchange

In addition, a new fiberoptic cable trunk line along US 395 from Golden Velley to Stead Boulevard will connect two adjacent sections and complete a conduit pathway for fiberoptic cable on US 395 from Carson City north to the California/Nevada state line. Fiberoptic lines along US 395 will support NDOT's Transportation Management Center by providing reliable connections to closed-circuit television (CCTV) and variable message signs on the highway system. Information gained



from the transportation management systems supports the Nevada State Police and emergency services so they can respond quicker to highway incidents. Fiberoptic lines support the use of warning signs and variable messaging systems along the corridor. High wind warning signs will provide increased safety along the corridor during high wind events.

Installing conduit for future fiberoptic lines along US 395 will also provide additional connections for the community, creating opportunities for economic growth and innovation. It will provide a backbone that will facilitate future fiber share opportunities and bring reliable broadband to the community and underserved populations.

Innovative project delivery: Adopts innovative practices in contracting, congestion management, asset management, O&M

None is anticipated.

Pursues innovative approaches to improve the efficiency and effectiveness of environmental review and permitting

NDOT and FHWA have a Programmatic Agreement that allows for expedited processing of Categorical Exclusions, considerably decreasing the processing time for required for approval.

Innovative Financing

None is anticipated.

Leveraging of non-traditional sources of funding for transportation infrastructure and/or using demand management strategies

None is anticipated.

VI. ECONOMIC ANALYSIS

The cost effectiveness of the improvements described in this application were measured through a Benefit-Cost Analysis (BCA) to monetize, as thoroughly as possible with the data available, benefits generated under the merit criteria defined in the INFRA program and to compare them against the project's costs.

The results of the analysis show that the project generates monetizable benefits that exceed the project's costs when using a 7 percent discount rate, based on a benefit-cost ratio of 1.60. In other words, for each dollar spent in project

Table 3. Key Benefit-Cost Analysis Results

Project Evaluation Metric	Constant Dollars	Discounted at 7 percent	
Total Benefits (millions of \$)	\$438.5	\$129.4	
Total Costs (millions of \$)	\$124.7	\$80.7	
Net Present Value (millions of \$)	\$313.8	\$48.7	
Benefit-Cost Ratio		1.60	
Internal Rate of Return (%)		12.4%	
Payback Period		8 years	

Note: The internal rate of return is the discount rate that makes the net present value (NPV) of all cash flows from the project equal to zero. The payback period represents the number of years it would take for the cumulative discounted benefits to become equal to the cumulative discounted costs.

costs, approximately \$1.60 worth of benefits will be generated by the improvements when costs and benefits are discounted at 7 percent annually.

A 26-year period of analysis was used in the estimation of project costs and benefits. Based on the project schedule, preliminary engineering costs will be spent from March 2022 to November 2024,



right-of-way dollars will be spent from September 2023 to December 2024, and construction costs are assumed to be incurred from February 2026 to December 2027. The analysis assumes 20 years of operation, such that annual benefits are estimated from 2028 through 2047. Project costs total \$150.6 million in year-of-expenditure dollars, and are deflated to 2020 dollars for the BCA, resulting in \$124.7 million in project costs.

The project's largest monetized benefit is travel time savings from reduced congestion and intersection delay attributed to the improvements on the US 395 mainline and the conversion to signalized interchanges at Golden Valley Road. The second largest benefit is crash reduction benefits from crash reduction, which is expected from various project improvements on US 395 and North Virginia Street, including the conversion from 4 to 6 total lanes, widened shoulders, and lane widths, and the auxiliary lane addition on US 395, traffic control and lighting improvements at the Golden Valley interchange, and the shared-use path on North Virginia Street. Crash reduction is estimated for each combination of safety measures on separate sections of the project. Refer to the Appendix B Benefit-Cost Analysis (BCA) for more information.

The table below summarizes the monetized benefits which are expected to result from the proposed improvements, and identifies benefits monetized for each portion of the project with independent utility. All benefits and costs in Table 4 are presented in discounted 2020 dollars.

Table 4: Benefit Estimates and BCA Metrics by Project Segment, Millions of 2020 Dollars

Benefit Categories, Discounted at 7 percent*	Total Project	US 395 Improvements	N. Virginia Improvements		
Travel Time Savings	\$85.6	\$85.6	\$0.0		
Crash Reduction Benefits	\$21.2	\$16.4	\$4.8		
Health Benefits	\$9.7	\$0.0	\$9.7		
Travel Time Reliability Benefits	\$6.4	\$6.4	\$0.0		
Residual Value	\$4.2	\$4.2	\$0.0		
Emission Cost Savings	\$1.8	\$1.8	\$0.0		
Journey Quality Benefits	\$0.8	\$0.0	\$0.8		
Operation & Maintenance Cost Savings	-\$0.4	-\$0.4	\$0.0		
Benefit-Cost Analysis Metrics					
Total Estimated Benefits	\$129.4	\$114.0	\$15.3		
Total Costs	\$80.7	\$72.0	\$8.6		
Net Present Value	\$48.7	\$42.0	\$6.7		
Benefit-Cost Ratio	1.60	1.58	1.78		

^{*}All benefits are discounted at 7 percent except CO₂ emission cost savings, which are discounted at 3 percent as per USDOT BCA Guidance for Discretionary Grant Programs. Total may not sum up due to rounding.

The project will also generate benefits that have not been monetized due to a lack of relevant data or lack of methodology from the USDOT. The inclusion of these benefits will increase the overall benefit-cost ratio. These benefits are:

- Benefits from increased accessibility: North Valleys residential areas will benefit from improved accessibility to the hospital in Reno (accessed via US 395). Communities will benefit from improved emergency vehicle response times and faster travel times to the hospital.
- Benefits from modal shifts: The BCA currently estimates the active transportation trips that will
 utilize the shared-use path after the project is implemented, and assumes that these are true
 induced trips, which result in mortality reduction benefits. The BCA also assumes a conservative
 level of transit ridership growth for a baseline of transit demand and does not assume any induced
 transit demand due to the project. However, some existing users may shift from trips in passenger
 vehicles to bicycle, pedestrian, or transit trips after the project is implemented, which would result
 in a reduction in vehicle-miles traveled, vehicle operating costs, and emissions.
- Additional crash reduction: The analysis does not quantify or monetize crash reduction from improved lighting at the Stead Boulevard Interchange intersections.
- Pavement reconstruction benefits: The analysis incorporates the increased cost to the agency of
 maintaining additional lane-miles of roadway on US 395, but there was not sufficient data to
 determine how much the agency would save in future necessary repaving or rehabilitation costs
 after the project improves pavement and bridge conditions. Additionally, users would perceive
 vehicle operating cost savings and possible safety benefits from the improved pavement
 condition, which are not monetized in the BCA.

VII. PROJECT READINESS AND ENVIRONMENTAL RISK

VII.1. Technical Feasibility

Applicant's history of delivering projects of similar scope and scale

NDOT has successfully met grant agreement requirements and obligations for several discretionary grant opportunities through USDOT, and has partnered with RTC Washoe on delivery of some of those projects as well. The following list provides a brief summary.

- FY 2022 RAISE NDOT provided data and support for the Arlington Avenue Bridges Replacement project in downtown Reno, including a structural analysis of the existing bridges.
- FY 2021 BUILD NDOT is a funding partner and is leading the design effort for the improvements to Pyramid Way, a major arterial and state highway in Sparks, Nevada. NDOT also assisted with the BCA for the grant application preparation.
- FY 2020 CIG (Small Starts) RTC Washoe delivered a Bus Rapid Transit (BRT) and corridor
 improvement project on time and under budget to connect the campus of the University of
 Nevada, Reno, to the popular Midtown area of Reno.
- FY 2014 TIGER & FY 2016 CIG (Small Starts) RTC Washoe delivered a BRT and corridor improvement project on time and under budget to connect the downtown areas of the Cities of Reno and Sparks.

Project's feasibility or constructability

The feasibility of the project is demonstrated in Appendix E Statement of Work, Schedule, and Cost Estimate. Prior planning has included the Reno-Sparks Freeway Study (NDOT, 2018). Preliminary

design has produced types and quantities of materials to form cost estimates, including contingencies.

Applicable Federal requirements, including compliance with Title VI/Civil Rights requirements, ADA, Buy American, among others

As a recipient of millions of dollars NDOT has established compliance processes related to Title VI/Civil Rights, ADA, Buy American, and other applicable requirements.

Plan for right-of-way acquisition

The multimodal improvements for North Virginia Street are entirely within existing right-of-way. Minimal right-of-way is anticipated for the US 395 component. There is some risk due to unknown impacts such as drainage, retention requirements, utilities, and temporary easements needed for construction.

VII.2. Project Schedule

INFRA grant funds will be obligated by April 2025, well in advance of the September 2025 statutory deadline.

Figure 14. Project Schedule

	2022		2023		2024		2025		2026	2027	
MAR	SEPT	DEC	FEB	JUNE	SEPT	NOV	DEC	JAN	APR	FEB	SEPT
Preliminary Design Begin NEPA (Ongoing)	INFRA Grant Award	Preliminary Design (30%) Submittal	INFRA Grant Agreement	National Environmental Policy Act (NEPA) process complete, environmental clearance obtained	Intermediate Design (60%) Submittal Begin ROW Activities	Final Design (100%) Submittal	Certify Right-of- Way and Environmental	Issue invitation for bids and award construction contract	INFRA Grant Funds obligated for construction	Start Construction	Construction Complete; INFRA Grant Funds expended

VII.3. Required Approvals

VII.3.A. Environmental Permits and Reviews

NEPA Status

The Categorical Exclusion for Phase 1 is almost complete; a Preliminary Certification for Phase 1 of the US 395 North Valleys project is provided in Appendix F Preliminary Phase 1 Categorical Exclusion.

For Phase 2 (the US 395 and Virginia Street North Valleys project), potential impacts, including right-of-way, are expected to be minimal. The key environmental resources are noise, cultural resources, air quality (hot spot analysis), possible environmental justice, and Section 401/404 permitting. Preparation for Phase 2 NEPA documentation has started with the noise assessment. NDOT and RTC Washoe anticipate a Categorical Exclusion would be the appropriate level of NEPA documentation for Phase 2, based on an initial environmental screening.

NDOT and FHWA have a Programmatic Agreement that allows for expedited processing of Categorical Exclusions, considerably decreasing the processing time for required for approval. This will help the project meet the proposed schedule while providing quality environmental documentation as approved by the NDOT Environmental Services Division.

Review, Approvals, and Permits by Other Agencies

No other approvals or permits by other agencies are required.

Environmental Studies

NEPA documentation for this project is currently underway and will identify project impacts and possible mitigation for those impacts.

Discussions with FHWA

Ongoing coordination has been occurring throughout planning and project development and is continuing during NEPA documentation.

Public Engagement

Public engagement in preparation for the project has been conducted over several years for US 395 and North Virginia Street, in a variety of different forums, as described in Section V.4 and V.5.

VII.3.B. State and Local Approvals

The Regional Transportation Improvement Program (RTIP) and State Transportation Improvement Program (STIP) include the preliminary engineering phase for US 395 Phase 2, ID # WA20180057. The RTIP and STIP will be formally amended in May 2022 to include the design phase of the North Virginia Multimodal Project, ID# XS20220010.

The project is included in RTC Washoe's 2050 Regional Transportation Plan:

- 2026-2030 Freeway. Project ID 1 US 395, Golden Valley to Stead Boulevard
- 2026-2030 Multimodal. Project ID 31 North Virginia St, Panther Drive to McCarran Boulevard

No additional planning coordination or approvals are needed to initiate construction.

VII.3.C. Federal Requirements Affecting State and Local Planning Approvals

The North Virginia Street portion of the project will need to be included in the STIP, which will be amended in May 2022. The STIP will be updated for the construction phases for both project components.

VII.3.D. Assessment of Project Risks and Mitigation Strategies

Table 5. Risk, Risk Levels, and Mitigation Strategies

Risk	Risk Level	Mitigation Strategy				
Engineering feasibility	Low	Phase 2 for US 395 continues the work of Phase 1, which has had no technical design issues.				
NEPA delay Low		A programmatic Categorical Exclusion will minimize the schedule requirements.				
Public support	Low	Phase 1 has had broad public support; no issues are anticipated.				
Receipt of permits	Low	No issues are anticipated.				
Right-of-way acquisition delay	Medium	Some minor right-of-way needs may be identified as design progresses; NDOT Supervisory Agent has an established acquisition process.				
Utility relocations	Low	Major utilities have been mapped on US 395, and minor conflicts are identified. For North Virginia Street, minor subsurface work is anticipated.				

VIII. STATUTORY PROJECT REQUIREMENTS

The project meets all of the statutory requirements of the INFRA program.

Table 6. Statutory Project Requirements

INFRA Statutory Requirement	Reference				
Requirement 1: National or Regional Benefits (All Three)	Reference: Outcome Criteria V.2 (State of Good Repair), V.3 (Economic Impacts, Freight Movement, and Job Creation) and V.5 (Equity, Multimodal Options, and Quality of Life)				
Requirement 2: Cost Effectiveness (All Three)	Reference: Section VI Economic Analysis Appendix B Benefit-Cost Analysis (BCA)				
Requirement 3: Highway Program Goals (23 U.S.C. 150) (INFRA and Rural)	Reference: Safety (V.1), Congestion Reduction, System Reliability, and Freight Movement/Economic Vitality (V.3), Environmental Sustainability (V.4)				
Requirement 4: Preliminary Engineering (INFRA and Rural)	Reference: Section VII. Project Readiness and Environmental Risk, Appendix E Statement of Work, Schedule, and Cost Estimate				
Requirement 5: Stable & Dependable Financial Plan (Mega and INFRA)	Reference: Section IV. Grant Funds, Sources, and Uses , Appendix E Statement of Work, Schedule, and Cost Estimate				
Requirement 6: Impact of Federal Funding (Mega and INFRA)	Reference: Section I.1. Project Description				
Requirement 7: 18 months to begin construction (INFRA and Rural)	Reference: Section VII. Project Readiness and Environmental Risk, Appendix E Statement of Work, Schedule, and Cost Estimate				

APPENDIX A. LETTER OF COMMITMENT

APPENDIX B.BENEFIT-COST ANALYSIS (BCA)

APPENDIX C. PROJECT LABOR AGREEMENT EXAMPLE

APPENDIX D. LETTERS OF SUPPORT

APPENDIX E. STATEMENT OF WORK, SCHEDULE, AND COST ESTIMATE

APPENDIX F. PRELIMINARY PHASE 1 CATEGORICAL EXCLUSION

APPENDIX G. REFERENCES

Attachment C



1200 New Jersey Avenue SE Washington, DC 20590

Project Name: US-395 & Virginia Street North Valleys Applicant: Nevada Department of Transportation

INFRA Grant Funding: \$88,917,130.

Portion of Proposed Award Subject to 23 U.S.C. 117(d)(2): \$0.

Estimated Future Eligible Project Costs: \$150,618,951. **Estimated Minimum Non-Federal Funding:** \$10,278,468.

Project Description: The project has two components. The first component will add two lanes along

approximately

three miles of US-395, along with improved traffic control, interchange lighting upgrades, sound walls, and Intelligent Transportation System (ITS) elements. The second component will create a complete street along a separate 2.5-mile stretch of North Virginia Street with added sidewalks and buffered bike lanes and/or shared-use path, pedestrian crossings with rectangular rapid flashing beacons, and improved transit stops.

Congratulations! The project above was selected to receive an FY 2022 INFRA grant.

The USDOT Operating Administration overseeing your project will contact you regarding next steps to complete the relevant requirements before executing a grant agreement.

This letter DOES NOT authorize the applicant to incur costs to carry out the project. The execution of a grant agreement will obligate INFRA grant funding, making it available to reimburse eligible expenses for the awarded project. Unless authorized by USDOT in writing, any costs incurred prior to that obligation of funds for a project (i.e., "pre-award costs") are ineligible for reimbursement and may be ineligible to count towards non-Federal match requirements. This letter DOES NOT authorize pre-award costs to be eligible. The Department expects all INFRA funding be obligated by September 30, 2025.

If you have any questions about this award, please contact the MPDG Opportunity Team at mpdgrants@dot.gov.

Sincerely,

John Augustine

Director, Office of Infrastructure Finance and Innovation Office of the Secretary

John 7. Augs

Attachment D

US 395 North Valleys Improvements Funding Table

Funding by Activity	Project/Elements	Preliminary	Right-of-Way	Construction Engineering	Contingency	TOTAL	Overall Percent Match			
and Source		Engineering	,	**Proposed Grant Participating Cost**						
MADDC Creat	US 395 Phase 2 Widening	\$ -	\$ -	\$ 74,291,074.00	\$ 14,626,056.00	\$ 88,917,130.00				
MPDG Grant	US 395 Virginia Multimodal	\$ -	\$ -	\$	\$ -		45.17%			
Other Federal (NHPP)	US 395 Phase 2 Widening	\$ -	\$ -	\$ 62,455,830.00	\$ 16,930,922.00	\$ 79,386,752.00				
Other rederal (MIFF)	US 395 Virginia Multimodal	\$ -	\$ -	\$ 7,429,107.00	\$ 1,392,958.00	\$ 8,822,065.00				
							48.01%			
Other Federal (STBG-WA)	US 395 Phase 2 Widening	\$ -	\$ -	\$	\$ -					
Other rederal (STBG-WA)	US 395 Virginia Multimodal	\$ -	\$ -	\$ 4,870,839.00	\$ 1,445,491.00	\$ 6,316,330.00				
State Funds	US 395 Phase 2 Widening	\$ 5,336,796.00	\$ 107,149.00	\$ 10,008,734.00	\$ 2,309,708.00	\$ 12,318,442.00				
State Fullus	US 395 Virginia Multimodal	\$ -	\$ -	\$ -	\$ -					
							6.82%			
Local Funds	US 395 Phase 2 Widening	\$ -	\$ -	\$ -	\$ -					
Local Fullus	US 395 Virginia Multimodal	\$ 967,160.00	\$ 107,149.00	\$ 900,254.00	\$ 207,751.00	\$ 1,108,005.00				
OVERALL	TOTAL	\$ 6,303,956.00	\$ 214,298.00	\$ 159,955,838.00	\$ 36,912,886.00	\$ 196,868,724.00	100.00%			
	US 395 Phase 2 Widening	\$ 5,336,796.00	\$ 107,149.00	\$ 146,755,638.00	\$ 33,866,686.00	· ·	91.75%			
Total Cost for Each Project and Percent Match		100.00% \$ 967,160.00	100.00% \$ 107,149.00	6.82% \$ 13,200,200.00	6.82% \$ 3,046,200.00	6.82% 16,246,400.00				
	US 395 Virginia Multimodal	100.00%	100.00%	6.82%	6.82%	6.82%	8.25%			
	US 395 Phase 2 Widening			74.54%	17.20%	91.75%				
Use Percent	US 395 Virginia Multimodal			6.71%	1.55%	8.25%				

^{* -} No revision to the original Grant Proposal Amount for Project Cost (Revised)

^{** -} Grant Participating Costs Proposed (Pending Approval of Grant Agreement Amendment with FHWA to remove PE & ROW costs)

^{*** -} Percentages Calculated from the overall TOTAL of the Proposed Participating Costs (Pending Approval of Grant Agreement Amendment with FHWA to remove PE & ROW costs)

Meeting Date: 2/21/2025 Agenda Item: 4.3.2

To: Regional Transportation Commission

From: Jessica Dover, Project Manager

SUBJECT: NDOT Interlocal Cooperative Agreement - Veterans Roundabout Modifications Project

RECOMMENDED ACTION

Approve an Interlocal Cooperative Agreement with the Nevada Department of Transportation for funding, maintenance, and operations responsibilities on the Veterans Roundabout Modifications Project.

BACKGROUND AND DISCUSSION

The purpose of this Interlocal Cooperative Agreement (ICA) is to define funding, maintenance, and operations responsibilities for the Veterans Roundabout Modifications Project (Project). The Nevada Department of Transportation (NDOT) owns, operates, and maintains the designated right-of-way within the Project limits. NDOT and RTC desire to modify the roundabout at Geiger Grade Road and Veterans Parkway to improve operations and increase capacity of the intersection as identified in the RTC Traffic Management Program Annual Traffic Signal, Intelligent Transportation System (ITS) Operation, & Intersection Improvements, Statewide Transportation Improvement Program (STIP) ID: WA20110215. RTC is currently completing final design of an eastbound to southbound Geiger Grade Road right turn bypass lane adjacent to the existing roundabout; and, an additional westbound Geiger Grade Road to northbound S. Virginia Street right-hand turn lane, in conjunction with striping, signage, concrete, lighting and associated appurtenances as may be determined necessary.

Per the ICA, RTC will fund and administer the entire Project which may include, but is not limited to, engineering, utility relocations, preparation of plans, special provisions, construction estimates, construction, construction management, quality control, quality control testing, and materials testing. This ICA will allow NDOT to assign a Resident Engineer (RE), at NDOT's expense, to act as NDOT's representative to review and comment on construction contract compliance of NDOT facilities included in the Project. The RE will expeditiously facilitate change during construction. Further, a Revocable Permit for Occupancy of Nevada Department of Transportation Right-of-Way will not be required to construct the Project; the ICA will stipulate the terms and conditions in their entirety, required to perform work with the NDOT Right-of-Way as related to the Project.

Construction is scheduled to begin Spring 2025.

FISCAL IMPACT

Fuel tax appropriations for this item are included in the FY 2025 Budget.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

Agreement Number NM083-25-201

INTERLOCAL AGREEMENT

This Agreement, made and entered into on , by and between the State of Nevada, acting by and through its Department of Transportation, hereinafter called the "DEPARTMENT", and the Regional Transportation Commission of Washoe County, 1105 Terminal Way, Reno, NV 89502, hereinafter called the "RTC".

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 agreement is authorized by law to perform and refers to such as an interlocal contract; and

WHEREAS, the NDOT Road Safety Assessment - I ound Cout is Cate Coute 431 (SR 431) at Veterans Parkway (April, 2018) previously completed by the DEPARTMENT; and, the South Meadows Multimodal Transportation Study (April, 2020) and the Mt. Rose Corridor Plan (April, 2022), previously completed by the RTC in coordination with the DEPARTMENT, resulted in recommendations focusing on physical lane characterization improvements at the study intersection to increase overall efficiency and operations of the roundabout; and

WHEREAS, the DEPARTMENT and RTC desire to modify the roundabout at Geiger Grade Road and Veterans Parkway to improve operations and increase capacity of the intersection; and

WHEREAS, these improvements are identified in the RTC Traffic Management Program Annual Traffic Signal, Intelligent Transportation System (ITS) Operation, & Intersection Improvements, Statewide Transportation Improvement Program (STIP) ID: WA20110215; and

WHEREAS, the purpose of this Agreement is for RTC to design and construct: an eastbound to southbound Geiger Grade Road right turn bypass lane adjacent to the existing roundabout; and, an additional westbound Geiger Grade Road to northbound S. Virginia Street right-hand turn lane, in conjunction with striping, signage, concrete, lighting and associated appurtenances as may be determined necessary (hereinafter "PROJECT"); and

WHEREAS, the DEPARTMENT owns, operates and maintains the designated right-of-way within the PROJECT limits; and

WHEREAS, the purpose of this Agreement is to define the funding, maintenance and operations responsibility for the PROJECT; and

WHEREAS, the services of the RTC shall be of benefit to the DEPARTMENT and to the people of the State of Nevada; and

WHEREAS, the RTC is willing and able to perform the services described herein.

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

ARTICLE I - RTC AGREES

<u>Funding</u>

1. To fund and administer the entire PROJECT which may include, but is not limited to, engineering, utility relocations, preparation of plans, special provisions, construction estimates, construction, construction management, quality control, quality control testing, and materials testing.

Project Administration

- 2. To monitor all PROJECT activities to ensure compliance with applicable environmental laws and regulations.
- 3. To invite the DEPARTMENT to PROJECT meetings, including but not limited to, field reviews, review meetings and the pre-construction conference.
- 4. To allow the DEPARTMENT to review, comment, and approve PROJECT change orders as well as other changes to the contract documents, plans, and specifications which involve DEPARTMENT facilities. The DE ARTHEN 's viri ten response or are made within five (5) working days or its notice of change order or other changes. No response from the DEPARTMENT within this time frame shall constitute the DEPARTMENT's consent to and acceptance of such change orders or other changes and for the RTC to proceed with the work.

Design Engineering

- 5. To design and construct the DEPARTMENT facilities using DEPARTMENT standards, specifications, and procedures set forth in the RTC's construction contract with its contractor for the development, analysis, and design of the PROJECT, except with the standards, specifications, and procedures set forth in the construction contract and where agreed upon by both parties.
- 6. To obtain the DEPARTMENT's approval for all exceptions to DEPARTMENT and AASHTO design standards.
- 7. To provide the DEPARTMENT with one (1) electronic submittal of each design submittal for the PROJECT and to invite the DEPARTMENT to the review meetings with the RTC to address said comments, if any.
- 8. To submit to the DEPARTMENT for a fifteen (15) working day review period of: preliminary plans at sixty percent (60%), ninety percent (90%), one hundred percent (100%), and bid set document submittals.

Construction

9. To construct the PROJECT and perform all required construction management inspections and quality assurance testing for the PROJECT.

- 10. To perform and be responsible for the construction administration of those facilities under DEPARTMENT's jurisdiction related to the PROJECT.
- 11. To allow the DEPARTMENT to observe, review, and comment on all construction work of those facilities under DEPARTMENT's jurisdiction related to the PROJECT. RTC's inspection and testing results will be shared on a weekly basis; DEPARTMENT shall respond within two (2) working days of any inspection and/or materials testing report received. Any such comments shall be immediately directed to the RTC's Project Manager and RTC's Construction Administration Consultant. DEPARTMENT shall not direct nor interfere with the RTC contractor's construction activities. Section 1.20 of the SUPPLEMENTAL GENERAL PROVISIONS of the Project Contract Documents shall be followed in case of any dispute arising between the Contractor and the inspector in regard to non-compliant materials furnished or workmanship performed. Non-compliance shall be determined by RTC's Project Manager and Construction Administration Consultant, in coordination with the DEPARTMENT's Resident Engineer as outlined per Article II, Paragraph 5.
- 13. The RTC shall, at its own expense, obtain and pay for all licenses, permits, and/or fees and comply with all applicable federal, state, and local laws, statutes, ordinances, rules, and regulations and the orders and decrees of any courts or administrative bodies or tribunals in any manner affecting the performance of this Agreement, including, without limitation, worker's compensation laws, licensing laws, and regulations.
- 14. To submit the PROJECT's as-built plan for DEPARTMENT review and invite the DEPARTMENT to the RTC final inspection of the PRC JECT
- 15. To require contractor to warrant equipment, material, and workmanship to be of first quality; contractor shall be required to guarantee that the quality of material and workmanship used in the job will be satisfactory for a period of one (1) year after final acceptance of the work. Material and Workmanship and Warranty of Corrections shall be followed as stipulated per Supplemental General Provisions of the Contract for Construction.
- 16. RTC's Contractor shall submit an email to D2DigAlert@dot.nv.gov for all NDOT locates. Supply the route with mile post, plan sheets, location sketch and work schedule. Email submittal must be done not less than five (5) working days before starting any excavation.
- 17. The DEPARTMENT Standard Plans for Traffic Control shall apply to this Agreement unless a Site-Specific Traffic Control Plan (SPTCP) is submitted to the District 2 Utility Inspector. Refer to Article III, Paragraph 26.ii, for the Standard Plans.
- 16. All persons working in the NDOT right-of-way shall wear OSHA approved reflective clothes, not limited to hats and vests. All vehicles occupying the public Right-of-Way shall be equipped with reflective markings and an overhead strobe light. Survey staff shall use all possible caution while performing facility or topographic surveys.
- 17. RTC's Contractor shall not disturb NDOT survey control points. RTC shall coordinate reestablishment of disturbed survey monuments with NDOT Location Division, Gary Nelson at (775) 888-7486. Monuments shall be replaced by a Nevada Licensed Professional Land Surveyor (PLS), per NDOT "Special Instructions for Survey, Mapping, or GIS Consultants" and Nevada Revised Statute (NRS).
- 18. RTC's Contractor shall maintain on ongoing dust control program, including watering of open areas, conforming to the latest Federal, State and County air pollution regulations. RTC's Contractor shall submit a dust control plan for approval to the appropriate air

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pollution control division and the approved plan shall be available at the job site, prior to commencement of any work within the right-of-way.

- 19. RTC shall ensure that contractors and subcontractors, that are moving equipment and materials from the PROJECT site into the right-of-way, where noxious weeds are present, shall wash and clean equipment prior to being moved.
- 20. If any species are listed by either the US Fish and Wildlife Service (USFWS) or by the State, the RTC's Contractor must have a qualified biologist complete a field assessment and determine species presence or absence and contact the appropriate agencies to determine what migration methods are required if found. RTC must submit copies of any reports and documentation of any required agency consultations to NDOT.
- 21. RTC and RTC's Contractor must follow BMPs to avoid impacts to all federal or state listed species and must submit copies of any reports and documentation of any required agency consultations to NDOT.
- 22. BATS: If bats are identified roosting within the permitted area, RTC's Contractor will contact the Nevada Department of Wildlife (NDOW) for proper guidance. An avoidance area with a 100' radius must be maintained until formal guidance is received. For information on how to contact NDOW go to: https://www.ndow.org/contact-us
- 23. MIGRATORY BIRD TREATY ACT (MBTA): Vegetation/structure removal shall be conducted to conform with the MBTA to avoid impacts to listed migratory birds (50 CFR 10.13) that may be actively utilizing vegetation or structures for nesting. When possible, vegetation and structure removal should not occur during avian breeding season (generally March 01 through July 31), but raptors and owls may begin nesting as early as January. As these dates are a general guideline, active nests may be observed outside this range. If vegetation/structure removal must occur during avian breeding season, nesting surveys must be conducted by a qualified biologist. If nesting sites are found within the PROJECT limits, US Fish and Wildlife must be consulted to determine a suitable buffer area around the nest site. Buffer areas around the nest site should be flagged as an avoidance area and no disturbance should occur within the avoidance area while the nest is occupied with eggs and/or young. Once young have left the nest, the avoidance area can be removed, and work can resume. For more information on the Migratory Bird Treaty Act go to: https://fws.gov/law/migratory-bird-treaty-act-1918
- 24. NOXIOUS WEEDS: RTC's Contractor shall complete the Noxious Weed Management Checklist/Plan Appendix I (https://www.dot.nv.gov/home/showpublisheddocument/14452/636668977566870000) describing how they will prevent the introduction and spread of noxious weeds. RTC must keep a copy of the completed Noxious Weed Management Checklist/Plan on site while working within the DEPARTMENT's right-of-way. At DEPARTMENT's request, RTC shall provide a copy of the Noxious Weed Management Checklist/Plan to NDOT Environmental Services for review and approval. For more information Nevada noxious weeds, go to: http://agri.nv.gov/NoxiousWeeds/
- 25. MONARCH BUTTERFLY. The monarch butterfly (*Danaus Plexippus*) and their larval host plant (*Asclepias spp.*) may be found in the PROJECT area. Survey all disturbance areas, including parking and staging areas, for the presence of milkweed species. If observed, RTC's Contractor must delineate the area for avoidance or work outside of their breeding window (March 15 through November 30). If RTC cannot work outside of the breeding window, RTC's Contractor must consult with the United States Fish and Wildlife Service and provide a copy of the consultation requirements to NDOT Environmental. RTC may contact the Reno field office or Southern Nevada field office (*Reno Fish and Wildlife Office* | *Contact Us* | *U.S. Fish & Wildlife*

Service (fws.gov)),(Southern Nevada Fish and Wildlife Office | Contact Us | U.S. Fish & Wildlife Service (fws.gov)

- 26. <u>Emergency</u> is defined as a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate the loss of, or damage to, life, health, property, or essential public services. Emergency work is not scheduled, if emergency work can be scheduled as applicable permit will be needed.
- 27. For emergencies during business hours, 8:00 a.m. to 5:00 p.m. contact the District 2 Permit Office at (775) 834-8330, option 1, and during non-business hours, 5:00 p.m. to 8:00 a.m. contact the District 2 Permit Emergency Line at (775) 834-8344.
- 28. Provide the following information to the District 2 Permit Office when providing notification of emergency work:
 - i. RTC's contact information for the emergency.
 - ii. Location of the emergency. (City/Route)
 - iii. Description of the emergency.
 - iv. Description of the traffic impact. (Traffic Control needs)
 - v. Estimated time to complete emergency work.
- 29. For emergencies, conducted without a permit, RTC shall submit a permit application to the District 2 Permit Office upon initial completion of the emergency work by the next business day.
- 30. Should NDOT ITS Fiber Optic Line be encountered during work, immediately contact the NDOT ITS TOTS 24/7 phone number at 1-(877)-638-6777.
- 31. RTC shall submit "As-built" plans to the District 2 Permit Office showing the exact locations and depths, on both plan and profile, within thirty (30) days of completion of construction.
- 32. RTC shall return all highway appurtenances, disturbed or destroyed, to a condition equal to or better than the original condition, and in accordance with NDOT Standard Plans and Specifications.
- 33. All disturbed areas, left undeveloped for longer than twenty (20) days, shall be stabilized by the application of an approved dust palliative. RTC shall be responsible for the condition of the disturbed area until vegetation is established.
- 34. No work shall be allowed in the NDOT right-of-way from 5:00 AM the working day before a holiday through 7:00 PM the working day after a holiday, unless prior written approval has been given by the District 2 Permit Office. To obtain approval, submit a formal Letter of Request to the District 2 Permit Inspector. The letter shall be addressed to the District 2, District Engineer, Bhupinder Sandhu, signed by the PERMITTEE and submitted at least five (5) working days prior to the holiday.

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NDOT recognized holidays are as follows:

- January 1, New Year's Day
- Third Monday in January, Martin Luther King Day
- Third Monday in February, President's Day
- Last Monday in May, Memorial Day
- June 19, Juneteenth National Independence Day

- July 4, Independence Day
- First Monday in September, Labor Day
- Last Friday in October, Nevada Day
- November 11, Veteran's Day
- Fourth Thursday in November, Thanksgiving Day
- Fourth Friday in November, Family Day
- December 25, Christmas Day

ARTICLE II - DEPARTMENT AGREES

Project Administration

- 1. To assign a project manager with approval authority on behalf of the DEPARTMENT to act as the DEPARTMENT's representative and designated point of contact to oversee the DEPARTMENT's portion of the PROJECT and to ensure compliance with applicable DEPARTMENT requirements and a continuity of communications between the RTC and the DEPARTMENT.
- 2. That the RTC will be the point of contact for all communications with the RTC's contractor for the PROJECT, including, but not limited to, reviewing comments on plans, specifications, traffic control plans, and inspections for the DEPARTMENT's portion of the PROJECT. Comments shall be immediately directed to the RTC's Project Manager and RTC's Construction Administration Consultant. DEPARTMENT shall not direct nor interfere with the RTC contractor's construction activities.

Design Engineering

3. To review and comment on the RTC design (including plans, specifications and estimates) through coordination with the DEPARTMENT's designated representative as prescribed per Article II, Paragraph 1. DEPARTMENT comments shall be provided within fifteen (15) working days from receipt of submittal. Failure of DEPARTMENT to respond within this time frame shall constitute the DEPARTMENT's approval of the plan and specifications, and shall signify the DEPARTMENT's consent for the RTC to proceed.

Construction

- 4. To allow the RTC to act on the DEPARTMENT's behalf and accept construction inspection oversight of DEPARTMENT's facilities of the PROJECT.
- 5. To assign a Resident Engineer, at DEPARTMENT's expense, to act as the DEPARTMENT's representative to review and comment on construction contract compliance of the DEPARTMENT's facilities included in the PROJECT. The Resident Engineer will expeditiously facilitate change during construction following communication protocols established per Article I, Paragraph 11, and the change order process stipulated per Article I, Paragraph 4.
- 6. To review and approve when appropriate addenda, supplementals and change orders to the PROJECT construction to ensure the compliance with the terms of this agreement within five (5) working days. Failure to respond within five (5) working days shall constitute approval.
- 7. To observe and review all work associated with the PROJECT during construction with the understanding that any and all items of concern are reported to the DEPARTMENT's Resident Engineer for further evaluation. Requests regarding additional information and/or possible corrective action shall be immediately communicated by the DEPARTMENT's Resident

Engineer; directed to the RTC's Project Manager and RTC's Construction Administration Consultant as outlined per Article II, Paragraph 2.

- 8. To review RTC's as-built plans and attend the RTC final inspection of the PROJECT.
- 9. To own and maintain PROJECT improvements within the DEPARTMENT right-of-way; unless otherwise identified in any associated DEPARTMENT encroachment permit.

ARTICLE III - IT IS MUTUALLY AGREED

- 1. The term of this Agreement shall be from the date first written above through and including December 31, 2026, or until the construction of all improvements contemplated herein have been completed and accepted by the RTC and DEPARTMENT and the (1) Year Warranty Period has expired, save and except the responsibility for maintenance as specified herein, whichever occurs first.
- 2. This Agreement shall not become effective until and unless approved by appropriate official action of the governing body of each party.
- 3. The parties agree to allow each other to observe, to inspect PROJECT construction, and to review applicable change orders in a timely manner which prevents PROJECT delay. All change order requests shall be made in writing. Each party shall complete its review of all change orders submitted to it by the other party, within five (5) working days after service of such change orders. In the event the DEPARTMENT does not provide the RTC with a written response to the RTC's change orders within five (5) working days following the RTC's service of such change orders, the RTC shall proceed with the change orders so as not to delay the PROJECT and shall assume no liability therefore. The DEPARTMENT shall be responsible for all costs associated with change orders requested by the DEPARTMENT.
- 4. 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.
- 5. 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: Tracy Larkin Thomason, P.E., Director

Attn.: Bhupinder Sandhu, P.E.,

Nevada Department of Transportation

District 2, District Engineer

310 Galletti Way

Sparks, Nevada 89431 Phone: (775) 834-8300

E-mail: BSandhu@dot.nv.gov

FOR RTC: Bill Thomas, AICP, Executive Director

Attn: Dale Keller, P.E.

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Regional Transportation Commission of Washoe County 1105 Terminal Way, Suite 108 Reno, NV 89502

Phone: (775) 335-1827

E-mail: <u>DKeller@rtcwashoe.com</u>

- 6. 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.
- 7. 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, the recovery of actual damages and the prevailing party's reasonable attorney's fees and costs.
- 8. 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.
- 9. 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.
- 10. To the fullest extent of NRS Chapter 41 liability limitations, each party shall indemnify, hold harmless, and defend, not excluding the other's right to participate, the other from and against all liability, claims, actions, damages, losses, and expenses, including, but not limited to, reasonable attorneys' fees and costs, caused by the negligence, errors, omissions, recklessness, or intentional misconduct of its own officers, employees, and agents. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described herein. This indemnification obligation is conditioned upon the performance of the duty of the party seeking indemnification (indemnified party) to serve the other party (indemnifying party) with written notice of an actual or pending claim, within thirty (30) calendar days of the indemnified party's notice of such actual or pending claim or cause of action. The indemnifying party shall not be liable for reimbursement of any attorney's fees and costs incurred by the indemnified party due to said party exercising its right to participate with legal counsel.
- 11. 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.

- 12. 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, including another breach of the same provision.
- 13. 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.
- 14. Neither party shall assign, transfer, or delegate any rights, obligations, or duties under this Agreement without the prior written consent of the other party.
- 15. Except as otherwise expressly 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.
- 16. Pursuant to NRS Chapter 239, information or documents may be open to public inspection and copying. The parties shall have the duty to disclose unless a particular record is confidential by law or a common law balancing of interests.
- 17. 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.
- 18. 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.
- 19. 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.
- 20. The RTC will ensure that any reports, materials, studies, photographs, negatives, drawings, or other documents prepared in the performance of obligations under this Agreement shall be the exclusive, joint property of the RTC and the DEPARTMENT. The RTC will ensure that any consultant will not use, willingly allow, or cause to have such documents used for any purpose other than performance of obligations under this Agreement without the written consent of both the RTC and the DEPARTMENT. The RTC shall not utilize (and shall ensure any consultant will not utilize) any materials, information, or data obtained as a result of performance of this Agreement in any commercial or academic publication or presentation without the express written permission of the DEPARTMENT. The RTC (and any consultant) shall not reference an opinion of an employee or agent of the DEPARTMENT obtained as a result of performance of this Agreement in any publication or presentation without the written permission of the employeeor agent to whom the opinion is attributed, in addition to the written permission of the DEPARTMENT.
- 21. Any alteration considered extra work shall be addressed through a written amendment to this Agreement. The amount and payment for extra work, as well as designation of responsibility for payment of such work, shall be specified in such amendment.

- 22. Any recipient or subrecipient of funds under this Agreement agrees to comply with the Federal Funding Accountability and Transparency Act and implementing regulations at 2 CFR Part 170, including Appendix A, available at http://edocket.access.gpo.gov/2010/pdf/2010-22705.pdf.
- 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. In connection with the performance of work under this Agreement, the parties agree not to discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity or expression, age, disability or national origin, including, without limitation, with regard to employment, upgrading, demotion, or transfer, recruitment or recruitment advertising, layoff, or termination, rates of pay or other forms of compensation, and selection for training, including, without limitation, apprenticeship. The parties further agree to insert this provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.
- 25. 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.
- 26. All work performed under this Agreement or for routine maintenance or emergency situations will be in accordance with the current editions of the State of Nevada:
 - i. Standard Specifications for Road and Bridge Construction (2014)
 - ii. Standard Plans for Road and Bridge Construction (2022)
 - iii. Access Management System and Standards (2017)
 - iv. The American Association of State Highway and Transportation Officials (AASHTO) publications (2024)
 - v. National Electrical Safety Code (2023)https://forms1.ieee.org/NESC-
 - vi. "A Guide for Accommodating Utilities within Highway Right-of-Way" (2005)
 - vii. "A Policy on the Accommodations and Installation of Utilities on State and Federal-Aid Highways, within the State of Nevada"
 - viii. Construction Site Best Management Practices Manual

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

RTC Washoe	State of Nevada, acting by and through its DEPARTMENT OF TRANSPORTATION
455Ā.386/;	Director
Name and Title (Print)	<u>10=<4></u> 1Ā+4:10<8: Approved as to Legality and Form:
	Signed by: Low M Story 59F1B2732A51494 peral

In Process

Meeting Date: 2/21/2025 Agenda Item: 4.3.3

To: Regional Transportation Commission

From: Amanda Callegari, Engineering Manager

SUBJECT: NDOT Interlocal Cooperative Agreement Amendment No. 3
Pyramid Highway/US 395 Connection Phase 1 Project

RECOMMENDED ACTION

Approve Amendment No. 3 to the Interlocal Cooperative Agreement Amendment with the Nevada Department of Transportation for the Pyramid Highway/US 395 Connection Phase 1 Project, to authorize additional federal funds for construction.

BACKGROUND AND DISCUSSION

This item is connected to the Sparks Boulevard Capacity Improvement Project NDOT LPA Agreement Amendment No. 1, which is also on this agenda.

Pyramid Highway / US 395 Connection Project Phase 1 (Project) is constructing as a high access arterial and will be widened from four to six lanes from Queen Way to Los Altos Parkway. Improvements include three travel lanes in each direction, bike lanes, curb and gutter, wide median, shoulder improvements and a barrier protected 10-foot shared use path on the east side of the road (Queen Way to Los Altos Parkway). Between Los Altos Parkway and Golden View Drive, four travel lanes will be maintained in addition to the other improvements mentioned above. Sound/screen walls will be installed in some locations and a protected sidewalk placed on the west side of the road.

On January 21, 2021, the parties entered into Interlocal Cooperative Agreement No. R591-20-015 to define responsibilities for funding, project administration, right-of-way, and construction of Phase 1 of the Pyramid Highway/US 395 Connection Project. Amendment No. 1 extended the agreement's termination date and clarified roles and responsibilities related to additional project funding. Amendment No. 2, approved administratively in June 2024, updated project funding sources and further defined the parties' roles regarding additional construction funding. However, due to Financial Management Information System (FMIS) restrictions, the DEPARTMENT's Surface Transportation Block Grant (STBG-Flex) funding of \$9,100,000, as specified in Amendment No. 2, was not applied to the project.

Amendment No. 3 establishes the appropriate roles and responsibilities between the parties and updates the project's funding sources, specifically identifying RTC's STBG-WA funds in the amount of \$17,034,115.

Project construction began in 2023 and is expected to be completed by summer 2025.

FISCAL IMPACT

\$9,100,000 of additional federal funds (STBG-WA) to be applied to the Project. Funding for this project is included in the FY2025 budget.

PREVIOUS BOARD ACTION

- O1/15/2021 Approved an Interlocal Agreement with NDOT for administration and funding of necessary right-of-way acquisition, utility relocation, construction and construction management activities necessary to complete Phase 1 of the Pyramid Highway/US 395 Connector Project at an estimated cost of \$54,100,000.
- 09/16/2022 Approved Amendment No. 1 to the Interlocal Cooperative Agreement with NDOT for Phase 1 of the Pyramid Highway/US 395 Connector Project to authorize additional federal funds for construction.

Amendment No. 3 to Interlocal Agreement No. R591-20-015

This Amendment is made and entered into on , between the State of Nevada, acting by and through its Department of Transportation, hereinafter referred to as the "DEPARTMENT", and the Regional Transportation Commission of Washoe County, 1105 Terminal Way, Reno, Nevada 89502, hereinafter referred to as the "RTC."

WITNESSETH:

WHEREAS, on January 21, 2021, the parties entered into Agreement No. R591-20-015 to assign responsibilities for funding, Project administration, right-of-way, and construction of Phase 1 of the Pyramid Highway/US 395 Connection Project; and

WHEREAS, on September 23, 2022, the parties entered into Amendment No. 1 to Agreement No. R591-20-015 to extend the termination date and establish roles and responsibilities between the parties regarding additional funds required for the Project; and

WHEREAS, on June 25, 2024, the parties entered into Amendment No. 2 to Agreement No. R591-20-015 to update the Project funding sources, and to update the roles and responsibilities between the parties regarding additional funding required for construction of the Project; and

WHEREAS, due to Financial Management Information System (FMIS) restrictions, the DEPARTMENT's Surface Transportation Block Grant (STBG-Flex), as outlined in Amendment No. 2, amounting to Nine Million One Hundred Thousand and No/100 Dollars (\$9,100,000.00), was not applied to the Project; and

WHEREAS, the Agreement must be amended to ensure the appropriate roles and responsibilities have been established between the parties, and to update the Project funding sources specific to the STBG funding, to be identified as RTC's STBG-WA, in the amount of Seventeen Million Thirty-Four Thousand One Hundred Fifteen and No/100 Dollars (\$17,034,115.00); and

WHEREAS, the parties hereto desire to make certain amendments to Agreement No. R591-20-015.

NOW, THEREFORE, the parties agree as follows:

- 1. Article III, Paragraph 3, is amended by deleting its entirety and inserting in its place: "The funding sources and amounts identified in Exhibit A-2, attached hereto and incorporated herein, are the only funding sources and amounts currently anticipated to be necessary and available for the PROJECT."
- 2. It is intended and understood that the provisions of the amended language above replaces any and all prior amendments to Article III, Paragraph 3, as well as the language of Article III, Paragraph 3, contained in the original Agreement No. R591-20-015.
- 3. All of the other provisions of Agreement No. R591-20-015 dated January 21, 2021, Amendment No.1 dated September 23, 2022, and Amendment No. 2 dated June 25, 2024, shall remain in full force and effect as if fully set forth herein.

IN WITNESS WHEREOF, the above-named parties have hereunto set their hands and executed this Amendment on the date first written above.

Regional Transportation Commission

STATE OF NEVADA acting by and through

of Washoe County	its DEPARTMENT OF TRANSPORTATION
	Director
Name and Title (Print)	Approved as to Legality and Form:
	Deputy Attorney General

EXHIBIT A-2

Funding Sources	TOTAL AWARD	Federal Funds	State Funds	Local Fuel Tax Funds	State FundsSpecial Conditions Notes
BUILD GRANT (Better Utilizing Investments to Leverage Development)	\$ 23,000,000	\$ 23,000,000		\$ 5,750,000	Reference Grant Agreement and Amendment No.1; Funds will be used for construction; Match ration 80/20
STBG-WA (Surface Transportation Block Grant)	\$ 17,034,115	\$ 17,034,115	\$ 473,684	\$ 422,848	Reference Grant Agreement and Amendment No.1 Match ration 95/5
HIP-WA (Highway Infrastructure Program)	\$ 3,965,885	\$ 3,965,885		\$ 208,731	Reference Grant Agreement and Amendment No.1 Match ratio 95/5
State Highway Funds (NDOT)	\$ 12,880,309		\$ 12,406,625		Reference Grant Agreement and Amendment No.1
Local Fuel Tax & RRIF Funds (RTC Washoe)	\$ 12,154,110			\$ 5,772,531	Reference Grant Agreement and Amendment No.1
TOTAL	\$ 69,034,419	\$ 44,000,000	\$ 12,880,309	\$ 12,154,110	

Meeting Date: 2/21/2025 Agenda Item: 4.3.4

To: Regional Transportation Commission

From: Garrett Rodgers, Project Manager

SUBJECT: Sparks Boulevard Capacity Improvement Project NDOT LPA Agreement Amendment No. 1

RECOMMENDED ACTION

Approve Amendment No. 1 to the Local Public Agency Agreement with the Nevada Department of Transportation for the use and reimbursement of federal funds on the Sparks Boulevard Capacity Improvement Project.

BACKGROUND AND DISCUSSION

This item is connected to the NDOT Interlocal Cooperative Agreement Amendment No. 3 for the Pyramid Highway/US 395 Connection Phase 1 Project, which is also on this agenda.

The Sparks Boulevard Capacity Improvement Project (Project) will enhance safety, expand roadway capacity, and improve bicycle and pedestrian infrastructure by widening Sparks Boulevard to three lanes in each direction between the I-80 westbound off-ramps and Baring Boulevard.

As a sub-recipient of federal transportation funds through the Nevada Department of Transportation (NDOT), the RTC is seeking approval of Local Public Agency (LPA) Agreement Amendment No. 1. This amendment will obligate up to \$62,700,000 in federal Surface Transportation Block Grant (STBG) funding for project construction, including NDOT construction engineering costs and RTC construction management cost. It also updates the agreement's termination date, revises the estimated project cost, and identifies available funding sources.

The total construction cost is estimated at \$66,000,000. The RTC is responsible for a 5% match of the federal funds, not to exceed \$3,300,000, and for covering all costs beyond the obligated federal funds. The RTC acknowledges that NDOT is not responsible for any excess costs. NDOT will assist in project completion and reimburse the RTC according to the terms outlined in the agreement.

Construction is expected to begin this summer and continue through 2026.

This item supports the FY2025 RTC Goal, "Begin Project Construction: Sparks Boulevard Capacity Improvement".

FISCAL IMPACT

The project is funded using Federal and Local Fuel Tax Funds. Approval of the LPA Amendment amendment would obligate \$9,100,000 in Federal STBG-Flex Funds and \$53,600,000 in Federal STBG-WA Funds and a five percent (5%) RTC Fuel Tax match in the amount of \$3,300,000. Total project funding is \$66,000,000. The RTC is responsible for one-hundred percent (100%) of all costs exceeding the obligated project funding. Funding for this item is included in the FY2025 budget and will be included in FY2026 and FY2027 budgets.

PREVIOUS BOARD ACTION

There has been no previous board action taken on this amendment.

Amendment No. 1 to COOPERATIVE (LOCAL PUBLIC AGENCY) Agreement No. PR205-22-063

This Amendment is made and entered into on , between the State of Nevada, acting by and through its Department of Transportation, hereinafter referred to as the "DEPARTMENT", and Regional Transportation Commission of Washoe County, 1105 Terminal Way, Reno, NV 89502, hereinafter referred to as the "RTC."

WITNESSETH:

WHEREAS, on June 7, 2022, the parties entered into Agreement No. PR205-22-063 to construct the Sparks Boulevard Widening Project; and

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

WHEREAS, the termination date must be amended due to additional time anticipated for contract construction and closeout; and

WHEREAS, the amount to be paid to the RTC must be increased by Fifty-Seven Million Seven Hundred Thousand and No/100 Dollars (\$57,700,000.00) due to additional federal funding being awarded to the project; and

WHEREAS, the parties hereto desire to make certain amendments to Agreement No. PR205-22-063.

NOW, THEREFORE, the parties agree as follows:

- **A**. Article I, Paragraph 3, is amended by deleting it in its entirety and inserting in its place:
 - "To obligate Federal STBG funding for the PROJECT in a maximum amount of Sixty-Two Million Seven Hundred Thousand and No/100 Dollars (\$62,700,000.00)."
- **B**. Article II, Paragraph 5, is amended by deleting it in its entirety and inserting in its place:
 - "To provide the design, NEPA, Right-of-Way services, and Right-of-Way acquisition for the PROJECT at no cost to the PROJECT."
- **C**. Article II, Paragraph 21, is amended by deleting it in its entirety and inserting in its place:
 - "To be responsible for the five percent (5%) match of Federal funds in an amount not to exceed Three Million Three Hundred Thousand and No/100 Dollars (\$3,300,000.00) and for one hundred percent (100%) of all costs exceeding the obligated Federal funds subject to the RTC's budgeted appropriations and the allocation of sufficient funds by the governing body of the RTC. The RTC agrees the DEPARTMENT and the State of Nevada are not responsible for any costs exceeding the obligated Federal funds."
- **D**. The termination date referenced in Article III, Paragraph 1, shall be changed from June 30, 2029, to June 30, 2030.
- **E**. Article III, Paragraph 5, is amended by deleting it in its entirety and inserting in its place:
 - "The following is a summary of the estimated PROJECT costs and available funds:

Total Estimated PROJECT Costs:

DEPARTMENT Construction Engineering Costs: \$ 200,000.00 RTC Construction Engineering Costs: \$ 6,500,000.00 Construction \$ 59,300,000.00

Total Estimated PROJECT Costs: \$ 66,000,000.00

Available Funding Sources:

 Federal STBG-Flex Funds:
 \$ 9,100,000.00

 Federal STBG-WA Funds:
 \$ 53,600,000.00

 RTC Match Funds:
 \$ 3,300,000.00

Total PROJECT Funding: \$ 66,000,000.00"

F. Article III, Paragraph 14, is amended by deleting it in its entirety and inserting in its place:

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

FOR DEPARTMENT: Tracy Larkin Thomason, P.E., Director

Attn: Phil Kanegsberg, P.E.

Local Public Agency Program Manager Nevada Department of Transportation

Roadway Design

1263 South Stewart Street Carson City, Nevada 89712 Phone: (775) 888-7669 Fax: (775) 888-7401

Email: pkanegsberg@dot.nv.gov

FOR RTC: Bill Thomas, AICP, Executive Director

Attn: Jeff Wilbrecht, P.E., Project Manager

Regional Transportation Commission of Washoe County

1105 Terminal Way, Suite 108

Reno. NV 89502

Phone: (775) 335-1872 Fax: (775) 348-3256

Email: jwilbrecht@rtcwashoe.com"

G. All of the other provisions of Agreement No. PR205-22-063 dated June 6, 2022, shall remain in full force and effect as if fully set forth herein.

IN WITNESS WHEREOF, the above-named parties have hereunto set their hands and

executed this Amendment on the date first written above.

Regional Transportation Commission of Washoe County	STATE OF NEVADA, acting by and through its DEPARTMENT OF TRANSPORTATION
Bill Thomas, AICP Executive Director	Director
	Approved as to Legality and Form:
	Deputy Attorney General

Meeting Date: 2/21/2025 Agenda Item: 4.3.5

To: Regional Transportation Commission

From: Dale Keller, Director of Engineering

SUBJECT: Traffic Engineering and Intelligent Transportation System (ITS) Program Qualified List

RECOMMENDED ACTION

Approve the qualified list of consultants to provide civil engineering, design, and construction management services for the Traffic Engineering Program and the Intelligent Transportation Systems (ITS) Program.

BACKGROUND AND DISCUSSION

RTC implemented a comprehensive qualifications-based procurement of certain architectural and engineering services specified under state law N.R.S. 625.530 and N.R.S. 332.115(1)(b). RTC Management Policy P-13 and related procedures allowed staff to procure such professional services in connection with the following programs and projects:

- 1. Traffic Engineering Program. Traffic engineering design and construction management services for traffic signals, lighting, signing, pavement marking, corridor studies, and other traffic engineering studies.
- 2. Intelligent Transportation Systems Engineering (ITS) Program. Traffic engineering design and construction management services for systems engineering, ITS software development, strategic planning including ITS communication and device design.

A selection committee consisting of RTC staff reviewed, evaluated, and scored the statements of qualifications received. Pursuant to the terms of the procurement, the RTC selected the eight (8) consultants with the highest scores for the qualified list.

Pending approval of this agenda item, the RTC will use the qualified list to engage consultants for future Traffic Engineering and ITS projects. The list is unranked and the RTC may assign multiple projects to the same firm when deemed prudent due to the size, nature, or interrelatedness of the projects and the consultant's demonstrated qualifications and ability to execute them.

RTC reserves the right not to award any contracts to any firm if it is not in the best interest of the RTC. The list will be effective for a period of three years.

FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

3/18/2022 Approved the qualified list of consultants to provide civil engineering, design, and construction management services for the Traffic Engineering Program and the Intelligent Transportation Systems (ITS) Program.

Qualified List for the Traffic Engineering and ITS Program

Pre-Qualified List
AtkinsRealis
Avenue Consultants
C.A. Group, Inc.
Headway Transportation
Horrocks Engineers
Kimley-Horn and Associates
Parametrix
Wood Rodgers

^{***} List is alphabetical and not sorted by rank or scoring***

Meeting Date: 2/21/2025 Agenda Item: 4.3.6

To: Regional Transportation Commission

From: Dale Keller, Director of Engineering

SUBJECT: McCarran Boulevard Safety and Operational Improvements Project Update

RECOMMENDED ACTION

Acknowledge receipt of an update regarding the McCarran Boulevard Safety and Operational Improvements Project.

BACKGROUND AND DISCUSSION

The RTC, in partnership with the City of Reno, City of Sparks, and Nevada DOT, has undertaken extensive transportation planning and preliminary engineering efforts to address capacity, safety, and multimodal challenges along McCarran Boulevard (SR-659).

Adopted in February 2023, the McCarran Boulevard Corridor Study provided a comprehensive analysis of transportation needs and opportunities along the 23-mile ring road encircling the Reno-Sparks urban area. Prioritized improvements have been incorporated into the 2025-2034 Regional Transportation Plan (RTP) and the short-term (five-year) Regional Transportation Improvement Program (RTIP) for preliminary design funding.

Through Interlocal Cooperative Agreements (ICAs) established in 2023, the RTC received authority to design and construct improvements identified in the study, including segments between Plumb Lane and South Virginia Street, and between El Rancho Drive and Rock Boulevard.

Currently, the RTC is developing a conceptual preliminary engineering layout for proposed improvements, such as adding one lane in each direction between Plumas Street and Lakeside Drive, intersection enhancements at Lakeside Drive, and potential multimodal upgrades.

Project advancement will depend on construction funding and NDOT approval, as NDOT owns, operates, and maintains McCarran Boulevard.

FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

2/16/2024 Approved a contract with Wood Rogers, Inc., for design and engineering during construction services related to the McCarran Boulevard Safety and Operational Improvements Project, in an amount not-to-exceed \$2,970,000.

Meeting Date: 2/21/2025 Agenda Item: 4.3.7

To: Regional Transportation Commission

From: Jessica Dover, Project Manager

SUBJECT: Veterans Roundabout Modifications Project Amendment No. 2

RECOMMENDED ACTION

Approve Amendment No. 2 to the contract with Kimley-Horn and Associates, Inc., for additional engineering during construction services needed in connection with the Veterans Roundabout Modifications Project, in the amount of \$351,135, for a new total not-to-exceed amount of \$680,500.

BACKGROUND AND DISCUSSION

The RTC and Kimley-Horn and Associates, Inc., (KHA) entered into a Professional Services Agreement (PSA) dated May 19, 2023, to perform engineering design and engineering during construction services in connection with the Veterans Roundabout Modifications Project (Project). On January 31, 2025, the parties executed no cost Amendment No. 1 to support additional design elements resulting from the Veterans Roundabout Analysis Memorandum (Countermeasure No. 2) as well as to accommodate additional coordination required between RTC and the Nevada Department of Transportation (NDOT). Budget allocated to the engineering construction services task was reallocated to final design to complete the additional work. The Project realized a savings of approximately \$75,000 in permitting costs; this savings was reallocated to final design as part of Amendment No. 1. Amendment No. 2 to the agreement provides an additional \$351,135 to KHA to support additional materials testing and inspection services associated with the added improvements and extended construction duration.

All other provisions of the PSA as previously amended shall remain in full force and effect. Construction is expected to begin this summer.

FISCAL IMPACT

Fuel tax appropriations for this item are included in the FY 2025 Budget.

PREVIOUS BOARD ACTION

5/19/2023 Apr

Approved a contract with Kimley-Horn and Associates, Inc., for design services and optional engineering during construction for the Veterans Roundabout Modifications project located at the intersection of Geiger Grade Road and Veterans Parkway, in an amount not-to-exceed \$329,365.

AMENDMENT NO. 2

The Regional Transportation Commission of Washoe County ("RTC") and Kimley-Horn and
Associates, Inc. ("Consultant") entered into an agreement dated May 19, 2023, as previously
amended by Amendment No. 1 dated January 31, 2025 (the "Agreement"). This Amendment No
2 is dated and effective as of .

RECITALS

WHEREAS, RTC and CONSULTANT entered into the Agreement in order for CONSULTANT to provide design and optional engineering during construction services in connection with the Veterans Roundabout Modifications Project (the "Project");

WHEREAS, the term of the Agreement, as amended, is through December 31, 2025;

WHEREAS, the CONSULTANT is providing design and engineering services to construct: an eastbound to southbound Geiger Grade Road right turn bypass lane adjacent to the existing roundabout; and, an additional westbound Geiger Grade Road to northbound S. Virginia Street right-turn lane, in conjunction with striping, signage, concrete, lighting and associated appurtenances as may be determined necessary to modify the roundabout at Geiger Grade Road and Veterans Parkway to improve operations of the intersection;

WHEREAS, on January 31, 2025, the parties entered into Amendment No. 1 to the Agreement to authorize use of, and reallocate fee amounts between: the existing Engineering During Construction (EDC), Design Contingency and the unused balance of Additional Optional Services task lines, to final design and engineering services to accommodate design scope changes not included in, but resulting from, analysis included in the original scope of the Agreement;

WHEREAS, the parties have determined that there is a need to amend the Agreement in order to provide an additional \$351,135 of budget for EDC services, required to construct the additional improvements;

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 3.2 shall be replaced in its entirety with the following:

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

Design Services	\$300,555.00
Optional Design Services	\$2,680.00
Design Contingency	\$0.00
EDC	\$347,265.00
Optional EDC	\$0.00
EDC Contingency	\$30,000.00
Total Not-to-Exceed Amount	\$680,500.00

- 2. Exhibit A Scope of Services of the Agreement is replaced in its entirety with the version of Exhibit A attached hereto.
- 3. Exhibit B Compensation of the Agreement is replaced in its entirety with the version of Exhibit B attached hereto.

Vice President

4. All other provisions of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have made and executed this amendment.

REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY

Ву:	
Bill Thomas, AICP, Executive Director	
KIMLEY-HORN AND ASSOCIATES, INC.	
By:	
Brian Smalkoski AICP P.F. PTOF	_

EXHIBIT A-1 through A-2

EXHIBIT A-1: SCOPE OF SERVICES

EXHIBIT A-2: SCHEDULE OF SERVICES

EXHIBIT A-1

SCOPE OF SERVICES FOR THE VETERANS ROUNDABOUT MODIFICATIONS PROJECT

This scope of services includes traffic analysis, existing roundabout analysis, permitting, design, and construction support services for the Veterans Roundabout Modifications Project. Additional analysis and schematic design of the westbound Geiger Grade Road to northbound Virginia Street intersection is also included.

The project is in the City of Reno and all anticipated review/improvements lie within NDOT jurisdiction and right-of-way. Procurement and construction will be provided by the selected contractor after the bid has been awarded for the bidding documents provided by Kimley-Horn and Associates (CONSULTANT).

The extent of planning scope and design scope services includes the following objectives at the following locations:

1. Veterans Roundabout –

- a. Traffic analysis including analysis of anticipated growth and the addition of a northbound leg from roundabout to Damonte Ranch Parkway.
- b. Roundabout operations analysis and recommended improvements.
- c. Design of roundabout modifications that are anticipated to consist of:
 - 1. An eastbound Geiger Grade Road to southbound Geiger Grade Road hot mix asphalt right turn bypass lane adjacent to existing roundabout with curb line and median.
 - 2. New sidewalk and grading outside of right turn bypass lane.
 - 3. Minor striping and signage modifications to existing roundabout limits.

Assumptions:

- a. Only striping/signage modifications are anticipated for the existing roundabout limits that include the PCCP, curb lines, median islands, and central island.
 - i. Addendum 1 removes this assumption.
- b. The right turn bypass lane will be hot mix asphalt and no modifications to existing *PCCP* roundabout area are planned.
 - i. Addendum 1 modifies this assumption to include improvements to the existing PCCP roundabout area.
- c. No retaining walls or structural services are included in this scope.
- d. Minor utility revisions are anticipated to consist of:
 - i. Existing storm drainage will remain in place and only minor storm drain revisions are anticipated to accommodate drainage from the right turn bypass lane which will connect into the existing storm drain system.
 - ii. Minor lighting revisions will be made to accommodate the right turn bypass lane.
 - iii. No utility relocations are anticipated.

- e. Only minor landscape revisions are assumed to accommodate relocation/replacement of landscape features disturbed by the project.
- f. No permitting requirements are anticipated with the exception of those specifically identified in these services.
- g. No encroachment outside of the public right of way is anticipated. No permanent easements or temporary construction easements are included.
- h. No services are included that are not specifically identified in these services.

2. Geiger Grade Road and Virginia Street –

- a. Traffic analysis including analysis of anticipated growth and the addition of a second lane connecting westbound Geiger Grade Road to northbound Virginia Street extending to I-580.
- a. Schematic design (15%) and opinion of probable construction cost for addition of second lane connecting westbound Geiger Grade Road to northbound Virginia Street extending to I-580.

The following scope has been developed for these services:

A. Preliminary and General Items:

A.1.Kickoff Meeting/Project Introduction meeting with RTC, NDOT, and City of Reno The CONSULTANT will conduct one agency stakeholder Project Kick-Off Meeting with RTC, NDOT, and City of Reno to inform these agencies of the project and confirm needs and available opportunities to complete project planning and design objectives. The RTC PM will determine appropriate contact personnel at each agency for coordination. An agenda and a meeting summary will be developed and provided for each meeting.

A.2. Public Outreach Support

The CONSULTANT will support the RTC with public outreach by providing up to four exhibits/renderings for use during public engagement activities performed by RTC.

A.3. Project Management

The CONSULTANT will provide general project management services involving regular coordination with the RTC Project Manager (PM), monthly invoicing, and regular work planning to deliver the services identified in this scope. The CONSULTANT has budgeted 36 hours of project manager time (average 2 hours per month) and 18 hours of project accountant time (average one hour per month) for this task based on an assumed up to 18-month project duration.

A.4. Amendment 1

Continuing 2 hrs (Senior Professional I) and 1 hrs (Support Staff) per month for 5 additional months associated with revised project scope planning/design services. Construction administration PM services are incorporated into Task F.

B. Data Collection and Analysis

B.1. Topographic and Boundary Survey

Using a subconsultant, the CONSULTANT will obtain topographic survey for the project area which includes the roundabout and the Geiger Grade/Virginia Street intersection (approximately 25 acres). The topographic survey will include road cross-sections, median islands, existing striping, edge of pavement, curb/gutter, surface utility information including invert and rim elevations of sanitary and storm sewer manholes and catch basins and will be suitable for design services identified in this scope of work. Property corners and right of way monuments will be located to establish right of way and adjacent property limits.

B.2. Geotechnical Evaluation

Using a subconsultant, CONSULTANT will conduct a geotechnical investigation of the roundabout right turn bypass lane project area. The geotechnical investigation will determine the soil conditions and make grading and pavement recommendations for the project.

Sampling will be performed to classify the encountered soils in accordance with the Unified Soil Classification System (USCS) and conduct laboratory testing on the samples collected.

Using a subconsultant, CONSULTANT will perform engineering analysis and calculations and develop a final Geotechnical Investigation Report that discusses the geologic settings, seismic considerations, exploration and site condition, field and laboratory test data, and conclusions and recommendations.

B.3. Traffic Analysis and Memorandum

The CONSULTANT will coordinate with the RTC to have a model run completed of the Regional Travel Demand Model with the extension of the northbound leg of Veterans Roundabout connecting to the existing southern limit of Damonte Ranch Parkway. The RTC will provide the CONSULTANT with updated TDM information necessary to reassign projected future volumes for the Veterans Roundabout.

Data Collection. The CONSULTANT will utilize traffic counts and turning movement counts provided by RTC with RTC provided adjustment factors.

Using the traffic counts and turning movement counts provided by RTC, the CONSULTANT will analyze traffic levels (existing, background, and background plus project) for the Veterans Roundabout. This effort will utilize Highway Capacity Manual, 6th Edition techniques for determining the LOS at the Veterans Roundabout. The CONSULTANT will analyze the following scenarios:

- 1. Existing Conditions
- 2. Existing Conditions (plus right-turn lane)
- 3. Future (2043) Background Conditions
- 4. Future (2043) Background Conditions (plus right-turn lane)
- 5. Future (2043) Background Conditions with Damonte Ranch Extension TDM Update
- 6. Future (2043) Background Conditions with Damonte Ranch Extension TDM Update (plus right-turn lane)

The CONSULTANT will prepare a Level of Service (LOS) analysis per the methodology defined by the Highway Capacity Manual, 6th Edition (HCM) using traffic analysis software Sidra for the Veterans Roundabout. A table will be prepared summarizing the LOS analysis.

Technical Memorandum. The CONSULTANT will prepare a Draft Technical Memorandum summarizing the data collection, analysis, lane configuration recommendations, and findings. The RTC will review the Draft Technical Memorandum and provide one round of comments. The CONSULTANT will prepare a comment/resolution form and perform one revision of the Technical Memorandum. The CONSULTANT will provide an electronic copy of the Final Technical Memorandum in PDF format to the RTC.

B.4. Roundabout Analysis, Memorandum, and Geometric Design (30%) and Opinion of Probable Construction Cost (OPC)

Using the data collected and obtained in 2.3 and review of existing site conditions, the CONSULTANT will complete geometric and operational evaluations for the Veterans Roundabout intersection and prepare a memorandum documenting:

- Observations related to the intersection's existing signing, striping, and geometric features.
- Recommended remedial measures for modifications to existing signing/striping and geometric configurations that is anticipated to include a right turn bypass lane adjacent to the roundabout from eastbound to southbound Geiger Grade Road.

Roundabout Memorandum: The CONSULTANT will prepare a Draft Technical Memorandum summarizing the analysis and findings. The RTC will review the Draft Technical Memorandum and provide written comments. The CONSULTANT will prepare a comment/resolution form and perform one revision of the Technical Memorandum. The CONSULTANT will provide an electronic copy of the Final Technical Memorandum in PDF format to the RTC.

30% Plans and Cost Estimate: CONSULTANT will prepare 30% design plans and an opinion of probable construction costs suitable for RTC, utility agency, and local government review. The 30% plans will contain proposed horizontal site layout design and no grading/drainage design will be performed with this task.

RTC Review Meeting: CONSULTANT will attend a preliminary design review meeting with the RTC and stakeholders to review preliminary design documents and comments received.

B.5. Mt. Rose Highway to Virginia Street Lane Addition Schematic Design and OPC CONSULTANT will prepare 15% level schematic design plans and an opinion of probable construction costs for the addition of a second lane from westbound Geiger Grade Road to northbound Virginia Street. The schematic plans will contain approximate proposed horizontal site layout utilizing topographic survey and publicly available aerial imagery.

CONSULTANT will submit draft schematic design plans and an OPC to the RTC for review.

CONSULTANT will attend a review meeting with the RTC to review comments received and develop final schematic level plans and OPC for the additional lane.

B.6. Utility Coordination and Mapping

CONSULTANT will investigate and locate identified subsurface utilities within the design project area in accordance with the American Society of Civil Engineers standard guidelines for the Collection and Depiction of Existing Subsurface Utility Data, Quality Level C. CONSULTANT will coordinate with Utility Owners to remove any lids of surface features and document depth of utility or invert of pipe.

B.7. Amendment 1

- B.7.1. Develop WB Geiger Grade Rd to NB S Virginia St lane addition from previously scoped 15% schematic exhibit to 30% plans with channeling island replacement, signal modification, and striping revisions.
- B.7.2. Incorporating Countermeasure 2 items from Roundabout Study:
 - B.7.2.1. Median geometric changes (x3 medians within the roundabout)
 - B.7.2.2. Truck apron geometric change
 - B.7.2.3. PCCP replacement
 - B.7.2.4. Complete striping changes for entire project area including Virginia Street
 - B.7.2.5. Addition of RRFBs
 - B.7.2.6. Slurry and/or mill and overlay to revise striping within revised project limits
- B.7.3. Addition of initial RTC submittal, response matrix, and revisions before scoped 30% submittal.

C. Roundabout Modifications

C.1.60% Plans, Technical Specifications, and OPC

CONSULTANT will address comments received from the 30% design documents and progress the preliminary plans and a preliminary opinion of probable construction costs to a 60% level suitable for RTC, utility agency, and local government review. 60% plans will include vertical grading and drainage design. CONSULTANT will prepare draft technical specifications utilizing the RTC's template documents.

RTC Review Meeting: CONSULTANT will attend a 60% design review meeting with the RTC and stakeholders to review preliminary design documents and comments received.

C.2.90% Plans, Technical Specifications, and OPC

CONSULTANT will address comments received from the 60% design documents and progress the plans, technical specifications, and opinion of probable construction costs to a 90% level. The 90% plans will contain sufficient design information to initiate the permitting task. CONSULTANT will prepare draft contract documents utilizing RTC template

documents.

RTC Review Meeting: CONSULTANT will attend a 90% design review meeting with the RTC and stakeholders to review design documents and comments received. Stakeholders will be notified that this is the final review deliverable prior to the Issued for Bids deliverable.

C.3. Issued for Bids Plans, Contract Documents, and OPC

CONSULTANT will address comments received from the 90% project documents and prepare issued for bids (IFB) contract documents. The IFB plans and technical specifications will be stamped and signed by a licensed Nevada Professional Engineer.

The final construction plans will be on 22" x 34" size sheets and will show all elements of the project construction, including plan view, right-of-way lines, cross-sections and construction/slope limits. The final plan set is anticipated to consist of up to 17 sheets:

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Cover Sheet (1 sheet)

Notes, Legend, and Abbreviations Sheet (1 sheet)

Demolition Plan (1 sheet, 1" = 60' scale)

Civil Plan (7 sheets):

Plan and Profile (3 sheets, 1" = 20' scale)

Storm Drainage Sheets (3 sheets, 1" = 20' scale)

Striping and Signage Plan (1 sheet, 1" = 60' scale)

Lighting Revision Plan (1 sheet)

Landscape Architecture Plan (1 sheet)

Details (5 sheets)
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The Contract Documents and Technical Specifications will reference the latest edition of Standard Specifications for Public Works Construction (Orange Book) and/or NDOT Standard Specifications for Road and Bridge Construction (Silver 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. Plans and specifications will be submitted electronically to the RTC, NDOT, City of Reno, affected utility agencies, and other affected parties for review at the 30%, 60%, and 90% stages of completion.

C.4. Amendment 1

Additional 60% Design Services

- C.4.1. Continuation of plan development based on Countermeasure 2 items
- C.4.2. Storm drain revisions with new median geometry
- C.4.3. Grading for PCCP, truck apron, median replacement, channeling islands
- C.4.4. PCCP jointing plan
- C.4.5. Coordination with NV Energy and NDOT on RRFBs and intersection lighting
- C.4.6. Cost estimate for additional items from Countermeasure 2
- C.4.7. Specifications for additional items from Countermeasure 2

C.4.8. Addition of initial RTC submittal, response matrix, and revisions before scoped 60% submittal

Additional 90% Design Services

- C.4.9. Continuation of plan development based on additional items from Countermeasure 2
- C.4.10. Drainage calculations and draft memo for storm drain revisions for additional items from Countermeasure 2
- C.4.11.Lighting/electrical coordination with NDOT and NV Energy. Electrical design to convert existing flat rate system to NDOT owned/metered system
- C.4.12. Continuation of cost estimate based for additional items from Countermeasure 2
- C.4.13. Continuation of specifications based for additional items from Countermeasure 2
- C.4.14. Additional Level of Service calculation to be provided to RTC via email for 2023, 2033, and 2043 years using RTC provided turning movements and growth factors from separate project.

Additional 100% Design Services

C.4.15. Additional deliverable as required per the NDOT/RTC Interlocal Cooperative Agreement (ICA)

Additional IFB Design Services

- C.4.16. Continuation of plan development based for additional items from Countermeasure 2
- C.4.17. Continuation of cost estimate based for additional items from Countermeasure 2
- C.4.18. Continuation of specifications based for additional items from Countermeasure 2
- C.4.19. Final memo for storm drain revisions for additional items from Countermeasure 2

D. Permitting

D.1.NDOT Permit

CONSULTANT will prepare and process an encroachment permit package through the NDOT District 2. One permit will be processed as part of the scope of this work for the roundabout modifications.

The CONSULTANT will submit the completed application and submit the color-coded plans at the 60% submittal. One set of review comments will be collected from NDOT and processed by the CONSULTANT. The final submittal will be at the 90% submittal. The City of Reno will be the applicant on the permit and will provide all applicant fees, signatures, and submittal documentation needed by the CONSULTANT to process the permit. Permit Terms and Conditions will be incorporated into the project specifications.

D.2. Amendment #1

Preliminary email coordination with NDEP and USACE was completed as part of this task.

Per NDOT's direction, a Standard Occupancy Permit will not be required to complete improvements within the NDOT Right of Way for this Project; and will instead be completed through administration of the ICA. This created a budget savings this Task and remaining balance was reallocated to additional design services described per Tasks A.4 and B.7, above.

E. Bidding Services for Roundabout Modifications

E.1. Bidding Services

CONSULTANT will be available during the bidding process to answer technical questions and will hold the pre-bid meeting. All questions and responses will be documented and provided to RTC. CONSULTANT will prepare and provide PDF addenda, if required. All questions regarding legal aspects of the contract documents will be referred directly to RTC. CONSULTANT will prepare and provide a PDF summary of the pre-bid meeting, as directed by the RTC.

CONSULTANT will respond to reasonable and appropriate bidder requests for information and issue necessary clarifications and interpretations of the Contract Documents to RTC as appropriate to the orderly completion of bidding. Preparation and issuance of up to one addendum is included with this task. Any orders authorizing variations from the Contract Documents will be made by RTC.

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.

F. Engineering During Construction

F.1. Construction Administration

CONSULTANT to provide construction administration services as follows:

- Preconstruction meeting: CONSULTANT will coordinate and lead a preconstruction meeting prior to commencement of work and will prepare and issue via PDF an agenda and meeting summary from the meeting. Up to twelve meetings have been assumed for this task.
- Construction management: CONSULTANT will provide construction management services that include regular coordination with the RTC project manager, the City of Reno, NDOT, affected utility agencies, and the Contractor. CONSULTANT will review and provide recommendations on contractor's construction schedule, work progress, and any required change orders. CONSULTANT will review and provide recommendations on contractor's traffic control plans.
- Submittal review: CONSULTANT will review and approve or take other appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the information given in the Contract

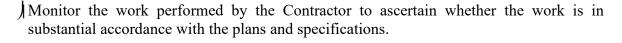
Documents. Such review and approvals or other action will not extend to means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction or to related safety precautions and programs.

- Weekly construction meetings: CONSULTANT will coordinate and lead weekly (or less often, as appropriate) construction meetings at the project site. Consultant will prepare and issue via PDF an agenda and meeting summary for each weekly meeting. Up to twelve meetings have been assumed for this task.
- Requests for Information (RFI): CONSULTANT will respond to reasonable and appropriate Contractor requests for information and issue necessary clarifications and interpretations of the Contract Documents to RTC as appropriate to the orderly completion of Contractor's work. Preparation and issuance of up to two addenda are included with this task. Any orders authorizing variations from the Contract Documents will be made by RTC.
- Pay Applications: Based on its observations and on review of applications for payment and accompanying supporting documentation, CONSULTANT will determine the amounts that CONSULTANT recommends Contractor be paid each monthly pay period. Such recommendations of payment will be in writing and will constitute CONSULTANT's representation to RTC, based on such observations and review, that, to the best of CONSULTANT's knowledge, information and belief, Contractor's work has progressed to the point indicated and that such work-in-progress is generally in accordance with the Contract Documents subject to any qualifications stated in the recommendation. In the case of unit price work, CONSULTANT's recommendations of payment will include determinations of quantities and classifications of Contractor's work, based on observations and measurements of quantities provided with pay requests.
- Substantial Completion Walk: CONSULTANT will, promptly after notice from Contractor that it considers the entire Work ready for its intended use, in company with RTC and Contractor, conduct a site visit to determine if the Work is substantially complete. Work will be considered substantially complete following satisfactory completion of all items with the exception of those identified on a final punch list. If after considering any objections of RTC, CONSULTANT considers the Work substantially complete, CONSULTANT will notify RTC and Contractor.
- Punch List Review and Project Closeout: CONSULTANT will conduct a final site visit to determine if the completed Work of Contractor is generally in accordance with the Contract Documents and the final punch list so that CONSULTANT may recommend, in writing, final payment to Contractor. Accompanying the recommendation for final payment, CONSULTANT shall also provide a notice that the Work is generally in accordance with the Contract Documents to the best of CONSULTANT's knowledge, information, and belief based on the extent of its services and based upon information provided to CONSULTANT upon which it is entitled to rely.

F.2. Inspection

Using a subconsultant, CONSULTANT will perform full time inspection services as described in the attached "Inspection and Materials Testing Services Proposal" prepared by CME and dated January 15, 2025. Qualified field personnel will be provided to observe the construction work performed by the Contractor and document if that work is in substantial compliance with the plans and specifications. Field personnel will prepare daily inspection reports documenting the work activities observed.

60 working days are assumed for the construction period and an average of eight hours per working day have been assumed for inspection services. CONSULTANT has assumed up to 480 hours of onsite inspection services for this task. An additional 120 hours has been included in this task for potential overtime needs. The following tasks summarize the major elements of Inspection anticipated with this project.



Assist in problem resolution with the RTC, contractor personnel, utility agencies, the public and others.

Prepare daily inspection reports, submitted weekly to RTC. The daily inspection will contain materials delivered to the site, excavation and earthwork, preparation of sub grades, placement of aggregate base material, asphaltic concrete, and placement of portland cement concrete.

Provide verification of the distribution of public relation notices required to be delivered by the Contractor.

Provide materials quantity reports and assist in reviewing and analyzing contractor's monthly progress payments.

Assist in preparation of the Punch List.

Maintain a field redline set of drawings to incorporate into record drawings.

F.3. Construction Survey

Using a subconsultant, CONSULTANT will provide construction surveying services as described in the attached proposal prepared by MAPCA and dated January 9, 2025. for the proposed improvements as follows:

Recover survey control

Delineate saw-cut lines for pavement demolition
Offset stakes to face of curb, sidewalk, points of Offset stakes to face of curb, sidewalk, points of curvature, and grade breaks with cut/fill to finished grade elevation.

F.4. Material Testing

Using a subconsultant, CONSULTANT will perform materials testing services as described in

the attached "Inspection and Materials Testing Services Proposal" prepared by CME and dated January 15, 2025. The following tasks summarize the major elements of testing anticipated with this project.

Provide material testing for compliance with the project specifications testing requirements. Materials/work to be tested is anticipated to include utility trenching, earthwork, aggregate base, Portland cement concrete (PCC), asphalt concrete, and Portland Cement Concrete Pavement. Test reports, accompanied with CONSULTANT's recommendation regarding acceptance/mitigation of materials, will be submitted to the RTC.

Subconsultant will perform up to nine site visits for compaction tests on utility trenches.

- Subconsultant will perform up to twelve site visits for compaction test on subgrade and aggregate base.
- Subconsultant will perform up to thirty-one site visits for testing associated with PCC and PCCP.
- Subconsultant will perform up to four site visits for testing associated with asphalt pavement and up to three additional site visits for asphalt coring.

F.5. As-Built Drawings and Project Closeout

CONSULTANT will provide as-built drawings for the completed project. A single file PDF format will be provided to RTC for its files and distribution. The as-built drawings will include addenda issued during construction as well as redline revisions to the plans provided to CONSULTANT by the CONTRACTOR and the CONSULTANT'S onsite inspector.

CONSULTANT will prepare a project closeout package with signed/sealed cover sheet/summary letter for the RTC that includes as-built drawings along with compiled testing and inspection reports, meeting summaries, substantial completion recommendation and final acceptance and relief of maintenance recommendation.

F.6. Amendment #1

Budget originally allocated to Engineering During Construction (EDC) Services was reallocated to Tasks B.7 and C.4 during the Final Design phase of the Project to accommodate required additional design services.

Amendment No. 2 Augments Task F to provide a comprehensive scope of additional construction engineering services, required to facilitate construction of additional improvements developed during the preliminary and final design tasks.

F.7. Contingency

This is a contingency for miscellaneous increases within the scope of this contract. CONSULTANT shall provide a written request 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.

G. Additional Optional Services

G.1.Traffic Counts Data Collection

If the traffic counts that are provided by RTC are not suitable for the traffic analysis task, the CONSULTANT will utilize video cameras to collect 24-hour turning movement counts for the Veterans Roundabout. Based on the 24-hour traffic counts, the peak AM and PM peak hour periods will be determined. Turning movement counts will be summarized for the AM and PM peak hours and will include vehicle. Traffic counts will not be collected on holiday, weekends, or during abnormal weather conditions.

G.2.Permit Analysis and Memorandum

Based on a preliminary desktop review, it is understood that the proposed project has the potential to impact both State and Federal jurisdictional resources. As such, the CONSULTANT will perform a desktop-level analysis of potential jurisdictional resources and prepare a jurisdictional resources memorandum.

The CONSULTANT will conduct a review of relevant information to support the identification of jurisdictional resources within the project site. The literature review helps to preliminarily identify areas that may fall under the jurisdiction of the regulatory agencies. Sources reviewed are anticipated to include topographic maps, soil surveys, historic/current aerial photographs, flood maps, hydrology/climate information, and watershed data. Once the literature review is complete, the CONSULTANT will perform a desktop-level analysis of potential jurisdictional resources under the authority of the U.S. Army Corps of Engineers and Nevada Division of Environmental Protection located within the project site.

A jurisdictional resources memorandum will be prepared summarizing the literature review information and results of the desktop analysis of potential jurisdictional resources located within the project site. The memorandum will include a regulatory approval process of the anticipated regulatory approvals required for the project and recommendations. This task includes GIS analysis to support the preparation of a jurisdictional impact figure.

Drainage and/or wetland features will be overlaid on an aerial photograph and the extent (acreage and linear feet) of each agency's jurisdiction will be identified and temporary and permanent impacts will be calculated.

The CONSULTANT will submit an electronic copy of the Permit Summary Memorandum to the Client.

G.3.401/404 Permits

If an Army Corps of Engineers permit is determined to be required, the CONSULTANT will prepare a Pre-Construction Notification Package (permit application) for a Corps permit to satisfy the requirements of Section 404 of the Clean Water Act. Based on a review of the conceptual site plan prepared for the project, it is anticipated project related impacts would be

less than ½ acre. Therefore, it is assumed under this task that authorization to proceed from the Corps can be achieved via Nationwide Permit (NWP) 14 – Linear Transportation Projects. The submittal package will include the following items:

- Pre-Construction Notification Form: The most recent Corps standard form will be utilized. An attachment may be provided so that the complete project description and necessary detail is included. A detailed project description for improvements within jurisdictional areas will also be provided.
- Project Figures: Figures will illustrate key project features. Anticipated figures include: Regional Vicinity Map, Site Vicinity Map, Site Photographs, Jurisdictional Map, and Project Site Plans.
- Environmental Documentation: The environmental documentation section of the application package will include the Aquatic Resources Delineation Report, Biological Resources Report, and additional documentation, as available.

Assumptions: This task assumes two rounds of response to comments on the draft Section 404 Pre-Construction Notification package from the Client prior to acceptance as final.

Deliverables: The CONSULTANT will submit the final application package as a PDF to the Corps and to the Client for file.

NDEP SECTION 401 WATER QUALITY CERTIFICATION APPLICATION

Since the proposed project will require Section 404 authorization from the Corps, Section 401 authorization is required from the Nevada Division of Environmental Protection (NDEP). Therefore, the CONSULTANT will prepare an application package to the NDEP for coverage under the existing statewide requirements of Section 401 of the Clean Water Act. The certification package is required to ensure state water quality standards have been met. The submittal package will include:

- Section 401 Water Quality Certification Application Form: The most recent application form will be utilized. An attachment may be provided so that the complete project description and necessary detail is included. A detailed project description for improvements within jurisdictional areas will be included.
- Best Management Practices (BMP)/Water Quality Design: The project's BMPs will be described to verify that no water quality impacts will occur.
- Project Figures: Figures will illustrate key project features and help clarify written text. Anticipated figures include: Regional Vicinity Map, Site Vicinity Map, Site Photographs, Jurisdictional Map, and Project Site Plans.
- Environmental Documentation: The CONSULTANT will include copies of the Biological Resources Assessment Reports, Aquatic Resources Delineation Report, and other relevant technical documents, as available
- Certification application fee (provided by the Client).

Assumptions: This task assumes two rounds of response to comments on the draft Section 401 application package from the Client prior to acceptance as final.

Deliverables: The Consultant will submit a final application package as a PDF to the NDEP and the Client for file.

REGULATORY APPROVAL PROCESSING

The CONSULTANT will provide regulatory services to support processing of the Section 404 NWP application through the Corps, and Section 401 application through the NDEP. Processing will include correspondence or telephone calls with reviewing agency staff related to the permit applications or points of clarification, if necessary. Typically, agency comments are responded to via email and telephone; however, this task includes two rounds of formal (written submittal) response to comments per each application package.

Deliverables: One copy Approved Jurisdictional Permits & correspondences in PDF to the Client for file.

G.4.Amendment #1

Tasks G.2 and G.3 were not required as part of this Project. As a result, the remaining balance for these subtasks were reallocated to additional design services described per Task C.4, above.

H. Contingency

This is a contingency for miscellaneous increases within the scope of this contract. CONSULTANT shall provide a written request 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.

H.2.Amendment #1

The full balance of Task H was reallocated to Task C.4 to assist in augmenting the budget required to complete additional design services.

RTC Veterans Roundabout Modifications Project - with proposed countermeasure 2 improvements

Project NTP: **06/02/23**



Updated: 12/04/24

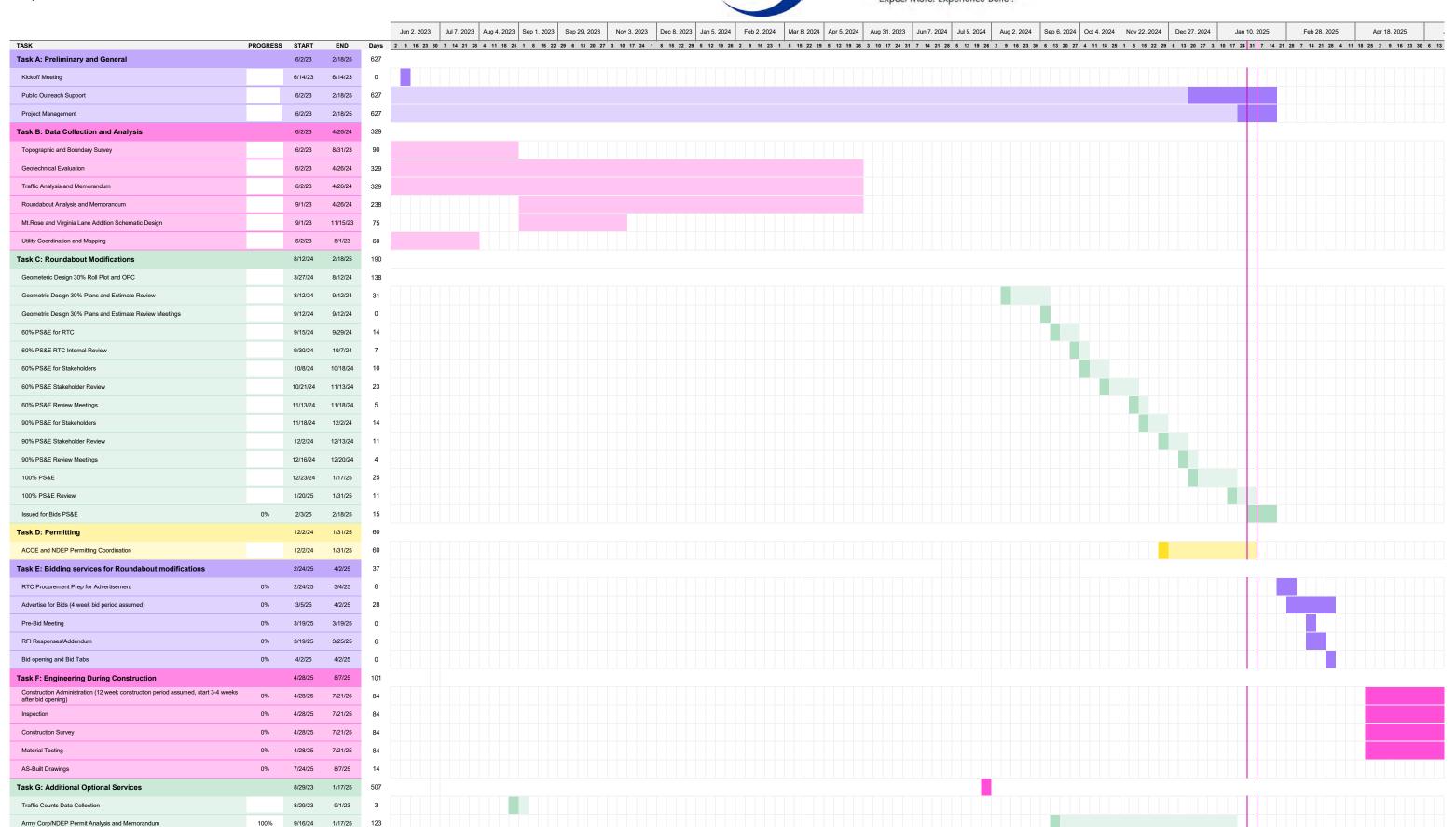


EXHIBIT B

COMPENSATION

Exhibit B - Schedule of Services AMENDMENT 2 Veterans Roundabout Modifications



TASK	DESCRIPTION	TASK TOTALS
Α	Preliminary and General Items	\$ 21,765.00
В	Data Collection and Analysis	\$ 119,280.00
С	Roundabout Modifications	\$ 153,820.00
D	Permitting	\$ 2,200.00
E	Bidding Services for Roundabout Modifications	\$ 3,490.00
	Total Design Services (Task A-E)	\$200 FFF 00
	Total Design Services (Task A-E)	\$300,555.00
F	Engineering During Construction	\$ 377,265.00
G	Additional Optional Services	\$ 2,680.00
Н	Contingency	\$ -
	Total Not-to-Exceed Amount	\$680,500.00

Contract No.: Page 1 of 1

Kimley » Horn

Exhibit B - Schedule of Services - AMENDMENT 2 Veterans Roundabout Modifications

Prepared by Kimley-Horn CNH/MSM/DG 2/6/2025 v04

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TASK	DESCRIPTION	ITS Sys. Manager/ Prof. II	Senior Prof. I	Prof.	Analyst II	Analyst I	Technical Support	Support Staff	CME Senior Project Manager	CME Assistant Project	CME Inspector	CME Inspector OT	CME Techinician	CME Technician OT	Hours Subtotal	Expenses	Subconsultant MAPCA	Expense Description	Task Amounts
		\$320	\$275	\$225	\$180	\$145	\$120	\$115	\$200	\$170	\$145	\$189	\$125	\$163					
Α	Preliminary and General Items			, .															
	Kickoff Meeting/Project Introduction Meeting with RTC, NDOT, and City of Reno	2	4	2		6									14				\$3,060.00
	Public Outreach Support	1	2			8		12							23				\$3,410.00
	Project Management		36					18							54				\$11,970.00
	Amendment 1		10					5							15				\$3,325.00
	Subtotal Hours	3	52	2	0	14	0	35	0	0	0	0	0	0	91				
	Subtotal Fee	\$960.00	\$14,300.00	\$450.00	\$0.00	\$2,030.00	\$0.00	\$4,025.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0	\$0		\$21,765.00
В	Data Collection and Analysis																		
	Topographic and Boundary Survey			2		4	4								10		\$21,350	MAPCA	\$22,860.00
	Geotechnical Evaluation		2			4									6	\$9,000		GES	\$10,130.00
	Traffic Analysis and Memorandum	4	2	20		40	10	2							78				\$13,560.00
	Roundabout Analysis, Memorandum, and Geometric Design (30%) with OPC	16	10	20	30	40	16	2							134				\$25,720.00
	Mt. Rose to Virginia Lane Addition Schematic Design (15%) with OPC		4	4	8	20	12								48				\$7,780.00
	Utility Coordination and Mapping			2		2	10								14				\$1,940.00
	Amendment 1	16	24	20	30	80	32	2							204				\$37,290.00
	Subtotal Hours	36	42	68	68	190	84	6	0	0	0	0	0	0	290				
	Subtotal Fee	\$11,520.00	\$11,550.00	\$15,300.00	\$12,240.00	\$27,550.00	\$10,080.00	\$690.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$9,000	\$21,350		\$119,280.00
С	Roundabout Modifications																		
	60% Plans, Technical Specifications, and OPC	4	16	16	24	60	24	2							146				\$25,410.00
	90% PS&E with Draft Contract Documents	2	16	4	30	60	30	2							144				\$23,870.00
	Issued for Bids PS&E	1	8	2	20	40	20	2							93				\$15,000.00
	Amendment 1	10	89	31	64	210	100	8							512				\$89,540.00
	Subtotal Hours	17	129	53	138	370	174	14	0	0	(0		0	383				
	Subtotal Fee	\$5,440.00	\$35,475.00	\$11,925.00	\$24,840.00	\$53,650.00	\$20,880.00	\$1,610.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0	\$0		\$153,820.00

Exhibit "B"

TASK	DESCRIPTION	ITS Sys. Manager/ Prof. II	Senior Prof. I	Prof.	Analyst II	Analyst I	Technical Support	Support Staff	CME Senior Project Manager	CME Assistant Project	CME Inspector	CME Inspector OT	CME Techinician	CME Technician OT	Hours Subtotal	Expenses	Subconsultant MAPCA	Expense Description	Task Amounts
D	Permitting																		
	NDOT Permit		8	20	16	16	10								70				\$13,100.00
	Amendment 1			(20)	(16)	(16)	(10)								(62)				-\$10,900.00
	Subtotal Hours	0	8	0	0	0	0	0	0	0	0	0	0	0	8				
	Subtotal Fee	\$0.00	\$2,200.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0	\$0		\$2,200.00
E	Bidding Services for Roundabout Modifications																		
	Bidding Services		2		4	12	4								22				\$3,490.00
	Subtotal Hours	0	2	0	4	12	4	0	0	0	0	0	0	0	22				
	Subtotal Fee	\$0.00	\$550.00	\$0.00	\$720.00	\$1,740.00	\$480.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0	\$0		\$3,490.00
F	Engineering During Construction																		
	60 Working Days																		
	Construction Administration	2	30		12		40								84				\$15,850
		(2)	137	129	246		224	22	72	24					852	\$360		CME PM Vehicle/Mileage	\$158,590
	Inspection				120										120	\$1,500			\$23,100
	Inspection																	CME Inspector	
					(120)						480	120			480	\$7,500		Vehicle/Mileage	\$78,180
	Construction Survey		2				4								6		\$9,000		\$10,030
			(2)				(4)								(6)		\$21,500	MAPCA Construction Staking	\$20,470
	Material Testing		2				4								6	\$8,000			\$9,030
													233		233	\$13,320		CME Material Tests	\$42,445
	As-Built Drawings		2		4		12								18				\$2,710
			6	20	36		28	4							94		\$5,000	MAPCA As-Built Staking	\$21,450
	Amendment 1	0	(41)	(5)	(122)		0	(2)							(170)	\$0			-\$34,590
	EDC Contingency (OPTIONAL)															\$30,000		EDC Contingency	\$30,000
	Subtotal Hours	0	136	144	176	0	308	24	72				233		,				
	Subtotal Fee	\$0.00	\$37,400.00	\$32,400.00	\$31,680.00	\$0.00	\$36,960.00	\$2,760.00	\$14,400.00	\$4,080.00	\$69,600.00	\$22,680.00	\$29,125.00	\$0.00		\$60,680	\$35,500		\$377,265.00
G	Additional Optional Services Traffic Counts Data Collection															***		Tour Control	40.000
	Army Corp./NDEP Permit Analysis and			2				2							4	\$2,000		Traffic Counts	\$2,680
	Memorandum		6	30		4		2							42				\$9,210
	401/404 Permits		4	141			20	2							167	\$20,000		Potential Environmental Studies	\$55,455
	Amendment 1		(10)	(171)		(4)	(20)	(4)								-\$20,000			-\$64,665
	Subtotal Hours	0	0	2	0	. 0	0	2	0	0	0	0	0	0	4	420,000			\$51,000
	Subtotal Fee	\$0.00	\$0.00	\$450.00	\$0.00	\$0.00	\$0.00	\$230.00								\$2,000			\$2,680.00
Н	Contingency															\$20,000		8% of Design	\$20,000.00
	Amendment 1															-\$20,000			-\$20,000.00
	Total Services Hours	56	369	269	386	586	570	81							2,431				
	Total Services Fee	\$17,920.00		\$60,525.00	\$69,480.00	\$84,970.00	\$68,400.00	\$9,315.00	\$14,400.00	\$4,080.00	\$69,600.00	\$22,680.00	\$29,125.00	\$0.00		\$71,680	\$56,850		\$680,500.00

Meeting Date: 2/21/2025 12:00:00 AM **Agenda Item: 4.3.8**

To: Regional Transportation Commission

From: Jessica Dover, Project Manager

SUBJECT: Pyramid Highway Operations Improvements Project Amendment No. 2

RECOMMENDED ACTION

Approve Amendment No. 2 to the contract with AtkinsRealis USA, Inc., for additional design and engineering during construction services needed in connection with the Pyramid Highway Operations Improvements Project, in the amount of \$2,511,026, for a new total not-to-exceed amount of \$3,197,506.

BACKGROUND AND DISCUSSION

The RTC and AtkinsRealis USA, Inc., (Atkins) entered into a Professional Services Agreement (PSA) dated September 15, 2023, to perform engineering design and engineering during construction services in connection with the Pyramid Highway Operations Improvements Project (Project). On December 04, 2024, the parties executed no cost Amendment No. 1 to extend the expiration date of the Agreement to April 30, 2025. The original PSA was an advanced scoping effort to evaluate feasible design alternatives throughout the Project limits (Ingenuity Avenue to Egyptian Drive), and then advance the preferred alternative to 30% design, with the intent that should this Project remain a separate effort from the ongoing and overlapping Pyramid HWY/U.S. 395 Connector Project, a future amendment would be required to complete design and construction of the improvements. Amendment No. 2 will provide an additional \$2,511,026 of budget for preliminary and final design services, environmental engineering and engineering during construction services, required to construct the improvements. The Agreement expiration date will also be extended to March 31, 2027.

All other provisions of the PSA as previously amended shall remain in full force and effect. The anticipated schedule is as follows:

Preliminary Design: July 2025Final Design: March 2026Construction: Summer 2026

FISCAL IMPACT

Fuel tax appropriations for this item are included in the FY 2025 Budget.

PREVIOUS BOARD ACTION

9/15/2023 Approved a contract with Atkins North America, Inc., for design and engineering during construction services related to the Pyramid Highway Operations Improvements Project, in an amount not-to-exceed \$686,480.

AMENDMENT NO. 2

The Regional Transportation Commission of Washoe County ("RTC") and AtkinsRealis USA,
Inc. ("Consultant") entered into an agreement dated September 15, 2023, as previously amended
by Amendment No. 1 dated December 04, 2024 (the "Agreement"). This Amendment No. 2 is
dated and effective as of .

RECITALS

WHEREAS, RTC and CONSULTANT entered into the Agreement in order for CONSULTANT to provide design engineering services in connection with the Pyramid Highway Operations Improvements Project (the "Project");

WHEREAS, on December 04, 2024, the parties entered into Amendment No. 1 to the Agreement to extend the expiration date of the Agreement to April 30, 2025;

WHEREAS, the parties have determined that there is a need to amend the Agreement to extend the expiration date to March 31, 2027, due to the amount of work remaining;

WHEREAS, the CONSULTANT is providing design and engineering during construction services to: widen Pyramid Highway in the southbound direction to provide an additional through lane from Egyptian Drive to Ingenuity Avenue, evaluate multi-use path connectivity where appropriate, traffic signal adjustments, utility adjustments, grading and drainage improvements. The signal at the intersection of Calle De La Plata will be adjusted to accommodate the roadway widening. In addition, a signal warrant analysis was performed during the alternatives analysis phase for the project, resulting in the addition of a signal at the Ingenuity Avenue and Pyramid Highway Intersection;

WHEREAS, the parties have determined that there is a need to amend the Agreement in order to provide an additional \$2,511,026 of budget for preliminary and final design services, environmental engineering and engineering during construction services, required to construct the improvements;

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 3.2 shall be replaced in its entirety with the following:

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

Design Services	\$1,946,121.00
Optional Design Services	\$101,290.00
Design Contingency	\$130,000.00
EDC	\$949,105.00
Optional EDC	\$0.00
EDC Contingency	\$70,990.00
Total Not-to-Exceed Amount	\$3,197,506.00

- 2. Exhibit A Scope of Services of the Agreement is replaced in its entirety with the version of Exhibit A attached hereto.
- 3. Exhibit B Compensation of the Agreement is replaced in its entirety with the version of Exhibit B attached hereto.
- 4. All other provisions of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have made and executed this amendment.

REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY	ΟN

By:
Bill Thomas, AICP, Executive Director
AtkinsRealis USA, INC.
By:
Brian Janes, P.E., Sr. Project Director

EXHIBIT A-1 through A-2

EXHIBIT A-1: SCOPE OF SERVICES

EXHIBIT A-2: SCHEDULE OF SERVICES

EXHIBIT A-1

SCOPE OF SERVICES

INTRODUCTION

CONSULTANT will provide engineering services for the <u>Pyramid Highway Operations</u> <u>Improvements Project No. 0237002 (Egyptian Drive to Ingenuity Avenue).</u>

The project limits include Pyramid Highway (SR 445) from and including the intersections of Egyptian Drive and Ingenuity Avenue, approximately 1.8 miles.

This project overlaps with the Pyramid Highway / US 395 Connector Project. The limits of the project overall is from the Calle De La Plata intersection south to Egyptian Drive.

The original scope of work was intended to be an advanced scoping effort to develop the project to a preliminary design phase and inform the scope needed for additional design. Amendment 2 is intended to advance the preliminary design phase through final design and construction.

Anticipated improvements include widening southbound to provide two lanes; multi-use path connectivity; traffic signal adjustments; utility adjustments; grading; and drainage improvements.

The signal at the intersection of Calle De La Plata will be adjusted to accommodate the roadway widening. Additionally, a signal warrant analysis was performed and a signal will be added at the Ingenuity Avenue intersection.

Pyramid Highway is entirely within Nevada Department of Transportation (NDOT) right-of-way and control-of-access. This project assumes that the Regional Transportation Commission (RTC) and NDOT will enter into an interlocal agreement for the project and NDOT will review each design submittal and an encroachment permit will therefore not be necessary at this phase of the project.

An alternatives analysis was originally scoped for two (2) alternatives to identify the preferred alternative to advance through design. As the project was advanced, the RTC decided to stop the alternatives analysis and develop a preliminary design report instead.

The environmental support originally scoped focused on reviewing the Record of Decision (ROD) document from the Pyramid Highway / US 395 Connector Project and identifying requirements that may overlap and affect this project. The ROD was reviewed and NDOT was engaged to identify a path forward for this project that compliments the Pyramid Highway / US 395 Connector Project and it's buildout scenario. Amendment 2 includes several environmental resource reports are anticipated to be performed to inform NDOT and provide additional information and support project decisions. This project is being performed with local funds therefore a National Environmental Policy Act (NEPA) evaluation is not required.

The anticipated project schedule for design and analysis is expected to occur over twelve (12) months with anticipated construction to start in the summer of 2026.

The scope of services will generally consist of the following tasks:

1. PROJECT MANAGEMENT

1.1. Team and Project Management

Original Contract - CONSULTANT will provide project management services for the duration of the Project including closeout activities; assumed to be twelve (12) months total, September 2023 through August 2024. Once the project proceeds to construction, project management will be performed under a Construction Services task.

Project management includes project setup and administration, including preparation and execution of Subconsultant agreements; monthly budget monitoring and invoicing; monthly preparation and reporting of project progress (including work completed and documentation of any changes, actual and anticipated, in scope, schedule, and budget); risk management; preparation and monthly project schedule updates; management of Subconsultants, oversight of quality assurance on deliverables; file management; project closeout; and general project administration.

CONSULTANT Project Manager will serve as the RTC's single point of contact and will have primary responsibility for coordinating the efforts of the project team and subconsultants.

Amendment 2 - CONSULTANT will provide project management services for the duration of the Project through bid support; assumed to be seventeen (17) months total, January 2025 through May 2026. Once the project proceeds to construction, project management will be performed under a Construction Services Task 11 Design Services During Construction.

Project management includes general project administration, including preparation and execution of Subconsultant agreements; monthly budget monitoring and invoicing; monthly preparation and reporting of project progress (including work completed and documentation of any changes, actual and anticipated, in scope, schedule, and budget); risk management; preparation and monthly project schedule updates; management of Subconsultants, oversight of quality assurance on deliverables; file management; and project closeout.

CONSULTANT Project Manager will serve as the RTC's single point of contact and will have primary responsibility for coordinating the efforts of the project team and subconsultants.

CONSULTANT Project Manager will keep the RTC Project Manager informed of progress with informal briefings via email or phone call and biweekly (every other week) meetings.

CONSULTANT Project Manager and RTC Project Manager meetings to discuss the design progress; upcoming milestones; schedule; risk status; key technical issues by discipline; and make informed decisions.

1.2. Project Coordination and Meetings

Original Contract - The CONSULTANT Project Manager will be responsible for the ongoing project coordination of CONSULTANT activities for the duration of the work. The CONSULTANT Project Manager shall also maintain communication, as appropriate, with local and state stakeholders as required for the progress of the scope of work detailed in this document. All significant communications shall be documented and reported to the RTC Project Manager.

CONSULTANT Project Manager will keep the RTC Project Manager informed of progress with weekly informal briefings via email or phone call and biweekly (every other week) CONSULTANT Project Manager and RTC Project Manager meetings to discuss the design progress; upcoming milestones; schedule; risk status; key technical issues by discipline; and make informed decisions.

The CONSULTANT Project Manager will coordinate with team leads to discuss the progress of the project and identify issues and action items to be addressed.

Amendment 2 – no change

1.2.1. Project Kickoff Meetings

Original Contract - CONSULTANT will hold an owner kickoff meeting with the RTC, City of Sparks, Washoe County, NDOT and other agency staff as appropriate, to confirm the project objectives, approach, milestones, stakeholder and outreach approach, and potential project challenges. Up to five (5) CONSULTANT staff will attend the meeting. CONSULTANT will prepare a meeting agenda, take and distribute meeting notes, and track concerns about the project from the attendees.

CONSULTANT will hold an internal kickoff meeting with CONSULTANT staff, and subconsultants to internally align the team with the goals of the RTC and the goals of the project.

Deliverables – Owner Kickoff Meeting Agenda and Notes

Amendment 2 – no change

1.2.2. Project Management Team (PMT) Meetings

Original Contract - CONSULTANT will facilitate monthly meetings with the RTC Project Manager and stakeholders to discuss design progress and coordinate issues. This meeting will be facilitated by the CONSULTANT Project Manager and an agenda and meeting summary will be provided. A total of ten (10) meetings are anticipated, to be attended by up to three (3) CONSULTANT staff.

<u>Deliverables</u> – PMT Meeting Agenda and Notes

Amendment 2 – no change

1.2.3. Internal Design Team Coordination Meetings

<u>Original Contract</u> - Starting with the Preliminary Design effort, CONSULTANT will hold biweekly (every other week) design coordination meetings with CONSULTANT design staff and subconsultants as appropriate to ensure cross-discipline coordination with design and schedule. A total of forty-eight (48) meetings are anticipated, to be attended on average by five (5) CONSULTANT staff.

Amendment 2 - Starting with the Preliminary Design effort, CONSULTANT will hold biweekly (every other week) design coordination meetings with CONSULTANT design staff and subconsultants as appropriate to ensure cross-discipline coordination with design and schedule. A total of sixty-eight (68) meetings are anticipated, to be attended on average by six (6) CONSULTANT staff.

1.2.4. Miscellaneous Coordination Meetings

<u>Original Contract</u> - CONSULTANT will prepare for and attend miscellaneous coordination meetings with RTC, Washoe County, City of Sparks, and NDOT staff as requested by and at the RTC's discretion. A total of six (6) meetings are anticipated over the duration of the project, to be attended on average by three (3) CONSULTANT staff.

<u>Deliverables</u> - Meeting Invitation, Materials, Exhibits and Meeting Agenda and Notes

<u>Amendment 2</u> – no change

1.3. Project Management Plan (PMP)

Original Contract - CONSULTANT will prepare a Project Management Plan (PMP) that will include: Project Instructions, Risk Management Plan, Communications Protocols; Project Directory, Scope, Schedule, and Budget, File and Information Sharing and Storage Protocols, and the Safety Plan. The PMP will be distributed to the CONSULTANT team, including Subconsultants, and will be updated as needed throughout the project duration.

Deliverables – Draft and Final PMP

Amendment 2 – no change

1.4. Quality Management Plan (QMP)

Original Contract - CONSULTANT will prepare a Quality Management Plan (QMP). A Quality Manager will be assigned and will be responsible for the development and implementation of the plan. The QMP will apply to both prime and Subconsultant team members. An independent quality review will be performed on each design deliverable including the Preliminary and Final

Design milestone packages.

<u>Deliverables</u> – Draft and Final QMP

Amendment 2 – no change

1.5. Design Schedule

Original Contract - CONSULTANT will prepare and maintain a project schedule and distribute updates on a monthly basis. The schedule will be reviewed with the RTC at monthly Project Management Team (PMT) meetings, with a focus on the upcoming 4-week look ahead, critical path activities, and schedule threats.

<u>Deliverables</u> – Schedule (Initial and Updates as needed)

<u>Amendment 2</u> – no change

2. PUBLIC INVOLVEMENT

<u>Original Contract</u> - CONSULTANT's public involvement team will assist the Regional Transportation Commission of Washoe County to inform the public, stakeholders, and business owners along the Pyramid Highway corridor about the project, including traffic restrictions, progress updates, a website, and social media posts throughout the anticipated project duration.

Amendment 2 – CONSULTANT's public involvement team will assist the Regional Transportation Commission of Washoe County to inform the public, stakeholders, and business owners along the Pyramid Highway corridor about the project, including traffic restrictions, progress updates, update information for the RTC's project website, and social media posts throughout the anticipated project duration.

2.1. Public Involvement Plan

Original Contract - CONSULTANT will develop a comprehensive Public Involvement Plan for this Project. This plan will outline all activities, strategies and deliverables related to the overall public information and outreach effort for this Project. The Plan will include products, responsibilities, multicultural outreach tactics and an overall timeline. The Plan will be a living document, and strategies and timelines will be adjusted as appropriate throughout the Project.

Deliverables – Draft and Final Public Involvement Plan

Amendment 2 – no change

2.2. Collateral Material Development

<u>Original Contract</u> - CONSULTANT will develop all meeting materials that will be presented and distributed as a part of this Project. Materials will include handouts, flyers, fact sheets, exhibits, maps, and surveys for print and online distribution. Materials will be translated into Spanish as needed. Exhibits will be coordinated with the project team and prepared in coordination with the technical discipline leads.

Website posts will be made by the RTC on the project website. CONSULTANT will provide developed information and graphics for the RTC's Public Information Officer to publicize to the site.

Deliverables – Material (as identified)

Amendment 2 – no change

2.3. Media Relations

<u>Original Contract</u> - CONSULTANT's public involvement team will assist the RTC's Public Information Officer with media relations for the duration of the Project.

Amendment 2 – no change

2.4. Documentation

Original Contract - CONSULTANT will develop and maintain a contact database for this Project. The database will include contact information for all stakeholders engaged throughout the project, an email contact list, and specific comments received by the public involvement team.

<u>Deliverables</u> – Contact Database

<u>Amendment 2</u> – no change

2.5. Business and Community Outreach (Formerly Task 8.3)

Original Contract - CONSULTANT will arrange and coordinate briefings for local community groups and adjacent business owners. The team will prepare Project information materials in both English and Spanish for residents and property owners throughout the Project area. Atkins will work with the RTC's Senior Project Manager and the RTC's Public Information Officer to identify and engage Homeowners Associations and local businesses, providing them with fact sheets and publicizing a survey.

<u>Amendment 2</u> – This task may also include public outreach efforts to support the noise analysis.

3. ENVIRONMENTAL COORDINATION AND DOCUMENTATION

<u>Original Contract</u> - CONSULTANT will coordinate with the RTC and NDOT to confirm the scope of the environmental work to be completed to support the project. No federal funding is being used for this work, therefore environmental work is only being performed to provide NDOT baseline information to inform project decisions.

Amendment 2 – no change

3.1. Review of Pyramid Highway/US 395 Connection Record of Decision (ROD)

<u>Original Contract</u> - Reviewing the Pyramid Connector ROD for any requirements or modifications that will be required for this project to ensure the future design is compatible with the overall Pyramid Connector buildout condition and in conformance with FHWA regulations.

Amendment 2 – no change

3.2. Agency Coordination

Original Contract - Engage NDOT and FHWA to confirm that an FEIS compatibility review consisting of (1) a compatibility review matrix; and (2) a Tech Memo that includes findings resulting from the compatibility review, in conjunction with recommendations based on proposed improvements and coordination with NDOT and FHWA will be satisfactory for project. It is assumed NEPA clearance is not required for this project. Task includes preparing materials for and attending two (2) meetings.

Amendment 2 – no change

3.3. Prepare Compatibility Report

Original Contract - Prepare a compatibility document that includes a compatibility matrix consisting of (1) a compatibility review matrix; and (2) a Tech Memo. The document will list the general elements/issues (residential and business impacts, displacements, noise and environmental justice, area of potential effects (APE), cultural resources, visual impacts, drainage, public outreach, etc.) of the compatibility review, the consistency with the this project's design, and proposed resolutions that are needed. Assume three (3) review cycles- for the document to be reviewed by RTC, NDOT, and FHWA sequentially. Assumes technical reports will be done later with an addendum if needed.

Amendment 2 – no change

3.4. Environmental Coordination (Amendment 2)

CONSULTANT will coordinate with the RTC and NDOT to confirm the scope of the environmental work to be completed to support the project. No federal funding is being used for

this work, therefore environmental work is only being performed to provide NDOT baseline information to inform project decisions.

3.5. Waters of the U.S. Technical Memorandum (Amendment 2, Optional)

CONSULTANT will conduct a potential waters of the U.S. (WOUS) delineation of the project limits as required by Section 401 and 404 of the Clean Water Act (CWA). The work includes one (1) 10-hour day of field work by two (2) biologists, recording and mapping resources (e.g., wetlands, ordinary high water mark), shovel testing for hydric soils, completing forms, and taking site photos. The work will also include two (2) travel days to travel to northern Nevada and the return trip back to home City. Travel may be from either Henderson, Nevada or Denver, Colorado. The CONSULTANT will post-process the field information and compile a Potential WOUS Delineation Technical Memo documenting resources present. The Potential WOUS Delineation Technical Memo will identify the presence of potential resources which fall under the jurisdiction of the CWA or that require documentation by the Nevada Department of Environmental Protection (NDEP) for the purpose of obtaining a Temporary Working-in-Waterways permit.

3.6. Clean Water Act – Section 404 Approved Jurisdictional Determination (Amendment 2, Optional)

CONSULTANT will prepare a request for an Approved Jurisdictional Determination (AJD) or a Dry Upland Jurisdictional Determination (DUJD) request to the USACE to confirm the presence or lack of presence of jurisdictional WOUS under Section 404 of the Clean Water Act. The work includes one (1) meeting with the Client to review either the AJD or the DUJD. The AJD will include the project location, project maps, and the WOUS technical memo. Based on a recent court case (Sackett) the project appears to not contain any jurisdictional WOUS. Therefore, the CONSULTANT assumes that a formal Section 401 Water Quality Certification and a Section 404 pre-construction notification is not required for this project.

3.7. Nevada Division of Forestry – Rare Plant Permit (Amendment 2, Optional)

If the CONSULTANT identifies any rare plants (such as Las Vegas Bear poppy) or cactus/yucca that will be impacted by the design and construction of the proposed project, then the CONSULTANT will coordinate with NDOT and the Nevada Division of Forestry (NDF) to obtain a permit for impacting rare plants or for transplanting or removal of cactus and yucca plants. The work includes three (3) meetings with NDOT and NDF to identify project-specific requirements of the NDF permit, submit an application, and receive the permit prior to the beginning of any construction on the project.

3.8. Traffic Noise (Amendment 2)

CONSULTANT will qualitatively evaluate the project area for the alternatives analysis and provide an opinion on the likely impact of widening the southbound lane on noise levels.

After the preferred alternative is chosen and if directed by the RTC, CONSULTANT will gather

data and location information to prepare noise models to analyze existing, future No-Build and future project noise conditions. Prepare a noise technical report to evaluate impacts to surrounding land uses and analyze reasonable and feasible noise mitigation for any impacts. CONSULTANT will conduct a noise study for the project area per NDOT guidelines.

3.8.1. Noise Wall Design (Amendment 2, Optional)

If needed, CONSULTANT will develop sound wall plans detail sheets and combined plan/profile sheets with enough information to define overall dimensions and ties to other discipline improvements. Post and panel walls are assumed for this task for up to 4,000 linear feet. Bill of material sheets will not be prepared for walls. CONSULTANT assumes one (1) continuous section for the entirety of the sound wall layout.

3.9. Hazardous Materials (Amendment 2, Optional)

CONSULTANT will perform a Phase I Initial Site Assessment (ISA) for the study area and identify potential sites of contamination and likelihood of encountering contaminated materials during construction. Consultant will obtain a Hazardous Materials database report from a third-party vendor and include as part of the Phase I ISA report.

4. INVESTIGATION OF EXISTING CONDITIONS

4.1. Data Collection and Condition Survey

<u>Original Contract</u> - CONSULTANT will obtain as-built data (hard copy, .pdf, and electronic CADD files) for the Project limits from NDOT, the RTC, City of Sparks, and Washoe County if available.

CONSULTANT will visually evaluate and document the condition of the existing roadway and project site conditions during a one (1) day site visit. A total of up to three (3) CONSULTANT staff are anticipated to attend.

CONSULTANT will qualitatively evaluate pavement condition, roadside areas, pedestrian paths, as well as utilities and other obstructions that may affect the design development.

CONSULTANT will perform up to two (2) additional field visits throughout the design effort to determine and/or confirm design decisions. A total of two (2) CONSULTANT staff are anticipated to attend per visit.

<u>Amendment 2</u> – no change

4.2. Pedestrian Path Connectivity Assessment

<u>Original Contract</u> - CONSULTANT shall review the corridor's existing multi-use path locations to identify potential multi-use path connectivity options. CONSULTANT anticipates coordinating with Washoe County and NDOT on the desired path connectivity and limits.

Efforts, findings, and recommendations will be summarized in a technical memorandum.

Amendment 2 – no change

4.3. Traffic Analysis

Original Contract - CONSUTANT will collect existing traffic count and turning movement data for both the AM and PM peak hours at the four intersections within the project limits. An existing condition analysis will be conducted using the collected peak hour volumes at the selected intersections. Existing roadway geometry will be used for existing condition. Traffic operations analysis including the estimation of delay and level of service (LOS) analyses will be completed using HCM methodologies included in the Synchro traffic analysis software.

Traffic forecasting will be done for the build condition analysis using traffic annual growth rate based on historic traffic growth on this corridor. Build condition analysis will be performed based on the proposed improvements within the corridor as determined for each alternative to support the alternatives analysis.

CONSULTANT will perform a signal warrant analysis for the Ingenuity Drive intersection per Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) requirements. The intent of this study is to conduct an evaluation of traffic and roadway conditions to determine if a traffic signal is an appropriate form of traffic control at this location. The justification for installation of traffic signal at an intersection is based on warrants stated in the MUTCD. 24-hour vehicular volume counts, and 12-hour pedestrian counts will be collected at this location. Crash data from NDOT Safety Engineering division will also be collected for warrant analysis. Warrant 1, Warrant 2, Warrant 3, Warrant 4, and Warrant 7 analyses, from MUTCD, will be performed to evaluate the need for a traffic signal. If warranted, an intersection delay analysis will be performed with Synchro for the proposed intersection with signal.

CONSULTANT will prepare a technical memorandum discussing the warrant analysis and address each warrant discussed in the MUTCD requirements.

No access management evaluation will be performed.

Deliverables – Analysis Summary in a Tech Memo

<u>Amendment 2</u> – Coordination will be performed with NDOT to confirm comments have been addressed.

4.4. Geotechnical Investigation – Desktop Review

<u>Original Contract</u> - Available data of nearby projects will be reviewed to determine key information to support the alternatives analysis. Geotech subconsultant will attend key meetings to discuss available data.

CONSULTANT will evaluate and provide known geotechnical settings, review available reports, as-builts, and data of nearby projects to identify key information to support the alternatives analysis. A summary technical memorandum will be produced to document the efforts, findings, and recommendations to support the alternatives analysis and preliminary design phase of the project.

Deliverables – Geotechnical and Pavement Desktop Review Summary

Amendment 2 – no change

4.4.1. Geotechnical Exploration and Pavement Investigation (Amendment 2)

Geotechnical exploration and analysis will be performed to advance the design of the additional southbound lane and intersection improvements through final design. This task will include literature review, subsurface exploration, laboratory testing, and engineering analysis to formulate project recommendations for design and construction.

Assumptions:

- Rodway widening will be limited to the southbound lanes.
- Mill and overlay will be performed for existing lanes. No structural design, testing or calculations will be required.
- Widened section will be based on NDOT standards, not 2022 RTC flexible structural section design standards.

Field Exploration - Due to high traffic volumes along this roadway segment, we assume night work will be required for exploratory borings, asphalt cores, and FWD testing. Work hours are assumed to be Sunday through Thursday from 6PM to 5AM. We understand an encroachment permit from NDOT will be required for this work and the permit fees will be waived.

We have budgeted the following to complete the field work:

- 1 days for USA North
- 4 nights for exploratory borings
- 2 nights for asphalt cores

Traffic Control and USA North - A traffic control plan and set up will be subcontracted through Silver State Barricade & Sign. Traffic control is anticipated to include a single lane closure with flaggers, single lane closure without flaggers in select areas, and shoulder closures.

Prior to initiating the subsurface exploration, CME will contact USA North to determine the location of existing utilities. CME will take standard precautions to lower the risk of damaging underground structures; however, underground exploration is inherently risky as it is not possible to precisely locate all underground structures. Our fee is not adequate to compensate for damage or disruption of service and repair costs. If insufficient or incorrect data results in damage to underground structures, the cost for repair will be the responsibility of the client.

For the purposes of drilling and traffic control subcontractors, we understand this is a non-

prevailing wage project.

Exploratory Borings - Consistent with both RTC and NDOT standards of practice, the existing roadway section will be explored at approximate 500 lineal foot intervals. Consequently, the subsurface field exploration will consist of drilling twenty-one (21) borings to depths of 5 feet below the existing ground surface or to refusal, whichever comes first, using a truck-mounted drill rig equipped with solid-stem augers. The intent of the exploration is to:

• Collect bulk samples and/or drive samples of underlying aggregate base and subgrade soils for laboratory testing.

Our geotechnical personnel will log material encountered during exploration in the field. Bulk samples of the subgrade soils will be obtained for R-value testing, sieve analyses, and plasticity index. Borings will be backfilled with soil cuttings.

If a box culvert extension is determined to be needed, one (1) boring will be drilled south of each of the intersections of Calle De La Plata and Ingenuity Avenue. The boring will be drilled to a depth of 20 feet below the existing ground surface or to refusal, whichever comes first, using a truck-mounted drill rig equipped with solid-stem augers.

Soil samples will include drive samples at generally 2.5-foot intervals. 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.

Asphalt Cores - To calibrate the previously obtained ground penetrating radar (GPR) data, up to ten (10) pavement cores have been budgeted. Pavement cores will be collected using a truck mounted coring rig with a 4-inch or 6-inch diameter core barrel. The underlying base thickness will be measured but not collected. Our field technician will photograph the pavement core and backfill each core location with rapid set, quick strength, DOT approved concrete or Aquaphalt 6.0.

Hand Augers – To investigate subgrade soil conditions at the potentially relocated multi-use path on the west side of the roadway between Calle De La Plata and 1,600 feet south, up to six (6) hand augers to 5 feet below existing grade or until refusal, whichever comes first. Hand auger excavations will be backfilled with soil and restored to near existing conditions.

Laboratory Testing - Representative samples of subgrade soil will be tested in the laboratory to determine index and mechanical properties. Since the design will be per NDOT standards, testing is not in accordance with the 2022 RTC manual.

- R-value tests (ASTM D2844)
- Sieve Analysis (ASTM C136 or D6913)
- Plasticity Index (ASTM D4318)
- Moisture Density Relationship (ASTM D1557)
- Consolidation Testing (ASTM D2435)

- Direct Shear Testing (ASTM D3080)
- Soil Chemistry Testing

Meetings - Per request from the client, CME has budgeted to attend the following meetings:

• Up to eighteen (18) 1-hour meetings for one CME geotechnical or pavement representative (Nick Anderson, PE, GE or Joe Mactutis, PE) for discussions on final design. Two (2) hours per meeting are budgeted to account for travel, preparation, and wrap up for a total of thirty-six (36) hours.

Geotechnical and Pavement Investigation Report - Upon completion of the field, laboratory testing, and analysis phases of our investigation, a Geotechnical and Pavement Investigation report will be completed for the project and include the following:

- Description of the project site with the approximate locations of our explorations, presented on a Site Plan
- Descriptive logs of the explorations performed for this study
- Summary of existing structural section thicknesses
- General summary of subgrade soil description
- Laboratory test results
- Subgrade soil design resilient moduli
- Pavement design¹ and construction recommendations including:
 - o Discussion of options for:
 - Functional mill and overlay
 - Construction of widened sections
 - o Aggregate base and asphalt concrete
 - o Full depth asphalt concrete
 - Design and construction recommendations for selected pavement widening technique
- Design parameters for the reinforced concrete box culvert, including factored bearing resistances, lateral earth pressures, settlement estimates, and sliding factors.
- Construction Recommendations including:
 - o Site preparation and grading recommendations
 - Anticipated construction difficulties

<u>Deliverables</u> – Draft and Final Geotechnical and Pavement Investigation Report

4.5. Control and Right-of-Way (ROW) Mapping

<u>Original Contract</u> - CONSULTANT will perform a right-of-way and control survey to establish fixed horizontal and vertical control referenced to the georeferenced datums, such as Nevada State Plane Coordinate System (NV SPCS) and North American Vertical Datum of 1988 (NAVD88).

Measurements will be made to existing street and highway reference monuments along Pyramid Highway and intersecting streets to determine the rights-of-way. If during our field survey, we are unable to locate enough of the original monuments required to be used for determining the street rights-of-way we will need to expand the field survey to locate additional monuments which will require additional field work and office support. Additional work will be provided after the approval of an extra work authorization for these services.

The results of the field survey will be analyzed, and final right-of-way boundaries will be determined by a Nevada Licensed Professional Land Surveyor and added to the topographic survey base map. The base map will include easement lines shown on record mapping.

The right-of-way will be shown on the project plans and used as the basis for Right-of-Way Engineering services. Owners names and assessor's parcel numbers will be shown on the base mapping.

Amendment 2 – no change

4.6. Topographic Survey and Mapping

<u>Original Contract</u> - Planimetric and topographic features along the highway and intersecting streets will be surveyed and mapped. Utility research and coordination will be done prior to commencement of the topographic survey. Sufficient data will be collected to enable preparation of a 1-foot contour map at a scale of 1" = 40'. Invert elevations will be measured for all sanitary and storm drain facilities and structures, along with the top of nut on all gas and water valves within or adjacent to the roadways.

Amendment 2 – no change

4.6.1. Field Survey (Amendment 2)

CONSULTANT will perform one day of field survey to confirm additional points needed for design accuracy. Traffic control will be performed for occupying NDOT right-of-way.

4.7. Subsurface Utilities

<u>Original Contract</u> - Utilities within the project area will be located and assessed for possible conflict with the proposed project.

CONSULTANT will investigate and locate subsurface utilities within the roadway ROW, and areas reasonably effected, in accordance with the American Society of Civil Engineers Standard guideline for the Collection and Depiction of Existing Subsurface Utility Data, Quality Level C.

Additionally, CONSULTANT will coordinate with Utility Owners to remove lids of surface features and document depth of utility device, or invert of pipe, within such surface features.

Based on field investigation, CONSULTANT will provide the RTC a list of utility companies whose utilities are likely to be within the project limits or reasonably affected by the project. CONSULTANT will prepare the initial notification letters and gather available utility information. CONSULTANT will coordinate with the utility agencies for upcoming work, facility relocation and new installation, and to ensure utilities likely affected by the project are drawn on the plan and profile, evaluate potential conflicts through field investigation, investigate conflict resolution strategies.

Regularly recurring utility coordination meetings will not be held with the RTC and affected utility companies.

Any design and technical specifications required to relocate impacted facilities are assumed to be provided by the utility owners or their representatives. CONSULTANT will include the approved utility design(s) and unique technical provision requirements for each utility in the contract documents if provided by the affected utility agency in a timely manner that meets the CONSULTANT design schedule.

No upgrading or expanding of utility facilities is included in this scope of work.

CONSULTANT will distribute design review submittals to utility agencies for review and comment and provide the RTC a list of utility agencies provided design review submittals and Utility Agency review comments and incorporate updates into subsequent plan submittals.

Utility potholing is not included in this scope of work.

<u>Deliverables</u> - Depiction of Subsurface Utilities on Design Plans, Subsurface Utility Inventory

<u>Amendment 2</u> – no change

4.7.1. Utility Potholing (Amendment 2, Optional)

Should insufficient information be available from existing records to determine if conflicts between the proposed work and existing utilities will occur, CONSULTANT shall request approval from the RTC to pothole a sufficient number of locations to make such a determination. CONSULTANT will hire a subsurface utility exploration (SUE) subconsultant to investigate and locate specific subsurface utilities within the roadway ROW, and areas reasonably effected by the project that are deemed to have potential conflicts with construction. This scope estimates that up to a total of between twenty and twenty five (20 - 25) potholes will be conducted to locate facilities within the project limits. SUE subconsultant will complete the NDOT temporary encroachment permit needed for the work. A potholing exhibit will be developed prior to this effort and approved by the RTC project manager before performing the field work.

Survey will be performed in a single day to confirm horizontal and vertical location of pothole

locations. Survey will be performed concurrently with utility SUE subconsultant to avoid the need for additional traffic control while occupying NDOT right-of-way.

5. ALTERNATIVES ANALYSIS

5.1. Design Criteria

<u>Original Contract</u> - CONSULTANT will develop design criteria for the project and will establish guidance based on:

- Standard Specifications for Public Works Construction, (Orange Book), Revision 8 of the 2012 Edition
- AASHTO Policy for Geometric Design of Highways and Streets (Green Book), 2018
- Manual on Uniform Traffic Control Device, 2010
- AASHTO Roadside Design Guide, 2011
- Guide for the Planning, Design, and Operation of Pedestrian Facilities, AASHTO, 2004
- Truckee Meadows Regional Drainage Manual, 4/30/2009 version
- NDOT Road Design Guide, 2019
- NDOT Standard Plans for Road and Bridge Construction, 2022
- NDOT Standard Specifications for Road and Bridge Construction, 2014

CONSULTANT will prepare draft-design criteria memo with a summarized listing of the governing standards and references, for review and approval by the RTC and NDOT.

Amendment 2 – no change

5.2. Alternatives Analysis

Original Contract - CONSULTANT will evaluate up to two (2) alternatives to provide two (2) southbound lanes from Ingenuity Avenue to Egyptian Drive. These alternatives will be coordinated with the RTC prior to development of the concept plans. Considerations will include, the existing ROW, traffic impacts, roadway alignment, signal and above ground utility structures, and the physical constraints of the project area.

Activities to be performed are anticipated to include:

- Plan, organize, and hold a meeting (up to 2 hours) with the CONSULTANT team, the RTC, NDOT, City of Sparks, and Washoe County. A total of three (3) CONSULTANT staff are anticipated to attend. The goal of the meeting is to review the two (2) alternatives, discuss pros and cons of each, and select a preferred alternative for design effort. The meeting is anticipated to be held at the RTC.
- Prepare meeting agenda, handouts, exhibits, and data to be used during the meeting.
- Develop each of the (2) the identified concepts to a roughly 15 Percent% level of design.

- o Conceptual plans will be developed in a roll plot format.
- O Conceptual roadway, drainage analysis, utility, structural, traffic, electrical, signal, and right-of-way requirements will be identified.
- Order of magnitude conceptual construction cost estimates will be developed.
- Document the preferred alternative in a technical memorandum for the project. This technical memorandum is expected to summarize the pros and cons of each alternative, outcome of the alternatives review meeting, and decisions leading to identifying the preferred alternative.

<u>Deliverables</u> – Tech Memo Summarizing the Alternatives Analysis

<u>Contract Adjustments Prior to Amendment 2</u> – alternatives analysis was changed to a preliminary design report.

6. PRELIMINARY DESIGN

<u>Original Contract</u> - Design Assumptions:

- Proposed roadway section will be provided by the NDOT Materials Division
- Retaining walls will not be required for this project
- Sound walls will not be required for this project
- Curb, gutter and sidewalk will not be incorporated into the roadway section
- The culvert south of Calle De La Plata will not require extension and the roadway improvements will not impact the channel conveyance capacity
- Project drainage improvements will be minimal
- Landscape and Aesthetics plans will not be required for this project
- Structural design will not be required for this project
- Submittals will be in electronic PDF format (no hard copies)

<u>Amendment 2</u> - Design Assumptions:

- An NDOT Encroachment Permit will not be required as the RTC is entering into an interlocal agreement with NDOT for this project
- Proposed roadway section will be provided by the NDOT Materials Division
- Retaining walls will not be required for this project
- Curb, gutter and sidewalk will not be incorporated into the roadway section
- The culvert south of Calle De La Plata will not require extension and the roadway improvements will not impact the channel conveyance capacity
- Project drainage improvements will be minimal
- Landscape and Aesthetics plans will not be required for this project
- Submittals will be in electronic PDF format (no hard copies)

6.1. 30 Percent Design

<u>Original Contract</u> - The preferred alternative will be used to advance to a 30% level of design. Roadway plans will be designed in accordance with design criteria developed in the Preliminary

Studies Task. Which will include a list of the exceptions (if any) identifying station limits, standards, and potential mitigations.

Plan sheets will be drafted and produced electronically in .pdf format at full size at either:

- 1" = 25' scale, on 22" x 34" size paper, but printed half size on 11" x 17" sized paper.
- Or 1" = 100' scale, on 11" x 17" size paper.

The following is a listing of plan sheets (and level of detail) anticipated in the project contract documents for the 30% design submittal:

Title Sheet (1)

Index of Sheets, General Notes, Legend, Abbreviations, Key Maps (3)

Geometric Control Plan Sheets (2)

• Roadway alignment curve and tangent data

Typical Section Sheets (4)

- As-constructed and proposed improvement typical sections
- Minimum and maximum roadway widths
- Preliminary roadside designs (slopes, curbs, gutters, and traffic barriers)
- Proposed pedestrian improvements

Survey Control/Right-of-Way Sheets (10)

- Existing right-of way-limits
- Schedule of coordinates, basis of bearing, stationing and offsets, the control coordinates, and datum statement

Removal Plans (12)

• Removal Limits

Roadway Plan Sheets (12)

- Horizontal curve data, bearings, distances and station and offsets for angle points, tapers, and curves
- Preliminary locations for curbs, gutters, and sidewalk
- Preliminary road widths
- Preliminary cut and fill slope limits
- Vertical grade and curve data
- Drainage improvements

Roadway Profile Sheets (8)

• Vertical grade and curve data

Multiuse Path Profile Sheets (8)

• Vertical grade and curve data

Utility Sheets (12)

• Existing Utilities

Approximately 72 Sheets Total.

Exclusions from the 30% Design:

- Geometric and Grading Plan Sheets will not be prepared
- Removal of signs, drainage, etc. will not be identified
- Utility conflicts and proposed utility adjustments/relocations will not be identified
- Superelevation diagrams will not be prepared
- Drainage Plan and Profile Sheets will not be prepared
- Drainage Detail Sheets will not be prepared
- Signing and Striping Sheets will not be prepared
- Detail Sheets will not be prepared
- Utility specific generated design (water, gas, etc.), as necessary resulting from utility conflicts, will not be prepared
- Site reconstruction plans for adjacent properties will not be prepared
- Sound Wall Sheets will not be prepared
- Lighting Sheets will not be prepared
- Signal, Traffic Signal Interconnect, and ITS Sheets will not be prepared
- Detailed analysis for electrical will not be completed
- Landscape and Aesthetic Sheets for new or remediation for project impacts will not be prepared
- Cross sections will not be prepared

<u>Deliverables</u> – 30% Design Plans, Drainage Tech Memo, Cost Estimate, Design Review Comment and Response Summary

Amendment 2 – no change

6.1.1. Drainage Analysis

<u>Original Contract</u> - CONSULTANT will prepare a drainage analysis associated with advancing the proposed concept of the preferred alternative to a preliminary design level. The analysis assumes that no (or limited) curb and gutter, sidewalk, and raised medians will be added within

the Project limits. The drainage analysis will generally consist of an onsite analysis within the project ROW.

No regional analysis will be performed with this phase of the project. If a regional analysis is determined to be needed, it will be addressed in a future addendum.

The April 30, 2009 version of the Truckee Meadows Regional Drainage Manual (TMRDM) and NDOT Drainage Manual will be used to guide the onsite analysis and drainage design. Pyramid Highway will be considered an Other Principal Arterial for the analysis. The Rational Formula will be used to calculate on-site runoff. Any areas of design exception will be summarized and discussed within the drainage report.

A review of local offsite drainage will be performed to address drainage conditions at the Project limits and at the edge of right-of-way.

Amendment 2 – no change

6.1.2. Draft Technical Drainage Memorandum

<u>Original Contract</u> - A drainage memorandum will be prepared for the preliminary design summarizing the analysis parameters, criteria used, design requirements, and findings. This is not intended to be a full NDOT or Truckee Meadows Regional Drainage Manual (TMRDM) formatted report.

Amendment 2 – no change

6.1.3. 30 Percent Cost Estimate

<u>Original Contract</u> - CONSULTANT will prepare a detailed engineer's estimate of probable construction cost in the same format as the bid proposal form to be included in the contract documents. Bid item numbers will correspond to the appropriate sections in the RTC's Orange Book. Technical Provisions will not be prepared for the 30% Design.

<u>Amendment 2</u> – no change

6.1.4. 30 Percent Design Submittal

Original Contract - CONSULTANT will submit the 30% Design as summarized:

RTC:

- 11" x 17" design plans
- Design Exception Summary (if necessary)
- Engineer's opinion of probable construction cost estimate
- Submittal Review Comment Form

NDOT, City of Sparks, and Washoe County:

- 11" x 17" design plans
- Design Exception Summary (if necessary)
- Submittal Review Comment Form

Utility Agencies:

- 11" x 17" design plans
- Submittal Review Comment Form

Amendment 2 – no change

6.1.5. 30 Percent Design Review Comment Resolution

Original Contract - CONSULTANT will prepare for and attend one (1) in-person meeting with RTC, NDOT, City of Sparks, and Washoe County staff to discuss the 30% Design. Preliminary responses will be identified for all comments. CONSULTANT will consolidate and provide final responses to the comments and submit with this phase of the project.

<u>Amendment 2</u> – no change

6.2. 60 Percent Design (Amendment 2)

At the start of the 60% design effort, CONSULTANT will contact reviewers of the 30% design and attempt to confirm that comment responses are acceptable. Incorporating agency comments from the 30% design review, CONSULTANT will advance the design and prepare design plans, cost estimate, and an outline of the technical specifications for the 60% design.

Plan sheets included in the 30% design submittal will be advanced to the 60% level of detail.

Additional sheets anticipated to be included are:

Multiuse Path Profile Sheets (11)

• Superelevation Diagrams (if necessary)

Geometric Control and Grading Sheets (16)

• Geometric control and grading plan information for median islands, ADA ramps, driveways, and any other feature needing geometry/grading defined for construction

Drainage Profile Sheets (4)

• Culvert extensions will include invert elevations, pipe type, slope, nearby utilities, etc.

Signing and Striping Sheets (20)

• Proposed signing and striping detailing sign type and location, lane arrangements including turn lanes, storage lengths, acceleration lanes, and deceleration lanes

Lighting and Electrical Sheets (4)

Detail Sheets (15)

Up to 125 Sheets Total.

Exclusions from the 60% Design:

- Grading Plan Sheets will not be prepared
- Utility specific generated design (water, gas, etc.), as necessary resulting from utility conflicts, will not be prepared
- Site reconstruction plans for adjacent properties will not be prepared
- Detailed analysis for electrical will not be completed
- Landscape and Aesthetic Sheets for new or remediation for project impacts will not be prepared
- Cross sections will not be prepared

<u>Deliverables</u> - 60% Design Plans, Draft Technical Drainage Report, Cost Estimate, Technical Specifications Outline, Design Review Comment and Response Summary

6.2.1. Drainage Analysis (Amendment 2)

CONSULTANT will advance the drainage analysis design in conjunction with other disciplines and incorporating input from the RTC and NDOT. This analysis assumes that the project does not affect offsite flows and facilities and therefore no significant offsite drainage analysis will be needed.

6.2.2. Draft Technical Drainage Report (Amendment 2)

A Draft Technical Drainage Report will be prepared to summarize the results of the analysis performed for the 60 Percent Design. The report will summarize the criteria and guidelines used in the analyses, the anticipated performance of the drainage facilities within the project design, conformance with criteria, and any noted design criteria exception areas.

6.2.3. Lighting and Electrical Design (Amendment 2)

Electrical design will include street lighting, signal modifications, and miscellaneous electrical connections (if any) at the Calle De La Plata and the Ingenuity Avenue intersections. The design

will include coordination with NVEnergy and will identify all necessary power locations, conduit, wiring, boxes, electrical schedules, and calculations.

Lighting design for the 60 Percent Design will be conceptual only. No detailed analysis will be completed at the 60 Percent Design for lighting. Proposed street lighting will include intersection locations only.

6.2.4. ITS and Signal Design (Amendment 2)

Signal design will include the following components:

- Loop detection on all 4 legs for each intersection
- (2) New cabinets 1 per intersection
- (2) Type 100 vaults 1 per intersection
- No. 7 pull boxes (needed at each intersection corner; will reuse existing if possible)
- No. 5 pull boxes for loop detectors
- New traffic signal and pedestrian poles (including signal heads, internally illuminated street name signs, pole-mounted signs, luminaires, tenons, push buttons, ped heads, emergency vehicle detection)
- Traffic signal conduit (3" and 2")

ITS design will include infrastructure along Pyramid Hwy for connectivity to the City of Sparks and NDOT ITS system. Within the project limits, the following components will be included:

- 4-inch conduit along one side of the road
- 144 strand fiber optic backbone
- P30 pull boxes (or double-stacked No. 7 pull boxes) every 1000 feet
- Type 200 vaults (or No. 9 pull boxes) and Close Circuit Television (CCTV) cameras for remote intersection monitoring at signalized intersections

6.2.5. 60 Percent Cost Estimate and Technical Specification Outline (Amendment 2)

CONSULTANT will prepare a detailed unit price engineer's estimate of probable construction cost in the same format as the bid proposal form to be included in the contract documents. Bid item numbers will correspond to the appropriate sections in the RTC's Orange Book.

The RTC will provide CONSULTANT the most recent RTC Technical Specifications templates. Technical provisions will utilize RTC standard specifications and include NDOT's Standard Specifications for Road and Bridge Construction (Silver Book) for standard construction items. Technical provisions will be prepared for changes to the standards or unique site conditions not adequately covered.

CONSULTANT will prepare 60% design technical provisions which will include a detailed outline of the technical provisions for those items not identified as part of the Standard Specifications.

6.2.6. 60 Percent Design Submittal (Amendment 2)

CONSULTANT will submit the 60% design as summarized:

RTC and NDOT:

- 11" x 17" design plans
- Design Exception Summary (if necessary)
- Draft Technical Drainage Report
- Engineer's opinion of probable construction cost estimate
- Technical Specifications outline
- Submittal Review Comment Form

Washoe County:

- 11" x 17" design plans
- Design Exception Summary (if necessary)
- Draft Technical Drainage Report
- Submittal Review Comment Form

Utility Agencies:

- 11" x 17" design plans
- Submittal Review Comment Form

6.2.7. 60 Percent Design Review Comment Resolution (Amendment 2)

CONSULTANT will prepare for and attend one (1) in-person meeting with RTC, NDOT, and Washoe County staff to discuss the 60% Design. Preliminary responses will be identified for all comments. CONSULTANT will consolidate and provide final responses to the comments with the 90% design deliverables.

6.3. Right-of-Way Engineering Services (Amendment 2)

It is estimated up to fifteen (15) parcels will require permanent and/or temporary easements and/or potentially partial fee takes to construct the planned improvements.

Upon completion of the 60 Percent Design CONSULTANT will present the proposed right-of-way needs to the RTC for concurrence. CONSULTANT will perform boundary surveying including preparation of full Metes and Bounds descriptions of fifteen (15) individual parcels. This will include property record research, drafting of property boundaries from record descriptions, calculation of search coordinates for field boundary survey, field boundary survey on each affected parcel, post processing and reduction of field data, boundary resolution based upon field findings, preparation of legal descriptions and exhibit maps of individual affected parcels. CONSULTANT will obtain Title Reports and updates as required and will invoice the

RTC for these items as reimbursable expenses.

Right-of-Way Appraisal, Property Owner Negotiations, Escrow Coordination and Title Clearance is not included within this task.

<u>Deliverables</u> – Property Boundary for 15 parcels, Exhibit Maps, Legal Descriptions.

7. DESIGN CONTINGENCY

<u>Original Contract</u> - This is a contingency for miscellaneous increases within the scope of this contract in performance of other tasks or added scope. If CONSULTANT determines that it is necessary to perform work outside of the base scope, CONSULTANT shall provide a letter detailing the need, scope, and not-to-exceed budget for any proposed work. Work under this task shall proceed only with the RTC Project Manager's written approval.

7.1. Design Services During Construction and Contract Administration (Amendment 2)

Utility potholing may be required as described in Task 4.7.1. Fee for this optional task will be utilized from this contingency task once agreed upon with the RTC.

8. MISCELANEOUS SERVICES (OPTIONAL)

8.1. Ingenuity Avenue signal Design

<u>Original Contract</u> - If the signal warrant analysis determines that a new signal is needed at Ingenuity Avenue, CONSULTANT will develop design plans for the proposed signal. The design is anticipated to include:

- Traffic signal poles
- Signal undergrounds
- Overhead street light arms with LED luminaires, mast arms, signal heads, pedestrian push buttons, ped signals, and mast arm signs
- Location for service pedestal, provide controller cabinet and loop detection
- Signal pole schedule, conduit and conductor schedule, phase diagram, and illuminated street name signs

<u>Deliverables</u> – Tech Memo Summary

<u>Amendment 2</u> - Task moved to base design Tasks 6.2.4, 9.1.3 and 9.2. Remaining task fee balance zero.

8.2. Public Outreach Survey

Original Contract - CONSULTANT will conduct a survey of businesses and residents adjacent

to the project area. The survey will collect demographic data of employers and employees. The public involvement team will develop a survey implementation plan, design an online and print survey in English and Spanish, identify participation metrics, and incorporate strategies from the team's multicultural engagement expert.

<u>Deliverables</u> – Survey Summary

Amendment 2 - Task removed. Remaining task fee balance zero.

8.3. Business and Community Outreach

Original Contract - CONSULTANT will arrange and coordinate briefings for local community groups and adjacent business owners. The team will prepare Project information materials in both English and Spanish for residents and property owners throughout the Project area. Atkins will work with the RTC's Senior Project Manager and the RTC's Public Information Officer to identify and engage Homeowners Associations and local businesses, providing them with fact sheets and publicizing a survey.

<u>Amendment 2</u> - Task moved to base design Task 2.6. Remaining task fee balance zero.

9. FINAL DESIGN (AMENDMENT 2)

9.1. 90 Percent Design

Incorporating agency comments from the 60% design review, CONSULTANT will advance the design and prepare design plans, cost estimate, and technical specifications for the 90% design.

Plan sheets included in the 60% design submittal will be advanced to the 90% design level of detail.

Sheets to be included for final design submittals are:

Title Sheet (1)

Index of Sheets, General Notes, Legend, Abbreviations, Key Maps (3)

Geometric Control Sheet (1)

Typical Section Sheets (6)

Removals Plans (11)

Roadway Plan and Profile Sheets (20)

Geometric Control and Grading Sheets (16)

Grading Sheets (20)

Multiuse Path Profile Sheets (11 if necessary)

Signing and Striping Sheets (20)

Traffic Signal Sheets for Calle De La Plata (4)

- Existing traffic signal poles. Install or relocate as required
- Existing signal undergrounds
- Signal pole schedule, conduit and conductor schedule, phase diagram

ITS Sheets (18)

- ITS conduit and pull boxes
- Fiber between Egyptian Drive and Ingenuity Avenue
- ITS details and splice diagrams

Lighting and Electrical Sheets (8)

Utility Sheets (11)

Detail Sheets (15)

Up to 165 Sheets Total.

Exclusions from the 90 Percent Design:

- Utility specific generated design (water, gas, etc.), as necessary resulting from utility conflicts, will not be prepared
- Site reconstruction plans for adjacent properties will not be prepared
- Cross sections will not be prepared

CONSULTANT will prepare for and attend one in-person meeting to discuss the 90% design.

<u>Deliverables</u> - 90% Design Plans, Final Technical Drainage Report, Cost Estimate, Technical Specifications Outline, Design Review Comment and Response Summary, working day estimate summary

9.1.1. Drainage Analysis

CONSULTANT will advance the drainage analysis design in conjunction with other disciplines and incorporating input from the RTC, Washoe County, and NDOT.

9.1.2. Final Technical Drainage Report

The Draft Technical Drainage Report will be updated as the design progresses. Review comments received from the 60 Percent Design will be incorporated and a Final Technical Drainage Report will be prepared for the 90 Percent Design submittal.

9.1.3. Lighting and Electrical, and ITS and Signal Design

CONSULTANT will advance these miscellaneous designs to 90 Percent Design, 100 Percent Design, and Final Design in conjunction with other disciplines and incorporating input from the RTC, Washoe County, and NDOT.

9.1.4. 90 Percent Cost Estimate and Technical Specifications

CONSULTANT will advance the detailed unit price engineer's estimate of probable construction cost to the 90% design level.

CONSULTANT will provide detailed technical specifications for the outline created in the previous submittal, and any additional items as determined during the 90% design. Technical provisions will utilize RTC standard specifications and include NDOT's Standard Specifications for Road and Bridge Construction (Silver Book) for standard construction items. Technical provisions will be prepared for changes to the standards or unique site conditions not adequately covered.

CONSULTANT will develop a working day estimate through development of a construction duration schedule. A draft estimate will be prepared and reviewed with the RTC. One round of comments will be incorporated, and a meeting will be held with NDOT to discuss the results. At the conclusion of the meeting, CONSULTANT will distribute meeting notes to attendees.

9.1.5. 90 Percent Design Submittal

CONSULTANT will submit the 90% design as summarized:

RTC and NDOT:

- 11" x 17" design plans
- Design Exception Summary (if necessary)
- Final Technical Drainage Report
- Engineer's opinion of probable construction cost estimate
- Technical Specifications
- Submittal Review Comment Form

Washoe County:

• 11" x 17" design plans

- Design Exception Summary (if necessary)
- Final Technical Drainage Report
- Submittal Review Comment Form

Utility Agencies:

- 11" x 17" design plans
- Technical Specifications outline
- Submittal Review Comment Form

9.1.6. 90 Percent Design Review Comment Resolution

CONSULTANT will prepare for and attend one (1) in-person meeting with RTC, NDOT, and Washoe County staff to discuss the 90% Design. Preliminary responses will be identified for all comments. CONSULTANT will consolidate and provide final responses to the comments with the 100% design deliverables.

9.2. 100 Percent Design

Incorporating agency comments from the 90% design review, CONSULTANT will advance the design and prepare a completed package of design plans, cost estimate, and technical specifications.

The 100 Percent Design assumes no sheets will be added from the 90 Percent Design.

<u>Deliverables</u> - 100% Design Plans, Cost Estimate, Technical Specifications, Design Review Comment and Response Summary

9.2.1. 100 Percent Cost Estimate and Technical Specifications

CONSULTANT will advance and prepare a completed engineer's estimate of probable construction cost and technical specifications.

9.2.2. 100 Percent Design Submittal

CONSULTANT will submit the 100% design as summarized:

RTC and NDOT:

- 11" x 17" design plans
- Design Exception Summary (if necessary)
- Engineer's opinion of probable construction cost estimate
- Technical Specifications
- Submittal Review Comment Form

Washoe County:

- 11" x 17" design plans
- Design Exception Summary (if necessary)
- Submittal Review Comment Form

Utility Agencies:

- 11" x 17" design plans
- Submittal Review Comment Form

9.2.3. 100 Percent Design Review Comment Resolution

CONSULTANT will prepare for and attend one (1) in-person meeting with RTC, NDOT, and Washoe County staff to discuss the 100% Design. Attendees will verify that all past comments have been addressed and that no outstanding comments remain.

9.3. Final Design

Once the agencies verify that all review comments have been addressed and no additional changes are required, CONSULTANT will sign and seal the design plans and technical specifications for use as an advertised project.

The Final Design assumes no sheets will be added from the 100 Percent Design.

<u>Deliverables</u> - Final Design Plans, Cost Estimate, Technical Specifications, Design Review Comment and Response Summary

10. BIDDING SERVICES (AMENDMENT 2)

CONSULTANT will be available during the bidding process to respond to Requests for Information (RFIs) and will attend the RTC hosted pre-bid meeting. All questions and responses will be documented and provided to the RTC, and prepare and provide any addenda, if required. All questions regarding legal aspects of the contract documents will be referred directly to the RTC. CONSULTANT will prepare and provide a summary of the pre-bid meeting, as directed by the RTC.

CONSULTANT will attend the bid opening, review the bids received for irregularities, and provide a recommendation for award. CONSULTANT will tabulate bid results into a MS Excel spreadsheet to verify the quantities and costs of the bid items.

After bid opening and award, CONSULTANT will prepare a conformed set of specifications for distribution to the project and construction teams. All RTC and Contractor signed pages and any addenda will be incorporated into a final set of project specifications. CONSULTANT will also prepare a conformed set of plans, if any changes are required resulting from RFIs during the bidding process.

11. CONSTRUCTION MANAGEMENT AND DESIGN SERVICES DURING CONSTRUCTION (AMENDMENT 2)

11.1. Design Services During Construction and Contract Administration

CONSULTANT will provide services during construction for the project. This will include project management, attendance at weekly contractor meetings, responding to contractor RFIs, review and approval of contractor submittals, development and distribution of field adjustments or addendums, and development of record drawings based on contractor redlines.

For the purposes of this task, CONSULTANT estimates that the duration for the construction effort will be approximately one hundred and twenty (120) working days.

CONSULTANT will lead the pre-construction meeting with agenda information, figures, and preparing post meeting notes. It is assumed that the RTC will attend and support the meeting.

CONSULTANT will lead weekly contractor meetings and prepare agenda, informational materials to support field discussion. Meeting notes will be prepared at the conclusion of the meeting and distributed.

12. CONSTRUCTION CONTINGENCY (AMENDMENT 2)

12.1. Construction Contingency

This is a contingency for miscellaneous increases within the scope of this contract in the performance of services under Task 11. If CONSULTANT determines that it is necessary to perform work outside of the scope covered in Task 11, 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.

12.2. Construction of Calle De La Plata Intersection

It is anticipated that the Calle De La Plata intersection improvements may be constructed in advance of the RTC project based on the RTC's Pyramid Highway Operations Improvements design. If the construction of the intersection improvement remains in the Pyramid Highway Operations Improvements Project, construction contingency will be used for the effort associated with the intersection.

PROJECT TEAM

Our anticipated key personnel for this project are as follows:

Project Manager – Brian Janes Asst. Project Manager/Drainage Lead – Kerri Lanza Environmental Lead – Kirk Webb Public Outreach Lead – Susan Berkley Traffic Lead – Anna Ericson Roadway Design Lead – Pankaj Maheshwari

SCHEDULE

The anticipated schedule is as follows:

Task	Start	End		
1 – Project Management	Sep 2023	May 2026		
2 – Public and Agency Involvement	May 2024	Jul 2026		
3 – Environmental Coordination and Documentation	Jan 2024	Feb 2026		
4 – Investigation of Existing Conditions	Sep 2023	Feb 2026		
5 – Alternatives Analysis	Jan 2024	Sep 2024		
6 – Preliminary Design	Aug 2024	Jul 2025		
ROW Engineering	Jul 2025	Feb 2026		
9 – Final Design	Jul 2025	Mar 2026		
10 – Bid Support	Mar 2026	Jun 2026		
11 – Construction Management and Design	Jun 2026	Jan 2027		
Servicers During Construction				

EXHIBIT A-2 SCHEDULE OF SERVICES

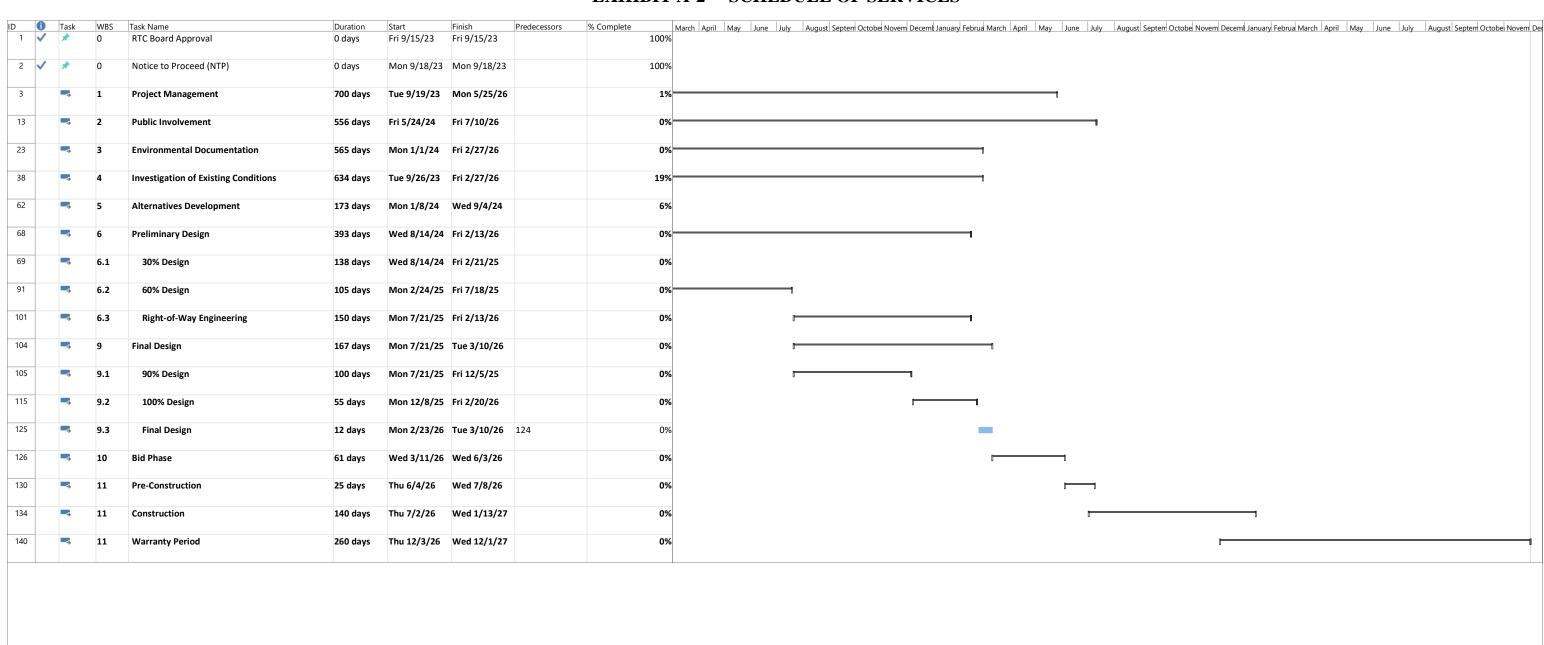




EXHIBIT B-1 through B-3

EXHIBIT B-1: PYRAMID HWY 2023-2024 HOURLY RATE FEE SCHEDULE

EXHIBIT B-2: FEE SUMMARY

EXHIBIT B-3: FEE SUMMARY DETAIL

EXHIBIT B-1

PYRAMID HIGHWAY 2023-2024 HOURLY RATE FEE SCHEDULE

MANAGEMENT AND DESIGN PERSONNEL

Project Principal	\$280.00/hr.
Sr. Project Director	\$270.00/hr.
Senior ITS/Traffic Engineer IV	\$270.00/hr.
Senior Engineer IV	\$270.00/hr.
Senior ITS/Traffic Technical Manager	\$235.00/hr.
Senior Designer III	\$220.00/hr.
Senior Roadway Engineer	\$215.00/hr.
Senior Engineer III	\$205.00/hr.
Professional Land Surveyor (PLS)	\$205.00/hr.
Senior ITS/Traffic Engineer II	\$195.00/hr.
Senior Engineer II	\$195.00/hr.
Public Information Lead	\$185.00/hr.
Senior ITS/Traffic Analyst II	\$180.00/hr.
Senior Engineer I	\$155.00/hr.
Engineer II	\$145.00/hr.
ITS/Traffic Engineer II	\$145.00/hr.
Engineer I	\$135.00/hr.
Senior Public Information Specialist	\$130.00/hr.
Senior Designer	\$130.00/hr.
Designer	\$110.00/hr.
Project Assistant	\$105.00/hr.
CAD Tech III	\$90.00/hr.
Public Information O Specialist	\$90.00/hr.
Intern	\$80.00/hr.

ENVIORNMENTAL PERSONNEL

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Environmental Technical Director	\$260.00/hr.
Senior Planner IV	\$230.00/hr.
Senior Planner III	\$220.00/hr.
Senior NEPA Specialist	\$210.00/hr.
Senior Scientist III	\$185.00/hr.
Planner II	\$150.00/hr.
Scientist II	\$130.00/hr.
GIS Analyst II	\$120.00/hr.
Technical Writer/Editor	\$105.00/hr.

CONSTRUCTION MANAGEMENT PERSONNEL

Sr. PM/RE	\$270/hr.
Scheduler/Estimator	\$210.00/hr.
Senior Inspector	\$165.00/hr.
Office Administrator	\$100.00/hr.

EXPENSES

Travel and associated expenses	As incurred
Direct expenses (e.g. title reports)	As incurred
Mileage	GSA rate

NOTES:

- 1. Rates valid through 2024 and may be increased 3% after that.
- 2. Categories and rates not shown on the table will be determined at the time of need.
- 3. Overtime for CM field staff and time spent on projects in litigation, in depositions and/or providing expert testimony will be charged at the standard rate times 1.5. Personnel rates shown apply to project charges during calendar year 2020. On January 1st of each subsequent year, labor rates invoiced will be increased to reflect annual cost of labor increases not to exceed 3%.

PYRAMID HIGHWAY 2025-2026 HOURLY RATE FEE SCHEDULE

MANAGEMENT	AND	DESIGN	PERSONNEL

GENIENT AND DESIGN TERSONNEL	
Design Manager/Sr. Project Director	\$280.00/hr.
Project Controls Manger	\$270.00/hr.
ITS/Traffic Technical Manager	\$250.00/hr.
Professional Land Surveyor	\$245.00/hr.
Senior Engineer IV	\$230.00/hr.
Sr. Project Manager	\$225.00/hr.
Senior Structural Engineer III	\$220.00/hr.
Senior Roadway Engineer	\$215.00/hr.
Public Information Lead	\$205.00/hr.
Senior ITS/Traffic Engineer II	\$200.00/hr.
Senior Surveyor III	\$200.00/hr.
Senior Landscape Architect III	\$200.00/hr.
Senior Structural Engineer II	\$200.00/hr.
Senior Landscape Architect II	\$185.00/hr.
Senior ITS/Traffic Engineer I	\$160.00/hr.
Engineer II/Structural Engineer II	\$150.00/hr.
Senior Public Information Specialist	\$145.00/hr.
Senior Technical Coordinator I	\$140.00/hr.
Engineer I	\$140.00/hr.
Landscape Architect II	\$135.00/hr.
ITS/Traffic Engineer I	\$120.00/hr.
Survey Tech. II	\$115.00/hr.
Designer	\$110.00/hr.
Public Information O Specialist	\$100.00/hr.

ENVIORNMENTAL PERSONNEL

Environmental Technical Director	\$265.00/hr.
Technical Manager	\$265.00/hr.
Senior Planner IV	\$225.00/hr.
Senior Scientist III	\$185.00/hr.
Senior Planner III	\$170.00/hr.
Senior Planner I	\$155.00/hr.
Scientist II	\$130.00/hr.
GIS Analyst II	\$130.00/hr.
Technical Writer/Editor	\$105.00/hr.

CONSTRUCTION PERSONNEL

Sr. Inspector	\$175.00/hr.
Document Control	\$145.00/hr.

EXPENSES

Travel and associated expenses	As incurred
Direct expenses (e.g. title reports)	As incurred
Mileage	GSA rate

NOTES:

1. Categories and rates not shown on the table will be determined at the time of need.

Exhibit B-2 Fee Summary - Pyramid Highway Operations Improvements Project No. 0237002 (Egyptian Drive to Ingenuity Avenue).

								Sun	nmary					,
Гask No.	Item No.	Task	Atkins Hours	Atkins Labor	Atkins Expense	Atkins	CME	CFA	PK Electrical	Total Subs	Total Price	Original Contract Price	Contract Adjusted Price	Total Contract Price
1	1	Project Management	581	\$131,890	\$500	\$132,390	0	\$0	\$0	\$0	\$132,390	\$132,390	\$83,390	\$83,390
!	1.1		212	\$49,320	\$500	\$49,820	0	\$0	\$0	\$0 \$0	\$49,820	\$49,820	\$29,820	\$29,820
		Team and Project Management	0	\$0	\$300 \$0	\$49,620	0	\$0	· · · · · · · · · · · · · · · · · · ·	\$0 \$0		\$49,620		\$29,820
	1.2	Project Coordination and Meetings	-	\$4,520	· · · · · · · · · · · · · · · · · · ·				\$0 \$0	· · · · · · · · · · · · · · · · · · ·	\$0 \$4,520		\$0	
	1.2.1	Project Kickoff Meetings	26		\$0	\$4,520	0	\$0	\$0	\$0		\$4,520	\$4,520	\$4,520
	1.2.2	Project Management Team Meetings	30	\$7,250	\$0	\$7,250	0	\$0	\$0	\$0	\$7,250	\$7,250	\$7,250	\$7,250
	1.2.3	Internal Design Team Coordination Meetings	252	\$56,160	\$0	\$56,160	0	\$0	\$0	\$0	\$56,160	\$56,160	\$27,160	\$27,160
	1.2.4	Misc. Coordination Meetings	18	\$4,350	\$0	\$4,350	0	\$0	\$0	\$0	\$4,350	\$4,350	\$4,350	\$4,350
	1.3	Project Management Plan (PMP)	12	\$2,580	\$0	\$2,580	0	\$0	\$0	\$0	\$2,580	\$2,580	\$2,580	\$2,580
	1.4	Quality Management Plan (QMP)	12	\$2,580	\$0	\$2,580	0	\$0	\$0	\$0	\$2,580	\$2,580	\$2,580	\$2,580
	1.5	Design Schedule	19	\$5,130	\$0	\$5,130	0	\$0	\$0	\$0	\$5,130	\$5,130	\$5,130	\$5,130
	1	Amendment 2	639	\$153,040	\$500	\$153,540	0	\$0	\$0	\$0	\$153,540			\$153,540
	1.1	Team and Project Management	221	\$60,010	\$500	\$60,510	0	\$0	\$0	\$0	\$60,510			\$60,510
	1.2	Project Coordination and Meetings	0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0			\$0
	1.2.1	Project Kickoff Meetings	0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0			\$0
	1.2.2	Project Management Team Meetings	10	\$2,250	\$0	\$2,250	0	\$0	\$0	\$0	\$2,250			\$2,250
	1.2.3	Internal Design Team Coordination Meetings	408	\$90,780	\$0	\$90,780	0	\$0	\$0	\$0	\$90,780			\$90,780
	1.2.4	Misc. Coordination Meetings	0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0			\$0
	1.3	Project Management Plan (PMP)	0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0			\$0
	1.4	Quality Management Plan (QMP)	0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0			\$0
	1.5	Design Schedule	0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0			\$0
2	2	Public and Agency Involvement	175	\$21,485	\$200	\$21,685	0	\$0	\$0	\$0	\$21,685	\$21,685	\$21,685	\$21,685
	2.1	Public Involvement Plan	40	\$5,310	\$100	\$5,410	0	\$0	\$0	\$0	\$5,410	\$5,410	\$5,410	\$5,410
	2.2	Collateral Material Development	80	\$11,225	\$100	\$11,325	0	\$0	\$0	\$0	\$11,325	\$11,325	\$11,325	\$11,325
	2.3	Media Relations	25	\$2,250	\$0	\$2,250	0	\$0	\$0	\$0	\$2,250	\$2,250	\$2,250	\$2,250
	2.4	Documentation	30	\$2,700	\$0	\$2,700	0	\$0	\$0	\$0	\$2,700	\$2,700	\$2,700	\$2,700
	2	Amendment 2	50	\$7,400	\$0	\$7,400	0	\$0	\$0	\$0	\$7,400	Ψ2,700	Ψ2,100	\$7,400
	2.5	Business and Community Outreach	50	\$7,400	\$0	\$7,400	0	\$0	\$0	\$0	\$7,400			\$7,400
		Ender and December 2	004	#45.000	#4.000	# 40.000	0	40	00	# 0	# 40,000	# 40,000	Ć46 220	¢46.220
3	3	Environmental and Permitting	294	\$45,330	\$1,000	\$46,330	0	\$0	\$0	\$0	\$46,330	\$46,330	\$46,330	\$46,330
	3.1	Review of Pyramid Highway/US 395 Connection Record of Decision (ROD)	104	\$17,120	\$0	\$17,120	0	\$0	\$0	\$0	\$17,120	\$17,120	\$17,120	\$17,120
	3.2	Agency Coordination	26	\$4,450	\$0	\$4,450	0	\$0	\$0	\$0	\$4,450	\$4,450	\$4,450	\$4,450
	3.3	Prepare Compatibility Report	164	\$23,760	\$1,000	\$24,760	0	\$0	\$0	\$0	\$24,760	\$24,760	\$24,760	\$24,760
		Amendment 2	1028	\$178,820	\$3,000	\$181,820	0	\$0	\$0	\$0	\$181,820			\$181,820
	3.4	Environmental Coordination	68	\$18,020	\$0	\$18,020	0	\$0	\$0	\$0	\$18,020			\$18,020
	3.5	Waters of the U.S. Technical Memorandum (Optional)	92	\$12,650	\$1,000	\$13,650	0	\$0	\$0	\$0	\$13,650			\$13,650
	3.6	Clean Water Act - Section 404 Approved Jurisdictional Determination (Optional)	52	\$7,550	\$0	\$7,550	0	\$0	\$0	\$0	\$7,550			\$7,550
	3.7	Nevada Division of Forestry - Rare Plant Permit (Optional)	106	\$15,240	\$0	\$15,240	0	\$0	\$0	\$0	\$15,240			\$15,240
	3.8	Traffic Noise	320	\$61,510	\$1,000	\$62,510	0	\$0	\$0	\$0	\$62,510			\$62,510
	3.8.1	Noise Wall Design (Optional)	292	\$47,880	\$0	\$47,880	0	\$0	\$0	\$0	\$47,880			\$47,880
	3.9	Hazardous Materials (Optional)	98	\$15,970	\$1,000	\$16,970	0	\$0	\$0	\$0	\$16,970			\$16,970
4	4	Investigation of Evicting Conditions	344	\$50,300	\$5.500	\$55,800	24975	\$58,000	\$ 0	¢82 975	\$120.675	\$139,675	\$122 617	\$133,617
4	4	Investigation of Existing Conditions		\$4,380	\$5,500	\$55,800 \$4,880		\$58,900	\$0	\$83,875	\$139,675 \$4,880		\$133,617 \$3,135	\$133,617
	4.1	Data Collection and Condition Survey	28	54 38H	\$500	SA XXII	0	\$0	\$0	\$0	34 XXII	\$4,880	\$3 135	וירו ר.ת

Exhibit B-2 Fee Summary - Pyramid Highway Operations Improvements Project No. 0237002 (Egyptian Drive to Ingenuity Avenue).

				Summary										
Task No.	Item No.	Task	Atkine Hours	Atkins Labor	Atkins Expense	Atkins	CME	CFA	PK Electrical	Total Subs	Total Price	Original Contract Price	Contract Adjusted Price	Total Contract Price
TASK INU.			116	\$17,600	\$5,000	\$22,600	0	\$0	\$0	\$0	\$22,600	\$22,600	\$32,173	\$32,173
	4.3	Traffic Analysis	0	\$17,000			24975	\$0		\$24,975	\$22,600	\$22,600	\$32,173	\$24,975
	4.4	Geotechnical Investigation - Desktop Review	8	\$1,160	\$0 \$0	\$0 \$1,160	0	\$15,320	\$0 \$0	\$24,975 \$15,320	\$24,975 \$16,480	\$24,975 \$16,480	\$24,975 \$15,320	\$24,975
	4.5 4.6	Control and Right-of-Way (ROW) Mapping	40	\$5,800	\$0 \$0	\$1,100	0	\$38,300	\$0	\$38,300	\$10,480	\$44,100	\$13,320	\$41,760
	4.0	Topographic Survey and Mapping Subsurface Utilities	104	\$13,920	\$0 \$0	\$13,920	0	\$5,280	\$0	\$5,280	\$19,200	\$19,200	\$41,760	\$14,814
	4.7	Amendment 2	64	\$13,920	\$0 \$0	\$13,920	103466	\$6,310	\$0	\$109,776	\$19,200	\$19,200	Ф14,014	\$121,096
	•		64	\$11,320	\$0 \$0	\$11,320	0	\$0,310	\$0	\$109,770	\$121,090			\$121,090
	4.3 4.4.1	Traffic Analysis	04	\$11,320	\$0 \$0	\$11,320	103466	\$0	\$0	\$103,466				\$103,466
		Geotechnical Investigation	0	\$0 \$0	\$0 \$0	\$0 \$0		\$6,310	\$0 \$0		\$103,466			
	4.6.1	Field Survey	<u> </u>				0			\$6,310	\$6,310			\$6,310
	4.7.1	Utility Potholing (Optional)	0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0			\$0
5	5	Alternatives Analysis	368	\$61,220	\$0	\$61,220	0	\$0	\$2,000	\$2,000	\$63,220	\$63,220	\$57,220	\$57,220
	5.1	Design Criteria	68	\$10,700	\$0	\$10,700	0	\$0	\$0	\$0	\$10,700	\$10,700	\$4,700	\$4,700
	5.2	Alternatives Analysis	300	\$50,520	\$0	\$50,520	0	\$0	\$2,000	\$2,000	\$52,520	\$52,520	\$52,520	\$52,520
0		Proliminam Parim	1070	¢470.040	ФО.	6470.040	0	ФО	ΦE 000	фг ccc	¢404.040	6404.040	6242.000	6242.000
6	6	Preliminary Design	1270	\$176,010	\$0	\$176,010	0	\$0	\$5,600	\$5,600	\$181,610	\$181,610	\$242,668	\$242,668
	6.1	30 Percent Design	968	\$128,920	\$0	\$128,920	0	\$0	\$5,600	\$5,600	\$134,520	\$134,520	\$223,298	\$223,298
	6.1.1	Drainage Analysis	120	\$17,800	\$0	\$17,800	0	\$0	\$0	\$0	\$17,800	\$17,800	\$2,800	\$2,800
	6.1.2	Draft Technical Drainage Report	80	\$12,800	\$0	\$12,800	0	\$0	\$0	\$0	\$12,800	\$12,800	\$8,080	\$8,080
	6.1.3	30 Percent Cost Estimate	72	\$11,720	\$0	\$11,720	0	\$0	\$0	\$0	\$11,720	\$11,720	\$3,720	\$3,720
	6.1.4	30 Percent Design Submittal	12	\$2,000	\$0	\$2,000	0	\$0	\$0	\$0	\$2,000	\$2,000	\$2,000	\$2,000
	6.1.5	30 Percent Design Review Comment Resolution	18	\$2,770	\$0	\$2,770	0	\$0	\$0	\$0	\$2,770	\$2,770	\$2,770	\$2,770
	6	Amendment 2	2739	\$419,895	\$23,000	\$442,895	0	\$0	\$11,000	\$11,000	\$453,895			\$453,895
	6.2	60 Percent Design	1568	\$235,780	\$0 \$0	\$235,780	0	\$0 ©0	\$0 *0	\$0 \$0	\$235,780			\$235,780
	6.2.1	Drainage Analysis	300	\$46,240	\$0	\$46,240	<u>~</u>	\$0	\$0	\$0	\$46,240			\$46,240
	6.2.2	Draft Technical Drainage Report	136	\$25,480	\$0	\$25,480	0	\$0	\$0	\$0	\$25,480			\$25,480
	6.2.3	Lighting and Electrical Design	0	\$0 #64.880	\$0 \$0	\$0 ¢c4.000	0	\$0 ©0	\$11,000	\$11,000	\$11,000 \$64,880			\$11,000
	6.2.4	ITS and Signal Design	472	\$64,880	\$0	\$64,880	0	\$0	\$0	\$0	\$64,880			\$64,880
	6.2.5	60 Percent Cost Estimate and Technical Specification Outline	40	\$7,800	\$0	\$7,800	0	\$0	\$0	\$0	\$7,800 \$4,640			\$7,800
	6.2.6	60 Percent Design Submittal	8	\$1,610 \$6,470	\$0	\$1,610 \$6,470	0	\$0 ©0	\$0 \$0	\$0 \$0	\$1,610			\$1,610
	6.2.7	60 Percent Design Review Comment Resolution	38 177	\$6,470	\$0 \$23.000	\$6,470	0	\$0 \$0	\$0 \$0	\$0 \$0	\$6,470 \$54,635			\$6,470 \$54,635
	6.3	Right-of-Way Engineering Services	177	\$31,635	\$23,000	\$54,635	U	φυ	ΦΟ	φυ	 \$34,033			\$34,033
7	7	Design Contingency	0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$130,000	\$130,000	\$50,000	\$130,000
	7.1	Design Contingency	0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$50,000	\$50,000	\$50,000	\$50,000
	7.2	4.7.1 - Utility Potholing	0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$80,000			\$80,000
		W		0.40.070	40	040.070		**	01.000	0.1.00 2	ΦΕ4.5=0	AF4 573	AF4 ===	A=4 ===
8	8	Miscellaneous Services (Optional)	320	\$49,970	\$0	\$49,970	0	\$0	\$1,600	\$1,600	\$51,570 \$07,470	\$51,570 \$67,470	\$51,570	\$51,570
	8.1	Traffic Signal at Ingenuity	150	\$25,570	\$0	\$25,570	0	\$0	\$1,600	\$1,600	\$27,170	\$27,170	\$27,170	\$27,170
	8.2	Public Outreach Survey	120	\$17,000	\$0	\$17,000	0	\$0	\$0	\$0	\$17,000	\$17,000	\$17,000	\$17,000
	8.3	Business and Community Outreach	50	\$7,400	\$0	\$7,400	0	\$0	\$0	\$0	\$7,400	\$7,400	\$7,400	\$7,400
	8	Amendment 2	0	\$0	\$0	\$0	0	\$0	\$0	\$0	-\$51,570			-\$51,570
	8	Miscellaneous Services (Optional)	0	\$0	\$0	\$0	0	\$0	\$0	\$0	-\$51,570			-\$51,570
9	9	Final Design (Amendment 2)	3252	\$508,070	\$0	\$508,070	0	\$0	\$26,000	\$26,000	\$534,070			\$534,070
	9.1	90 Percent Design	1540	\$234,820	\$0	\$234,820	0	\$0	\$0	\$0	\$234,820			\$234,820
		Drainage Analysis	148	\$23,520	\$0	\$23,520	0	\$0	\$0	\$0	\$23,520			\$23,520

Exhibit B-2 Fee Summary - Pyramid Highway Operations Improvements Project No. 0237002 (Egyptian Drive to Ingenuity Avenue).

				Summary										
Task No	Item No.	Task	Atkins Hours	Atkins Labor	Atkins Expense	Atkins	CME	CFA	PK Electrical	Total Subs	Total Price	Original Contract Price	Contract Adjusted Price	Total Contract Price
rack rtc.	9.1.2	Final Technical Drainage Report	72	\$13,600	\$0	\$13,600	0	\$0	\$0	\$0	\$13,600		11100	\$13,600
	9.1.3	Lighting and Electrical, and ITS and Signal Design	324	\$44.880	\$0	\$44,880	0	\$0	\$18,500	\$18,500	\$63,380			\$63,380
	9.1.4	90 Percent Cost Estimate and Technical Specifications	98	\$23,000	\$0	\$23,000	0	\$0	\$0	\$0	\$23,000			\$23,000
	9.1.5	90 Percent Design Submittal	8	\$1,610	\$0	\$1,610	0	\$0	\$0	\$0	\$1,610			\$1,610
	9.1.6	90 Percent Design Review Comment Resolution	38	\$6,470	\$0	\$6,470	0	\$0	\$0	\$0	\$6,470			\$6,470
	9.2	100 Percent Design	932	\$142,500	\$0	\$142,500	0	\$0	\$7,500	\$7,500	\$150,000			\$150,000
	9.2.1	100 Percent Cost Estimate and Technical Specifications	42	\$8,260	\$0	\$8,260	0	\$0	\$0	\$0	\$8,260			\$8,260
	9.2.2	100 Percent Design Submittal	8	\$1,610	\$0	\$1,610	0	\$0	\$0	\$0	\$1,610			\$1,610
	9.2.3	100 Percent Design Review Comment Resolution	24	\$4,350	\$0	\$4,350	0	\$0	\$0	\$0	\$4,350			\$4,350
	9.3	Final Design	18	\$3,450	\$0	\$3,450	0	\$0	\$0	\$0	\$3,450			\$3,450
10	10	Bidding Services (Amendment 2)	40	\$8,080	\$100	\$8,180	0	\$0	\$2,500	\$2,500	\$10,680			\$10,680
	10	Bidding Services	40	\$8,080	\$100	\$8,180	0	\$0	\$2,500	\$2,500	\$10,680			\$10,680
11	11	Design Services During Construction (Amendment 2)	4364	\$741,730	\$11,620	\$753,350	114555	\$72,700	\$8,500	\$195,755	\$949,105			\$949,105
	11.1	Design Services During Construction and Contract Administration	2364	\$391,730	\$1,000	\$392,730	0	\$0	\$8,500	\$8,500	\$401,230			\$401,230
	11.2	Construction Surveying	0	\$0	\$0	\$0	0	\$72,700	\$0	\$72,700	\$72,700			\$72,700
	11.3	Inspection	2000	\$350,000	\$10,620	\$360,620	0	\$0	\$0	\$0	\$360,620			\$360,620
	11.4	Materials Testing	0	\$0	\$0	\$0	114555	\$0	\$0	\$114,555	\$114,555			\$114,555
	12	Construction Contingency (Amendment 2)	0	\$0	\$0	\$0	11590	\$9,400	\$0	\$20,990	\$70,990			\$70,990
	12.1	Construction Contingency	0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$50,000			\$50,000
	12.2	Construction of Calle De La Plata Intersection	0	\$0	\$0	\$0	11590	\$9,400	\$0	\$20,990	\$20,990			\$20,990
		Totals	15,528	\$2,564,560	\$45,420	\$2,609,980	\$ 254,586.00	\$147,310	\$57,200	\$459,096	\$3,197,506	\$766,480	\$686,480	\$3,197,50

Exhibit B-3 Fee Summary Detail - Pyramid Highway Operations Improvements Project No. 0237002 (Egyptian Drive to Ingenuity Avenue).

			Fovironmental Personnal Constructi	on Summary
Tesk No. Item No. Tesk	Project Principal St. Project Manager St. Roadway Engineer St. Engineer II Project Controls Manager St. Engineer II St. Engineer II CAD Tech III CAD Tech III	St. Structural Engineer II St. Structural Engineer II Structural Engineer II TEST antic Engineer II TEST antic Annalysis II St. ITST antic Annalysis II St. ITST antic Engineer II TEST	Survey Tech II St. Landscape Architect II Landscape Architect II Environmental Technical Manager Technical Manager St. Ranner II St. Planner II St. Planner II St. Planner IV St. Pla	Summary To be a summary Alkins Alkins Alkins Labor Expense Alkins CME CFA PK Electrical Total Subs Total Pirc
Bill Rates (202		\$220.00 \$200.00 \$150.00 N/A \$250.00 \$200.00 N/A \$160.00 N/A \$120.00 \$205.00 \$145.00 \$100.00 \$140.00 N/A \$245.00 \$200.00		45.00
1	12 285 0 0 0 0 0 116 0 16 0 0 2 4 16 10 10 12 48 96 6 8 8 19 0 285 112 68 0 0 0 0 68 0 0	0 0 0 0 0 88 0 0 0 0 0 0 0 0 0	0 0 0 0 0 666 0 0 0 0 0 0 0 0 0 0 0 0 0	56 581 \$131,800 \$500 \$132,360 \$0 \$0 \$0 \$132,800 \$0 \$0 \$132,800 \$7 \$0 \$0 \$0 \$7 \$0
1.2 Project Coordination and Meetings 12.1 Project Kindorf Meetings 12.2 Project Management Team Meetings 12.2 Internal Design Team Coordination Meetings 12.3 Miss. Coordination Meetings 13.4 Project Management Team (PMP) 14.5 Design Schedule 15.5 Design Schedule	10 68 68 68 68	68	68	0 50 50 50 50 50 50 50 50 50 50 50 50 50
2 Public and Agency Involvement 2.1 Public Involvement Plan 2.2 Collisteral Material Development 2.3 Media Relations 2.4 Documentation 2. Amendment 2 2.5 Business and Community Outreach 3 3 Environmental and Permitting 3.1 Review of Pyramid Highway/US 39 Connection Record of Decision (ROD)		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 17 45 55 58 0 0 16 16 17 15 15 15 15 15 15 15 15 15 15 15 15 15	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	40 \$5,310 \$100 \$5,410 \$0 \$5,55 \$0 \$51,225 \$100 \$11,325 \$0 \$51,225 \$0 \$2,250 \$0 \$2,250 \$0 \$2,270 \$0 \$50 \$52, \$0 \$51,255 \$0 \$51,255 \$0 \$51,250 \$0 \$52,700 \$0 \$50 \$50 \$57,400 \$0 \$7,400 \$0 \$50 \$50 \$57,400 \$0 \$1,400 \$1,40
3.1 Review of Pyramid Highway(U.S.395 Connection Record of Decision (ROD) 3.2 Agency Coordinator 3.3 Prepare Compatibility Report 3 Amendment2 3.4 Environmental Coordination 3.5 Connection of Control Memorandum (Optional) 3.6 Connection Control Control Memorandum (Optional) 3.7 Neved a Division of Forestry - Rare Plant Permit (Optional) 3.8 Todfile Notic 3.8.1 Notice Wall Design (Optional) 3.9 Hazardous Materials (Optional) 3.1 National Control Cont	0 0 0 0 0 0 0 138 0 0	0 24 48 220 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	16 80 8 8 2 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9	104 \$17,120 \$17,120 \$17,120 \$0 \$17,120 \$0 \$17,120 \$0 \$17,120 \$
4 Investigation of Existing Conditions 4.1 Data Collection and Condition Survey 4.2 Pedestrain Park Connectivity Assessment 4.3 Traffic Analysis 4.4 Geotechnical Investigation - Desktop Review 4.5 Control and Right-of-Way (ROW) Mapping 6.6 Topographic Survey and Mapping 6.7 Suburiface Utilities 6.8 A mendment 2	0 0 0 0 0 51 0 0 8 242 0 0 4 8 16 8 40 15 98 8 8 40 40 40 40 40 40 40 40 40 40 40 40 40		0 0 40 0 0 0 0 0 0 0 0 0 0 0 0 0	3 344 \$50,300 \$5,500 \$58,800 \$24,875 \$58,960 \$0 \$83,875 \$139,000 \$0 \$4,800 \$
4.3 Traffic Analysis 4.1 Geotechnical Investigation 4.6.1 Field Survey 4.7.1 Ultisty Perhoring (Optional) 5 S Alternatives Analysis 5.1 Design Criteria 5.2 Afternatives Analysis	24 0 0 44 0 0 0 16 236 0 0 12 56 32 16 180	0 0 0 0 12 12 24 24 0 0 0 0 0 0 0 0 0 0 0 12 12 24 24	0 0 0 0 0 0 0 0 0 0 0 0	68 \$10,700 \$10,700 \$0 \$10, 300 \$50,520 \$50,520 \$2,000 \$2,000 \$52,
6 6 Pretininary Design 6.1.3 De recent Design 6.1.1 Drininge Analysis 6.1.2 Unit Technical Drainage Report 6.1.3 So Precent Cost Estimate 6.1.3 So Precent Cost Estimate 6.1.5 3D Precent Design Review Comment Resolution 6 Annondment 2 6.2 6.0 Precent Design Review Comment Resolution	0 0 0 10 0 28 0 0 92 436 280 280 280 280 16 264 280 280 280 17 264 280 280 280 280 280 280 280 280 280 280	40 8 8 24 24 40	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	968 \$128,920 \$128,920 \$5,600 \$5,600 \$134, \$120,00 \$17,800 \$17,800 \$17,800 \$17,800 \$17,800 \$17,800 \$12,800 \$12,800 \$12,800 \$12,800 \$12,800 \$12,800 \$12,800 \$12,800 \$12,800 \$12,800 \$12,800 \$12,800 \$12,800 \$10,
6.2.1 Drainage Analysis 6.2.2 Draint Technical Drainage Report 6.2.3 Lighting and Electrical Design 6.2.4 Ill Stand Signal Design 6.2.5 60 Percent Cost Estimate and Technical Specification Outline 6.2.6 60 Percent Design Submittal 6.2.7 60 Percent Design Submittal 6.2.8 Right of-Way Engineering Services 7 7 Design Contingency	32 8 80 180 56 16 24 40 24 2 2 4 16 2 2 2 8 16	8 16 148 300 2 2 4 2 75 7	18 84 0 0 0 0 0 0 0 0 0 0 0 0 0 0	300 546,240 346,240 5 546,
7.1 Design Contingency 7.2 4.7.1 - Utility Potholing 8	0 0 0 0 0 0 0 0 0 0	0 0 0 12 8 32 0 0 98 0 60 50 20 30 10 0 12 8 32	0 0 0 0 0 0 0 0 0 0 0 0	\$50, \$50, \$50, \$50, \$50, \$50, \$50, \$50,
9 9 Final Design (Amendment 2) 3.1 50 Percent Design 5.1 Design (August 2) 5.1 Design (August 2) 5.1 Design (August 2) 5.1 Ughting and Electrical and TS and Signal Design 9.1.4 So Percent Cells (Estimate and Technical Specifications 9.1.5 50 Percent Design August 2) 9.1.6 50 Percent Design Review Comment Resolution 9.1.1 Design (August 2) 9.2.1 100 Percent Design Percent Design 9.9.1 Design (August 2) 9.9.1 100 Percent Design Review Comment Resolution 9.9.1 100 Percent Design Review Comment Resolution	0 20 112 114 64 0 42 0 888 1412 0 64 24 4 480 800 24 4 4 40 89 32 8 8 24 10 24 2 42 20 2 2 2 4 4 2 2 4 300 480 24 2 4 16	0 28 62 40 0 30 32 0 112 0 200 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 32 8 56 0 0 0 0 0 0 0 0 0 0 0 0 16 4 32 16 4 24	1540 \$234,820 \$234,820 \$0 \$234,820 \$0 \$234,820 \$0 \$234,820 \$0 \$235
9.2.2 100 Percent Design Submittal 9.2.3 100 Percent Design Review Comment Resolution 9.3 Final Design 10 10 Blidding Services (Amendment 2) 10 Bidding Services (Amendment 2) 11 11 Design Services During Construction (Amendment 2) 11.1 Design Services During Construction and Contract Administration 11.2 Construction Surveying	2 2 4 4 8 2 2 2 4 4 4 8 4 4 4 4 8 16 16 16 16 16 16 16 16 16 16 16 16 16	2 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8 \$1,610 \$1,610 \$0 \$1, 24 \$4,350 \$4,350 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
11.2 Construction Surveying		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		2000 \$350,000 \$10,620 \$800,620 \$0 \$114,555 \$114,

Meeting Date: 2/21/2025 Agenda Item: 4.3.9

To: Regional Transportation Commission

From: Alex Wolfson, Project Manager

SUBJECT: Intelligent Transportation Systems (ITS) Strategic Master Plan

RECOMMENDED ACTION

Acknowledge receipt of the RTC's Intelligent Transportation Systems Strategic Master Plan.

BACKGROUND AND DISCUSSION

The final draft of the RTC's Intelligent Transportation System (ITS) Strategic Master Plan (SMP) is the culmination of a multi-year effort to establish the region's near- and long-term vision and goals to leverage resources and capabilities of ITS applications into the future.

ITS technology is designed to drive innovation in transportation safety, mobility, and environmental sustainability. By integrating advanced communication technologies into vehicles and infrastructure, ITS enhances traditional improvement strategies to optimize transportation operations, efficiency, and reliability. Successful ITS deployments include adaptive traffic signal coordination, crash and incident detection, multimodal detection systems, curve and weather warning systems, ramp metering, and traveler information systems.

The ITS SMP evaluated the region's existing ITS resources and capabilities, gathered stakeholder input on regional needs of ITS operations and maintenance moving forward, and recommended 24 strategies to support future implementation of these ITS improvements. These strategies generally fall into four categories: operations, maintenance, standards, and decision-making. One of the main strategies from the ITS SMP is to regionalize transportation operations with the establishment of a regional Traffic Management Center (TMC) through which all local arterial networks can be managed for the individual jurisdictions in the urban region.

To fully realize a functioning ITS system, cooperation and inter-operation among the local agencies will be critical. To highlight the importance of this cooperation, RTC, Washoe County, and the cities of Reno and Sparks entered into a memorandum of understanding (MOU) in 2024 to define roles and responsibilities for implementation of the deployment recommendations. The fully executed MOU is incorporated into the final ITS SMP document.

Moving forward, the RTC will be responsible for developing implementation and funding plans for each specific deployment recommendation in coordination with the local agencies. Updates and contract actions will be brought before the Board as needed as each deployment moves through the implementation process.

The item supports Strategic Roadmap Goal #4, "Proactively manage congestion."

FISCAL IMPACT

RTC will be responsible for developing funding plans for each specific deployment recommendation when implemented. Additional funding needs for the program will be included in future fiscal year budgets when presented to the Board for approval.

PREVIOUS BOARD ACTION

4/19/2024 Approved an MOU between RTC, the City of Reno, the City of Sparks, and Washoe County to collaborate on the deployment recommendations contained within RTC's ITS SMP.





RTC Washoe ITS Strategic Master Plan Final Report



December 2024

FINAL REPORT

Prepared for:



1105 Terminal Way Suite 214 Reno, NV 89502 (775) 348-0400

Prepared by:



6671 Las Vegas Boulevard South Suite 320 Las Vegas, Nevada 89119 (702) 862-3600

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

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RTC Washoe ITS Strategic Master Plan

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	LIST OF ABBREVIATIONS	
ATC	Advanced Traffic Controller	
ATM	Active Traffic Management	
ATMS	Advanced Traffic Management System	
ATSPM	Automated Traffic Signal Performance Measures	
ATTAIN	Advanced Transportation Technology and Innovation	
ATTIMD	Advanced Transportation Technologies and Innovative Mobility Development	
RII	Rinartisan Infrastructure Law	

RTC Washoe ITS Strategic Master Plan

C2C Center to Center

CCTV Closed Circuit Television

CDCA Communication Distribution Cable Assembly

CIP Capital Improvement Program

ConOps Concept of Operations

COTS Commercial Off-the-Shelf Software

CV/AV Connected and Automated Vehicles

DMS Dynamic Message System

DSRC Dedicated Short-Range Communication

FHWA Federal Highway Administration
FMS Freeway Management System
FTA Federal Transit Administration

FTE Full Time Equivalent

FY Fiscal Year

GIS Geographic Information System

HAR Highway Advisory Radio

ICM Integrated Corridor Management

ID Identifier

IMO Integrated Mobile Observations

INFRA Infrastructure for Rebuilding America

IT Information Technology

ITS Intelligent Transportation System

KMZ Keyhole Markup Language

LMR Land Mobile Radio

MDSS Maintenance Decision Support System

MMFO Multimodal Fiber Optic

MOU Memorandum of Understanding

MPO Metropolitan Planning Organization

NDOT Nevada Department of Transportation

NHP Nevada State Police Highway Patrol Division

NSRS Nevada Shared Radio System

O&M Operations and Maintenance

PIO Public Information Officer

PSOM Public Safety Outreach Management

RTC Washoe ITS Strategic Master Plan

RAISE Rebuilding American Infrastructure with Sustainability and Equity

RFP Request for Proposal

RITIS Regional Integrated Transportation Information System

ROC Road Operations Center

ROUTES Rural Opportunities to Use Transportation for Economic Success

RRFBs Rectangular Rapid-Flashing Beacon

RTC Regional Transportation Commission of Washoe County

RTIP Regional Transportation Improvement Program

RWIS Road Weather Information System

SEMP System Engineering Management Plan

SMART Strengthening Mobility and Revolutionizing Transportation

SMFO Single Mode Fiber Optic

SMP Strategic Master Plan

SOP Standard Operating Procedures

TAC Technical Advisory Committee

TMC Traffic Management Center

TMWA Truckee Meadows Water Authority

TSMO Transportation Systems Management and Operations

UNR University of Nevada, Reno

1. Introduction

The Regional Transportation Commission of Washoe County (RTC) initiated the development of an Intelligent Transportation System (ITS) Strategic Master Plan (SMP) to establish the long-term vision and goals of leveraging ITS resources and capabilities to improve the transportation network of the Truckee Meadows region through 2050. The ITS SMP seeks to improve the transportation network's safety, reliability, mobility, and overall operational performance. The ITS SMP serves as an update to the *Concept of Operations (ConOps) Truckee Meadows Collaborative Traffic Management Plan (2010)*, the *Concept of Operations Addendum* (2016), and the creation of a time-phased implementation plan to assist the RTC in successfully operating the region's surface transportation network while simultaneously implementing the strategies outlined in this ITS SMP.

1.1 Background

The RTC is responsible for various aspects of transportation system policy, planning, construction, and operation for parts of Northern Nevada located in Washoe County, specifically in the Reno/Sparks Metropolitan Area as shown in **Figure 1**. RTC is a leader in ITS initiative implementation in Washoe County. ITS initiatives for the region started in 2010 with the development of the Shared Regional Operations ConOps. Additional collaborative management reports followed, such as the *Collaborative Traffic and Emergency Management in the Truckee Meadows* (2010) report developed in close consultation with the Nevada Department of Transportation (NDOT), Federal Highway Administration (FHWA), and the cities of Reno and Sparks.

In continuation of these ITS efforts, RTC recognizes that the Truckee Meadows area continues to grow, thereby intensifying the need for cooperation and interoperation among the local agencies including the City of Reno, City of Sparks, NDOT District 2 (NDOT D2), and Washoe County. Each of the local agencies currently operates and maintains its own ITS devices apart from Washoe County, which has an agreement with the City of Reno to maintain its traffic signals. Furthermore, the City of Reno and the City of Sparks each have agreements to maintain NDOT-owned traffic signals. A goal of this ITS SMP is to recommend a regional Traffic Management Center (TMC) concept to allow for continued and consistent collaboration with all local agencies and maintenance of all region-wide signals by a single agency to ensure consistency in the system.

1.2 Project Overview

This ITS SMP thoroughly evaluates and assesses the ITS systems in the region, determines current and future needs, and outlines future ITS strategies to plan, construct, operate, and manage the Truckee Meadows surface transportation system now and in the future. The ITS SMP was developed in alignment with the *Nevada Statewide ITS and Active Traffic Management (ATM) Master Plan* (December 2023), developed by NDOT. The *Nevada Statewide ITS and ATM Master Plan* aligns with the *NDOT Transportation Systems Management and Operations (TSMO) Program*, established in 2020, and the *One Nevada Transportation Plan*, revised in 2020. The NDOT TSMO program is used to proactively address transportation challenges through high-level strategic, programmatic, and tactical elements designed to help Nevada achieve transportation goals in alignment with the *FHWA TSMO Primer* and the *One Nevada Transportation Plan*. *The One Nevada Transportation Plan* outlines strategic direction and guiding principles to help Nevada meet current and future transportation needs by guiding advancing infrastructure and mobility needs through collaborative efforts with a multitude of stakeholders.

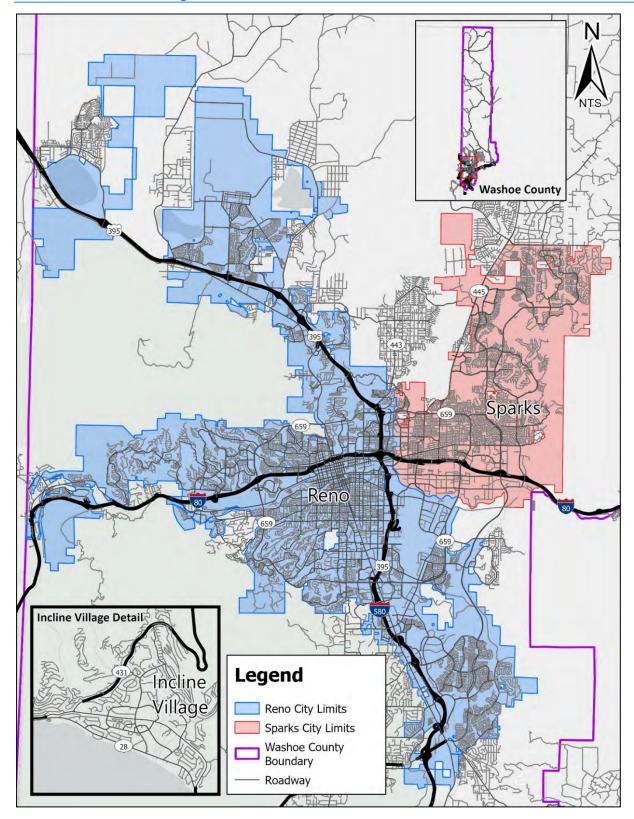


Figure 1 – Project Vicinity Map

1.3 Vision, Goals, and Objectives

The vision, goals, and objectives for this ITS SMP were developed with input from local agencies and the project management team. ITS devices are used to support transportation needs and increase network efficiency. The overarching goal of the ITS SMP is to facilitate collaboration between local agencies for seamless transportation network operations across regional jurisdictional boundaries by implementing deployment strategies, including the creation of a regional Transportation Management Center (TMC) to increase coordination and collaboration. The TMC will promote increased use of existing and future ITS infrastructure to create a safer, more effective transportation network in the region. The ITS SMP considers existing ITS capabilities and devices on a detailed, localized level.

1.4 Key Project Tasks

The project had four major tasks as shown in Figure 2 below.



Figure 2 - Key Project Tasks

2. STAKEHOLDER ENGAGEMENT

The RTC local agencies were included in the development of the ITS SMP to understand the needs of each agency and identify opportunities to leverage agency strengths to develop a vision for the regional TMC concept allowing for consistent management and operations for areas within the region. Key stakeholders for this project include:

- RTC
- City of Reno
- City of Sparks
- Washoe County
- NDOT District 2

One-on-one meetings with each local agency were conducted to gather information on their existing ITS operations and maintenance and to gain an understanding of their vision for future ITS deployment in the region. A summary of stakeholder meetings, along with each member in attendance, and meeting topics is provided in **Table 1**.



Table 1 – Stakeholder Meeting Summary

Agency Meeting / Date	Attendees	Meeting Topics
Washoe County One-on-One Meeting June 30, 2022	Mitchell Fink	 Brief overview and purpose of the project Outline of existing ITS network, agreements, and assessment of needs Discussion on potential improvements to the region's ITS operations and collaboration with RTC and other local agencies
City of Reno One-on-One Meeting July 14, 2022	Khalil Wilson Kurt Dietrich David Hutchinson John Baker	 Brief overview and purpose of the project Summary of existing ITS network and agreements Discussion on the city's vision of ITS beyond traffic signals, and potential improvements to ITS operations and maintenance
City of Sparks One-on-One Meeting July 14, 2022	Jim Herman Amber Sosa	 Brief overview and purpose of the project Discussion about the city's commitment to a regional TMC, existing operations and maintenance for the ITS network, potential alignment with a future NDOT Northern Nevada TMC, and improvements to ITS operations and maintenance
NDOT One-on-One Meeting July 14, 2022	Mike Fuess	 Brief overview and purpose of the project Summary of existing ITS network and agreements Discussion on NDOT Northern Nevada TMC and the development of a sustainable program

Table 1 – Stakeholder Meeting Summary (Continued)

Agency Meeting / Date	Attendees	Meeting Topics
RTC Washoe One-on-One Meeting July 19, 2022	Dale Keller Blaine Petersen Bill Thomas	 Brief overview and purpose of the project Summary of existing ITS network and agreements Discussion on RTC's vision of ITS beyond traffic signals, and potential improvements to ITS operations and maintenance
Washoe Region Operations Concept Next Steps (City of Sparks) March 31 & April 3, 2023	Jon Ericson Andrew Jayankura Amber Sosa Dale Keller Alex Wolfson	 Brief project update and task overview of the outcomes from the Needs Assessment documenting short- to long-term priorities Discussion about alignment with NDOT concept of Northern Nevada TMC, Regional ITS Database, Centralized Regional Advanced Traffic Management System (ATMS), establishing the RTC TMC, Regional Traveler Information Services, and potential agreements for operation and maintenance of ITS and signals in the region Addressed concerns regarding deployment recommendations
City of Reno Deployment Recommendations Meeting April 3, 2023	Kurt Dietrich Dale Keller Kerrie Koski Alex Wolfson	 Brief project update and task overview of the outcomes from the Needs Assessment documenting short- to long-term priorities Discussion regarding overall project purpose, network and infrastructure upgrade needs, signal timing, staffing, and potential agreements with NDOT, RTC, and local agencies
RTC Deployment Recommendations Meeting April 3, 2023	Bill Thomas Dan Doenges Dale Keller Mark Maloney Alex Wolfson John Ponzo Amber Bowsmith Paul Nelson Sara Going Jeff Wilbrecht	 Brief project update and task overview of the outcomes from the Needs Assessment documenting short- to long-term priorities Discussion about overall project purpose, consensus of strategy with local agencies, transit coordination, and potential agreements with local agencies
Washoe County Deployment Recommendations Meeting June 28, 2023	Dale Keller Alex Wolfson Dwayne Smith Mitch Fink Mariam Ahmad	 Brief project update and task overview of the outcomes from the Needs Assessment documenting short- to long-term priorities Discussion regarding overall project purpose, network, and infrastructure maintenance and operation needs, coordination with agencies, coordination with TMC capabilities, maintaining capabilities with new and old infrastructure in the future, potential agreements with local agencies

RTC Washoe ITS Strategic Master Plan

Key needs identified during the meetings include:

- Providing enhanced real-time operations collaboration
 - Coordination between freeway and arterials
 - Coordination in response to incidents
- Implementing a shared regional operations center (virtual)
- Providing a shared event (incident) tracking mechanism
- Providing timely and comprehensive current condition information to travelers
- Providing comprehensive work zone management
- Coordinating collaborative maintenance

3. Existing Conditions

The following section is a review of completed plans and studies, ITS inventory, regional ITS staffing, and agreements among the local agencies within the region.

3.1 Review of Completed Plans and Studies

The review of completed plans and studies includes Collaborative Traffic and Emergency Management in the Truckee Meadows, ConOps Addendum and System Engineering Management Plan (SEMP), RTC 2016 Center-to-Center (C2C) Software Evaluation Summary, Reimagine Reno: The City of Reno Master Plan, RTC ITS Network Master Plan, and Sparks Intelligent Corridor Options. Key takeaways from each of these documents are listed in **Table 2** with a summary of each study is included in **Appendix A**.

Table 2 – List of Existing Studies

Name of Study (Year)	Lead Agency/ (Participating Agency)	Key Takeaways
Collaborative Traffic and Emergency Management in the Truckee Meadows, Version 5 (December 2010)	RTC/ (NDOT, City of Reno, City of Sparks, Washoe County, Nevada State Police Highway Patrol Division (NHP), University of Nevada, Reno (UNR))	 Continued focus on ITS functionality Continued focus on ITS data capabilities Increased data communication between agencies
ConOps Addendum and System Engineering Management Plan, Version 4 (November 2012)	RTC/ (NDOT, City of Reno, City of Sparks, Washoe County, NHP, UNR)	 Recommends continued use of Trafficware ATMS.now system Creation of a shared dashboard to effectively communicate data between agencies Capability to include additional data in the future Increased ability to share data between agencies Work to create a unified transportation system
Memorandum – RTC 2016 C2C Software Evaluation Summary (August 2016)	RTC/ (City of Reno, City of Sparks)	 Summarizes results of the RTC C2C software evaluation and selection Recommends utilization of existing Trafficware ATMS.now System Shared closed-circuit television (CCTV) system addressed
Reimagine Reno: The City of Reno Master Plan (November 2021)	City of Reno	 Outlines plans surrounding automated technology, connected and automated vehicles (CV/AV) technologies, continued partnership with RTC, UNR and Truckee Meadows Community College Continued adoption of emerging technology
ITS Network Master Plan (December 2021)	RTC/ (City of Reno, City of Sparks, Washoe County)	 Identifies ITS needs/projects for the next 5 years Recommendations for ITS standards including fiber optic infrastructure Recommendations for desired network topology
Sparks Intelligent Corridor Options (January 2022)	RTC/ (City of Sparks)	 Recommend integrated corridors using various ITS technologies for Sparks Boulevard and Vista Boulevard to offset the impacts of rapid population growth Introduce CCTV, dynamic messaging systems (DMS), signal pre-timing, crowd-sourced information

3.2 Existing ITS Inventory

The following sections summarize the existing ITS inventory, database schema, devices and infrastructure, software capabilities, deployed technologies, and ITS technologies being explored.

3.2.1 Review of Existing ITS Inventory

The *ITS Network Master Plan* from December 2021 set a vision and outlined strategies for the RTC to build out the existing ITS network, with recommendations for the development of a C2C network infrastructure, standardization of specifications and details, and fiber network topology recommendations. A copy of the *ITS Network Master Plan* is located in **Appendix B**. The *ITS Network Master Plan* also developed a database with available data elements collected from available plan sets and record drawings as part of the strategy development. These elements include:

- Existing fiber cable paths
- Other communication links
- Fiber splice diagrams (Appendix C)
- Communications conduit locations
- RTC 10-year map of CIP projects

The existing December 2021 *ITS Network Master Plan* inventory was reviewed, and new data was collected to update the inventory with devices and systems not already accounted for as part of the ITS SMP. The ITS inventory review process included a review of all inventory layers in addition to as-builts and record drawings and other data from the RTC, cities of Reno and Sparks, and Washoe County (received from Reno). Recommendations for combining all layers into a regionwide database as part of the vision for a regional TMC were made.

Observations from the review of the existing inventory and available layers from the agencies include the following:

- The current Signalized Intersection layer from the RTC does not have unique identifiers (IDs) corresponding to the local agency layer provided.
- Signalized Intersection naming conventions and formats differ between agencies.
- Maintenance responsibilities for signals maintained by agreements are not included in the signalized intersection layer (RTC, NDOT, and cities of Reno and Sparks).
- Emergency signals and pedestrian crossings are included in the signalized intersection layers.

3.2.2 Existing Software Capabilities

In 2016, the RTC modified and updated the *ConOps Addendum and SEMP Version 4* to determine the necessary functional requirements and software needed to create a successful shared C2C operated network. Proper software selection would ensure a cost-effective, low-maintenance approach. The recommended approach based on the functional requirements and software evaluation consisted of two phases. In Phase A, local agencies would modify and use software already in place to connect traffic signal data/control and CCTV feeds. Later, after proving the Phase A collaboration concept, Phase B suggested utilizing a system software to assist in implementing more centralized operations, and potentially introduce a dashboard system. Implementation of Phase A yielded co-access to the *ATMS.now* system for data exchange between signals and agencies and setting up all CCTV on *Video Insight Software* which

is now shared between the City of Reno, City of Sparks, and RTC. The City of Reno also manages Washoe County's signals through ATMS.now. While UNR develops the signal timings, the signal timing information, communicated to each signal using ATMS.now, is input by city engineer staff.

3.2.3 Summary of Deployed Technologies

The technologies that have been previously deployed within the region are listed below, however many of the technologies are not operated or maintained by the RTC and associated agencies. Those technologies are owned and operated by NDOT or the NHP and are identified as part of a statewide system of ITS infrastructure.

The technologies currently deployed within the region include:

- Crash Prevention and Safety
 - Wrong-Way Driver Detection
- Road Weather Management
 - Road Weather Information System (RWIS)
 - Vehicle Integrating Mobile Observations (IMOs)
 - Ice Detection
- Traffic Incident Management
 - Incident Management Platform System
- Traveler Information
 - DMS
 - Highway Advisory Radio (HAR)
 - Nevada Advanced Traveler Information System
 - Chain Up Signage
- Work Zone Management
 - Smart Work Zones
- Connected/Autonomous Vehicles (CV/AV)
- Communication
 - Fiber Optic Cable
 - Fiber Hub
 - Conduit
 - Wireless (Radio and Cellular)
 - Dedicated Short-Range Communication (DSRC)

Additional details of the above listed technologies can be found in Appendix D.

3.2.4 New ITS Technologies Being Explored in Truckee Meadows

The following technologies are being explored to alleviate congestion and improve safety on key corridors, which have experienced increased traffic due to the region's continuous growth.

3.2.4.1 Integrated Corridor Management

The RTC and City of Sparks are currently exploring deploying an Integrated Corridor Management (ICM) system as part of the Sparks Intelligent Corridors project to alleviate congestion along the key north-south corridors (Pyramid Highway [SR 445], Sparks Boulevard, and Vista Boulevard) as these corridors experience congestion due to recent continuous growth of the city. Future

decisions will be made based on the performance of the existing systems, informed by current operational effectiveness and efficiency. From 2016 to 2020, the city experienced a 14% increase in population due to an influx of businesses and industries to the region that increased the need for housing in the area. The Sparks Intelligent Corridor ICM system will deploy a virtual system to distribute traveler information to connected vehicles and travelers, intelligent sensor-based infrastructure, system-to-system integration, and smart traffic signals. This system will augment the City of Sparks' ability to effectively operate the key north-south corridors in real-time by providing improved traveler information via a virtual DMS platform advising travelers of upcoming traffic incidents, delays, and other roadway conditions allowing them to take alternative routes. The RTC submitted a Stage 1 SMART Grant application in November 2022 for the prototyping of the project. The prototype system will be evaluated, and if successful, will be expanded to other areas in the region. Potential expansion of the system could include:

- US 395 North Valley/US 395 Business (Virginia Street)
- I-80 and I-580 and US 395/SR 569 McCarran Loop Roads
- I-580/Veterans Parkway
- Virginia Street/Kietzke Lane

3.2.4.2 Ice Detection and De-Icing System

An NDOT ice detection system exists at the Galena Creek bridge along I-580 within the region boundary. This bridge is equipped with a de-icing system that detects icy conditions through air and pavement temperature readings. The system applies de-icing solution to the road surface when specified temperature parameters are met.

3.3 ITS Inventory Update

The following subsections provide details on the process conducted to review and update the existing ITS Inventory from 2021 with new ITS project deployments.

3.3.1 Database Schema

A schema based on the observations made from the 2021 ITS inventory (**Section 3.2**) was developed to provide the RTC with a regionwide database for the various ITS devices. A Geographic Information Systems (GIS) database schema provides the structure of a database which includes tables and any relations associated with the tables within a database. The development of this database allows information from each of the regional agencies to be standardized and stored in one location, easing future efforts for asset management when the regional TMC is established. The following layers were established in the new regionwide ITS inventory database:

• Signalized Intersections: Layer containing all signalized intersections within the region and associated attributes to be consistent with all agencies. Additional attributes such as RTC Identifier (RTC ID), owning agency, maintaining agency, agreements, CCTV cameras, traffic cabinets, detection, and communication type are included. The unique RTC ID was created by using the existing agencies' ATMS.now ID and adding the corresponding owning agencies' initial to the ATMS.now ID ("R" = Reno, "S" = Sparks, "N" = NDOT, and "W" = Washoe County). For example, the intersection of Sullivan Lane and Greenbrae Drive owned by City of Sparks has an ATMS.now ID of 1120 and was provided an RTC ID of S.1120 for incorporation into the RTC Signalized Intersection Layer. Note that any signal with only three digits added an extra zero to the beginning of the ID to ensure that all RTC IDs have at least four digits.

Wireless Radio Devices: Layer providing details regarding wireless radio within the region. Devices with wireless radio to a signalized intersection are identified.

Other layers within the database collected include:

- Pull Box
- ITS Vault
- ITS Cabinet
- NDOT Hub
- NDOT Conduit
- Reno Conduit
- Reno Interconnect
- Sparks Conduit
- Sparks Interconnect
- Network Nodes
- Washoe Conduit

Inventory maps with data gathered as part of the ITS SMP are shown in **Appendix E**. Only elements provided by the agencies and those found in available as-builts were included. Maintenance agreements are not included in the schema but are discussed further in **Section 3.4**.

3.3.2 Updates to ITS Devices and Infrastructure

Available as-built record drawings from the agencies within the region were obtained and reviewed to extract traffic signal and ITS communications plans, and their associated splice details. These plan sets were then geocoded and applied to the latest *ITS Network Master Plan* GIS/Keyhole Markup Language Zipped (KMZ) inventory database. Remaining infrastructure asbuilts not obtained through this process are not included in the GIS/KMZ inventory database. The process of geocoding infrastructure will require ongoing efforts as as-builts become available, or field data collection is completed. The existing ITS device and connection inventory for the region is summarized in **Figure 3**. More detailed inventory information for each of the agencies is included in **Table 3** and **Table 4**.



Figure 3 – Existing Regional ITS Inventory Summary

ITS Device	City of Reno ¹	City of Sparks	Washoe County ¹	RTC Washoe	NDOT*1
Traffic Signals	191	73	23	-	130
Traffic Cabinets	191	73	23	-	130
Pull Boxes	825	909	-	-	65
Traffic Cameras	46	31 ²	-	-	-
Hub Cabinets	-	3	-	-	-
Network Nodes	1	1	0	2	5
Total	1,254	1,090	46	2	330

^{*}Note: 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.

Table 4 – Existing Conduit and Cable Inventory (Linear Feet)

ITS Conduit Cable	City of Reno	City of Sparks	Washoe County	NDOT
Empty	239,157	9,276	-	23,515
Unknown	10,846	726	-	5,966
Communication Distribution Cable Assembly (CDCA)	-	78	-	5,825
Multi-Mode Fiber Optic (MMFO)	239,751	-	-	30,726
Single Mode Fiber Optic (SMFO)	32,207	117,041	679	300,742
Interconnect	138,057	5,845	-	-
Total	660,018	132,966	679	366,774

3.4 Existing Agreements

The City of Reno and the City of Sparks have agreements with NDOT to maintain existing ITS devices and traffic signals. The City of Reno's interlocal agreement with NDOT includes the maintenance of 87 NDOT-owned signals and the City of Sparks agreement includes the maintenance of 43 NDOT signals. 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. The flexibility provided by the interlocal agreements allows the cities to respond to and better maintain all NDOT traffic signals within their jurisdictions. The interlocal agreements between NDOT and the cities of Reno and Sparks can become the standard when coordinating maintenance responsibilities between agencies. The City of Reno also has an agreement with Washoe County to maintain and operate its 23 signals. The existing agreements are summarized in **Table 5** below and can be found in **Appendix F** along with a list of signal locations maintained by both the City of Reno and the City of Sparks.

^{1.} Source: City of Reno and City of Spark, as of September 2024.

^{2.} City of Sparks has more CCTV cameras installed, but more licenses are needed for the Video Insights Software to access these extra cameras.

Table 5 – Existing Signal Agreements

Agreement	Key Elements
NDOT/Sparks Agreement	 Covers ownership, maintenance, operation, and repair of 43 NDOT intersections. An additional NDOT signal has shared responsibility, where the City of Sparks provides signal timing updates and the City of Reno provides maintenance. Does not include capital improvements NDOT is responsible for any and all costs that exceed \$1,500 per intersection and are not covered by insurance, including emergency replacements The term of agreement is 2 years
NDOT/Reno Agreement	 Covers ownership, maintenance, operation, and repair of 87¹ intersections (one of the intersections has shared responsibility 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 and all costs that exceed \$1,500 per intersection and are not covered by insurance The term of agreement is 2 years
NDOT/Washoe County Agreement	 Covers ownership, maintenance, operation, and repair of 17 intersections. Does not include capital improvements NDOT is responsible for any and all costs that exceed \$1,500 per intersection and are not covered by insurance The term of agreement is effective indefinitely
Reno/Washoe County Agreement	 Covers maintenance of 23 intersections Completed services must not exceed \$70,000 per contract year unless there has been an amendment. The term of agreement is 5 years.

Note: 1. City of Reno has an agreement to maintain 87 NDOT signals as of August 2024.

3.5 Existing Regional ITS Staffing

Staffing for the region's ITS infrastructure and communications networks is only useful if staffing resources can effectively utilize available technology for public service. Specific staff roles and a minimum number of staff will be needed to properly maintain existing and new ITS infrastructure scheduled to be deployed as part of the identified ITS improvements.

RTC currently has 14 engineering staff, with ten Engineer II's and no Engineer I's. There are also two engineering managers, a property agent, and an engineering director on the RTC staff. The current RTC Engineering Department Staffing is shown in **Table 6** and **Appendix G**.

Table 6 – Existing RTC Washoe Staffing

Role	RTC
Engineering Director	1
Property Agent	1
Engineering Manager	2
Engineer (I and II)	10
Total	14

^{*}Values as of July 2024.

Having enough staff to effectively maintain the traffic signal system is important to ensure reliable and consistent mobility for the region. Currently, there are a total of six traffic technicians and four mechanics for the region required to maintain all 417 traffic signals, which results in a total of approximately 42 signals per technician or mechanic. A summary of the signals owned by each agency and their number of technicians as of September 2024, is found in **Table 7**.

Table 7 – Traffic Signal Inventory

Agency	Traffic Signal Count	Existing Technicians / Mechanics	Existing Signals per Technician/Mechanic		
City of Reno	278	4/42	35		
Washoe County	23	Staff from Reno	N/A		
City of Sparks	117	2/0	59		
Total	417 ¹	6/4	42		

Note:

The current rate of 42 signals per technician shows that the region is significantly understaffed to operate and maintain traffic signals proactively. Each of the ten technicians/mechanics has other roles apart from maintaining the signal system, which only allows technicians/mechanics to maintain traffic signals reactively. The City of Reno's signal mechanics focus on the electrical elements such as conductors and conduit while technicians focus on other non-electrical components. ATMS.now signal timing input is limited to city traffic engineers only.

According to the FHWA *Traffic Signal Operations and Maintenance Staffing Guidelines* it is best practice to spend 60 hours on maintenance annually per signal. This equates to 42 hours of preventative maintenance, 15 hours for response maintenance, and three hours for design maintenance. The guide states that the average signal technician spends 1,627 hours, or 78% of their time, in production, allowing a technician to service up to 27 intersections per year. Considerations for complex intersections should be evaluated as these would require more man hours for those signals. With the recommended estimate of 27 intersections per technician/mechanic, the region needs approximately 16 technicians/mechanics to proactively maintain the traffic signals in the region.

3.6 Existing Funding Sources

The RTC Regional Transportation Improvement Program (RTIP) is a five-year plan of street, highway, transit, bicycle, and pedestrian projects aimed at increasing safety, promoting economic development, and increasing sustainability and travel choices in the region. The RTIP is updated

^{1.} The 417 signals include one NDOT-owned signal in which City of Reno and City of Sparks have shared responsibility, where the City of Reno provides maintenance and City of Sparks provides signal timing updates. 2. Number of technicians and mechanics for the City of Reno as of July 2024.

each year. The City of Reno, City of Sparks, and Washoe County publish a Capital Improvement Plan (CIP) for each fiscal year which contains similar information to the RTIP, though on a more localized level. The CIP lists planned projects with estimated costs over \$100,000. Both the RTIP and CIPs are organized by funding year and project obligation. Funding for the RTIP and CIPs comes from a variety of sources as shown in **Table 8**. Projects on both the RTIP and CIPs can be amended or adjusted due to existing needs.

Table 8 - Federal and State Funding Sources

Federal Funding
National Highway Performance Program
Surface Transportation Block Grant Program
Highway Safety Improvement Program
National Highway Freight Program
Congestion Management/Air Quality
Transportation Alternatives Set-Aside Program
Federal Appropriation (Community Project Funding)
State Funding
Federal Transit Administration (FTA) Section 5307, Urbanized Area Formula Grants
FTA Section 5309, New Starts Program
FTA Section 5311 Formula Grants for Rural Access
FTA Section 5337 State of Good Repair Grants
FTA Section 5339 Bus/Fac Large Urban Capital
FTA Section 5310 Elder/Disabled Large Urban Capital
State Gas Tax
Local Funding
City of Reno – Street Fund
Washoe County – Roads Fund
City of Sparks – Fuel Tax Fund, Truckee Meadows Water Authority (TMWA) MUA Fund, Electric and Gas Franchise Fees, Miscellaneous
RTC – Fuel Tax Fund, Transit Sales Tax, Road Sales Tax, Regional Road Impact Fees

4. **NEEDS ASSESSMENT**

Pre-recommendation meetings with the RTC and each of the local agencies were held to gather input on needs and desired outcomes for the ITS SMP regarding the future of ITS infrastructure for the region. Takeaways from the pre-recommendation meetings with each of the agencies are summarized in **Table 9**.

Table 9 - Agency Needs

Agency	Identified Need
City of Reno	 Utilize fiber fault-tolerant ring topology when designing future fiber splices Begin providing additional slack at pull boxes to ease installation efforts of additional ITS devices Continue to install backup communication connections where NDOT infrastructure exists to
	decrease response times Increase training and maintenance staff resources before implementation of additional ITS capabilities or network build-out
City of Sparks	 Install CCTV at intersections that are not currently equipped with similar devices Install fiber communications to traffic signals that are not currently equipped with fiber Increase training and maintenance staff resources before implementation of additional ITS capabilities or network build-out, including fault-tolerant ring topology fiber communications training to prevent data storms Evaluate fault-tolerant mesh topology to provide better redundancy to the traffic network via tree-spanning protocol
Washoe County	 Use bandwidth on ITS system Need for better connections during emergency services
RTC	■ Expand C2C network to include Washoe County and UNR

A workshop discussing the next steps for a regional operations and maintenance concept and seeking consensus among the agencies was conducted on September 7, 2022. A summary of the identified needs as they relate to software, infrastructure, staffing, training, and funding from the pre-recommendation meetings and the workshop are summarized in the following subsections.

4.1 Software Needs

The cities of Sparks and Reno use the same version of Trafficware ATMS.now, which has increased their C2C capability. Additional benefits of having the same ATMS.now version includes being able to view the region's arterial traffic signal inventory list and maps for the region as entered in the system, ease of facilitation for coordination plans, ability to pivot to unified management under a central agency, and easier coordination with NDOT and their freeway management system. Other modules that ATMS offers, such as incorporating CCTV, and monitoring the health of traffic cabinets, which can provide alerts to users when an event occurs, should be explored. Additionally, consolidating software where possible could further streamline operations.

NDOT operates a separate version of the ATMS.now freeway software system for freeway ITS infrastructure throughout the region. The traveling public expects a coordinated and responsive transportation system that does not have institutional barriers or borders. The two systems in place create unintended barriers in the operations and management of the network that could be rectified for a seamless transportation experience.

A challenge that software could address is the need to collect near real-time data to make changes based on operational performance. Traffic condition data, crash data, and travel pattern data are available today but are not being harnessed in a manner to justify investments, and resources, or explain patterns in a way that makes sense to operators, users, and stakeholders. It is crucial to establish a link between the data being collected and the end-user experience, as it is important for the end-user to find value in utilizing this data. Previously insufficient use of data has caused mistrust as to why investments are being made when benefits for the use of these data are not seen.

4.2 Infrastructure Needs

Existing systems within the region require regular maintenance, including repairs and upgrades. For signals, the City of Reno plans to install Cubic Commander controllers, whereas the City of Sparks has Cubic 980 Advanced Traffic Controllers (ATCs) which were installed in the last five years. As each agency continues to upgrade and maintain existing signal controller infrastructure, it is important to understand what type of inventory is currently used to determine the most appropriate investments in new or upgraded infrastructure and how compatible the different systems are at operating together.

Both the cities of Reno and Sparks have a cooperative agreement with RTC for their signal timing plans. This creates uniformity across the region, with the only difference being the use of partial clearance versus all-red clearance. There is not a single set of signal timing standards from which the agencies in the region pull from to perform signal timing updates. There is a need to review the existing Regional Traffic Guidelines and document the latest changes to the signal timing process. A vision for the future of the RTC is for everything to be adaptive or dynamic, but in the meantime, the RTC Is establishing the best timing plans that can be used with different cycle lengths depending on conditions. The current signal timing program is funded by the fuel tax and allocates \$500k per year (\$100k for traffic counts and \$400k for signal retiming). Currently, signals are in a rotation for signal retiming but sometimes signals could become high priority based on conditions. Signal timing is provided by UNR through a contract with the RTC. UNR develops plans that are then reviewed by the agencies and implemented in the field. City engineering staff input signal timing plans into their ATMS. To perform the maintenance required on traffic signals and ITS equipment in the region, there is a limited stockpile of inventory equipment available from which to utilize during projects and maintenance activities. This limited stockpile will create a challenge in the future as infrastructure continues to be added to operate and manage the transportation network. There are opportunities to improve existing infrastructure, improve upon the functions provided by existing infrastructure, and deploy traditional infrastructure to support real-time situational awareness on the roadways before investing in the latest and greatest technologies like adaptive signal timing or ICM strategies.

Other infrastructure needs within the region include the standardization of ITS design plans and specifications because fiber optic network infrastructure materials and standards currently differ between agencies. The differences in materials and standards have caused different types of fiber optic cables to be used within the region (i.e., multi-mode and single-mode). Additionally, the available fiber use is inefficient due to general inexperience with managed network switches. Infrastructure needs should also consider the power resiliency of traffic signals, especially within the NV Energy Public Safety Outage Management (PSOM) Zones.

4.3 Staffing Needs

Currently, the cities of Reno and Sparks have staff that function as operators, maintainers, technicians, and managers. There is a varying level of staff available at each agency to support the amount of infrastructure within each jurisdiction and staff typically function reactively,

responding to outages and inquiries as they are identified. While there may be some preventative maintenance activities occurring, adequate staff to serve both reactive and proactive real-time functions does not currently exist. Additionally, the RTC does not serve in a real-time operations or management role within the region. Current staff are performing job duties that require different certifications or training from what is provided or required as part of existing job descriptions. Activities such as managing an information technology (IT) network should be completed by staff who are trained and certified to verify security, risk, and data-sharing requirements appropriately.

Additionally, incident management in the region is largely managed by incident responders. Incident responders are responsible for traffic control in addition to the incident management duties at the scene, which distracts and requires them to provide additional duties taking away from their core responsibilities. Incident management should be streamlined and supported by a dedicated team that can handle the coordination of incident response.

4.4 Training Needs

As innovative advancements are made in ITS technology, infrastructure can become outdated over time, making training staff to integrate, maintain, and install ITS technology a challenge for agencies. It should also be noted that training for signal maintenance is different from ITS infrastructure maintenance. New technology investments require maintenance resources to be in place to maximize their longevity and usefulness. It is also critical to have staff skilled in IT networking and in-house fiber splicing, which are essential for maintaining and advancing ITS infrastructure.

Identifying training needs for existing and future staff will be necessary when a regional TMC is fully realized. In addition to properly training staff to perform required duties, cross-training between maintenance staff, ITS maintenance staff, and TMC staff can help alleviate unbalanced workloads, while creating a workforce capable of performing effectively in multiple positions if needed. This includes ensuring IT networking training falls under the ITS maintenance staff framework. Additional strategies may be developed for the management of cross-trained maintenance staff, such as identifying tasks each staff member can perform to best maximize efficiency while addressing current needs. Both the cities of Reno and Sparks have identified training and expanding maintenance staff resources as a priority. Continuous training opportunities should also be considered by each agency.

4.5 Funding Needs

Funding operations and maintenance efforts of signals and ITS devices will require funding from numerous resources. Existing funding sources already in use to fund the system, previously described in **Section 3.6**, should be used moving forward. Additional funding should be allocated to support the ongoing operations, management, and lifecycle replacement of infrastructure. This plan serves as a concept of regional operations from which to use recommendations for the pursuit of federal grants or other types of funding external to the region. The more formalized the partnership in the region and the clearer the strategy and vision is, the better collaboration can be demonstrated and used as a foundation from which to build upon to justify funding for innovation or pilot projects. Parties interested in pursuing grants can pursue them in coordination with other agencies in the region. RTC will seek to pursue every available grant in coordination with local agencies. Future planning efforts could evaluate fiber sharing with the private sector as a source of income to support further growth of ITS infrastructure operations. Fiber sharing with the private sector could require legislative efforts based on existing Nevada state statutes.

5. ITS DESIGN STANDARD PLANS AND SPECIFICATIONS

Within the region, RTC, NDOT, City of Reno, City of Sparks, and Washoe County each have their own standard plans and ITS specifications. Therefore, many of the RTC ITS infrastructure improvements have been developed without a consistent approach across the region. Currently, the following local agency sources used for ITS design standard plans and specifications do not adequately address the need for consistent construction of an ITS network and device infrastructure within the region:

- RTC Regional Traffic Guidelines (Revision: September 2023)¹
- RTC Standard Specifications for Public Works Construction ("Orange Book" Revision: 2012)² Note that there is a 2016 version, which is not used by local agencies at this time.
- City of Reno PW Design Manual (Revision: January 2009)³
- City of Reno Standard Details for Public Works Construction (Revision: January 2023)⁴
- City of Sparks Construction Standard Details (Revision: January 2020)⁵
- Washoe County Standard Details⁶
- NDOT Standard Specifications for Road and Bridge Construction ("Silver Book" Revision: 2014)⁷
- NDOT Standard Plans for Road and Bridge Construction (2022)⁸

After a review of the above sources, it was determined that the *RTC Regional Traffic Guidelines* provide the most information and are the most appropriate document for adding an ITS Standard Design Guidelines, Standard Details, and Standard Specifications. As such, a new section titled *Intelligent Transportation Systems* was added. This section includes requirements for:

- Contractor System Integrator
- Conduit and Pull Box System
- Fiber Optic Cabling System
- Communications Hub Cabinet
- Field Hardened Network Device
- CCTV Camera

The addition of the above-listed sections will benefit the design and construction of future ITS projects within the region by being more efficient and promoting consistency and interconnectivity across jurisdictional boundaries within the region. Standardizing the way ITS projects are implemented now will alleviate potential compatibility complications in the future. Additionally, standard ITS plan details have also been added to the *RTC Washoe Regional Traffic Guidelines*. A copy of the new ITS Design Guidelines, Standard Details, and Standard Specifications are included in **Appendix H**.

¹https://rtcwashoe.com/wp-content/uploads/2024/08/RTCRegionalTrafficGuidelines-Sep2023.pdf

²http://rtcwashoe.wpengine.com/wp-content/uploads/2018/01/2016-Version-Revision-No.-9.pdf and

https://www.rtcwashoe.com/engineering-resource/orange-book/

https://www.reno.gov/home/showpublisheddocument/58638/635942503590470000

⁴ https://www.reno.gov/government/departments/public-works/forms-publications/construction-standard-details

⁵https://cityofsparks.us/resources/resource/construction-standard-details/

⁶https://www.washoecounty.us/csd/engineering capitalprojects/information for developers/standard details.php

⁷ https://www.dot.nv.gov/home/showpublisheddocument/6916/636257041112930000

⁸https://www.dot.nv.gov/home/showpublisheddocument/21537/638150725828230000

6. Deployment Strategy Implementation Plan

Deployment strategies to support the needs identified by the RTC and local agencies were developed to align with the following goals and objectives identified for the ITS SMP:

- Support transportation needs
- Increase network efficiency
- Facilitate collaboration between agencies in the region
- Increase use of existing and future ITS infrastructure investments
- Create a safer, more effective transportation network

The deployment strategies developed outline several strategic areas where future projects and initiatives can be implemented to expand the ITS program within the region through 2030. Deployment strategies are planned through 2030 to account for rapid advances in technology. Visions and strategies beyond 2030 through 2050 should be synthesized through the recommended strategies implemented by this master plan, in alignment with the 2050 Regional Transportation Plan. It is recommended that this ITS SMP be updated every five years to keep up with advances in technology and for evaluation of the implementation of recommended strategies.

The deployment strategies in the ITS SMP have been developed through an examination of past documents and previous tasks in this project. Strategies are also being developed with synergy towards current and future RTC ITS standards and specifications and the *NDOT ITS & ATM Master Plan*.

Deployment strategies for software, infrastructure, staffing, training, and funding needs were discussed with the RTC and are presented as part of this ITS SMP. Several of these needs have already been conceptualized into current or ongoing near-, mid-, and long-term plans, while others are only just now being envisioned for implementation. Still, some ITS technology has already been deployed in the field, including a network of fiber optic cables and switches, cameras, and detection devices with each of these devices being owned and maintained by different agencies within the region.

The deployment strategies should be pursued by the RTC to further the development of the existing ITS network. Projects included will require secured funding or capital before implementation, with some projects estimated to have a higher cost than others. Some projects may not require additional funding, and those projects should be completed by the agencies in the region whenever possible, regardless of the timing of other projects.

6.1 Software

Deployment strategies associated with software for the region include the implementation of a regional ATMS, regional ITS and signal asset management database, and C2C software used for regional performance dashboards.

6.2 Infrastructure

Deployment strategies associated with infrastructure for the region include ITS upgrades, implementation of a lifecycle replacement program, new capital ITS investments, regional signal timing optimization, implementation and standardization of ITS design details and specifications, leveraged opportunities of third-party data use, adaptive timing and feasibility studies, and development of a regional CV/AV infrastructure. The installation of ITS devices as part of future capacity and rehabilitation projects should be considered.

The lifecycle costing would look at the following elements to determine service life and replacement cycle recommendations.

- Traffic Signal System
- Cabinets
- Controllers
- Field Network Switches
- Traffic Signals
- Wire Re-Cabling
- Traffic Signal Vehicle Detection
- In-Pavement Detection

- Video Image Detection
- Radar Detection
- Emergency Vehicle Preemption
- Cameras
- Other Traffic Signal/ITS Items
- ITS Vehicle Detection
- ITS Communications

6.3 Staffing

There are and will continue to be a variety of staffing needs in the region. Staffing both the virtual and established RTC TMC will require planning and careful implementation to ensure staff are properly trained, and standard operating procedures are developed. Development of clear job descriptions for ITS and signal maintenance staff, along with a clear career path development will also be required for the RTC and other agencies. An RTC TSMO Program Plan, like nationally adopted TSMO plans, will be important for coordination and funding efforts. Other key staffing requirements include the creation of a regional shared event tracking system, regional service patrol program, and regional traveler information services (511). Note that coordination with NDOT on the traveler 511 services would be required. Staffing is further discussed in **Section 7.2**.

6.4 Training

Staff training strategies include development of a training program aimed at supporting expansion of the existing ITS network across the region, including implementation of new technologies and new and existing RTC job responsibilities.

6.5 Funding

Funding will also be an important issue for the RTC to pursue. Strategies surrounding funding include securing funding for ITS upgrades, establishment of a lifecycle replacement program, new ITS capital investments, development of operations and maintenance agreements in the region, and public awareness campaigns.

6.6 ITS Investments

ITS investments for the region include the deployment of a strategy for ITS New Capital Investments (Strategy 6) and an ITS Upgrade/Lifecycle Replacement Program (Strategy 21) proposed for 2024. Deploying the ITS Upgrade/Lifecycle Replacement Program will provide the RTC will valuable information on required upgrades for existing equipment and create a plan for future replacement of equipment once it reaches its service life. Results from the ITS Upgrade/Lifecycle Replacement Program will inform the development of new capital investments for the region including investments for active and real-time operations and management of the transportation network regionwide.

6.7 Implementation Plan

As part of the implementation plan, which can be periodically reviewed, altered, and updated according to completed efforts or additional needs, recommended strategies are also presented

in a dependency diagram outlining the timeline for deployment of the proposed strategies in **Figure 4**. The dependency diagram identifies tasks that must be completed before the initiation of another task. For example, an RTC TMC must be established before TMC Standard Operating Procedures can be implemented, or staff can be hired to operate the TMC. Some strategies will take only a few months to accomplish, while others may take years to be fully implemented. The strategy box in **Figure 4** is shown for when the implementation should start. Some of these strategies will take multiple years to complete.

	2023	2024 (Present)	2025	2026-2030
Software Track	Arterial Traffic Management System C2C	Centralized Regional ATMS	Enhance Regional ITS and Signal Asset Management Database Regional Performance Dashboard and Reporting	
Infrastructure Track	Regional Signal Timing Optimization Program ITS Design Standards and Specifications	Enhance ITS Upgrades / Lifecycle Replacement Program Enhance ITS New Capital Investments Third-Party Data Use	Adaptive Timing Feasibility Study	Regional CAV Plan
Staffing Track	Establish RTC TMC	TSMO Program Plan ITS and Signal Staff Job Descriptions and Career Path Development Regional Traveler Information Services	Regional Shared Event Tracking Mechanism RTCTMC Standard Operating Procedures	Regional Service Patrol Program
Training	Management of Network Switches		Staff Training Program	
Funding Track	Dedicate Funding for ITS Upgrades / ITS Lifecycle Replacement Program Enhance Public Engagement System for ITS SMP Strategies Agreements for O&M for ITS and Signals in Region	Enhance Funding for ITS New Capital Investments		

Note: The strategy box shows when the implementation should start. Some of these strategies will take multiple years to complete.

Figure 4 – Deployment Strategies Dependencies Diagram

Deployment strategies include recommended interlocal and maintenance agreements, preventative maintenance strategies, suggested standard operating procedures, recommended TSMO alignment guidelines, and further strategic planning considerations. The following is a listing of the 24 deployment strategies for this plan.

Software:

- Strategy #1: Centralized Regional ATMS
- Strategy #2: Enhance Regional ITS and Signal Asset Management Database
- Strategy #3: Arterial Traffic Management System and Freeway Management System (FMS) C2C
- Strategy #4: Regional Performance Dashboard and Reporting

Infrastructure:

- Strategy #5: ITS Upgrades/Lifecycle Replacement Program
- Strategy #6: ITS New Capital Investments
- Strategy #7: Regional Signal Timing Optimization Program
- Strategy #8: ITS Design Standards and Specifications
- Strategy #9: Third-Party Data Use in TMC
- Strategy #10: Adaptive Timing Feasibility Study
- Strategy #11: Regional CV/AV Plan

Staffing:

- Strategy #12: Establish RTC TMC
- Strategy #13: ITS and Signal Staff Job Descriptions and Career Path Development
- Strategy #14: RTC TMC Standard Operating Procedures
- Strategy #15: TSMO Program Plan
- Strategy #16: Regional Service Patrol Program
- Strategy #17: Regional Shared Event Tracking Mechanism
- Strategy #18: Regional Traveler Information Services

Training:

- Strategy #19: Staff Training Program
- Strategy #20: Management of Network Switches

Funding:

- Strategy #21: Dedicate 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
- Strategy #24: Enhance Public Engagement System for ITS SMP Strategies

Each deployment strategy has been described and outlined with recommended steps for the RTC with suggested implementation timeframes, suggested project scoping notes, and needed coordination between strategies or regional projects. Details for each strategy are found in **Appendix I**. A summary of the timeframe and cost of each deployment strategy by year is shown in **Table 10**.

Table 10 – Deployment Strategies Cost and Timeframe Summary by Year

					-								
No. Strategy Name	Desired Outcomes	Cost	Length	2023 Y1	2024 Y2	2025 Y3	2026 Y4	2027 Y5	2028 Y6	2029 Y7	2030 Y8	2031 Y9	2032 Y10
Software					12	10	14	10	10		10	10	110
Centralized Regional ATMS	Consolidated ATMS across all agencies around the region	One Time	1 Year	-	\$ 750,000	-		-	-	-		-	-
<u> </u>	managed by RTC.	Annual	Ongoing 6 Months to 1			\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Enhance Regional ITS and Signal Asset	Enhance and support a centralized regional ITS database to support agencies in the region for ITS and signal asset	One Time	Year	-	-	\$ 300,000-400,000	-	-	-	-	-	-	-
Management Database	management purposes.	Annual	Ongoing				\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
2 Arterial Traffic Management System and	Continue to maintain the system in its current functionality and	One Time	3 Months	\$ 25,000	-	-	-	-	-	-	-	-	-
Freeway Management System (FMS) C2C	adapt the system as needed to keep all agencies aligned and unified.	Annual	Ongoing		\$ 25,000 - 50,000	\$ 25,000 - 50,000	\$ 25,000 - 50,000	\$ 25,000 - 50,000	\$ 25,000 - 50,000	\$ 25,000 - 50,000	\$ 25,000 - 50,000	\$ 25,000 - 50,000	\$ 25,000 - 50,000
Regional Performance Dashboard and	Proactive system monitoring through regional performance	One Time	1 Year	-	-	\$ 150,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	- 2F 000	\$ 25,000	- - 25,000
Reporting Infrastructure	dashboard and reporting.	Annual	Ongoing				\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Enhance ITS Upgrades / Lifecycle	Proactive replacement and maintenance of regional ITS system.	One Time	Ongoing	-	Varies								
Replacement Program	, ,	Annual One Time	Ongoing 4 Months	-	Varies Varies								
6 Enhance ITS New Capital Investments	Maintain and enhance the RTC's annual ITS program.	Annual	Ongoing	-	Varies								
7 Regional Signal Timing Optimization Program	Highlight success and continue enhancement of regional signal timing optimization program.	Annual	Ongoing	\$ 320,000			\$ 320,000		\$ 320,000	\$ 320,000			\$ 320,000
8 ITS Design Standards and Specifications	Maintain up-to-date ITS Design Standards and Specifications for consistency across the region.	Annual	Ongoing	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies
9 Third-Party Data Use in TMC	Reduce capital and O&M costs while providing regional	Annual	1 Month	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies
10 Adaptive Timing Feasibility Study	transportation system monitoring. Comprehensive study that evaluates how this technology can be	One Time	1 Year	-	-	\$ 100,000	-	-	-	-	-	-	-
11 Regional CV/AV Plan	utilized within the region. Comprehensive study that documents what the industry is doing regarding CAVs and what applications are applicable to the RTC	One Time	1 Year	-	-	-	\$ 100,000	-	-	-	-	-	-
	Washoe region.												
Staffing 12 Establish RTC TMC	Establish TMC space and continue to provide improved transportation system management for the region.	One Time	Incremental Development	-	\$ 300,000	-	-	-	-	-	-	-	-
TS and Signal Staff Job Descriptions and Career Path Development	Provide a sustainable way to provide staffing and resources and elevate the importance, recognition, and evolution of staffing involved in a TSMO program supporting ITS functions for the region.	N/A	ASAP	-	-	-	-	-	-	-	-	-	-
	Document outlining the RTC's TMC procedures compatible with	One Time	3 Years	_	_	\$ 250,000.00	_	_	_	_	_	_	_
14 RTC TMC Standard Operating Procedures	future NDOT TMC plans including step-by-step procedures that are principle and action based.	Annual	Ongoing	-	-	-	Varies						
45 TSMO Drogrom Dian	Document that builds upon the framework outlined in this SMP and informs the region in the path and resources necessary to	One Time	2 Years	-	\$ 200,000	-	-	-	-	-	-	-	-
15 TSMO Program Plan	move the region from implementing ad hoc TSMO projects toward institutionalizing TSMO as a core function of the agency. Will leverage the NDOT TSMO Program for regional application.			-	-	-	-	-	-	-	-	-	-
16 Regional Service Patrol Program	Provide some level of service to arterials and expand as needed in	One Time	1 Year	-	-	-	-	-	Varies	-	-	-	-
rtegranar eerweer aller riegiani	the future.	Annual	Ongoing	-	- \$ 100,000	-	-	-	-	Varies	Varies	Varies	Varies
17 Regional Shared Event Tracking Mechanism	Provide a system that allows agencies to share information among the region. Find ways to consolidate and coordinate different programs with each other.	One Time Annual	1 Year Ongoing	<u>-</u> -	-	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
18 Regional Traveler Information Services	Central location for traveler information with local agency input.	One Time	6 Months	-	-	\$ 100,000							
Training	Central location for traveler information with local agency input.	Annual	Ongoing	-	-	\$ 25,000.00	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Training	Formal training program to ensure staff are training in latest	Ongoing	Ongoing	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies
19 Staff Training Program	standards and trends. Monitoring new trends to ensure staff stays up to date on the latest updates.	Annual	Ongoing	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies
20 Management of Network Switches	Provide a system in which network switches are proactively maintained to provide appropriate level of service operations and begin operating a fault tolerant region wide network.	N/A	Ongoing	-	-	-	-	-	-	-	-	-	-
Funding	10 III												
Dedicate Funding for ITS Upgrades / Lifecycle Replacement Program	Continue to operate an ITS lifecycle program that provides proactive maintenance to the system and provides a high quality of service to the region.	One Time Annual	Ongoing Ongoing	Varies Varies	Varies Varies	Varies Varies	Varies Varies	Varies Varies	Varies Varies	Varies Varies	Varies Varies	Varies Varies	Varies Varies
	Continue to operate a new capital investment program that	One Time	Ongoing	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies
Enhance Funding for ITS New Capital Investments	provides new proactive upgrade maintenance to the system and provides a high quality of service to the region. Establish private-public partnerships through permitting	Annual	Ongoing	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies
	requirements for constructing ITS infrastructure.												
Agreements for O&M for ITS and Signals in Region	Provide a regional and consolidated approach to how the region maintains their infrastructure while providing efficiency and	One Time Annual	2 Years As Needed	\$ 150,000	-	-	- Varies						
	enhancing the level of operations provided. Ensure the public is informed in a transparent manner and input is	One Time	Ongoing	-	Varies								
SMP Strategies	solicited at all opportunities.	Annual	Ongoing	-	Varies								

7. ESTABLISHMENT OF A RTC TMC

A goal of this ITS SMP is to recommend a regional TMC concept, designed such that a continued and consistent partnered collaboration with each of the regional and local agencies is possible. When this goal is attained, a centralized system for the operation and maintenance of regionwide signals and ITS devices on the arterial system will be realized. The development of a regional TMC will take place in two phases. Phase 1 will be implemented first and will consist of a virtual/hybrid TMC model with a Phase 2 concept for a TMC that is collocated with NDOT in the future. The proposed TMC concept is a Washoe Region-specific concept based on the regional needs heard from stakeholders as part of this project. The proposed concept, shown in **Figure 5**, puts NDOT and RTC at the same level, with NDOT District 2 Roadway Operation Center (ROC) focusing on freeway management and the RTC TMC focusing on arterial management for the local jurisdictions. The concept also centralizes maintenance activities for the ATMS – a single agency would operate and maintain all the signals and arterial ITS in the region. The concept also proposes an RTC TMC liaison that sits regularly at NDOT District 2 ROC to facilitate collaboration between NDOT District 2 and the RTC TMC. This role is yet to be defined.

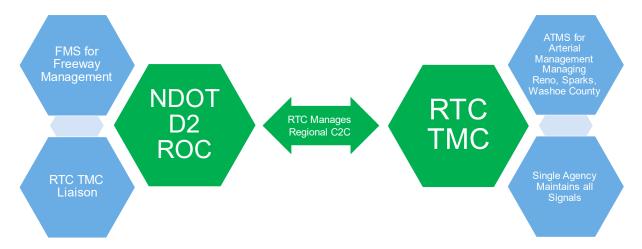


Figure 5 – Proposed TMC Concept

The proposed TMC concept would provide benefits in the following areas:

- Enhanced real-time operations collaboration
- Coordination between freeway and arterials
- Coordination in response to incidents
- Implementation of a shared regional operations center
- Provide a shared event (incident) tracking mechanism
- Provide timely and comprehensive current conditions information to travelers
- Work zone management
- Collaborative maintenance
- Proactive operations

7.1 Virtual TMC (Phase 1)

The initial concept for a TMC recommends a virtual or hybrid TMC model where NDOT and RTC would interact regularly. A virtual TMC provides the functions for monitoring, controlling, and managing the elements of a transportation management system with the use of computers and computer networks without the need to be present in a physically collocated center. The ability to monitor, control, and manage functional ITS devices using software and system applications from any location is a crucial requirement for the success of a virtual TMC. The virtual TMC model provides capital cost savings, eliminates recurring costs like overhead or maintenance fees, and allows TMC operations to occur anywhere. However, this model requires broader staff capabilities, including knowledge surrounding standard operating practices.

To accommodate the virtual TMC model, operating procedures defining the operating steps, area of responsibility, and procedural steps that will be followed must be developed. A modified staffing plan and training regimen shifting away from the in-person setting should be developed. An operations and maintenance plan should be developed to describe the list of existing ITS devices, as well as how and when those systems will be maintained.

The initial concept will consist of a small physical TMC housed at the RTC where all local arterial networks can be managed for all the jurisdictions in the area. The NDOT District 2 ROC should maintain control and management of freeways and establish center-to-center communication with the new RTC TMC to coordinate ATMS systems and leverage resources to support after-hour operations as the ROC is open 24 hours per day 7 days a week. The RTC TMC personnel will primarily support the arterial network, although it is anticipated that an RTC liaison will be physically located at the NDOT District 2 ROC during emergency management or other situations where face-to-face coordination may be needed, which will build relationships of trust with NDOT operators and personnel. With the creation of an RTC TMC, the cities within the region, and the RTC could significantly increase safety, efficiency, and public relations benefits through monitoring and operating traffic signals and other devices in real-time from a centralized location. Coordination between NDOT and RTC signals and facilities should also be considered as part of the RTC TMC function. With the centralization of traffic controls and coordination into the RTC TMC, agencies within the region will have better opportunities to coordinate and collaborate on traffic operations, management, and planning strategies.

7.1.1 TMC Infrastructure and Systems

The proposed TMC layout for the RTC consists of a conference room table, three workstations, a video wall, a device testing and configuration area, a test controller and cabinet area, and server rack space to house required equipment as shown in **Figure 6** and **Figure 7**. Further details regarding the TMC concept include:

- Operations floor workstations (3 Stations) will provide access to TMC-specific systems, such as the ATMS.now and video systems that provide the ability to see CCTV images, and agency systems for email and other intranet applications. The primary purpose of the operators on the floor is to operate/manage the TMC systems that support real-time traffic management, incident management, and information sharing. The Initial Buildout is expected to include:
 - 1 Operations staff workstation
 - 1 Analysis staff workstation
 - 1 Spare/Shared workstation for temporary use by TMC staff, public safety officials, Public Information Officer, other agency staff, vendors, contractors or for use by Operations/Analysis staff in the event of equipment failures at the primary Operations/Analysis workstation
- A video wall will enable operators, managers, and other TMC personnel to share a common view of situational information. Ten 55-inch HDTVs are recommended for the video wall.
- Common area items, including storage, library, shelving/filing space, and other amenities that need to be accessible to all staff in the TMC.
 - Common furnishings such as shelving units, counters/review space, locking storage for staff
 - Common office equipment such as a dedicated TMC phone and printer/scanner
 - Device testing and configuration area
 - Test controller and cabinet area
 - A conference table providing seating for up to 14 people for regular meetings with traffic operations stakeholders is also provided
- A **communications/server room** is needed to house the rack and server space needed to support the video wall and other technology equipment in the TMC.

In addition to the costs for these components, TMC construction costs will also include building renovations to the RTC building space to accommodate the RTC TMC. It is estimated that these renovations will cost approximately \$100 per square foot to construct. 720 square feet of the new TMC area will be renovated and furnished. A budget of \$150,000 should be established to build out the TMC at the RTC building and set up all the technologies including purchase of equipment, software, servers, and other items and services to complete the system integration (\$78,000) for a fully operational TMC.

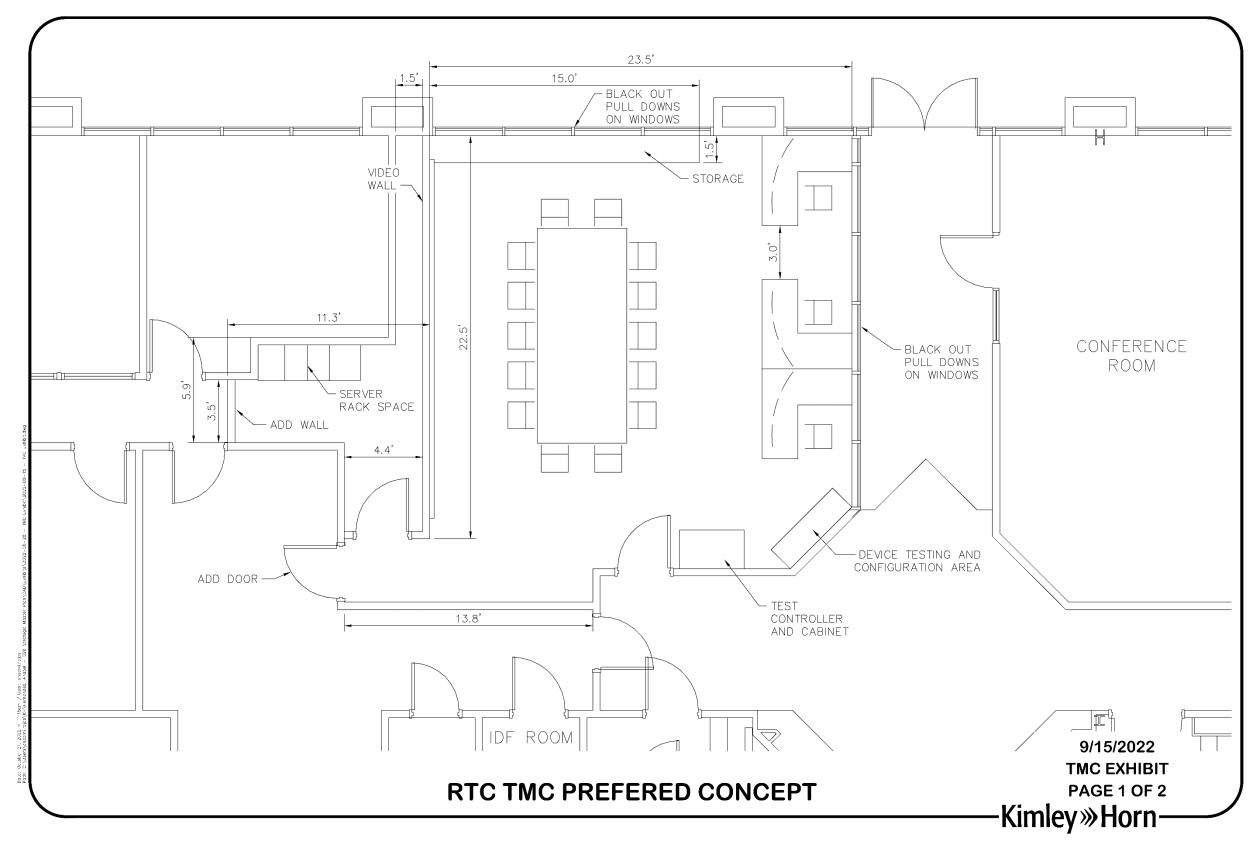


Figure 6 – Proposed TMC Concept (Plan View)

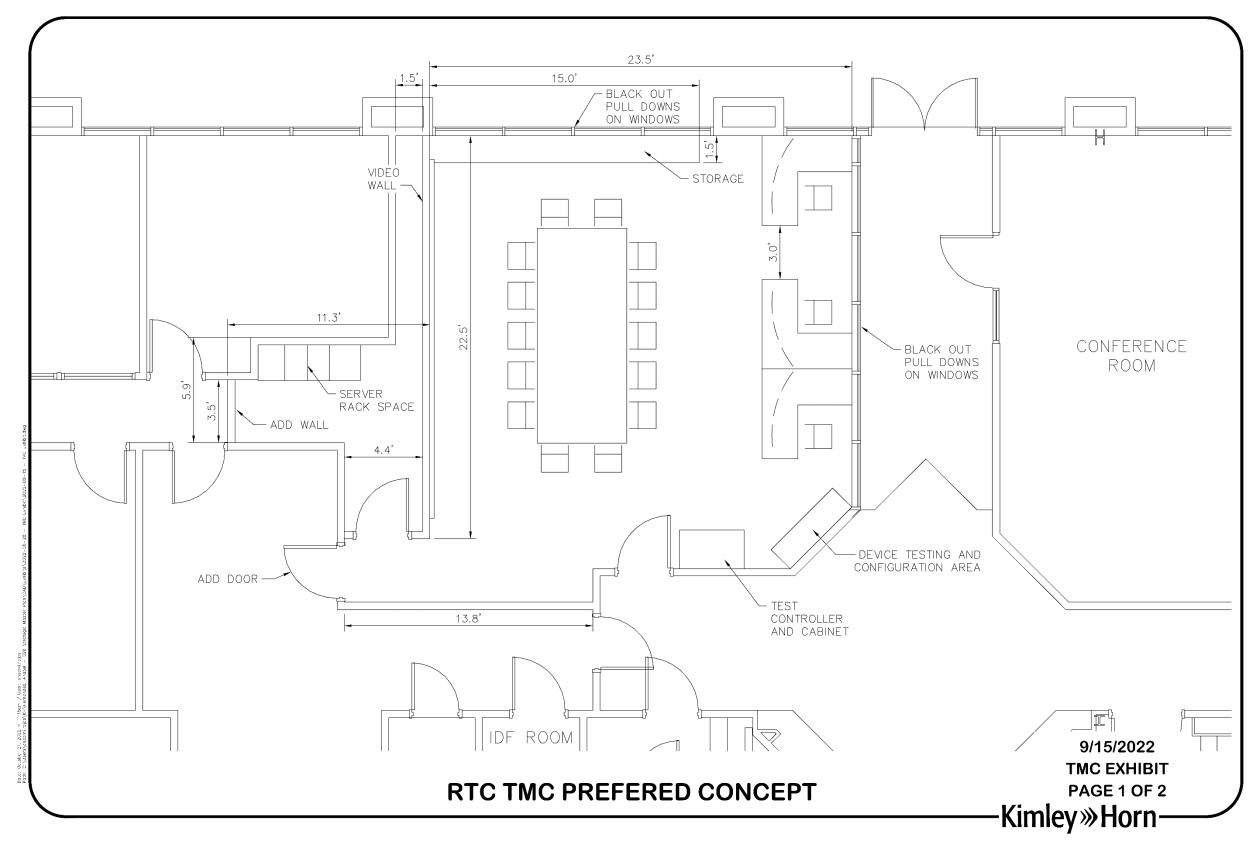


Figure 6 – Proposed TMC Concept (Plan View)

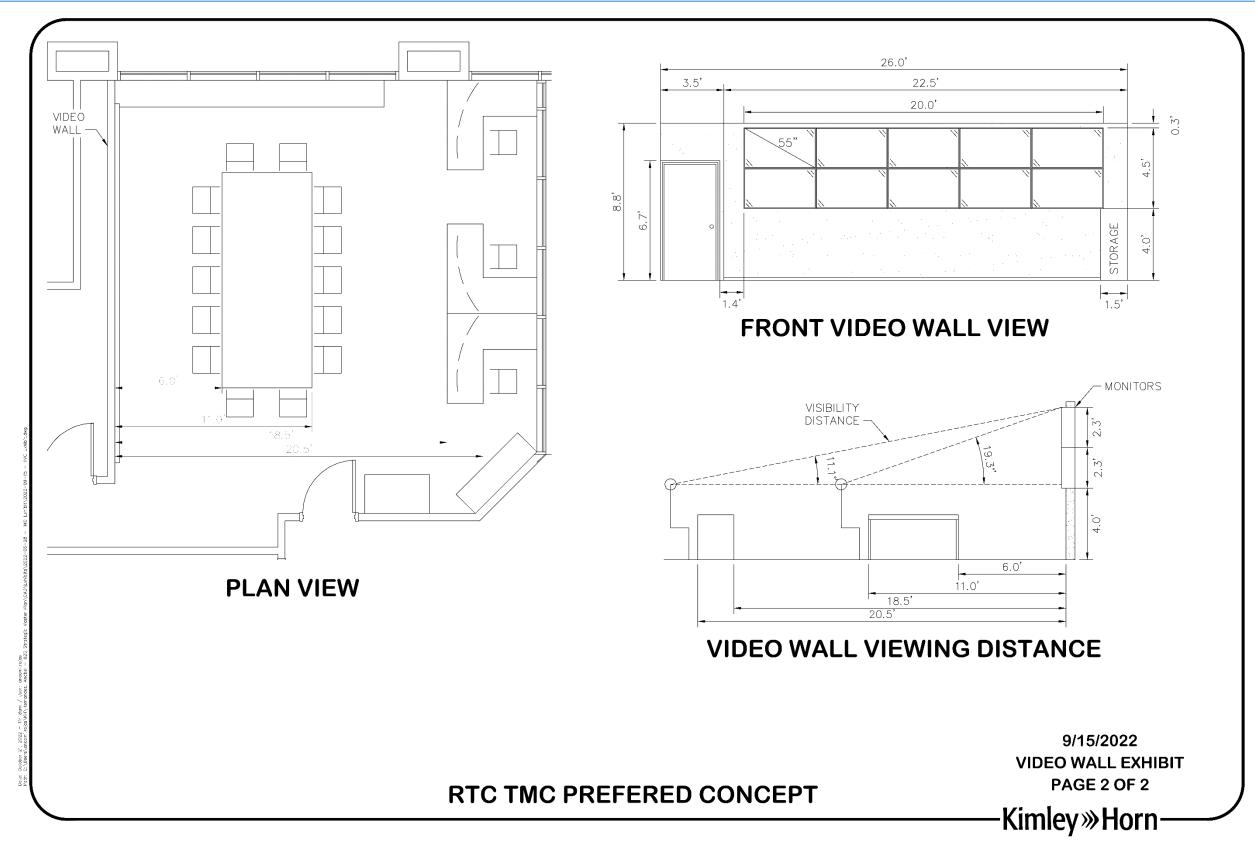


Figure 7 – Proposed TMC Concept with Video Wall Detail

7.1.2 ITS and Signal Staff Job Descriptions and Career Path Development

Specific staff roles and a minimum number of staff required to properly operate and maintain the TMC and maintain existing and new ITS infrastructure will be needed. To accomplish this, a strategy to develop job descriptions and career paths for new positions within the RTC (Strategy 13) should be implemented. Specific skill sets and/or appropriate training are required to update signal timing, maintain an IT network, and troubleshoot ITS field devices. The development of job descriptions needs to match the required experience and skill sets required by those types of positions. Specifically, for the RTC TMC positions, peak period monitoring would be required for proactive management of the region's transportation network which will require two to three full-time equivalent staff responsible for management and operations of the TMC and may carry additional responsibilities in RTC Engineering. This staff will need to provide at a minimum one operator per shift and one supervisor per shift to cover entry-level, supervisor-level, and manager-level career path positions, with career progression offered beyond the manager level to other areas of RTC Engineering. An additional role providing a regional service patrol program during peak hours that functions across arterial boundaries should also be considered.

The following roles may be performed by TMC facility staff or by a combination of existing staff who choose to take on additional TMC-specific roles as part of their current position:

- Management Responsible for overseeing and managing the TMC, the ITS network, and general City/Region traffic and network operations
- Analysis Responsible for managing and implementing traffic signal timing in the City/Region
- Operations Responsible for the real-time operation and management of ITS equipment and systems to support real-time and coordinated traffic operations from the TMC

7.1.3 ITS Device Maintenance Staffing

The RTC should pursue technicians who can support both traffic signal and ITS maintenance by cross-training staff to achieve a 1 to 25 staff-to-signal ratio. Taking into consideration that there are a total of 417 signals, this means the TMC would need a minimum of 17 technicians who can support both signal and ITS device maintenance. Only 10 technicians/mechanics are currently employed by the local agencies. Therefore, seven additional staff that can be cross-trained in both traffic signals and ITS maintenance would be needed to proactively maintain the traffic signals and ITS devices in the regional network.

7.1.4 RTC TMC Standard Operating Procedures

Development of Standard Operating Procedures (SOP) for the new RTC TMC that includes special event management, work zone management, incident management, integrated corridor management, and alternate routing procedures as well as required coordination with NDOT under each of those circumstances should be implemented. These SOPs should outline agreed roles and responsibilities as they relate to each function listed above including, level of service expectations, sharing of data, and performance dashboard thresholds warranting different responses.

7.1.5 Staff Training Program

A staff training program should be established to support the expansion of the existing ITS network across the region and the introduction of new technologies and RTC job responsibilities. When introducing new staff to new activities or processes, it is essential to establish standard procedures and practices to support these new initiatives. All users who interface with the devices or their programs should receive training. Additional training should be provided as new technologies are introduced. Consideration for cross-training between traffic signals and ITS should be included, with training for operators to input signal timing changes.

In the near-term, current signal timing staff should be trained to prepare incident/congestion timing plans that can be easily implemented by operators with basic skills and training. Arterial network staff at the RTC and/or local agencies need to be trained to manage and configure network switches to use the functionality of a ring topology fiber network (smart network switches).

7.2 TMC Full Build Out (Phase 2)

It is anticipated that NDOT will build a new facility in District 2 that could house both the NDOT ROC and the RTC TMC. Collocation provides additional coordination benefits. The TMC full build out at NDOT District 2 is planned to be completed in the future. Establishing a C2C connection with the RTC TMC and staffing the NDOT District 2 ROC appropriately are priorities before implementing additional ITS infrastructure in the region. A Concept of Operations for a Northern Nevada ROC will be established by the NDOT ITS & ATM Master Plan that identifies updated operational strategies for remotely monitoring and managing traffic conditions and highlights the near-term initial and long-term ultimate requirements for such a collocated facility. An integrated system will enable NDOT, MPOs, and local agencies to provide 24/7 operations staffing across the entire transportation network to support alternate routing signal timing plans, Automated Traffic Signal Performance Measures (ATSPM), arterial signal coordination with ramp metering, better traveler information, and improved incident response support.

8. MEMORANDUM OF UNDERSTANDING AND AGREEMENTS

Collaboration between the local agencies and the RTC is vital to the overall deployment and success of the ITS strategies documented in **Table 11**. Without an agreed-upon and executed collaboration agreement between all of the local agencies within the region, the development of a seamless regional transportation network is difficult to achieve. The nature of a regional transportation network requires shared responsibility between agencies and must be coordinated, agreed upon, and executed before the commencement of the TMC and regional ITS network creation.

To assist in interagency collaboration in the region, a Memorandum of Understanding (MOU), has been executed. The MOU provides an understanding that collaboration between local agencies is required and provides guidance such that each agency knows its continuous role and commitment to the deployment and maintenance of ITS strategies and technologies. The MOU also provides a basis for future agreements. Currently, the executed MOU outlines the fundamental roles and agreements of the RTC and local agencies regarding decision-making, operations, maintenance, and establishment of standards for the ITS network within Washoe County but leaves many details to be officially determined through a combination of future interagency collaboration and agreements. The executed MOU is provided in **Appendix J**.

Software, infrastructure, staffing, training, and funding areas require additional interagency collaboration and agreements to fully realize a regional integrated ITS network. Establishing interagency agreements for these areas is an important next step for the future ITS network and region. The following list provides further details on the agreement requirements for each of the areas.

Software Agreements

- Strategy 1: An agreement establishing the location of a centralized regional ATMS system for the entire region, which hosts and maintains all aspects of the future ITS network. All ATMS systems for the entire region will be located and managed from the centralized location, with access provided to all local agencies and NDOT.
- Strategy 2: An agreement establishing a regional ITS signal management database, with consistent schema and data attributes among all agencies to create a central database platform capable of storing system information for all ITS and signal management assets within the region. Important database capabilities including health monitoring, alert generation, and maintenance scheduling should be incorporated in the agreement.
- Strategy 3 and Strategy 12: An agreement outlining how and when the Arterial Traffic Management System and FMS will interface with NDOT for ICM and emergency services, including dispatch services and law enforcement. The existing C2C system should be preserved and utilized.
- Strategy 4: An agreement providing agencies access to centralized ATMS coordination and signal timing software and analytics.

Infrastructure Agreements

- Strategy 5 and Strategy 6: An agreement establishing ITS lifecycle/replacement timelines and details, physical device storage, and investment activities.
- Strategy 5, Strategy 6, Strategy 12, and Strategy 23: An agreement outlining a maintenance plan and responsibilities of who manages the operation and maintenance of infrastructure, assigns infrastructure modification or installation, and who is responsible for funding lifecycle replacement activities, and new or modified ITS installations.
- Strategy 5 and Strategy 6: An agreement establishing unified hardware requirements for use between agencies.

Staffing Agreements

- Strategy 12 and Strategy 13: An agreement establishing job positions, descriptions, and career path details for the proposed TMC. Information regarding other local agency staff that should sit at the TMC should be included.
- Strategy 14 and Strategy 18: An agreement establishing standard operating and communication procedures, TSMO program alignment, service patrol programs, event tracking, and traveler information services throughout the region.
- Strategy 3 and Strategy 12: An agreement establishing agency responsibilities and decision-making authority during interagency coordination.

Training Agreements

Strategy 19 and Strategy 20: An agreement developing a training program and schedule, both for internal and external classes, to prepare staff to effectively operate a regional TMC and ITS network infrastructure.

Funding Agreements

- Strategy 12: An agreement establishing responsibilities for TMC funding for new staff.
- Strategy 21 24: An agreement establishing specific funding protocols for infrastructure upgrades, lifecycle replacement, new capital investments, operations and maintenance efforts, and public awareness campaigns.

As future phases of the ITS SMP are implemented, additional strategic agreements will be required to fully realize an integrated regional ITS network; however, the above agreements outline many of the essential needs that must be programmed.

9. MAINTENANCE

The strategies outlined in this plan describe a variety of implementation types that warrant ongoing maintenance discussions, including:

- Infrastructure This includes physical assets on the transportation network or inside of buildings that support real-time transportation operations for the region or individual jurisdiction. There are two types of maintenance activities required to properly conduct an infrastructure maintenance program: preventative and responsive.
- **Software** This includes computer software that may require ongoing licensure or maintenance as well as the physical assets to support the software, such as servers.
- **Staffing** This includes both full-time equivalent agency personnel as well as contracted staffing for specific roles, projects, or programs.
- **Training** From a maintenance perspective, the training strategies fall in line with maintenance of staffing and will be captured as such.
- **Funding** For those activities that require ongoing funding to maintain that cannot be included in an external funding request such as a federal grant, intentional allocations of types of funding sources for types of strategies need to be outlined.
- **Agreements** For strategies where specific roles and responsibilities are required between multiple partner agencies to implement the strategy effectively, different agreements may warrant further development and updates over time.

Detailed information on the above implementation types is included in **Appendix K**.

10. Funding

External funding is a potential source for some of the strategies listed in this Plan, though not all strategies will apply. This section outlines the various types of external funding that could be pursued, and which strategies would apply to these funding sources.

10.1 Federal Grants and Discretionary Programs Available

Most United States Departments issue grant opportunities. Federally funded strategies are typically geared toward innovation, pilot projects, or new safety mitigation strategies. ITS and traffic signal strategies are traditionally less costly than roadway widening, bridge or tunnel builds, or roadway crossings. There are a variety of federal grant opportunities where ITS strategies could be woven into a larger infrastructure-based project such as a bridge reconstruction or roadway development.

There is a list of 65 programs and projects that the FHWA lists as active mechanisms to pursue external funding to support initiatives at a local level. Some of those funding programs are considered Formula Grants, such as Congestion Mitigation and Air Quality and the Highway Trust Fund which are already established RTC Washoe funding mechanisms based on the region size. Other external funding opportunities beyond those already active could be pursued to support RTC Washoe's initiatives outlined in this Plan. Grant programs currently available for RTC Washoe consideration in funding eligible strategies include:

Advanced Transportation Technologies and Innovative Mobility Development (ATTIMD)/Advanced Transportation Technology and Innovation (ATTAIN) – The Bipartisan Infrastructure Law (BIL) amended the Advanced Transportation and Congestion Management Technologies Deployment grant program and renamed it the ATTIMTD Program. The program provides competitive grants to deploy, install, and operate advanced transportation technologies to improve safety, mobility, efficiency, system performance, intermodal connectivity, and infrastructure return on investment. Each fiscal year (FY) – FY 2022 through FY 2026 – \$60 million is authorized and the Federal share for each project may be up to 80 percent of the cost of the project.

https://www.transportation.gov/rural/grant-toolkit/advanced-ransportation-technologies-and-innovative-mobility-deployment

- Strengthening Mobility and Revolutionizing Transportation (SMART) Grant Program – This program was established to provide grants to eligible public sector agencies to conduct demonstration projects focused on advanced smart community technologies and systems.
 - https://www.transportation.gov/grants/SMART
- Reconnecting Communities Pilot Program This program was established to reconnect communities that are cut off from opportunity and burdened by past transportation infrastructure decisions.
 - https://www.transportation.gov/grants/rcnprogram/about-rcp
- Rural Opportunities to Use Transportation for Economic Success (ROUTES) The ROUTES program prioritizes the needs of rural America by supporting rural transportation policy and equitable access for rural and Tribal communities that face challenges relating to transportation safety, mobility, and economic development. https://www.transportation.gov/rural

- Infrastructure for Rebuilding America (INFRA) Program The INFRA program awards competitive grants to multimodal freight and highway projects of national or regional significance to improve the safety, accessibility, efficiency, and reliability of the movement of freight and people in and across rural and urban areas. Eligible projects will improve safety, generate economic benefits, reduce congestion, enhance resiliency, and hold the greatest promise to eliminate supply chain bottlenecks and improve critical freight movements. ITS strategies could be woven into these major INFRA project applications.
 - https://www.transportation.gov/grants/infra-grant-program
- Mega Program (National Infrastructure Project Assistance Program) This program supports large, complex projects that are difficult to fund by other means and likely to generate national or regional economic, mobility, or safety benefits. ITS strategies could be woven into these Mega project applications.
 - https://www.transportation.gov/grants/mega-grant-program
- Automated Driving System Demonstration Grants This program focuses on funding demonstrations of automated driving systems and has been applied for by DOTs, transit agencies, and universities.
 - https://www.transportation.gov/av/grants
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grants The RAISE program helps communities around the country conduct projects with significant local or regional impact completing critical freight and passenger transportation infrastructure projects.
 - https://www.transportation.gov/RAISEgrants
- Federal Appropriations (Community Project Requests) State and local governments can request federal funds from Congress through Community Project Requests to fund projects that will provide significant value to their communities. https://www.cortezmasto.senate.gov/help/federal-funds/appropriations/

The federal funding process can be lengthy, but it can establish solid methods that can be replicated by owning agencies for demonstration of the innovative or creative use of funding and successful implementation. It is important to develop concepts fully before pursuing and identifying the long-term O&M for when the federal funding timeline ends. Federal grants typically look for the following types of applications:

- Joint applications between multiple agencies, especially recognizable if one of those agencies is larger (a regional metropolitan planning organization (MPO) or a state agency) and is the primary applicant for the federal funding request
- Clearly identifying the federal and local share funding requirements for the grant. In some cases, this is a 60%/40% split. In other cases, it is 80%/20% or 100% fully federally funded. The applicant needs to methodically show the use of funding to support the grant request and also the ongoing funding required to continue the pilot or project if it is deemed successful for the region or locality.
- Specific programs require specific types of concepts some are technology asset acquisition and testing and some are planning and concept development. Acquisition and piloting of new technologies is a good way to demonstrate the success and impact of a concept and should be considered for any external funding pursuit if allowed. Topics that are typically of interest for federal programs include:
 - Advanced transportation technologies
 - ICM systems

- Advanced parking, freight mobility, tolling, managed lanes, or congestion pricing systems
- CV/AV systems
- Advanced traveler information systems
- Data use and analysis to perform better real-time operations for safety and mobility
- Other types of innovation with new technologies or new use of existing technologies serving a new function or purpose in a region or local area

10.2 Public-Private Partnerships

RTC Washoe should consider leveraging the private sector to support strategies relating to data sources, physical underground infrastructure, and pilots or demonstrations of new technologies.

10.2.1 Data Sources

It will be important to leverage available data where possible, especially data available through NDOT. In addition, RTC Washoe should consider pursuing a direct public-private partnership with data providers to support the following two strategies:

- Strategy 4: Regional Performance Dashboard and Reporting
- Strategy 9: Third-Party Data Use in TMC

Direct partnerships with private sector data providers can be challenging because of the ownership and liability constraints of the data. Any contract entered into with a private sector data provider should be carefully considered and reviewed in relation to the use of data, ownership of data, and ability to share data with other agencies or departments.

10.2.2 Pilots or Demonstrations of New Technologies

Other types of public-private partnerships can be considered for pilots or demonstrations of technologies or applications that require a relationship with a private company for monitoring and evaluating the technology. These pilots or demonstrations can, and likely should, be implemented through the use of federally funded grant opportunities. Through that mechanism, the initial pilot and risk are through federal funding rather than local funding, and because of that, RTC Washoe can decide on continuing a relationship, changing it, or discontinuing it post-implementation period.

10.2.3 Physical Underground Infrastructure

Underground network infrastructure (pull boxes and conduits per the *Regional Traffic Guidelines*) is recommended to be installed on all new permit roadway projects for future ITS connectivity and use. Public-private partnerships for funding support of RTC Washoe initiatives will mostly address the following strategies as related to upgrades or new infrastructure:

- Strategy 5 and 21: ITS Upgrades/Lifecycle Replacement Program and Funding
- Strategy 6 and 22: ITS New Capital Investments and Funding

RTC Washoe should limit private sector deployment of above-ground innovative technologies, or at minimum, partner with companies to test or pilot.

10.3 Eligible Strategies

RTC Washoe will need to carefully select the strategies that could receive external funding to complete. Most of the strategies listed in this ITS SMP will need to remain locally funded because

they are focused on enhancing regional infrastructure and are more locally applied, including minor upgrades or replacement of outdated equipment. These types of strategies are locally focused and not necessarily considered innovative. Thus, applying for external funding sources for these types of strategies is not expected to be suitable. The strategies that likely need to stay locally funded by RTC Washoe allocations of regional funding are listed below.

Strategies that would be considered establishing new or upgrading to a <u>technologically</u> <u>standardized process foundational to any ITS Program</u> that **may not** be ranked high in the innovative or creative categories in federal definitions warranting new money:

- Strategy 1: Centralized Regional ATMS
- Strategy 2: Regional ITS and Signal Asset Management Database
- Strategy 3: Arterial Traffic Management System and FMS C2C
- Strategy 7: Regional Signal Timing Optimization Program
- Strategy 8: ITS Design Standards and Specifications
- Strategy 12: Establish RTC TMC
- Strategy 14: RTC TMC Standard Operating Procedures

Strategies that would likely be considered <u>ongoing RTC Washoe and local agency requirements</u> or desires that are **likely not** relying on external funding sources for ongoing funding, could be a cost-sharing opportunity with NDOT leveraging similar functions or strategies, or are unique to the region warranting of new money:

- Strategy 5: ITS Upgrades/Lifecycle Replacement Program
- Strategy 10: Adaptive Timing Feasibility Study
- Strategy 11: Regional CV/AV Plan
- Strategy 13: ITS and Signal Staff Job Descriptions and Career Path Development
- Strategy 15: TSMO Program Plan
- Strategy 19: Staff Training Program
- Strategy 20: Management of Network Switches
- Strategy 21: Establish Funding for ITS Upgrades/Lifecycle Replacement Program
- Strategy 23: Agreements for O&M for ITS and Signals in Region
- Strategy 24: Public Awareness Campaign

Strategies that are <u>considered more innovative and creative</u> **may fit well** in some federally funded grant opportunities due to the requirement for the development and integration of elements that are not integrated today or are pilot demonstrations for a specific benefit. The strategies that should be considered for external grant opportunities are included below. Further details of why these strategies are innovative are found in **Appendix I**.

- Strategy 4: Regional Performance Dashboard and Reporting
- Strategy 6 & 22: ITS New Capital Investments and Funding for Investments
- Strategy 9: Third-Party Data Use in TMC
- Strategy 16: Regional Service Patrol Program
- Strategy 17: Regional Shared Event Tracking Mechanism

11. NEXT STEPS

The next steps for the RTC and partnering agencies should focus on the implementation of the strategies identified in this plan. These strategies should be evaluated by establishing performance measures the RTC can use to track progress on implementation. Evaluating the success of the ITS SMP involves assessing various metrics and indicators to determine its effectiveness in achieving objectives, including:

- Comparing pre- and post-implementation data to gauge the plan's impact on ITS efficiency and effectiveness
- Assessing the perception of changes in mobility, safety, and overall satisfaction with the transportation network
- Evaluating the impact of enhancing transportation accessibility and equity across various demographic groups

The completion of the ITS SMP signifies a collective commitment to advancing transportation systems within the region. This comprehensive plan was developed to address evolving challenges and opportunities in modernizing transportation infrastructure and services, setting the stage for strategic progress.

Actualizing the ITS SMP's objectives requires commitment from all participating agencies to execute near-, mid-, and long-term deployment strategies delineated in the plan, as detailed in **Appendix I**. This entails a concerted collaborative effort among stakeholders to allocate resources and synchronize activities. Collective action will enable agencies to harness their expertise and resources to expedite the implementation of ITS solutions.

The completion of the ITS SMP underscores a shared dedication to enhancing transportation systems to benefit all stakeholders. By embracing the recommended deployment strategies and fostering collaborative synergy among agencies, stakeholders can chart a more efficient, safer, and sustainable transportation network.

Memorandum of Understanding for Deployment of the RTC ITS Strategic Master Plan

This Memorandum of Understanding (this "MOU") is made and entered into on ______ June 18 _____. 2024, by and between the following agencies:

- Regional Transportation Commission of Washoe County ("RTC")
- City of Reno ("Reno")
- City of Sparks ("Sparks")
- Washoe County ("Washoe")

Reno, Sparks, and Washoe may be referred to herein collectively as the "Local Agencies," and each a "Local Agency".

RECITALS

WHEREAS, the purpose of this MOU is for RTC and the Local Agencies to collaborate on the deployment of the "2023 RTC Intelligent Transportation Systems (ITS) Strategic Master Plan (SMP)," including the recommendations in "Technical Memorandum #2" attached hereto (**Attachment A**).

WHEREAS, ITS devices, technologies and software are targeted at infrastructure, vehicles, and travelers, as well as integrated applications among them, to enable the development of an intelligent transportation system that improves safety, reliability, mobility and overall performance of the surface transportation system. Successful ITS deployments include, but are not limited to, traffic signal coordination, accident and incident detection, ramp meters, and traveler information systems.

WHEREAS, Reno, Sparks and the Nevada Department of Transportation ("NDOT") all operate and maintain ITS devices in the region. Washoe has an agreement with Reno to operate and maintain Washoe's ITS devices. RTC coordinates with the Local Agencies through the Traffic Operations Management Subcommittee, and collaborates on ITS capital investments and a regional signal timing program.

WHEREAS, the RTC's Regional Transportation Plan (RTP) includes strategic goals to increase the accessibility and mobility of people and freight, enhance the integration and connectivity of the transportation system across and between modes, and promote efficient system management and operation.

WHEREAS, it is in the interest of the RTC and the Local Agencies to collaborate on deployment of the 2023 RTC ITS Strategic Master Plan deployment recommendations to improve the performance of the regional transportation system.

WHEREAS, this MOU shall not obligate the parties to allocate or transfer funds. Specific projects or activities that involve the transfer of funds or property will require the execution of separate agreements. RTC will be responsible for developing funding plans for each specific deployment recommendation in coordination with the Local Agencies.

WHEREAS, there are other stakeholders that may be or need to be involved with deployment recommendations in the future such as Nevada Department of Transportation (NDOT), University of Nevada, Reno (UNR), emergency services, etc. The goal of this MOU is to unify RTC and the Local Agencies with regard to management of these efforts and the vision for deployment before engaging other

agencies or stakeholders. If and when agreements are necessary, RTC will use direction gained from this MOU to pursue future agreements.

COVENANTS

NOW, THEREFORE, in consideration of mutual covenants and conditions herein contained, the RTC and Local Agencies agree as follows:

- 1. <u>Decision Making</u> the authority, accountability, leadership, direction and, control exercised by the RTC and Local Agencies to oversee the development and implementation of SMP deployment recommendations
- 1.1 The RTC will strive to perform the following tasks and functions in close coordination with the Local Agencies:
 - Plan and implement SMP recommendations
 - Establish and manage an oversight committee that will be made up of at least one representative from each Local Agency and be responsible for providing direction regarding SMP recommendations
 - Measure performance of SMP recommendations and communicate results with all stakeholders
- 1.2 The Local Agencies will strive to perform the following tasks and functions in close coordination with the RTC:
 - Participate in implementation of SMP deployment recommendations and provide oversight as needed
 - Provide representation on the oversight committee and participate in decision-making regarding SMP recommendations
 - Review and support development of performance measures
- 2. <u>Operations</u> the planning and controlling of the movement of all modes of travel on streets and highways with the goal of ensuring maximum safety and efficiency
- 2.1 The RTC will strive to perform the following tasks and functions in close coordination with the Local Agencies:
 - Operate regional traffic signal and ITS network and infrastructure
 - Establish and operate a regional Traffic Management Center (TMC)
- 2.2 The Local Agencies will strive to perform the following tasks and functions in close coordination with the RTC:
 - Participate in and provide oversight of regional traffic signal and ITS operations
 - Provide control and access to traffic signal and ITS infrastructure as needed to allow for regional TMC operation
- 3. <u>Maintenance</u> the systematic process for maintaining, upgrading, and expanding physical assets based on quality data and well-defined objectives in order to ensure the best long-term benefits
- 3.1 The RTC will strive to perform the following tasks and functions in close coordination with the Local Agencies:
 - Establish a regionally consolidated ITS and traffic signal maintenance program

- Provide management, oversight, support, and establish maintenance responsibilities
- 3.2 The Local Agencies will strive to perform the following tasks and functions in close coordination with the RTC:
 - Collaborate with development and implementation of a regionally consolidated maintenance program
 - Adopt consolidated approach to maintenance of traffic signals and ITS
- 4. <u>Standards</u> the architecture of interrelated systems that work together to deliver dynamic traffic operations in environments that feature changing conditions and demands
- 4.1 The RTC will strive to perform the following tasks and functions in close coordination with the Local Agencies:
 - Develop and implement regional ITS and traffic signal design standards and specifications
 - Establish and maintain a regional traffic signal and ITS asset management program
- 4.2 The Local Agencies will strive to perform the following tasks and functions in close coordination with the RTC:
 - Participate in the development and adoption of regional traffic signal and ITS design standards and specifications
 - Support and participate in regional traffic signal and ITS asset management

Authorized Representatives

By signing below, each agency indicates that it endorses collaborative efforts to deploy the 2023 RTC ITS Strategic Master Plan deployment recommendations and agrees to maintain its responsibility as listed in this document.

Regional Transportation Commission Chair	Executive Director
City of Reno	
Mayor	City Manager
City of Sparks	
Mayor	City Manager
Washoe County	
Chair	County Manager

- Provide management, oversight, support, and establish maintenance responsibilities
- 3.2 The Local Agencies will strive to perform the following tasks and functions in close coordination with the RTC:
 - Collaborate with development and implementation of a regionally consolidated maintenance program
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 - Support and participate in regional traffic signal and ITS asset management

Authorized Representatives

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Regional Transportation Commission

Chair Executive Director City of Reno Mayor City of Sparks City Manager City Manager City Manager Chair County Manager

Regional Transportation Commission

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 - Establish and maintain a regional traffic signal and ITS asset management program
- 4.2 The Local Agencies will strive to perform the following tasks and functions in close coordination with the RTC:
 - Participate in the development and adoption of regional traffic signal and ITS design standards and specifications
 - Support and participate in regional traffic signal and ITS asset management

Authorized Representatives

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Chair	Executive Director
City of Reno	
Mayor	City Manager
City of Sparks	
Ed lawson	John Martini
Mayor	City Manager
Washoe County	
Chair	County Manager
Light State City Class	Sparks Wes Duncan
Lisa Hunderman, Sparks City Clerk	Wes Duncan, Sparks City Attorney

- Provide management, oversight, support, and establish maintenance responsibilities
- 3.2 The Local Agencies will strive to perform the following tasks and functions in close coordination with the RTC:
 - Collaborate with development and implementation of a regionally consolidated maintenance program
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Authorized Representatives

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Regional Transportation Commission	
Chair	Executive Director
City of Reno	
Mayor	City Manager
City of Sparks	
Mayor	City Manager
Washoe County OLD OLD OLD OLD OLD OLD OLD OL	Franc & B
Chair	County Manager

Meeting Date: 2/21/2025 Agenda Item: 4.3.10

To: Regional Transportation Commission

From: Garrett Rodgers, Project Manager

SUBJECT: Sparks Boulevard Capacity Improvement Project PSA Amendment No. 3

RECOMMENDED ACTION

Approve Amendment No. 3 to the contract with AtkinsRealis USA, Inc., for engineering during construction (EDC) services on the Sparks Boulevard Capacity Improvement Project in the amount of \$817,902, for a new total not-to-exceed amount of \$9,292,233.

BACKGROUND AND DISCUSSION

On April 17, 2020, the RTC and AtkinsRealis USA, Inc. ("Consultant") executed an agreement for engineering design services related to the Sparks Boulevard Capacity Improvement Project ("Project"). The original scope included environmental services, preliminary engineering, and final design services for this Project. Additionally, Engineering During Construction (EDC) was included within the contract as optional, with scope and fee development to occur prior to the start of construction and incorporated into the contract through an amendment. This contract Amendment No. 3 will incorporate EDC for the Project, as intended in the original contract.

Amendment No. 3 allocates \$817,902 to the Consultant to complete all tasks related to EDC. These tasks include attendance of weekly project meetings, providing responses to contractor requests for information, review and approval of contractor submittals for conformance to the design and specifications, development and distribution of design changes, and record drawing development. Additionally, the Consultant will monitor wetland mitigation throughout construction and during the one-year warranty period for conformance with our Section 404 Permit with the United States Army Corps of Engineers (USACE). Wetland monitoring and mitigation is critical to the overall success of this project and will include post-construction site inspection of wetland mitigation areas along Sparks Boulevard to assess and identify any discrepancies between the construction of mitigation sites and design of mitigation sites. A detailed technical memorandum will be developed that will identify National Environmental Policy Act (NEPA) and USACE permits, monitoring methodology, results from the one-year monitoring assessment, risks or damage to the mitigation sites, and adaptive management techniques that need to be implemented to promote success and execution of the Section 404 Permit Requirements. Additional details are outlined in the recitals within the attached amendment. All other provisions of the contract remain unchanged and

in full effect.

Construction of the Project is anticipated to begin in 2025.

This item supports the FY2025 RTC Goal, "Begin Project Construction: Sparks Boulevard Capacity Improvement".

FISCAL IMPACT

Fuel tax appropriations for this item are included in the FY 2025 Budget.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

AMENDMENT NO. 3

The Regional Transportation Commission of Washoe County ("RTC") and AtkinsRealis USA, Inc. ("Consultant") entered into an agreement dated April 17, 2020, as previously amended by Amendment No. 1 dated September 10, 2021, and Amendment No. 2 dated November 6, 2023 (the "Agreement"). This Amendment No. 3 is dated and effective as of February 21, 2025.

RECITALS

WHEREAS, the Agreement has Optional Design Services During Construction;

WHEREAS, the parties have determined that there is a need to amend the Agreement to include Design Services During Construction. The RTC and Consultant have chosen to amend this agreement for the Consultant to perform and assist with project management, public information services, engineering design services, record drawings, and wetland mitigation monitoring per our United States Army Corp of Engineers section 404 permit;

WHEREAS, the additional services needed total \$817,902 for a new not-to-exceed amount of \$9,292,233.00.

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 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 reallocated not-to-exceed amounts between tasks. A request to reallocate not-to-exceed amounts must be accompanied with a revised fee schedule, and must be approved in writing by 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 Design Contingency	\$7,398,821.40 \$1,075,509.60
EDC Services	\$767,902.00
EDC Contingency	\$50,000.00
Total Not-to-Exceed Amount	\$9,292,233.00

- 2. Exhibit A: Scope of Services of the Agreement is replaced in its entirety with the version of Exhibit A attached hereto.
- 3. Exhibit B: Compensation is replaced in its entirety with the version of Exhibit B attached hereto.
- 4. All other provisions of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have made and executed this amendment.

REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY By: Bill Thomas, Executive Director ATKINSREALIS USA, INC. By: Matt Baird, PE, Vice President

EXHIBIT A-1

SCOPE OF SERVICES

INTRODUCTION

CONSULTANT will provide engineering services during construction and ensure compliance with the Compensatory Mitigation Plan included in the U.S. Army Corps of Engineers (USACE) permitting related to Section 404 of the Clean Water Act during construction and one year after construction completion for the RTC20-10 Sparks Boulevard Capacity Project.

The project limits include Sparks Boulevard from and including the I-80 westbound off-ramp to the south side of the Shadow Lane intersection.

Anticipated improvements include reconstructing and widening the existing four-lane roadway (one lane in each direction) to include six lanes (three lanes in each direction) with a raised median; dedicated left turn lanes; dedicated right turn lanes where necessary; new curb, gutter and sidewalk along both sides of the roadway; bicycle lanes; pedestrian ramps; traffic signal infrastructure; utility adjustments; grading; and drainage improvements. Existing raised median; transit pullouts; curb, gutter and sidewalk; and multi-use path reconfiguration, removal, and/or replacement will be necessary.

The intersections along Spark Boulevard including East Lincoln Way, East Prater Way, O'Callaghan Drive, and Springland Drive will be reconfigured and reconstructed to accommodate the widened roadway section.

Multiple existing residential and commercial development access locations including but not limited to Big Fish Drive, McCabe Park Street, Tyco Way, Express Street, and Howard Drive will also be reconfigured and reconstructed to accommodate the widened roadway section and multimodal improvements.

Sparks Boulevard extends through Nevada Department of Transportation (NDOT) right-of-way and control-of-access within the I-80 corridor. Interchange improvements will be included to accommodate the widened roadway and multimodal improvements.

The project requires wetland mitigation and will require wetland establishment monitoring beginning near the end of construction. This monitoring is expected to be required for up to five (5) years to successfully close out the USACE 404 permit. The engineering team will monitor the wetlands establishment at construction closeout and through the contractor's 1 year warranty period at which time, the monitoring efforts are expected to be turned over to/transitioned to the City of Sparks. The engineering team will monitor construction and ensure compliance with the Mitigation Plan 404 Permit Requirements. If required, corrective actions/adaptive management activities will be incorporated to facilitate the establishment of the wetland areas. Annual reporting for year 1 will be performed by the engineering team. The City of Sparks is expected to perform reporting for years 2 through 4 and permit closeout.

Design services are expected to be completed in early 2025 with advertisement and bid support to occur in the spring of 2025. Construction is expected to begin in the summer of 2025 and conclude in the late fall of 2026. Engineering services during construction will be provided for the duration.

The scope of services will generally consist of the following tasks:

1. PROJECT MANAGEMENT

1.1. Team and Project Management

CONSULTANT will provide project management services for the duration of the Sparks Boulevard Capacity Project including closeout activities; assumed to be thirty-nine (39) months total, April 2020 through June 2023. Once the project proceeds to construction, project management and public involvement services will be performed under the Services During Construction task.

Project management includes project setup and administration, including preparation and execution of Subconsultant agreements; monthly budget monitoring and invoicing; monthly preparation and reporting of project progress (including work completed and documentation of any changes, actual and anticipated, in scope, schedule, and budget); risk management; preparation and monthly project schedule updates; management of Subconsultants, oversight of quality assurance on deliverables; file management; project closeout; and general project administration.

CONSULTANT Project Manager will serve as the Regional Transportation Commission (RTC)'s single point of contact and will have primary responsibility for coordinating the efforts of the project team and subconsultants.

1.2. Project Coordination and Meetings

The CONSULTANT Project Manager will be responsible for the ongoing project coordination of CONSULTANT activities for the duration of the work. The CONSULTANT Project Manager shall also maintain communication, as appropriate, with local, state, federal, and private stakeholders as required for the progress of the scope of work detailed in this document. All significant communications shall be documented and reported to the RTC Project Manager. CONSULTANT Project Manager will keep the RTC Project Manager informed of progress with weekly informal briefings via email or phone call. The CONSULTANT Project Manager will coordinate with team leads to discuss the progress of the project and identify issues and action items to be addressed.

CONSULTANT Design Manager will directly oversee the design disciplines, manage the production of Preliminary and Final Design, and coordinate milestone submittals, reviews, and incorporation of review comments.

CONSULTANT Project Manager, Design Manager, Environmental Manager, Public

Information Manager and key design support and subconsultant staff will participate in project kickoff, project management, internal team, and miscellaneous coordination meetings.

1.2.1. Project Kickoff Meetings

CONSULTANT will hold a kickoff meeting with the RTC, the City of Sparks, NDOT and other agency staff as appropriate, to confirm the project objectives, approach, milestones, stakeholder and outreach approach, and potential project challenges. Up to eight (8) CONSULTANT staff will attend the meeting. CONSULTANT will prepare a meeting agenda, take and distribute meeting minutes, and track concerns about the project from the attendees.

CONSULTANT will hold an internal kickoff meeting with CONSULTANT staff, and subconsultants to internally align the team with the goals of the RTC and the goals of the project.

1.2.2. Project Management Team Meetings

CONSULTANT will facilitate monthly meetings with the RTC Project Manager to discuss the design progress; upcoming milestones; scope, schedule, and budget; risk status; key technical issues by discipline; and make informed decisions. This meeting will be facilitated by the CONSULTANT Project Manager and an agenda and meeting summary will be provided. A total of thirty-nine (39) meetings are anticipated, to be attended on average by five (5) CONSULTANT staff.

1.2.3. Internal Design Team Coordination Meetings

Starting with the Preliminary Design effort, CONSULTANT will hold biweekly design coordination meetings with CONSULTANT design staff and subconsultants as appropriate to ensure cross-discipline coordination with design and schedule. A total of seventy-two (72) meetings are anticipated, to be attended on average by eight (8) CONSULTANT staff.

1.2.4. Miscellaneous Coordination Meetings

CONSULTANT will prepare for and attend miscellaneous coordination meetings with RTC, City of Sparks, and NDOT staff as requested by and at the RTC's discretion. A total of sixty (60) meetings are anticipated over the duration of the project, to be attended on average by three (3) CONSULTANT staff.

<u>Deliverables</u> - Meeting Invitation, Materials, Exhibits and Summaries

1.3. Project Management Plan (PMP)

CONSULTANT will prepare a Project Management Plan (PMP) that will include: Project Instructions, Risk Management Plan, Communications Protocols; Project Directory, Scope, Schedule, and Budget, File and Information Sharing and Storage Protocols, and the Safety Plan. The PMP will be distributed to the CONSULTANT team, including Subconsultants, and will be updated as needed throughout the project duration.

Deliverables – Draft and Final PMP

1.4. Quality Management Plan (QMP)

CONSULTANT will prepare a Quality Management Plan (QMP) specific to the Sparks Boulevard Capacity Project. A Quality Manager will be assigned and will be responsible for the development and implementation of the plan. The QMP will apply to both prime and Subconsultant team members. An independent quality review will be performed on each design deliverable including the Preliminary and Final Design milestone packages.

Deliverables – Draft and Final QMP

1.5. Design and NEPA Schedule

CONSULTANT will prepare and maintain a project schedule and distribute updates on a monthly basis. The schedule will be reviewed with the RTC at monthly Project Management Team (PMT) meetings, with a focus on the upcoming 4-week look ahead, critical path activities, and schedule threats.

1.6. Constructability Reviews and Construction Schedules

CONSULTANT will provide an independent constructability review of the 50 Percent Design plans, an independent review of the 50 Percent Design cost estimate, and provide a draft construction schedule. Constructability reviews and updates to the draft construction schedule will be provided on the Final Design Submittals.

1.7. Cost Risk Assessment (CRA)

Upon completion of the 50 Percent Design submittal, a Cost Risk Assessment (CRA) workshop will be conducted. The CONSULTANT will perform probabilistic risk analysis via Monte Carlo simulation models to establish a probable range for both project cost and schedule based on anticipated risks, uncertainties and escalation. Escalation rates will be as provided by NDOT's Escalation Rates Forecast Technical Memorandum dated November 1, 2016.

Cost and schedule risks will be evaluated for the project as a whole.

CONSULTANT will provide Subject Matter Experts (SME's) in roadway, bridge, geotechnical, drainage, and traffic to participate in the workshop; provide senior professionals to conduct the workshop including independent review of the cost estimate and assessment of project risk; collect and analyze the data obtained from the workshop; and prepare the final report.

The CONSULTANT will coordinate the CRA workshop with the RTC Project Manager who will assist in the identification of representatives from key stakeholder groups and provide additional SME's as appropriate. Prior to the start of the CRA, CONSULTANT develop an initial list of risk items to consider and as part of the CRA workshop, when developing the risk register. With input from the SME's, the risk register will identify potential project risks, cost or schedule impacts of the risks, and the likelihood of the risk occurring and response strategies to help mitigate risk.

Upon completion of the workshop the CONSULTANT will prepare a draft CRA report that will be circulated to participants for review and comment. The CONSULTANT will document comments and responses in a spreadsheet and use these comments to finalize the CRA report. The final CRA report, including the risk register, will be provided electronically to the RTC Project Manager.

<u>Deliverables</u> – Meeting Invitation, Materials, Exhibits, Summaries, Draft and Final CRA Report

2. PUBLIC AND AGENCY INVOLVEMENT

2.1. Public Outreach and Involvement Plan

CONSULTANT will develop a Public Outreach and Involvement Plan that outlines specific objectives, organization and roles of stakeholders, and definition and schedule of target activities to accomplish the objectives of the Project.

CONSULTANT will meet with the RTC Project Manager and Communications Team to review the overall strategy for public involvement. Following this meeting, CONSULTANT will draft a plan that supports the RTC's objectives and addresses the needs of the community. The plan will ultimately provide the RTC with record of all outreach and involvement efforts executed as part of the project.

Deliverables - Public Outreach and Involvement Plan

2.2. Outreach Methods

2.2.1. Project Branding and Logo

CONSULTANT will develop three (3) project branding guides that will include color and style palettes and a logo concept for each, for the RTC to choose from or to provide direction on how to modify the concepts to develop one (1) final project branding color theme, style and logo. Project branding will provide a consistent look on all public outreach materials and resources.

Deliverables - Project Logo and Branding Guide

2.2.2. Website/Social Media Outreach

CONSULTANT will establish and secure a domain name and maintain a project-specific website. The website will be updated monthly and as needed as project activities require. The website will be used for the project's lifespan and will include a project description; frequently asked questions (FAQ); all project collateral material; schedule with updates to emphasize current activities; design and aesthetic treatment concepts; advance notice of stakeholder meetings, exhibits, and handout materials from public meetings; advance notice of construction activities and traffic control; project map and drawings; project photos; e-mail sign-up (subscription) and comment page; contact page; and updated maps and design

drawings/renderings. The website will include links to the RTC Home Page and any project videos and media mentions. Website content will be approved by the RTC Project Manager and Communications Team prior to being available to the public.

CONSULTANT will provide the RTC's Communications Team with project information and announcements to be posted by the RTC on their social media channels.

CONSTULTANT will not be responsible for providing project information or meeting announcements to the media. It is assumed the RTC Communications Team will be the media's point of contact and will provide these services.

<u>Deliverables</u> - Project Website with Secure Domain Name

2.2.3. Stakeholder Database

CONSULTANT will develop and maintain a strategic and comprehensive stakeholder list. CONSTULTANT will obtain an updated list of property owners within 500 feet of the project corridor from the County's Assessor's Office. CONSULTANT will obtain lists of homeowner's associations/neighborhood associations within the project area. The stakeholder database will include project team members, elected officials, businesses, agencies, residents, and community organizations. The database will be a single master database and will be updated as needed.

CONSULTANT will add contacts obtained from meetings and the website subscription to the stakeholder database.

Deliverables - Stakeholder Database

2.2.4. Collateral Material

CONSULTANT will develop project information materials (in English) for distribution to the general public and for use at public and stakeholder meetings. This material will include a project Fact Sheet (history, benefits, impacts, milestones, and schedule) and a FAQ sheet. Collateral material will discuss environmental and design project information. All materials will be made available both electronically via the project website and hard copy. One draft version of each product will be provided to RTC Project Manager and Communications Team for review. CONSTULTANT will provide copies of collaterals as requested and as needed for meetings and/or briefings. Translation of collateral materials into Spanish will be provided by the RTC.

Deliverables - Project Fact Sheet and FAQ Sheet

2.3. NEPA Outreach Requirements

2.3.1. Public and Resource Agency Scoping Meetings

CONSULTANT will secure appropriate venues, prepare applicable materials and exhibits, and assist with facilitation for two (2) scoping meetings. One meeting will be held with local and

state agencies and the other will be held with the public in the form of a public information meeting. The primary objective of the scoping meetings is to describe the project, environmental assessment (EA) process and schedule, and to take comments on environmental issue areas.

CONSULTANT will create and distribute the invitation to the agency scoping meeting with direction from the RTC Project Manager.

2.3.2. Public Hearing

CONSULTANT will secure appropriate venues, prepare applicable materials and exhibits, assist with facilitation, and document one (1) public hearing in the form of a public information meeting. The purpose of the public hearing will be to discuss and take comments on the draft EA and preferred alternative.

CONSULTANT will prepare scoping and hearing summary reports identifying the commenters and the environmental issues raised.

It is assumed the RTC will design and place print ads, prepare mailers and press releases, and secure a court reporter and Spanish translator for the public scoping meeting and public hearing. The costs associated with these are not included as part of the CONSULTANT'S fee. Translation of public meeting materials into Spanish will be provided by the RTC.

<u>Deliverables</u> - Meeting Invitation, Materials, Exhibits and Summaries

2.4. Additional Public Information Meetings

CONSULTANT will identify and secure appropriate venues, prepare applicable materials and exhibits, assist with facilitation, and document up to two (2) additional public information meetings. These meetings will be held following the completion of 50 Percent Design to take comments on final design and review construction packages; and prior to Phase 1 construction to discuss the construction schedule and strategy. A public information meeting prior to the start of Phase 2 construction is not scoped.

It is assumed the RTC will design and place print ads, prepare mailers and press releases, and secure a court reporter and Spanish translator. The costs associated with these are not included as part of the CONSULTANT'S fee. Translation of public meeting materials into Spanish will be provided by the RTC.

Public Information Meetings will be livestreamed on Facebook by the RTC Public Information Officer.

Deliverables - Meeting Materials, Exhibits and Summaries

2.5. Technical Advisory Committee (TAC) Meetings

A technical advisory committee (TAC) will be established to provide alternative recommendations, assist with consensus on the preferred alternative to advance to 30 Percent Design, and to guide design decisions during Preliminary Design. The TAC will consist of the

RTC, City of Sparks, and NDOT and others as identified at RTC's discretion. The TAC will participate in the Alternative Development workshop discussed in Task 5.7. TAC meetings will be held quarterly starting with Task 5 Preliminary Studies through completion of Task 6 Preliminary Design. It is assumed six (6) meetings will be held and attended, on average, by five (5) CONSULTANT staff.

CONSULTANT will prepare for and attend miscellaneous TAC coordination meetings as requested by and at the RTC's discretion. A total of three (3) meetings are anticipated, to be attended on average by five (5) CONSULTANT staff.

CONSULTANT will prepare meeting agendas, compose meeting notes, maintain action item log and distribute meeting notes via email.

<u>Deliverables</u> - Meeting Materials, Exhibits and Summaries

2.6. Individual Stakeholder Meetings

CONSULTANT will be available and assist in hosting individual meetings with and presentations to project stakeholders, as requested and as needed. Stakeholder meetings can include discussions on project limits, scope, tentative schedule, driveway access, and property/business concerns. It is anticipated the CONSULTANT will hold up to twenty (20) stakeholder meetings with property and land owners, businesses, and neighborhood associations. Up to three (3) CONSULTANT staff will be available for each stakeholder meeting. CONSULTANT will provide meeting summaries as directed by the RTC.

Deliverables - Meeting Materials, Exhibits and Summaries

2.7. Regional Transportation Commission Board Meetings

CONSULTANT will provide a PowerPoint Presentation to the RTC Project Manager for monthly project updates to the RTC Board of Commissioners.

CONSULTANT Project Manager will attend the RTC Board Meetings quarterly to support the RTC Project Manager during Sparks Boulevard presentations and assist in responding to questions from the RTC Board Members. A total of ten (10) meetings are anticipated.

Deliverables - Presentation Assistance and Attendance at 39 Meetings

2.8. Sparks City Council Board Meetings

CONSULTANT will provide materials and assist in the development of a PowerPoint presentation for the RTC Project Manager for project briefings to Sparks City Council as required. Two meetings per year, for a total of six (6) meetings are anticipated to be attended by the RTC Project Manager.

Deliverables - Presentation Assistance and Attendance at 12 Meetings

2.9. Groundbreaking Event

A groundbreaking event will be held at the start of Phase 1 construction to bring media and public attention to the start of construction and provide detailed project information. CONSULTANT will assist the RTC with event development and implementation as requested. No groundbreaking event is scoped for Phase 2 construction.

3. ENVIRONMENTAL AND PERMITTING

This task encompasses permitting activities as well as ongoing environmental coordination and documentation efforts necessary to complete the NEPA process. To complete the NEPA process on schedule, CONSULTANT will use the following procedures:

- Draft and distribute intent to study letter to public
- Coordinate regularly and communicate clearly with the RTC, NDOT, FHWA, and any cooperating agencies
- Work closely with regulatory agencies to understand the expectations of key reviewers from agencies such as the State Historic Preservation Office, US Army Corp of Engineers, and others
- Use subject matter experts who have appropriate credentials for the task, experience in the study area, and thorough knowledge about NEPA and associated regulations as applied to highway transportation projects
- Understanding the importance of thorough documentation that will minimize agency and public comments, support the administrative record, and reduce the risk for legal challenges using periodic peer reviews and legal sufficiency reviews for quality assurance and to validate the documentation is complete and compliant throughout the process
- Use of a style guide and document template, and employing over-the-shoulder reviews of studies and EA chapters as the overall document is developed to facilitate the approval process, incorporating FHWA's Improving Quality Environmental Documentation principals in the EA document format and content
- Using a technical editor, GIS analysts, and graphic artists to support the documentation

3.1. NEPA Coordination

CONSULTANT will manage the environmental and permitting tasks which require significant coordination of subconsultants, agencies, stakeholders, and the engineering team. Specific focus of this task will include the coordination for the environmental permitting and mitigation elements with the engineering design and to ensure regulatory elements are appropriately reflected in the final project design.

3.1.1. NDOT/FHWA/Resource Agency Update Meetings

CONSULTANT will participate in meetings with RTC management, NDOT, FHWA, and any relevant resource agencies at key milestones to discuss project issues and status. Approximately

six (6) meetings (with approximately two (2) in-person and approximately four (4) teleconferences) will occur through the NEPA process. These meetings are in addition to the regularly scheduled meetings with the RTC.

3.2. NEPA Data Collection, Field Investigation and Resource Analysis

This task consists of development of the study area and review of environmental resources that must be analyzed for the NEPA process, coordinated with respective stakeholders and resource agencies, documented, and, in some cases, mitigated. The following table summarizes the environmental factors assumed for analysis and the level of documentation. Two (2) alternatives, including one build and one no action/no build, will be analyzed. The anticipated resources that occur in the project area and have the potential to be affected will be analyzed using best available data appropriate to the scope of the resource in context with the project.

NEPA Analysis Task Item	EA Documentation	Field Analysis/Tech Reports	Agency/Stakeholder Coordination
Air Quality	x	x	X
Traffic	x	x	
Biological Resources and Threatened/ Endangered/Sensitive Species	x	x	x
Noise Analysis	x	x	
Wetlands/Waters of the US	x	x	X
Energy Resources and Geology	Х		
Floodplains and Water Resources/Quality	х	Х	X
Hazardous Materials	x	x	
Land Use	x		
Cultural Resources/Section 106	X	X	X
Parks and Recreation Resources	х		
Social and Economic Conditions, including Environmental Justice	х		
Section 4(f) and 6(f) Analysis	x	x	X
Visual Resources	x	x	

NEPA Analysis Task Item	EA Documentation	Field Analysis/Tech Reports	Agency/Stakeholder Coordination
Cumulative and Indirect Effects Analysis	X		
Acquisitions and Relocations	x	x	

Data will be collected for the resources and specialty areas listed in the above table. Information will be gathered through field surveys, personal interviews, library and archival research, on-site modeling and sampling, and by contacting resource agencies and data repositories. The areas of social, economic, and environmental interests will be studied to identify issues of concern within the study area.

Stand-alone technical reports will be prepared for those study areas identified in the second column of the table above. The reports will document the findings of the required analyses and surveys, the effects of the proposed action to resources, and measures to avoid and/or minimize project effects. Two iterations, one draft and one final, of all technical reports will be prepared.

The data collected and analysis will include the following:

3.2.1. Air Quality

Document existing energy resources in the study area and assess the project's effect on air quality during construction and operation in the future. Assumes that no air quality modeling will be required. Coordinate with RTC to ensure the project is in conformity with the TIP and LRTP.

3.2.2. Traffic

Summarize the results of the traffic analysis performed for the project (see Task 5.3), disclosing the benefits and impacts of the proposed improvements in the study area.

3.2.3. Biological Resources and Threatened & Endangered/Sensitive Species

Collect and analyze wildlife resource data and document existing vegetation in the project area. Obtain updated information from U.S. Fish and Wildlife Service (USFWS), Nevada Department of Wildlife (NDOW), BLM biological resource specialists, and Nevada Natural Heritage Program regarding threatened, endangered, sensitive, or rare species of plant or animal species in the project area. A reconnaissance survey of the project area will be conducted to determine if any remnant habitats are present, and to evaluate the potential for impacts to migratory birds and bats. No species-specific protocol surveys will be conducted. Formal consultation with USFWS for potential adverse effects to ESA-listed species is not anticipated.

3.2.4. Traffic Noise

Gather data and location information to prepare noise models to analyze existing, future No-

Build and future project noise conditions. Prepare a noise technical report to evaluate impacts to surrounding land uses and analyze reasonable and feasible noise mitigation for any impacts. CONSULTANT will conduct a noise study for the project area based on the procedures presented in the *RTC Traffic Noise Mitigation Policy* guidelines in effect May 2013.

3.2.5. Wetlands and Waters of the US

Existing conditions and project impacts will be analyzed. If necessary, CONSULTANT will describe the type of permitting that may be required (i.e., nationwide or individual) and any related mitigation measures. Permit documentation will be prepared, permit application(s) will be filed, and mitigation commitments will be made as a separate part of this scope of work (see Task 3.5).

3.2.6. Energy Resources and Geology

Document existing energy resources in the study area and assess the project's energy use during construction and operation. Report on any geologic resources that could affect the project.

3.2.7. Floodplains and Water Resources

Identify surface waters or FEMA-regulated floodplains in the study area. Utilize the project drainage/hydrology report to determine potential water quality, storm water, and permitting (USACOE) issues for affected waters of the US (North Truckee Drain).

3.2.8. Hazardous Materials

Perform Initial Site Assessment for the study area and identify potential sites of contamination and likelihood of encountering contaminated materials during construction.

3.2.9. Land Use

Collect existing, planned, and future land use and zoning information from the City of Sparks and Washoe County. Collect information on pending development and related land use changes, in coordination with local planners. Describe generalized existing and future land use.

3.2.10. Cultural Resources

Archaeological and historical resources in the project area will be identified through field surveys, archival research, and coordination with the Nevada State Historic Preservation Officer (SHPO). Cultural resources reports will be prepared for review and concurrence by the RTC, NDOT, FHWA, and SHPO. This scope includes:

- The Area of Potential Effects (APE) will include the limits of anticipated direct and indirect effects within roadways and parcels between Greg Street and Baring Boulevard. The indirect APE will include the viewshed area adjacent to Sparks Boulevard right-of-way, as appropriate.
- The APE will be submitted to the RTC, NDOT, FHWA and the RTC will determine the APE and transmit it to the SHPO for review and comment.
- Historic resources (buildings and structures 45 years of age or older) will be recorded, described, and mapped utilizing the Nevada SHPO historic resource information form (HRIF).
- Cultural resources identified during the surveys will be evaluated for eligibility utilizing established National Register of Historic Places criteria/standards. Archaeological survey will be limited to undeveloped parcels with exposed ground surface. Recommendations regarding eligibility will be made with FHWA making the final determination of eligibility.
- The NDOT and/or FHWA will conduct the Native American consultation, with the CONSULTANT in a technical support role (co-authoring Native American consultation letters).
- Preparation of an agreement document (MOA) or provision of mitigation services is not included. If preparation of a MOA is necessary, CONSULTANT will request approval to proceed as part of Task 15, Design Contingency.

3.2.11. Parks and Recreation

Identify any recreational uses in the study area, analyze impacts, and identify any mitigation measures.

3.2.12. Section 4(f)

It is assumed the historic and recreation resources will be affected by the project and, therefore, a Section 4(f) de minimis evaluation will be completed for affected properties. Preparation of an agreement document (MOA) and provision of mitigation services, if required, will be addressed.

3.2.13. Social and Economic Conditions, including Environmental Justice

Data will be obtained from the US Census Bureau and American Community Survey. This will be supplemented with the most up to date information from other local sources.

3.2.14. Visual Conditions

Prepare one 3D model simulation of proposed project improvements overlain onto high resolution photos for inclusion in the NEPA document. Each 3D model simulation will be evaluated for visual impacts relative to the existing condition, following the FHWA guideline for assessing potential impacts according to the views from and to the proposed project.

3.2.15. Cumulative and Indirect Impacts

Data on resources as well as information on past, present, reasonably foreseeable future projects will be collected and assessed relative to the proposed project. Growth in population and employment will be assessed using census and other available demographic information.

3.2.16. Acquisitions and Relocations

Calculate the number of full and partial property acquisitions and the number of businesses and residents that need to be relocated.

3.2.17. Define Area of Impact

Development of the area of impact using the potential construction limits determined within the 30 Percent Design.

3.3. NEPA Class of Action Confirmation

CONSULTANT will prepare a technical memorandum for RTC, City of Sparks, NDOT, and FHWA review confirming the need for an EA or documenting the reasons why a Categorical Exclusion (CE) would be acceptable once the limits of project impact and review of potential resource impacts by the preferred alternative are determined. CONSULTANT Project Manager and Environmental Manager will prepare for and attend one (1) coordination and class of action presentation meeting with resource agencies as discussed in Task 3.1.1.

3.4. Environmental Assessment (EA) Preparation

This task encompasses the preparation of the EA document. CONSULTANT will author, edit, and revise the document per direction from the RTC, NDOT, FHWA, and resource agencies. The following iterations of the EA document are included:

- 1. Administrative Draft RTC review
- 2. Preliminary EA NDOT and FHWA review
- 3. Approved EA Public review

CONSULTANT will prepare a quality, concise, and user-friendly EA document, consistent with FHWA's Improving Quality Environmental Documentation Initiative. CONSULTANT will respond to and incorporate substantive public and agency comments received during scoping. Preparation of the EA will include the following tasks.

CONSULTANT will prepare electronic copies of the EA for the draft reviews and fifteen (15) copies for the published EA. .pdf electronic files will be provided to the RTC to post to their website.

3.4.1. NEPA Scoping

Prepare Intent to Study letter, and up to three (3) agency-specific cooperating agency letters to resource agencies; project limits and study area will be established by the RTC, NDOT, and FHWA guidelines.

3.4.2. Prepare Purpose and Need

The purpose and need will utilize existing demographic, traffic, and economic data to support the need for improved operations, safety, capacity, and local access. Logical termini and independent utility will also be documented. CONSULTATANT assumes the purpose and need will be defined using the Purpose and Priorities section within the Sparks Boulevard Multi-Modal Corridor Study.

3.4.3. Prepare the Description of Alternatives

Prepare the Description of Alternatives, including evaluation criteria and screening process used, other alternatives considered but not advanced, and selection and description of the Preferred Alternative.

3.4.4. Document Resources Not Affected

Prepare rationale/justification for not including in the EA specific resources/environmental factors that will not be affected. This rationale will be included in the EA and information prepared for NDOT/FHWA concurrence prior to preparation of the EA.

3.4.5. Document Resources Affected

Compile environmental information collected in Task 3.2 in the Affected Environment section of the EA.

3.4.6. Document Environmental Consequences

Analyze impacts and prepare write-ups for the Environmental Consequences section of the EA. Impacts will be avoided, minimized or mitigated. This scope assumes the Preferred Alternative and a No-Action Alternative will be fully analyzed.

3.4.7. Response to Comments

Responses to public review comments will be prepared for up to fifty (50) substantive comments on the EA. These comments may come from fewer than fifty (50) comment submittals as some comment letters may include multiple substantive comments.

3.5. Decision Document (Finding of No Significant Impact (FONSI))

This task encompasses the preparation of the FHWA decision document and the request for FONSI. The CONSULTANT will author, edit, and revise the document per direction from the RTC, NDOT, and FHWA. The following iterations of the decision document are included:

- 1. Administrative Draft the RTC review
- 2. Revised Administrative Draft –the NDOT and FHWA review
- 3. Final

CONSULTANT will prepare electronic copies of the FONSI for the draft reviews and five (5) copies for the published FONSI. .pdf electronic files will be provided to the RTC for publication on their website.

CONSULTANT will develop a schedule to receive a FONSI within nineteen (20) months from the date of the Intent-to-Study letter. The schedule will include milestones for all major tasks and deliverables, including agency review and revision times.

<u>Deliverables for NEPA compliance is as follows:</u>

Intent-to-Study Letter
NEPA Class of Action Technical Memorandum
PowerPoint Presentation and Updates for Public Information Meetings
Public Notices for Public Information Meetings
Responses to Comments from Public Information Meetings
NEPA Technical Reports (draft and final)
NEPA Environmental Assessment (drafts and final)
Public Hearing Notice, Presentation Materials and Handouts
Responses to Comments on the Circulated EA
NEPA Decision Document (FONSI) (draft and final)
Schedule and Updates (as needed)

3.6. US Army Corps of Engineers (USACE) Permitting and Coordination

This task encompasses preparation of information and coordination needed to a permit from the USACE to disturb wetlands and Waters of the US. It is assumed that the project will proceed under an Individual Permit for the Project, representing the worst-case scenario. CONSULATNT will coordinate with the Nevada Department of Environmental Protection (NDEP) under the USACE's oversight as appropriate regarding disturbance of Waters of the State. This scope of work does not include the development of a detailed compensatory mitigation plan, nor work to complete a Section 408 clearance.

3.6.1. Pre-Permit Meeting the USACE and NDEP

CONSULTANT will initiate a pre-permitting meeting with the USACE Sacramento District and RTC to identify the appropriate Section 404 permitting for the project with consideration for the

most rapid and cost-effective permitting strategy.

<u>Deliverables</u> - USACE and NDEP Pre-permitting materials and meeting minutes

3.6.2. Wetland Delineation Reports

CONSULTANT will perform field surveys to identify and qualify wetlands and waters of the US in the study area that could be affected by the project and prepare reports, plans, and graphics for submittal to the USACE and NDEP.

<u>Deliverables</u> - Wetland Delineation Report

3.6.3. Individual Permit Application

The CONSULTANT will prepare documentation in support of the IP application and use that information to reduce the effort needed to develop the IP. The completed ENG Form 4345 will be drafted as needed to meet the requirements of the IP including the following content:

Project description
Project purpose and need
Reason, type, and amount of discharge associated with the resource impact
Description of avoidance and minimization of impacts including a discussion of alternatives considered or LEDPA Analysis Memorandum documenting analysis under Section 404(b)(1) requirements
Contact info for all adjacent landowners for the USACE to complete a public interest review
Summary of other Federal, State, and Local agency coordination including studies performed and/or clearances obtained
Supporting figures and impact drawings

CONSULTANT will serve as the permitting agent during the 404 process and will be available for up to four (4) conference calls and one in-person meeting with stakeholders and regulatory agencies as needed.

CONSULTANT will complete a draft permit application for review by the USACE. One (1) round of comments from the RTC and City of Sparks will be addressed for completion of a final version to be submitted to the USACE. Once received by the USACE, Atkins will respond to reasonable requests for clarification and/or additional information as needed.

<u>Deliverables</u> - Draft and final Individual Permit Applications

3.7. UPRR Permitting

CONSULTANT shall prepare a right-of-entry permit in an effort to obtain an agreement with the UPRR to support geotechnical explorations within UPRR right-of-way.

The team anticipates needing several borings near the footings and toe of slope for the existing

UPRR bridge to facilitate decisions associated with bridge widening and/or replacement and construction of retaining walls. It is assumed that the borings will be performed outside UPPR and federally regulated safety zones and therefore not require a flagger during field work. Crossing of the tracks by personnel and/or equipment is not included in this scope of work.

It is assumed that CONSULTANT and geotechnical SUBCONSULTANT will incur additional expenses associated with the right-of-entry permit that will be included as project costs and billed to the client. These costs include but are not limited to: permit fee, contractor's endorsements, additional general liability insurance, and railroad protective liability insurance (RPLI). UPRR rush fees are not included in this scope of work.

The UPRR permit process will be initiated using the online application system (Utility Contracts System). It is anticipated that the permit process will take nine (9) months to complete; however, the permit process timeline is dependent on the UPRR and ability to review submitted information.

3.8. NDOT Encroachment Permit

CONSULTANT will prepare and process an encroachment permit package through the Nevada Department of Transportation for geotechnical exploration for the portions of the project within NDOT right-of-way. CONSULTANT will participate in a pre-permit meeting before submitting the permit application. Any revisions required by NDOT will be made on the plans before finalizing the permit. The RTC and the local agency will be the co-applicants on the permit and will provide all applicant fees, signatures and submittal documentation needed by the CONSULTANT to process the permit.

4. INVESTIGATION OF EXISTING CONDITIONS

4.1. Condition Survey

CONSULTANT will visually evaluate and document the condition of the existing roadway and project site conditions during a one (1) day site visit. A total of eight (8) CONSULTANT staff are anticipated to attend.

CONSULTANT will evaluate curb and gutter, sidewalk, and driveway approaches based upon RTC criteria. The CONSULTANT shall also evaluate existing pedestrian ramps for compliance with current ADA standards and consider multi-modal improvements.

CONSULTANT will perform up to ten (10) field visits throughout Tasks 5 through Task 8 and Task 11, Preliminary Studies, Preliminary Design, and Final Design to determine and/or confirm design decisions. A total of two (2) CONSULTANT staff are anticipated to attend per visit.

4.2. Geotechnical Investigation

The Sparks Boulevard corridor project is located in two different geologic formations consisting of alluvium deposits in the northern portion and floodplain deposits overlying Tahoe Outwash deposits in the southern portion of the project boundaries.

Zone 1 Geotechnical Profile - Due to the complex geomorphic environment, the soils profile consists of granular soils that are interbedded with fine grained soils. It is anticipated that the roadway corridor has been built-up with various thicknesses of fill soils. Granular native soil classifications primarily consist of silty sands, clayey sands, silty, clayey sand, and poorly graded sand with silt. Fine-grained soil classifications primarily consist of lean clay with sand or sandy silt.

Zone 2 Geotechnical Profile - This zone has four anticipated predominant soil strata:

- Uppermost soil stratum consists of fill soils up to 10 feet thick
 Directly below the fill soils are fine-grained floodplain deposits with soil classifications of either lean clay with sand or sandy silt and thicknesses of >20 feet toward the south end of the Zone 2 alignment, becoming thinner toward the north end with estimated thicknesses ranging from 10 to 15 feet
- A sporadic poorly graded sand horizon with thicknesses of 5 to 10 feet may be encountered below the fine-grained floodplain deposits
- The lowermost soil horizon consists of glacial outwash deposits that are typically coarse-grained sediments with predominant soil classifications of either poorly graded sand with silt and gravel or poorly graded gravel with sand

Floodplain deposits will likely be the most challenging geologic unit for project design. Floodplain deposits are predominantly fine-grained and are compressible when subjected to the anticipated structural loading associated with this project. However, underlying Tahoe Outwash Deposits are coarse grained granular deposits with much higher support strengths and will provide support for the drilled shaft foundations. The sporadic poorly graded sand horizon typically has a loose to medium dense relative density and may be susceptible to soil liquefaction during a seismic event.

CONSULTANT will perform geotechnical investigations and associated laboratory testing to develop geotechnical design recommendations. In order to accommodate the roadway widening, the following roadway improvements are assumed beginning at Greg Street:

- Greg Street to approximately 250 feet south of the Kleppe Lane Overpass It is assumed that the roadway widening can be accomplished by steepening the existing roadway side slopes to 2H:1V and retaining structures will not be required.
- 250 feet south of Kleppe Lane Overpass to Kleppe Lane It is assumed that retaining structures, likely MSE Walls with estimated heights of 10 to 15 feet, will be required on both sides of the roadway.
- Kleppe Lane Overpass The overpass will be widened on both sides of the roadway. It is assumed that a clear span bridge structure will be constructed supported on drilled shafts at both abutments.
- Kleppe Lane Overpass to the south abutment of the UPRR Overpass It is assumed retaining structures, likely MSE Walls with estimated heights of 10 to 15 feet, will be required on both sides of the roadway.
- UPRR Overpass The overpass will be widened on both sides of the roadway. It is

- assumed that a clear span bridge structure will be constructed supported on drilled shafts at both abutments.
- I-80 Overpass The overpass will be widened on the west side. It is assumed that a two-span bridge structure will be constructed supported on drilled shafts at both abutments and a center bent structure foundation.
- Immediately north of the I-80 Overpass to Big Fish Drive Sparks Boulevard will be widened on the west side of the roadway between the I-80 overpass abutment to the I-80 westbound on-ramp. In this section of roadway widening would be facilitated by either constructing an embankment fill or a combination of MSE wall and embankment fill. The section of roadway between the I-80 westbound on-ramp and Big Fish Drive has an existing right-hand turn lane. It is assumed that this right-hand turn lane will be converted to a travel lane and widening will not be required.
- Big Fish Drive to East Lincoln Way This section of roadway has three travel lanes in the southbound lane and two thru lanes with a right-hand turn lane in the northbound direction. It is assumed that a new right-hand turn lane will be constructed, which may require the box culvert beneath East Lincoln Way to be extended downstream.
- East Lincoln Drive to East Prater Way Except for the south end of the southbound lanes, both the southbound and northbound lanes will require widening to 3 lanes in each travel direction. The box culvert crossing East Prater Way, near the intersection with Sparks Boulevard, may require to be extended in both an upstream and downstream direction.
- East Prater Way to Springland Drive Both the southbound and northbound lanes will require widening to 3 lanes in each travel direction. The box culvert, located in the northbound lanes, will require to be extended in both an upstream and downstream direction.
- Springland Drive to Baring Boulevard Both the southbound and northbound lanes will require widening to 3 lanes in each travel direction. The box culvert that discharges into the North Truckee Drain will require to be extended downstream for an estimated distance of 250 feet. Flood walls or a topless RCBC may be required south of the extended box culvert for a distance of about 1,000 feet. The existing bridge at Springland Drive may be modified by widening.
- Other Project Improvements Other shorter (<4 feet) retaining walls may be required at sporadic locations.

The preliminary investigation will cover the entire roadway alignment. The final investigation includes the entire alignment except for the I-80 corridor. The I-80 corridor boundaries extends from the railroad tracks on the southside to the I-80 overpass north abutment.

Except for the I-80 north abutment area, field exploration for the I-80 corridor area is not included. This includes the existing center bent, on and off ramps, and south abutment. It is assumed that after the preliminary investigation has been completed, this area will be reevaluated including input from NDOT on further improvements. CONSULTANT will provide a revised proposal for this area after the new improvements have been determined; however, CONSULTANT assumes exploration at the I-80 southern abutment and center bent during the Phase 2 final investigation phase.

Research of existing geotechnical studies and as built plans will be completed during the preliminary investigation phase. However, CONSULTANT assumes that no existing information is available. If existing information is available, CONSULTANT will reevaluate this field investigation scope and budget and coordinate accordingly with the RTC Project Manager.

All field work within the Sparks Boulevard roadway area will occur during night time hours on weekdays, and daytime hours on weekends.

4.2.1. Research

CONSULTANT will research existing geotechnical studies, reports, and as built plans during the preliminary investigation. Research will also include review of published geologic maps and fault hazard reports to establish the presence of any documented geologic hazards near the project location. CONSULTANT assumes that no existing and/or limited information is available. If existing information is available, CONSULTANT will reevaluate our field investigation scope and budget and coordinate accordingly with the RTC Project Manager.

4.2.2. Field Exploration

All explorations, completed by exploratory borings, will follow AASHTO guidelines, RTC Flexible Pavement Design Manual, 2007, and NDOT standards, where applicable.

It is anticipated that exploration will include:

- Preliminary Design ninety-five (96) exploratory borings to depths of 5 to 100 feet below the existing grade surface for a total of 2,485 lineal feet
- Phase 1 Final Design twenty (20) exploratory borings to depths of 5 to 50 feet below the existing grade surface for a total of 610 lineal feet
- Phase 2 Final Design six (6) exploratory borings to depths of 20 to 100 feet below the existing grade surface for a total of 420 lineal feet

Borings will be advanced with auger, mud rotary drilling, ODEX, or sonic methodologies. Either ODEX or Sonic methodologies will be used to drill through the coarse-grained glacial outwash deposits.

Soils will be sampled with a 2-inch OD split-spoon sampler driven by a standard 140-pound drive hammer with a 30-inch stroke. The number of blows to drive the sampler one-foot into undisturbed soil (Standard Penetration Test) is an indication of the density and shear strength of the material. Larger diameter in-place samples will be taken to determine in-place densities. Shelby tube samples will be taken in fine-grained soil layers for further laboratory testing. If cohesive soils are stiff to hard, Shelby tube sampling may not be possible and driven tube samples may be required. Pocket penetrometer testing and density testing will be completed to further define the undrained shear strength and dry density and moisture content of near surface underlying weak, compressible soils.

CONSULTANT will log material encountered during the field exploration. The ground water surface depth will be measured, where encountered. Representative samples will be returned to

CONSULTANT laboratory for testing.

Borings will be backfilled with cement grout per City of Sparks requirements and field exploration locations will be referenced to existing improvements.

CONSULTANT will obtain an encroachment permit from the City of Sparks for field exploration activities. A third-party traffic control service will be hired for onsite traffic control and preparation of traffic control plans. Underground Service Alert (USA) will be contacted to clear all utilities in the location of the proposed boreholes. If significant utility conflicts exist based on USA markings and borehole locations cannot be adjusted, CONSULTANT will notify the RTC, and with the RTC Project Manager's concurrence, request approval to pothole a sufficient number of locations to obtain more detailed information, as part of Task 15, Design Contingency. If pothole information is not needed or concurrence by the RTC Project Manager is not obtained, CONSULTANT will take every precaution to lower the risk of damaging underground structures; however, if insufficient or incorrect data results in damage to underground structures, the cost for repair will be the responsibility of the RTC.

4.2.3. Geophysical Measurements

CONSULTANT will complete five (5) geophysical arrays using Refraction Microtremor (ReMi) methodologies. The DAQlink III 24-bit acquisition system (Seismic Source/Optim) utilizing a multichannel geophone cable with twelve geophones, placed at an approximate spacing of 25 feet, were used to obtain surface wave data. Vertical geophones with resonant frequencies of 10 Hz measure surface wave energy from broad band ambient site noise across the geophone array (i.e. ReMi setup location) for multiple 30-second iterations.

4.2.4. Laboratory Testing

Laboratory testing will be completed on representative soil samples to determine soil classifications, strength and compressibility properties, and corrosion. Several different tests are anticipated including index properties, moisture content, in-place dry density, consolidation, triaxial testing, direct shear testing, proctor, and R-value. A brief description of these tests is included below:

- Representative samples of each significant soil type will be tested in our laboratory for index properties, such as moisture content, grain size distribution and plasticity.
- Consolidation testing will be conducted on fine-grained soils to evaluate settlement potential. Several different material properties are derived from this test including preconsolidation pressure, coefficient of consolidation, compression index, and recompression index. The preconsolidation pressure is an important soil property, as it provides a measure of the past maximum pressure that the soil has experienced. Typically, if the design load on the soil is less than the preconsolidation pressure, then the overall settlement potential is significantly reduced.
- Undrained unconsolidated (UU) and consolidated undrained (CU) triaxial testing will be performed to assess undrained shear strengths of cohesive soils. Test results are used to determine the material strength of cohesive soil layers below embankment fills or structures for stability analysis. Cyclic triaxial tests may be required to determine residual shear strengths for seismic stability analysis.

- Direct shear testing will be completed on in situ or remolded native soils to assess shear strengths for slope stability, soil lateral pressure analysis, and allowable bearing pressures. Moisture-density curve relationships (Proctor) will be completed to determine remolded dry density and moisture contents for direct shear testing.
- Moisture-density curve relationship tests will also be completed on representative subgrade soils. Optimum moisture content determined by these tests will be compared to in-place subgrade soil moisture contents and provides a basis to determine if unstable subgrade soils will be encountered.
- Resistance value tests (R-value testing) will also be completed; R-value testing measures the strength of subgrade soils and its expansion potential. The test results are used to determine the subgrade soil resilient modulus, which is used in structural section design.
- Corrosion testing on representative native soils will also be performed to determine corrosion potential to steel and concrete. Soils will be tested for resistivity, soluble sulfates, and pH.

4.2.5. Analysis

All analyses will be in accordance with AASHTO LRFD Standards (2018) and current NDOT standards, as applicable.

4.2.5.1. Bridge Abutment Foundation Analysis

Foundations may include shallow spread-type footings or deep foundations such as driven piles or drilled shafts. Axial compression, tension, and lateral capacities for deep foundations will be provided. Total and differential settlements will also be provided. Recommended selection of deep foundation systems will be based on key factors such as constructability, accessibility, and costs.

SHAFT v6.0 computer software will be used to determine axial capacity and settlement behavior of drilled shafts. Axial capacity can be determined for multiple shaft diameters and tip elevations.

Lateral loading can be evaluated with computer software such as LPILE. This software will evaluate pile head deflections for different pile lengths. Also, bending moments and shear force with depth can be evaluated.

4.2.5.2. Retaining Walls

It is assumed that the majority of the retaining walls will consist of MSE walls. As in past projects, the internal stability of the MSE walls including required strap lengths will be determined and designed by other consultants. CONSULTANT will assist the consultants, as needed, and provide anticipated design lateral loads including surcharge, static, and seismic. CONSULTANT will complete global stability analysis and anticipated total and differential settlements.

Cantilever retaining walls will also be designed. CONSULTANT will provide anticipated design lateral loads including surcharge, static, and seismic. Also, foundation design recommendations

including allowable bearing pressures, passive pressures, soil friction values, and settlement (total and differential) will be provided.

4.2.5.3. Box Culverts

Several extensions of existing box culverts are planned within the North Truckee Drain. The primary design elements for the box culverts and associated wing walls is bearing capacities and settlement potential. Construction issues will include a high groundwater table, soft soils at the bottom of the North Truckee Drain, and stabilization construction options.

4.2.5.4. Embankments

Embankments may overlie weak, compressible soils and our analysis will evaluate both bearing or rotational failure (slope stability) and settlement. Settlement durations including time increments to achieve settlement milestones will be given, so embankment construction planning or staged construction, if required, can be completed. Recommendations to reinforce embankment fills, if required, including the use of geogrids, or other methods to reduce potential bearing failure and excessive horizontal deformations will be presented. Construction recommendations to stabilize subgrade soils will also be given.

Instrumentation of embankment settlement during construction may be required. Recommended instrumentation to measure both vertical and horizontal displacements during construction will be provided.

4.2.5.5. Analytical Software

Slide 6.0 or ReSSA 3.0 (Adama Engineering Inc.) will be used to perform slope stability analyses on embankment fill slopes and global stability for MSE walls. These programs perform a two-dimensional limit equilibrium analysis to compute the factor of safety (FOS) for a layered slope using the simplified Bishop method. This method satisfies vertical force equilibrium for each slice and overall moment equilibrium about the center of the circular trial forces. Slope stability analyses will be performed for both static and pseudostatic conditions.

SETTLE 3.0 or FoSSA 2.0 (Adama Engineering Inc.) will be used to determine potential settlements (elastic and consolidation) of the underlying soil profile due to embankment, foundation loading, or loading from MSE walls. These programs are an interactive program for computing the stresses and settlement resulting from embankment and foundation loading. These programs have many other capabilities including the determination of increases in undrained shear strength due to consolidation of fine-grained soils; determining time rate settlements of fine-grained soils including staged construction; and designing prefabricated vertical drains (PVD's) to acceleration settlement consolidation of fine-grained soils.

4.2.5.6. Retaining Walls

To determine the location of mapped earthquake faulting trending through or near the project site, a review of the following published information was completed:

USGS Website: Earthquake Hazards Program Quaternary Faults in Google Earth
The USGS Interactive Fault Map

Our review indicates that no mapped faults traverse through the roadway alignment. However, regional faulting will also be evaluated and fault properties including magnitude and lengths will determine seismic parameters used for soil liquefaction analysis.

Peak ground acceleration, site classifications, spectral responses, and site coefficients will be determined based on our geophysical studies (ReMi shear wave analysis), AASHTO references, and NDOT standards. Design ground accelerations will be determined for retaining wall lateral load analysis. Peak ground accelerations will be used to determine pseudo-static forces for slope stability analysis.

Soil liquefaction and lateral spread potential will also be evaluated. Mitigation construction options will be presented, as applicable. Design recommendations will be provided, if needed, but is not included in this cost proposal.

4.2.5.7. Structural Section Design

Structural section design recommendations will be based on AASHTO methodology and the current RTC Flexible Pavement Design Manual, 2007. Both rigid and flexible pavement structural sections are anticipated for this project. Design recommendations will also follow City of Sparks structural section recommendations based on the roadway classification.

Provided traffic volumes, over a 20-year design period, will be utilized to determine growth factors and ESAL counts. The average ESAL factors for the roadway functional classification will be based on the latest NDOT's Annual Traffic Report. RTC bus traffic impact to the ESAL counts will also be considered and will be based on current and projected future bus frequencies.

Two different structural sections will be determined: Full-depth structural sections for widened and reconstructed roadway sections and AC overlay thicknesses for rehabilitated roadway sections.

AC overlay recommendations will be based on ESAL counts, existing structural section thicknesses, and estimated remaining structural section life (based on the structural strength of the existing structural section). Falling weight deflectometer (FWD) testing is a field method that is used to determine the strength of the existing structural section. This method requires specialized equipment and trained personnel, which is not readily available in our area. It is recommended that this investigation ultimately be completed to provide accurate structural section strength parameters for design. An FWD study is not included in our budget. The need for an FWD study will be determined after our preliminary AC overlay alternatives have been reviewed.

The goal of this phase of the investigation is to provide preliminary AC overlay options to extend the remaining life of the existing structural section. Several AC overlay thicknesses with milling depths will be included as an alternative. To provide an approximate AC overlay thickness for this preliminary study, AASHTO has empirical methods to assess the existing pavement structural strength by evaluating the existing pavement condition. The pavement condition is evaluated through the pavement condition index (PCI), which grades the pavement in a numerical index from 0 to 100. The PCI for this roadway will be obtained for our evaluation. In addition, we will also complete a pavement condition assessment study.

4.2.6. Geotechnical Investigation Report

Upon completion of field, laboratory, and office studies, a geotechnical investigation report will be completed for the project. Separate reports will be generated for preliminary and final investigations (if necessary) for submittal to the RTC and the City of Sparks including the following:

Introduction, Site and Geologic conditions, and Laboratory Testing:
Seismicity
Geotechnical Design Parameters
Structural Section
Construction Recommendations

A final report will be issued addressing the comments; only one round of review and comments is scoped. After addressing any comments, a final Preliminary Design Geotechnical Investigation Report will be completed.

<u>Deliverables</u> – Draft and Final Preliminary Design Geotechnical Investigation Reports

4.3. Topographic Survey

Topographic mapping and boundary will be determined to meet design needs.

CONSULTANT will conduct field surveys and provide photogrammetric mapping and office support to produce topographic design surveys within the project area. The survey information will be provided for the full right-of-way width and/or limits of proposed construction. The existing ground topography shall extend 500 feet to 1,000 feet past the intersections with Greg Street and Baring Boulevard as well as the I-80 corridor, and provide additional coverage as needed at major intersections as necessary.

All key existing features of the project site will include, but will not be limited to: centerline elevations; existing stripping; edge of pavement; curb, gutter, and sidewalks; ADA ramps; multiuse paths; retaining walls; ditch features; hinge points; location, invert and rim elevations of all sewer and storm drain manholes and cross-manholes; culverts; location, invert and rim elevations for all water and gas valves, boxes and vaults; location, invert and rim elevations of storm drain inlets and catch basins; utility poles and anchors; fences; signs; existing survey monuments; location of underground utility carsonite markers (if any); and any other key existing features.

Field survey will include up to one-hundred (100) right-of-way centerline monuments, boundary corners, section corners, and applicable public land survey monuments within the project limits.

CONSULTANT will perform an aerial planimetric survey. CONSULTANT will provide aerial imagery and topography for 200 feet beyond centerline on each side of the roadway from and including 500 feet to 1,000 feet beyond the I-80 corridor, Greg Street and Baring Boulevard intersections, and provide additional coverage as needed at major intersections as necessary.

CONSULTANT will perform minor supplemental field survey as necessary as design progresses.

The horizontal datum shall be Nevada State Plane Coordinate System, West Zone NAD83/94 (HARN), based on GPS surveys. The vertical datum shall be NAVD 88 based on digital barcode leveling circuits to published City or County, benchmarks.

<u>Deliverables</u> – Color aerial imagery ortho photos compatible with both MicroStation and AutoCAD; MicroStation V8i .dgn file with topographic linework, InRoads existing ground .dtm including 3D breaklines; label callouts for rim and pipe inverts of storm drains, sewer systems, and other utilities; 1-foot existing ground contour intervals at a scale of 1" = 20' for 200 feet beyond the existing centerline and 500 feet to 1,000 feet beyond each of the project limit interchange and intersection returns.

4.4. North Truckee Drain Supplemental Survey

This scope assumes that the existing condition hydraulic model and terrain for hydraulic modeling will be developed during the Physical Map Revision (PMR) that the Truckee River Flood Management (TRFMA) is currently developing. CONSULTANT will obtain a copy of the terrain from TRFMA's consultant and will review the terrain detail. If needed, CONSULTANT will gather additional supplemental survey to support hydraulic modeling.

4.5. Right-of-Way Mapping

CONSULTANT will research ownerships and Assessor's Parcel Numbers (APNs) within the project limits, as well as obtain copies of any recorded maps that identify road rights-of-way and boundary lines.

CONSULTANT will prepare right-of-way based on field survey of centerline monuments, section corners, and record maps. Field surveys to adequately locate existing boundary lines is included in Task 4.3.

The right-of-way will be shown on the project plans and used as the basis for Right-of-Way Engineering services included in Task 6.6. Owners names an assessor's parcel numbers will be shown on the base mapping.

Deliverables – Record Right-of-Way in Electronic CADD Format

4.6. Subsurface Utilities

Utilities within the project area will be located and assessed for possible conflict with the proposed project.

CONSULTANT will investigate and locate subsurface utilities within the roadway R/W, and areas reasonably effected, in accordance with the American Society of Civil Engineers Standard guideline for the Collection and Depiction of Existing Subsurface Utility Data, Quality Level C. Additionally, CONSULTANT will coordinate with Utility Owners to remove lids of surface features and document depth of utility device, or invert of pipe, within such surface features.

Based on field investigation, CONSULTANT will provide the RTC a list of utility companies whose utilities are likely to be within the project limits or reasonably affected by the project and prepare the initial notification for placement on RTC letterhead and for RTC signature. CONSULTANT will distribute to the utility agencies on the list and coordinate with the utility agencies for upcoming work, facility relocation and new installation, and to insure utilities likely affected by the project are drawn on the plan and profile, evaluate potential conflicts through field investigation, investigate conflict resolution strategies.

Monthly utility coordination meetings will not be held with the RTC and affected utility companies.

CONSULTANT will coordinate any utility relocations necessary to accommodate the project with the utility companies. The design and technical specifications required to relocate impacted facilities will be provided by others. CONSULTANT will include the approved utility design(s) and unique technical provision requirements for each utility in the contract documents if provided by the affected utility agency in a timely manner that meets the CONSULTANT design schedule. CONSULTANT will assist the RTC in preparation of applications necessary for submission to utility companies for facility relocations, as required.

No upgrading or expanding of facilities shall be included.

CONSULTANT will distribute design review submittals to utility agencies for review and comment and provide the RTC a list of utility agencies provided design review submittals and Utility Agency review comments.

<u>Deliverables</u> - Depiction of Subsurface Utilities on Design Plans, Subsurface Utility Inventory

4.6.1. Kinder Morgan Coordination

CONSULTANT shall coordinate with Kinder-Morgan to locate the high-pressure gas line within the I-80 corridor. This line is located just south of the I-80 eastbound offramp and just north of the UPRR tracks and crosses under the Greg Street embankment.

It is anticipated that Kinder-Morgan will need to be notified prior to the geotechnical SUBCONSULTANT performing borings/corings in the area. No activity is planned within 25 feet of the pipeline; however, if needed a Kinder-Morgan representative will need to be onsite. No blasting or other extreme conditions are planned for the explorations that will affect the gas

line. Additional insurance may be required for the project and will be considered a project cost if needed.

4.7. Utility Potholing

Should insufficient information be available from existing records to determine if conflicts between the proposed work and existing utilities will occur, CONSULTANT shall request approval from the RTC to pothole a sufficient number of locations to make such a determination. CONSULTANT will hire a potholing subconsultant to investigate and locate specific subsurface utilities within the roadway R/W, and areas reasonably effected by the project that are deemed to have potential conflicts with construction. This is estimated up to a total of eighty-two (82) potholes will be conducted to locate facilities within the project limits.

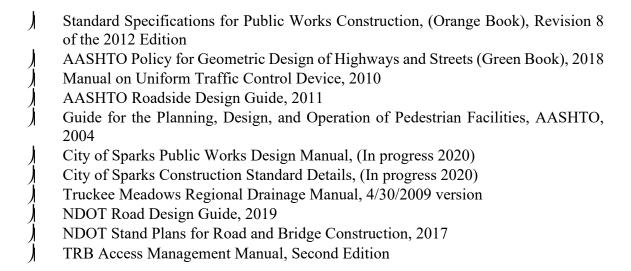
5. PRELIMINARY STUDIES

5.1. Data Collection

CONSULTANT will obtain as-built data (hard copy, .pdf, and electronic CADD files) for the Sparks Boulevard project limits from the RTC, the City of Sparks, and NDOT if available.

5.2. Design Criteria

CONSULTANT will develop design criteria for the project and will establish guidance based on:



Structural design needed beyond what is included in the Orange Book shall follow the NDOT Structures Manual, 2008 and subsequent revisions.

CONSULTANT will prepare draft-design criteria with a summarized listing of the governing standards and references, for review by the RTC, City of Sparks, and NDOT for review and approval. CONSULTANT will review existing geometry for consistency with the agreed upon standards.

Should the RTC, City of Sparks or NDOT direct the use of future releases of these references that would significantly alter the scope of work or increase the level of effort required to complete the work, incorporating these changes will be negotiated as additional services before additional work is initiated.

<u>Deliverables</u> – Draft and Final Design Criteria Memorandums

5.3. Traffic Volume Verification

5.3.1. Data Collection

The RTC will provide existing (2020) AM and PM peak hour turning movement counts at the study intersections, to update/verify the volumes identified in the Sparks Boulevard Multimodal Corridor Study. Intersections along Sparks Boulevard for traffic counts include:

Greg Street
I-80 Eastbound Ramp Termini
I-80 Westbound Ramp Termini
Lincoln Way
Prater Way
O'Callaghan Drive/Springland Drive
Baring Boulevard

5.3.2. Forecast Verification, Update and Intersection Analysis

CONSULTANT will compare volumes provided by the RTC in Task 5.3.1 with the traffic volumes identified in the Sparks Boulevard Corridor Study. CONSULTANT will develop a straight-line forecast for each signalized intersection from the existing count to the 2035 design volumes identified in the Sparks Boulevard Study and compare 2020 existing counts to the 2020 straight-line forecast. Any significant differences shall be discussed with the RTC and forecasts will be adjusted as agreed upon.

Traffic data is needed to estimate the past 18-kip equivalent single axle load (ESAL) applications that have contributed to the current condition of the pavement, as well as the future 18-kip ESAL applications that will be required for reconstruction design. It is assumed that all the information on average daily traffic (current and future), truck percentages and truck factors will be available from RTC and/or City of Sparks traffic records. Additionally, CONSULTANT will provide 2040 forecasted traffic volumes for Sparks Boulevard utilizing existing counts and RTC provided 2020 and 2040 traffic forecast output from the RTC Regional Traffic Model to determine traffic operations and turn lane storage lengths utilizing SYNCHRO for the 2040 design year AM and PM traffic.

CONSULTANT shall review RTC RIDE bus route schedules, calculate and include ESAL's in the pavement design to ensure proposed structural sections will accommodate a 20-year pavement design life.

5.4. Access Management

According to the RTCs 2040 Regional Transportation Plan, Sparks Boulevard is classified as a "Medium Access Control Arterial." Access Management will be evaluated with the proposed design utilizing the RTCs Access Standards as outlined in the 2040 Regional Transportation Plan. the City of Sparks Public Works Design Manual, and the TRB Access Management Manual.

5.5. Safety Assessment

CONSULTANT will review the latest 3 years of crash data provided by NDOT. CONSULTANT will identify existing hot spots and/or trends for special consideration. Characterization of the crash types and trends will be used to identify potential countermeasures that could be incorporated in the project design. Site specific crash analysis and diagramming is not included as a high-level, predictive type evaluation is intended.

5.6. Multimodal Connectivity Assessment

CONSULTANT shall review the corridor to identify multi-modal connectivity through corridors include pedestrian, bicycle, and transit modes. CONSULTANT shall identify the entire absence or gaps within these modes for consideration by the RTC for potential improvements.

5.7. Alternative Development

CONSULTANT will evaluate and further develop the recommended improvements identified in the Sparks Boulevard Multimodal Corridor Study as appropriate. Considerations will include LOS, the existing right-of-way width, number of lanes entering and exiting the intersections, turning movements and storage lengths, other access locations in proximity, typical lane widths, bicycle lanes, sidewalks, pedestrian ramps, bus and other large traffic turning movements and the physical constraints of the project area.

CONSULTANT will work with the RTC, City of Sparks and NDOT to identify up to two (2) potential concepts at four (4) key locations focusing on the I-80 interchange, Springland Drive/O'Callaghan Drive, Baring Boulevard, and the multi-modal connectivity throughout the corridor. These will be refined to one project concept for detailed investigation. This refinement will be evaluated against the purpose and need for the project and organized into a matrix that will approximate the benefit and prioritize each concept. The results of the analysis and selection of a preferred alternative will be documented in a technical memorandum. Activities to be performed are anticipated to include:

- Plan, organize, and hold a 6-hour meeting with the CONSULTANT team, the RTC, City of Sparks, and NDOT. A total of eight (8) CONSULTANT staff are anticipated to attend. The goal of the meeting is to identify possible alignments, discuss pros and cons of each, and refine the number of concepts down to one for detailed study. The meeting is anticipated to be held at the RTC.
- Prepare meeting agenda, handouts, exhibits, and data to be used during the meeting Develop the identified concept to a 15 Percent level of completion

- o Conceptual plans will be developed in a roll plot format
- O Conceptual roadway, drainage, utility, structural, traffic, and right-of-way requirements will be determined
- o Conceptual construction cost estimates will be developed
- Prepare a technical memorandum documenting the concept development process

Deliverables – Alternatives Development and Preferred Alternative Technical Memorandum

6. PRELIMINARY DESIGN

6.1. Drainage Analysis

CONSULTANT will prepare a drainage analysis to determine the impacts associated with the changes to or addition of travel lanes, curb and gutter, sidewalk, and any raised medians within the Project limits. Existing drainage conditions will be reviewed using site visits and the 2011 City of Sparks Stormwater Basin Master Plan (SBMP). The drainage analysis will generally consist of an onsite analysis, local offsite analysis, and analysis of the North Truckee Drain.

The April 30, 2009 version of the Truckee Meadows Regional Drainage Manual (TMRDM) will be used to guide the onsite analysis and drainage design. Sparks Boulevard will be considered an Arterial for calculation of the on-site minor and major storm events in the TMRDM as well as dry width criteria. The Rational Formula will be used to calculate on-site runoff for the 5-year and 100-year, minor and major storm events respectively. HEC-22 methodology will be used to evaluate drainage inlet interception, bypass, flow depth, and flow spread. A majority of the local drainage systems drain to the North Truckee Drain and therefore, their capacities are limited by the tailwater conditions in the drain. CONSULTANT is assuming storm drain connection designs will be based on low tailwater conditions in the drain. Any areas of design exception will be summarized and discussed within the drainage report.

An analysis of local offsite drainage will be performed to address drainage conditions at the Project limits and at the edge of right-of-way. The SBMP will be reviewed and used to identify areas of concern. The analysis will include identifying drainage improvements that may be needed to mitigate any impacts that may occur due to the roadway or other Project improvements. Additionally, recommendations may be made to include capital improvement project (CIP) improvements identified in the SBMP that would improve offsite drainage deficiencies. These recommendations would likely be made based on the opportunity to include drainage improvements now with the widening of Sparks Boulevard.

Sparks Boulevard parallels and crosses the Federal Emergency Management Agency (FEMA) Special Flood Hazard Area (SFHA) associated with the North Truckee Drain. The SFHA is designated mostly as a Zone A throughout the Project limits with a portion designated as Zone AE (associated with the Truckee River) south of the I-80 westbound onramp. Depending on the extent of disturbance of the project, a Conditional Letter of Map Revision (CLOMR) and Letter of Map Revision (LOMR) submittals to FEMA may be necessary and are included with this scope of work as a separate task. CONSULTANT assumes the following with regards to the North Truckee Drain modeling:

- The existing condition hydraulic model will be a HEC-RAS model specifically for the North Truckee Drain (not including the Truckee River) and will be available in May 2020 from TRFMA's PMR effort.
- The existing condition HEC-RAS model will not require any modification for use with this project.
- CONSULTANT will develop a post-project HEC-RAS model from the existing condition model that includes improvements associated with the project design. The post-project model will be needed regardless of the CLOMR/LOMR submittals to ensure no adverse impact from project improvements.
- Hydraulic models will be based on a 100-year event on the North Truckee Drain with a tailwater representative of a 50-year event on the Truckee River.
- Hydrology will be used as is from the existing condition model and will not require modification. Hydrology is expected to be based on USACE data that will be submitted by TRFMA's consultant.

6.1.1. Draft Technical Drainage Report

A Draft Technical Drainage Report will be prepared to summarize the results of the on-site and off-site analysis performed for the 50 Percent Design. The report will summarize the criteria and guidelines used in the analyses, the anticipated performance of the drainage facilities within the project design, conformance with criteria, and any noted design criteria exception areas. The draft report will discuss the modeling results of the North Truckee Drain; however, no work will be performed on the CLOMR or LOMR at this stage.

<u>Deliverables</u> – Draft Technical Drainage Report (50 Percent Design)

6.2. Structural Design

CONSULTANT will advance the design of bridge widenings, retaining walls, floodwalls, and culverts in conjunction with other disciplines and incorporating input from the RTC, the City of Sparks and NDOT.

CONSULTANT will provide preliminary structural design for the following:

Four (4) bridge widenings, one side or symmetrical (including one UPRR bridge)
Four (4) RCB culvert or floodwall extensions
3,000 feet of retaining wall

6.2.1. 30 Percent Design

For the 30 Percent Design, CONSULTANT will develop the front sheets in conjunction with roadway geometric refinements for the bridge widenings.

6.2.2. 50 Percent Design

CONSULTANT will develop retaining wall plans, bridge plans, floodwall plans (if needed), and culverts plans to a 50 Percent Design level of completion, incorporating comments received on

the 30 Percent Design submittal. At 50 Percent Design, retaining walls, bridge widening, floodwalls and culverts plans will present enough information to define overall dimensions and ties to other discipline improvements. Reinforcing steel details may or may not be shown at this stage.

6.3. Lighting and Electrical Design

Electrical design will include any required new street lighting, relocating, and/or removing the existing street lighting, irrigation control power, miscellaneous electrical connections (if any), electrical service points for lighting and signalized intersections, and coordination with NV Energy for any electrical utility relocations and any new service requirements. CONSULTANT will provide electrical load and voltage drop calculations.

Lighting design will not be completed for the 30 Percent Design. Lighting design for the 50 Percent Design will be conceptual only. No detailed analysis will be completed at the 50 Percent Design for lighting. Proposed street lighting will include intersection locations only.

6.4. ITS Design

ITS design will include infrastructure along Sparks Boulevard for connectivity to the City of Sparks and Washoe County ITS system. Within the project limits, the following components will be included:

4-inch and 3-inch conduit along one side of the road
72 strand fiber optic backbone
P30 pull boxes (or double-stacked No. 7 pull boxes) every 1000 feet
Type 200 vaults (or No. 9 pull boxes) and Close Circuit Television (CCTV) cameras for remote intersection monitoring at signalized intersections

ITS design will not be completed for the 30 Percent Design. ITS design for the 50 Percent Design will be conceptual only. No detailed analysis will be completed at the 50 Percent Design for ITS.

6.5. Landscape and Aesthetics

CONSULTANT will prepare alternative landscape and aesthetics concepts for the project. At the 30 Percent Design stage CONSULTANT will organize a landscape and aesthetics specific workshop to be held with the RTC, the City of Sparks, NDOT and other stakeholders as directed at the RTC's discretion to present and receive feedback on alternatives and select a preferred alternative. CONSULTANT Landscape Architect will attend the public information meeting held at 50 Percent Design to present and receive feedback on the preferred alternative. Generally, the process will include:

- Develop three (3) alternative concepts

 Present the process followed and the three concepts developed at a landscape and aesthetics specific workshop with the RTC, the City of Sparks, and NDOT to gather feedback
- Refine a preferred alternative, incorporating agency feedback

Present the preferred alternative at one public information meeting

CONSULTANT will provide graphic displays and conceptual plans of the alternative concepts and preferred alternative. The alternative concepts will draw from existing themes and environment and expand on the RTC's and City of Sparks vision for the corridor. It is anticipated that the concepts may be similar in theme but vary in the application of treatments between hardscape and landscape, and between locations. A conceptual construction cost range for each alternative will be prepared. Costs will be targeted at 3 percent or less of construction cost.

Landscape and aesthetics design will not be completed for the 30 Percent Design. Landscape and design for the 50 Percent Design will be conceptual only. No detailed analysis will be completed at the 50 Percent Design for Landscape.

<u>Deliverables</u> - 3 Preliminary and 1 Final Landscape Concepts and Cost Estimates, Landscape Exhibits for 1 Agency Workshop and 1 Public Meeting

6.6. 30 Percent Design

Incorporating the results of the alternative development in Task 5.7 CONSULTANT will prepare a 30 Percent Design submittal for widening Sparks Boulevard to six (6) lanes. Roadway plans will be designed in accordance with design criteria developed in Task 5.2. CONSULTANT will prepare a list of the exceptions (if any) identifying station limits, standards, and potential mitigations.

Plan sheets will be drafted electronically at full size 1 " = 25' scale, on 22" x 34" size paper, and produced electronically in .pdf format, but printed at only half size 1" = 50' scale, on $11" \times 17"$ sized paper.

The following is a listing of plan sheets (and amount of detail) anticipated in the project contract documents for the 30 Percent Design submittal:

Title Sheet (1)

Index of Sheets, General Notes, Legend, Abbreviations, Key Maps (3)

Typical Section Sheets (8)

As-constructed and proposed improvement typical sections

Minimum and maximum roadway widths

Preliminary roadside designs (slopes, curbs, gutters, dikes, and traffic barriers)

Proposed pedestrian and bicycle improvements

Proposed bridge and retaining wall locations

Survey Control/Right-of-Way Sheets (35)

Existing right-of way-limits

Schedule of coordinates, basis of bearing, stationing and offsets, the control coordinates, and datum statement Roadway Plan Sheets (35) Horizontal curve data, bearings, distances and station and offsets for angle points, tapers, and curves Preliminary locations for curbs, gutters, and sidewalk Preliminary road widths Preliminary cut and fill slope limits Vertical grade and curve data Roadway Profile Sheets (20) Profile view stacked window layout Vertical grade and curve data Multiuse Path Profile Sheets (10) Profile view stacked window layout Vertical grade and curve data Bridge Sheets (8) Plan and Elevation Typical Section and General Notes Geometrics (foundation plan) Approximately 120 Sheets Total. Exclusions from the 30 Percent Design: Geometric Control and Grading Sheets will not be prepared Pavement section depths will not be prepared Removal limits, including existing roadway, signs, drainage, etc. will not be prepared Existing utilities and proposed utility adjustments/relocations will not be prepared Superelevation diagrams will not be prepared Drainage Plan and Profile Sheets will not be prepared Drainage Detail Sheets will not be prepared Signing and Striping Sheets will not be prepared Detail Sheets will not be prepared Utility specific generated design (water, gas, etc.), as necessary resulting from utility conflicts, will not be prepared Site reconstruction plans for adjacent properties will not be prepared Retaining Wall, Soundwall, Floodwall, and Culvert Sheets will not be prepared Lighting Sheets will not be prepared

Signal, Traffic Signal Interconnect, and ITS Sheets will not be prepared

Detailed analysis for electrical will not be completed

Landscape and Aesthetic Sheets for new or remediation for project impacts will not be prepared

Cross sections will not be prepared

6.7. 30 Percent Cost Estimate

CONSULTANT will prepare a detailed unit price engineer's estimate of probable construction cost in the same format as the bid proposal form to be included in the contract documents. Bid item numbers will correspond to the appropriate sections in the RTC's Orange Book. Technical Provisions will not be prepared for the 30 Percent Design.

6.8. 30 Percent Design Submittal

CONSULTANT will submit the 30 Percent Design as summarized:

RTC:

3 copies 11" x 17" 50 Percent Design plans, Design Exception Summary (if necessary)
 1 copy Engineer's opinion of probable construction cost estimate
 2 CDs with 22" x 34" .pdf of 30 Percent Design plans; Engineer's estimate
 1 Electronic Distribution of Review and Comment Form

City of Sparks:

2 copies 11" x 17" 50 Percent Design plans, Design Exception Summary (if necessary)
 I copy Engineer's opinion of probable construction cost estimate
 2 CDs with 22" x 34" .pdf of 30 Percent Design plans; Engineer's estimate Electronic Distribution of Review and Comment Form

Utility Agencies:

1 copy 11" x 17" 30 Percent Design plans 1 Electronic Distribution of Review and Comment Form

6.9. 30 Percent Design Review Comment Resolution

CONSULTANT will prepare for and attend one in-person meeting with RTC, City of Sparks, and NDOT staff to discuss the 30 Percent Design. CONSULTANT will consolidate and provide responses to the 30 Percent Design plan review comments with the 50 Percent Design deliverables.

6.10. 50 Percent Design

Incorporating agency comments from the 30 Percent Design review, CONSULTANT will advance the design and prepare 50 Percent Design plans, a corresponding 50 Percent Design preliminary engineer's estimate, and an outline of the 50 Percent Design technical specifications.

Plan sheets included in the 30 Percent Design submittal will be advanced to the 50 Percent level of detail.

Additional sheets and sheet detail to be included are:
Typical Section Sheets
Removal limits Pavement section depths
Removals and Utility Sheets (70)
Removal Limits, including existing roadway, signs, drainage, etc. Existing Utilities and Proposed Utility adjustments/relocations Existing ground contours at 1' interval
Roadway Profile Sheets
Superelevation Diagrams (if necessary)
Multiuse Path Profile Sheets
Superelevation Diagrams (if necessary)
Drainage Plan and Profile Sheets (35)
Plan view over pipe profile view stacked window layout Locations of existing and proposed drainage facilities Locations of utilities shown in plan view Locations of utility crossings in pipe profile view Proposed ground contours at l' interval
Signing and Striping Sheets (35)
Proposed signing and striping detailing sign type and location, lane arrangement including turn lanes, storage lengths, acceleration lanes, and deceleration lanes
Bridge Sheets (60)
Plan and Elevation Typical Section and General Notes

Geometrics (foundation plan) Removal Plan **Abutment Foundations** Abutments Plan, Elevation and Section Pier Foundations Piers Plan, Elevation and Section Framing Plan Girder Layout Retaining Wall, Floodwall, Culvert Sheets (25) Plan and Elevation **Typical Sections** Approximately 343 Sheets Total. Exclusions from the 50 Percent Design: Geometric Control and Grading Sheets will not be prepared Drainage Detail Sheets will not be prepared Detail Sheets will not be prepared Utility specific generated design (water, gas, etc.), as necessary resulting from utility

Site reconstruction plans for adjacent properties will not be prepared

Lighting Sheets will not be prepared

conflicts, will not be prepared

Signal, Traffic Signal Interconnect, and ITS Sheets will not be prepared

Detailed analysis for electrical will not be completed

Landscape and Aesthetic Sheets for new or remediation for project impacts will not be prepared

Cross sections will not be prepared

6.11. 50 Percent Cost Estimate and Technical Specification Outline

CONSULTANT will prepare a detailed unit price engineer's estimate of probable construction cost in the same format as the bid proposal form to be included in the contract documents. Bid item numbers will correspond to the appropriate sections in the RTC's Orange Book.

The RTC will provide CONSULTANT the most recent RTC Technical Specifications templates. Technical provisions will reference Revision 8 of the 2012 Edition of Standard Specifications for Public Works Construction (Orange Book) for standard construction items. Technical provisions will be prepared for changes to the standards or unique site conditions not adequately covered in the Orange Book.

CONSULTANT will prepare 50 Percent Design technical provisions which will include a detailed outline of the technical provisions for those items not identified as part of the Standard Specifications.

6.12. 50 Percent Design Submittal

CONSULTANT will submit the 50 Percent Design as summarized:

RTC:

- 3 copies 11" x 17" 50 Percent Design plans, Design Exception Summary (if necessary)
- 1 copy of the Technical Specifications outline
 - l copy Engineer's opinion of probable construction cost estimate
- 2 CDs with 22" x 34" .pdf of 50 Percent Design plans; Engineer's estimate; Technical Specifications outline; full version of Draft Hydraulic Report; full version of Draft Geotechnical Report
- 1 Electronic Distribution of Review and Comment Form and previous submittal responses (if applicable)

City of Sparks:

- 2 copies 11" x 17" 50 Percent Design plans, Design Exception Summary (if necessary)
- 1 copy of the Technical Specifications outline
- I copy Engineer's opinion of probable construction cost estimate
- 2 CDs with 22" x 34" .pdf of 50 Percent Design plans; Engineer's estimate; Technical Specifications outline; full version of Draft Hydraulic Report; full version of Draft Geotechnical Report
- 1 Electronic Distribution of Review and Comment Form and previous submittal responses (if applicable)

Utility Agencies:

- 1 copy 11" x 17" 50 Percent Design plans
- 1 copy of the Technical Specifications outline
- 1 Electronic Distribution of Review and Comment Form and previous submittal responses (if applicable)

6.13. 50 Percent Design Review Comment Resolution

CONSULTANT will prepare for and attend one in-person meeting with RTC and City of Sparks staff to discuss the 50 Percent Design. CONSULTANT will consolidate and provide responses to the 50 Percent Design plan review comments with the 90 Percent Design deliverables.

7. PHASE 1 FINAL DESIGN

7.1. Drainage Analysis

CONSULTANT will advance the drainage analysis design in conjunction with other disciplines and incorporating input from the RTC, the City of Sparks and NDOT.

7.1.1. Final Technical Drainage Report

A Final Technical Drainage Report will be prepared and submitted with the 90 Percent Design. At this stage, it is assumed that all major drainage components will have been identified and detailed in the design plans. The final report will discuss the modeling results of the North Truckee Drain, onsite and offsite calculations and analyses. At this stage, with the concurrence of the City of Sparks, a CLOMR submittal will be initiated based on the 90 Percent Design.

If needed, a Drainage Report Addendum will be prepared for the 100 Percent Design/Final Design submittal of the design plans. It is anticipated that this submittal will only be necessary to clarify minor changes to the analyses or results and that no significant drainage improvements will be added or changed between the 90 Percent Design and 100 Percent Design submittals.

<u>Deliverables</u> –Final Technical Drainage Report (90 Percent Design), Drainage Report Addendum (100 Percent Design, if needed)

7.2. Structural Design

CONSULTANT will advance the design of bridge widenings, retaining walls, floodwalls, and culverts in conjunction with other disciplines and incorporating input from the RTC, the City of Sparks and NDOT.

CONSULTANT will provide Phase 1 final structural design for the following:

One (1) bridge widening, one side or symmetrical, final design and load rating
Four (4) RCB culvert extensions final design and load ratings
Retaining wall final design
Floodwall final design (if needed)

7.2.1. 90 Percent Design, 100 Percent Design, and Final Design

For the 90 Percent Design submittal, CONSULTANT will respond to and incorporate comments from the 50 Percent Design submittal and develop final retaining wall plans, bridge plans, floodwall plans, and culverts plans. Bill of material sheets will not be prepared for walls, bridges, and culverts. Rather, quantities will be summarized in tables incorporated into selected detail sheets.

For the 100 Percent Design submittal, CONSULTANT will respond to and incorporate RTC, City of Sparks, and NDOT comments from the 90 Percent Design submittal, and advance the structure plans, quantities, and cost estimates in preparation for construction.

For the Final Design submittal, structure plans and technical provisions will be finalized for construction. CONSULTANT will prepare bridge load rating calculations and submit a Load Rating Report, Load Rating Summary, and supporting calculations for each bridge widening. The Load Rating Report and supporting calculations will be stamped and signed by the responsible engineer registered in the State of Nevada in accordance with requirements of NDOT.

7.3. Lighting and Electrical, ITS, Landscape and Aesthetics Design

CONSULTANT will advance these miscellaneous designs to 90 Percent Design, 100 Percent Design, and Final Design in conjunction with other disciplines and incorporating input from the RTC, the City of Sparks and NDOT.

7.4. 90 Percent Design

Incorporating agency comments from the 50 Percent Design review, CONSULTANT will advance the design and prepare 90 Percent Design plans, a corresponding 90 Percent preliminary engineer's estimate, and 90 Percent technical specifications.

The Draft Technical Drainage Report will be updated as the design progresses. Review comments received from the 50 Percent Design will be incorporated and a Final Technical Drainage Report will be prepared for the 90 Percent Design submittal.

Plan sheets included in the 50 Percent Design submittal will be advanced to the 90 Percent Design level of detail.

Sheets to be included are:

Title Sheet (1)

Index of Sheets, General Notes, Legend, Abbreviations, Key Maps (2)

Typical Section Sheets (5)

As-constructed and proposed improvement typical sections

	Minimum and maximum roadway widths Preliminary roadside designs (slopes, curbs, gutters, dikes, and traffic barriers) Proposed pedestrian and bicycle improvements Proposed bridge and retaining wall locations Removal limits Pavement section depths
Survey Co	ontrol/Right-of-Way Sheets (25)
)	Existing right-of-way limits Schedule of coordinates, basis of bearing, stationing and offsets, the control coordinates, and datum statement
Removals	and Utility Sheets (50)
)))	Removal Limits, including existing roadway, signs, drainage, etc. Existing Utilities and Proposed Utility adjustments/relocations Existing ground contours at 1' interval
Roadway	Plan Sheets (25)
)))	Horizontal curve data, bearings, distances and station and offsets for angle points, tapers, and curves Preliminary locations for curbs, gutters, and sidewalk Preliminary road widths Preliminary cut and fill slope limits
Roadway	Profile Sheets (13)
	Profile view stacked window layout Vertical grade and curve data Superelevation Diagrams (if necessary)
Multiuse 1	Path Profile Sheets (7)
	Profile view stacked window layout Vertical grade and curve data Superelevation Diagrams (if necessary)
Drainage	Plan and Profile Sheets (25)
	Plan view over pipe profile view stacked window layout Locations of existing and proposed drainage facilities Locations of utilities shown in plan view Locations of utility crossings in pipe profile view

)	Proposed ground contours at l' interval
Signing a	nd Striping Sheets (25)
J	Proposed signing and striping detailing sign type and location, lane arrangements including turn lanes, storage lengths, acceleration lanes, and deceleration lanes
Bridge Sh	neets (30)
	Plan and Elevation Typical Section and General Notes Geometrics (foundation plan) Removal Plan Abutment Foundations Abutments Plan, Elevation and Section Abutments Details Pier Foundations Piers Plan, Elevation and Section Piers Plan, Elevation and Section Piers Details Framing Plan Girder Layout and Details Bearing Pad Details Intermediate Diaphragm Details Deck Slab Layout and Reinforcement Details Abutment Diaphragms Plan, Elevation and Section Pier Diaphragms Plan, Elevation and Section Camber and Concrete Classification Finished Grade Elevations Approach Slabs Layout and Reinforcement Details Expansion Joint Details Barrier Rail Layout and Reinforcement Details
Retaining	Wall, Floodwall, Culvert Sheets (15)
)))	Plan and Elevation Typical Sections Reinforcement Details
Additiona	al sheets not included in Preliminary Design are:
J	Geometric Control and Grading Sheets (25) - Geometric control and grading plan information for median islands, ADA ramps, driveways, and any other feature needing geometry/grading defined for construction
j	Signal and Traffic Signal Interconnect Sheets (16)

ITS Sheets (30)
Lighting and Electrical Sheets (16)
Landscape and Aesthetic Sheets (50)
Other Special Structural Features (5)
Detail Sheets (25)

Approximately 370 Sheets Total.

Exclusions from the 90 Percent Design:

Utility specific generated design (water, gas, etc.), as necessary resulting from utility conflicts, will not be prepared

Site reconstruction plans for adjacent properties will not be prepared

Cross sections will not be prepared

CONSULTANT will prepare for and attend one in-person meeting with RTC and City of Sparks staff to discuss the 90 Percent Design.

7.5. 90 Percent Cost Estimate and Technical Specifications

CONSULTANT will advance the detailed unit price engineer's estimate of probable construction cost to the 90% design level.

CONSULTANT will provide detailed technical specifications for the outline created at the 50% submittal, and any additional item as determined during the 90% design. Technical provisions will reference Revision 8 of the 2012 Edition of Standard Specifications for Public Works Construction (Orange Book) for standard construction items.

7.6. 90 Percent Design Submittal

CONSULTANT will submit the 90 Percent Design as summarized:

RTC:

3 copies 11" x 17" 90 Percent Design plans, Design Exception Summary (if necessary)

1 copy 90 Percent Technical Specifications

l copy Engineer's opinion of probable construction cost estimate

2 CDs with 22" x 34" .pdf of 90 Percent Design plans; Engineer's estimate; full version of Hydraulic Report; full version of Geotechnical Report

1 Electronic Distribution of Review and Comment Form and previous submittal responses (if applicable)

City of Sparks:

2 copies 11" x 17" 90 Percent Design plans, Design Exception Summary (if

necessary)

1 copy 90 Percent Technical Specifications
I copy Engineer's opinion of probable construction cost estimate
2 CDs with 22" x 34" .pdf of 90 Percent Design plans; Engineer's estimate; full version of Hydraulic Report; full version of Geotechnical Report
1 Electronic Distribution of Review and Comment Form and previous submittal responses (if applicable)

Utility Agencies:

1 copy 11" x 17" 90 Percent Design plans
 1 copy of the Technical Specifications
 1 Electronic Distribution of Review and Comment Form and previous submittal responses (if applicable)

7.7. 90 Percent Design Review Comment Resolution

CONSULTANT will prepare for and attend one in-person meeting with RTC and City of Sparks staff to discuss the 90 Percent Design. CONSULTANT will consolidate and provide responses to the 90 Percent Design plan review comments with the 100 Percent Design deliverables.

7.8. 100 Percent Design

Incorporating agency comments from the 90 Percent Design review, CONSULTANT will advance the design and prepare 100 Percent Design plans, engineer's estimate, and technical specifications. CONSULTANT will submit 100 Percent Design plans, specifications and engineer's estimate to RTC, City of Sparks, and utility companies with facilities in the project limits to verify all comments have been responded to, reconciled, and incorporated into the plans.

7.9. 100 Percent Cost Estimate and Technical Specifications

CONSULTANT will advance the detailed unit price engineer's estimate of probable construction cost and detailed technical specifications to the 100% design level.

7.10. 100 Percent Design Submittal

CONSULTANT will submit the 100 Percent Design as summarized:

RTC:

3 copies 11" x 17" 100 Percent Design plans, Design Exception Summary (if necessary)
 1 copy 100 Percent Technical Specifications
 1 copy Engineer's opinion of probable construction cost estimate
 2 CDs with 22" x 34" .pdf of 100 Percent Design plans; Engineer's estimate; full version of Hydraulic Report; full version of Geotechnical Report

1 Electronic Distribution of Review and Comment Form and previous submittal responses

City of Sparks:

2 copies 11" x 17" 100 Percent Design plans, Design Exception Summary (if necessary)

1 copy 90 Percent Technical Specifications

1 copy Engineer's opinion of probable construction cost estimate

2 CDs with 22" x 34" .pdf of 100 Percent Design plans; Engineer's estimate; full version of Hydraulic Report; full version of Geotechnical Report

1 Electronic Distribution of Review and Comment Form and previous submittal responses

Utility Agencies:

1 copy 11" x 17" 100 Percent Design plans
 1 copy of the Technical Specifications
 1 Electronic Distribution of Review and Comment Form and previous submittal responses

For the 100 Percent Design submittal CONSULTANT will provide a full sized .pdf and a .pdf of the Technical Specifications to the RTC for posting on their e-bid system for advertisement.

CONSULTANT will submit a 11" x 17" hard copy of the 100 Percent Design plans and 1 hard copy of the Technical Specifications to the RTC and City of Sparks.

7.11. 100 Percent Design Review Comment Resolution

CONSULTANT will prepare for and attend one in-person meeting with RTC and City of Sparks staff to discuss the 100 Percent Design. CONSULTANT will consolidate and provide responses to the 90 Percent Design plan review comments with the 100 Percent Design deliverables.

7.12. Final Design

Once the agencies verify that all review comments have been addressed and no additional changes are required, CONSULTANT will sign and stamp the design plans and technical specifications for use as an advertised project.

8. CLOMR AND LOMR SUBMITTALS

Immediately following the Phase 1, 90 Percent Design review comment resolution, with the concurrence of the City of Sparks, a CLOMR submittal will be initiated for submittal to FEMA. It is anticipated that the submittal may include minor changes to the Final Technical Drainage Report and that FEMA's MT-2 forms will be completed. Submittal and review fees are included with this scope of work and considered a project cost. It is anticipated that FEMA will take

between six (6) to twelve (12) months to review and approve the CLOMR submittal. CONSULTANT may be required to supply additional information or coordinate with FEMA during this time to facilitate acceptance of the submittal.

Currently effective hydrology and hydraulic models do not exist for the North Truckee Drain (per a FEMA data request). TRFMA currently is developing the existing condition model for the North Truckee Drain and is expected to submit it to FEMA in the summer of 2020. Our scope of work assumes that TRFMA's existing condition model will be available for the team's use and will be obtained from TRFMA's consultant in May of 2020. This scope of work also assumes that this existing condition model will be able to be used as the effective model for FEMA. CONSULTANT will review the existing condition effective model to ensure that it can be used for this Project. It is assumed that TRFMA's existing condition effective model will be able to be used without adjustment/modification by CONSULTANT. Additionally, since the effective model for the North Truckee Drain is new, this scope of work assumes that a corrected effective model will not be needed for this Project.

The LOMR submittal can be initiated following the finalization of record drawings. At this time CONSULTANT will again submit the MT-2 forms to FEMA for their review. The MT-2 forms will be updated from the CLOMR submittal to incorporate the record drawing information. It is anticipated that replacement of the design information with the record drawing information will not change the results of the CLOMR/LOMR submittal. Submittal and review fees are included with this scope of work and considered a project cost. It is anticipated that FEMA may take up to six (6) months to approve the LOMR submittal. CONSULTANT may be required to supply additional information or coordinate with FEMA during this time to facilitate acceptance of the submittal.

9. PHASE 1 BIDDING SERVICES

CONSULTANT will be available during the bidding process to respond to Requests for Information (RFIs) and will attend the RTC hosted pre-bid meeting. All questions and responses will be documented and provided to the RTC, and prepare and provide any addenda, if required. All questions regarding legal aspects of the contract documents will be referred directly to the RTC. CONSULTANT will prepare and provide a summary of the pre-bid meeting, as directed by the RTC.

CONSULTANT will attend the bid opening, review the bids received for irregularities, and provide a recommendation for award. CONSULTANT will tabulate bid results into a MS Excel spreadsheet to verify the quantities and costs of the bid items.

After bid opening and award, CONSULTANT will prepare a conformed set of specifications for distribution to the project and construction teams. All RTC and Contractor signed pages and any addenda will be incorporated into a final set of project specifications. CONSULTANT will also prepare a conformed set of plans, if any changes are required resulting from RFIs during the bidding process.

<u>Deliverables</u> – Pre-Bid meeting minutes, bid review tabulation, conformed set of design plans and specifications.

10. PHASE 1 DESIGN SERVICES DURING CONSTRUCTION (AMENDMENT 3)

CONSULTANT will provide services during construction from I-80 westbound on/off ramps through Baring Boulevard to just south of Shadow Lane.

10.1. Project Management

CONSULTANT will provide project management services for the duration of the Phase 1 (north phase) construction including closeout activities; assumed to be three hundred and thirty (330) working days total.

Project management includes monthly budget monitoring and invoicing; monthly preparation and reporting of project progress (including work completed and documentation of any changes, actual and anticipated, in scope, schedule, and budget); management of Subconsultants, oversight of quality assurance on deliverables; file management; project closeout; and general project administration.

CONSULTANT Project Manager will serve as the Regional Transportation Commission (RTC)'s single point of contact for engineering services during construction and will have primary responsibility for coordinating the efforts of the project engineering team and subconsultants.

10.2. Public Information

CONSULTANT will provide updates for the RTC's project website monthly and provide graphic support when requested. This scope of work assumes that up to 20 hours per month may be required to provide public information services.

10.3. Engineering Services During Construction (ESDC)

CONSULTANT will provide services during construction for the project. This will include development of conformed documents, attendance at weekly contractor meetings, responding to contractor RFIs, review and approval of contractor submittals, development and distribution of field adjustments or addendums, and development of record drawings based on contractor redlines.

For the purposes of this task, CONSULTANT estimates that the duration for the construction effort will be approximately three hundred and thirty (330) working days.

CONSULTANT will attend weekly contractor meetings and prepare informational materials as requested to support field discussion. A total of up to seventy (70) meetings are anticipated, to be attended on average by up to two (2) CONSULTANT staff. This task assumes the contractor or the RTC's construction manager will develop meeting agendas and notes.

Contractor RFIs and submittals will be reviewed by the project manager and distributed for review. RFIs will be checked against the design intent and applicable standards. Submittals will be reviewed against the design plans, specifications, and applicable standards. CONSULTANT will provide a written response in a timely manner.

CONSULTANT will provide field adjustment markups or addendums when field conditions warrant a change sufficient to issue revised design plan sheets.

ESDC Assumptions:

- Up to 5 to 6 requests for information (RFIs) may occur per month average for the duration of construction.
- Up to 120 construction submittals and re-submittals will require engineering review and approval.
- Up to 30 hours per month average may be required to address field redlines and design plan revisions.

<u>Deliverables</u> – conformed documents, written RFI responses, written submittal responses, field adjustment markups or addendums

10.4. Record Drawings

CONSULTANT will develop record drawings based on redlines provided by the RTC and contractor. This task assumes redlines provided will include sufficient detail to update design plans reflecting changes made in the field.

Deliverables – record drawings

10.5. Wetland Monitoring

CONSULTANT will monitor wetland mitigation throughout the construction period and during the 1-year warranty period. After construction is completed, a site inspection will be conducted of the wetland mitigation areas along Sparks Boulevard to assess and identify any discrepancies between the construction of the wetland mitigation sites (grading, seeding\planting, irrigation, etc.) and the design of the mitigation sites.

CONSULTANT will prepare a post-construction assessment technical memorandum detailing any corrective actions required by the CONTRACTOR to facilitate the terms and conditions of the Section 404 permit and to support the successful growth and creation of wetlands within the mitigation sites. The technical memorandum will include mapping and photos of areas within the mitigation sites that require further corrective actions (grading, seeding, etc.).

CONSULTANT will conduct a year 1 site visit (during the 1-year warranty period) as part of the annual monitoring of the wetland mitigation sites along Sparks Boulevard to assess success parameters that are outlined in the Compensatory Mitigation Plan and as part of the terms and conditions of the Section 404 permit. Parameters include wetland plant growth, aerial coverage, presence of noxious weeds, etc.

The Year 1 Monitoring Visit will include the CONSULTANT setting up static photo points (GPS

coordinates, lathes marked with numbered locations), transect locations, quadrat sampling locations, wetland sampling point locations, and other necessary sampling features to conduct a thorough sampling of the mitigation sites to complete the annual monitoring report per the Section 404 permit. The following information and data will be collected and documented in the monitoring report:

- Presence of noxious weeds, including location, species, and density
- Evidence of wetland hydrology and hydric soils (based on visual observations and delineation)
- Representative photos of the overall mitigation area and sampling locations (establish photo points for the mitigation area to use each year)
- Evidence of how the performance standards are being met and documentation of how the mitigation plan goals are being achieved
- Extent of created wetlands by type and acreage (using a formal delineation method with paired data points)
- Vegetation cover and species diversity using wetland sample points from the delineation and transects with data plots that represent each wetland type

CONSULTANT will prepare a technical report detailing the background of the project, identifying both NEPA and USACE clearances and permitting information, project location, monitoring methodology, results from the Year 1 monitoring assessment, risks or damage to the mitigation sites, and any adaptive management or corrective actions that need to be implemented to improve the mitigation site or expedite site success per the Section 404 permit requirements. The Year 1 Annual Monitoring Report will include GIS mapping of features of both mitigation sites, quality control (reviews and technical editing), and incorporating one round of review\comments by the CLIENT.

Once the CLIENT approves the Year 1 Annual Monitoring Report, CONSULTANT will submit to the USACE and address any follow-up questions or comments the USACE has on the report.

At the conclusion of the Year 1 monitoring, CONSULTANT will transfer data and reports to the City's monitoring consultant who will be responsible for Years 2 through 5 monitoring, permit closeout and documentation.

<u>Deliverables</u> – post-construction wetland site inspection mitigation memo, meeting minutes, year 1 monitoring schedule, Year 1 annual monitoring report, third party entity review comments, third party approval letters, GIS data files

11. PHASE 2 FINAL DESIGN

11.1. Drainage Analysis

CONSULTANT will advance the drainage analysis design in conjunction with other disciplines and incorporating input from the RTC, the City of Sparks and NDOT.

11.1.1. Final Technical Drainage Report

A Final Technical Drainage Report will be prepared and submitted with the 90 Percent Design. At this stage, it is assumed that all major drainage components will have been identified and detailed in the design plans. The final report will discuss the modeling results of the North Truckee Drain, onsite and offsite calculations and analyses. At this stage, with the concurrence of the City of Sparks, a CLOMR submittal will be initiated based on the 90 Percent Design.

If needed, a Drainage Report Addendum will be prepared for the 100 Percent Design/Final Design submittal of the design plans. It is anticipated that this submittal will only be necessary to clarify minor changes to the analyses or results and that no significant drainage improvements will be added or changed between the 90 Percent Design and 100 Percent Design submittals.

<u>Deliverables</u> –Final Technical Drainage Report (90 Percent Design), Drainage Report Addendum (100 Percent Design, if needed)

11.2. Structural Design

CONSULTANT will advance the design of bridge widenings, retaining walls, floodwalls, and culverts in conjunction with other disciplines and incorporating input from the RTC, the City of Sparks and NDOT.

CONSULTANT will provide Phase 2 structural design for the following:

- Three (3) bridge widenings, one side or symmetrical (including one UPRR bridge), final design and load rating
- Retaining wall final design

11.2.1. 90 Percent Design, 100 Percent Design, and Final Design

For the 90 Percent Design submittal, CONSULTANT will respond to and incorporate comments from the 50 Percent Design submittal and develop final retaining wall plans, bridge plans, floodwall plans, and culverts plans. Bill of material sheets will not be prepared for walls, bridges, and culverts. Rather, quantities will be summarized in tables incorporated into selected detail sheets.

For the 100 Percent Design submittal, CONSULTANT will respond to and incorporate RTC, City of Sparks, and NDOT comments from the 90 Percent Design submittal, and advance the structure plans, quantities, and cost estimates in preparation for construction.

For the Final Design submittal, structure plans and technical provisions will be finalized for construction. CONSULTANT will prepare bridge load rating calculations and submit a Load Rating Report, Load Rating Summary, and supporting calculations for each bridge widening. The Load Rating Report and supporting calculations will be stamped and signed by the responsible engineer registered in the State of Nevada in accordance with requirements of NDOT.

11.3. Lighting and Electrical, ITS, Landscape and Aesthetics Design

CONSULTANT will advance these miscellaneous designs to 90 Percent Design, 100 Percent Design, and Final Design in conjunction with other disciplines and incorporating input from the RTC, the City of Sparks and NDOT.

11.4. 90 Percent Design

Incorporating agency comments from the 50 Percent Design review, CONSULTANT will advance the design and prepare 90 Percent Design plans, a corresponding 90 Percent Design engineer's estimate, and 90 Percent Design technical specifications.

The Draft Technical Drainage Report will be updated as the design progresses. Review comments received from the 50 Percent Design will be incorporated and a Final Technical Drainage Report will be prepared for the 90 Percent Design submittal.

Plan sheets included in the 50 Percent Design submittal will be advanced to the 90 Percent level of detail.

Sheets to be included are:

Title Sheet (1)

Index of Sheets, General Notes, Legend, Abbreviations, Key Maps (2)

Typical Section Sheets (3)

As-constructed and proposed improvement typical sections

Minimum and maximum roadway widths

Preliminary roadside designs (slopes curbs gutters dikes and

Preliminary roadside designs (slopes, curbs, gutters, dikes, and traffic barriers)

Proposed pedestrian and bicycle improvements

Proposed bridge and retaining wall locations

Removal limits

Pavement section depths

Survey Control/Right of Way Sheets (10)

Existing right-of-way limits

Schedule of coordinates, basis of bearing, stationing and offsets, the control

coordinates, and datum statement

Removals	and Utility Sheets (20)
	Removal Limits, including existing roadway, signs, drainage, etc. Existing Utilities and Proposed Utility adjustments/relocations Existing ground contours at 1' interval
Roadway	Plan Sheets (10)
) 	Horizontal curve data, bearings, distances and station and offsets for angle points tapers, and curves Preliminary locations for curbs, gutters, and sidewalk Preliminary road widths Preliminary cut and fill slope limits
Roadway	Profile Sheets (5)
	Profile view stacked window layout Vertical grade and curve data Superelevation Diagrams (if necessary)
Multiuse l	Path Profile Sheets (3)
	Profile view stacked window layout Vertical grade and curve data Superelevation Diagrams (if necessary)
Drainage]	Plan and Profile Sheets (10)
	Plan view over pipe profile view stacked window layout Locations of existing and proposed drainage facilities Locations of utilities shown in plan view Locations of utility crossings in pipe profile view Proposed ground contours at l' interval
Signing a	nd Striping Sheets (10)
J	Proposed signing and striping detailing sign type and location, lane arrangements including turn lanes, storage lengths, acceleration lanes, and deceleration lanes
Bridge Sh	eets (90)
) }	Plan and Elevation Typical Section and General Notes

)	Geometrics (foundation plan)
	Removal Plan
	Abutment Foundations
	Abutments Plan, Elevation and Section
	Abutments Details
	Pier Foundations
	Piers Plan, Elevation and Section
	Piers Details
	Framing Plan
	Girder Layout and Details
	Bearing Pad Details
	Intermediate Diaphragm Details
))	Deck Slab Layout and Reinforcement Details
	Abutment Diaphragms Plan, Elevation and Section
	Pier Diaphragms Plan, Elevation and Section
	Camber and Concrete Classification
	Finished Grade Elevations
	Approach Slabs Layout and Reinforcement Details
	Expansion Joint Details
)	Barrier Rail Layout and Reinforcement Details
Retaining	Wall Sheets (6)
J	Plan and Elevation
Ĵ	Typical Sections
j	Reinforcement Details
Additional	sheets not included in Preliminary Design are:
) J	Geometric Control and Grading Sheets (20) - Geometric control and grading plar information for median islands, ADA ramps, driveways, and any other feature needing geometry/grading defined for construction Signal and Traffic Signal Interconnect Sheets (10)
Ĵ	ITS Sheets (8)
Ĵ	Lighting and Electrical Sheets (8)
Ĵ	Landscape and Aesthetic Sheets (12)
	Other Special Structural Features (2)
	Detail Sheets (20)
Approxima	ately 250 Sheets Total.
Exclusions	from the 90 Percent Design:

Utility specific generated design (water, gas, etc.), as necessary resulting from utility

conflicts, will not be prepared
Site reconstruction plans for adjacent properties will not be prepared
Cross sections will not be prepared

CONSULTANT will prepare for and attend one in-person meeting with RTC and City of Sparks staff to discuss the 90 Percent Design.

11.5. 90 Percent Cost Estimate and Technical Specifications

CONSULTANT will advance the detailed unit price engineer's estimate of probable construction cost to the 90% design level.

CONSULTANT will provide detailed technical specifications for the outline created at the 50% submittal, and any additional item as determined during the 90% design. Technical provisions will reference Revision 8 of the 2012 Edition of Standard Specifications for Public Works Construction (Orange Book) for standard construction items.

11.6. 90 Percent Design Submittal

CONSULTANT will submit the 90 Percent Design as summarized:

RTC:

- 3 copies 11" x 17" 90 Percent Design plans, Design Exception Summary (if necessary)
- 1 copy 90 Percent Technical Specifications
- 1 copy Engineer's opinion of probable construction cost estimate
- 2 CDs with 22" x 34" .pdf of 90 Percent Design plans; Engineer's estimate; full version of Hydraulic Report; full version of Geotechnical Report
- 1 Electronic Distribution of Review and Comment Form and previous submittal responses (if applicable)

City of Sparks:

- 2 copies 11" x 17" 90 Percent Design plans, Design Exception Summary (if necessary)
- 1 copy 90 Percent Technical Specifications
- I copy Engineer's opinion of probable construction cost estimate
- 2 CDs with 22" x 34" .pdf of 90 Percent Design plans; Engineer's estimate; full version of Hydraulic Report; full version of Geotechnical Report
- 1 Electronic Distribution of Review and Comment Form and previous submittal responses (if applicable)

Utility Agencies:

1 copy 11" x 17" 90 Percent Design plans

1 copy of the Technical Specifications

1 Electronic Distribution of Review and Comment Form and previous submittal responses (if applicable)

11.7. 90 Percent Design Review Comment Resolution

CONSULTANT will prepare for and attend one in-person meeting with RTC and City of Sparks staff to discuss the 90 Percent Design. CONSULTANT will consolidate and provide responses to the 90 Percent Design plan review comments with the 100 Percent Design deliverables.

11.8. 100 Percent Design

Incorporating agency comments from the 90 Percent Design review, CONSULTANT will advance the design and prepare 100 Percent Design plans, engineer's estimate, and technical specifications. CONSULTANT will submit 100 Percent Design plans, specifications and engineer's estimate to RTC, City of Sparks, and utility companies with facilities in the project limits to verify all comments have been responded to, reconciled, and incorporated into the plans.

Additional changes to the drainage report are not anticipated after the 90 Percent Design submittal; however, if required, a drainage report addendum will be issued for the 100 Percent Design submittal.

11.9. 100 Percent Cost Estimate and Technical Specifications

CONSULTANT will advance the detailed unit price engineer's estimate of probable construction cost and detailed technical specifications to the 100% design level.

11.10. 100 Percent Design Submittal

CONSULTANT will submit the 100 Percent Design as summarized:

RTC:

3 copies 11" x 17" 100 Percent Design plans, Design Exception Summary (if necessary)

1 copy 100 Percent Technical Specifications

1 copy Engineer's opinion of probable construction cost estimate

2 CDs with 22" x 34" .pdf of 100 Percent Design plans; Engineer's estimate; full version of Hydraulic Report; full version of Geotechnical Report

1 Electronic Distribution of Review and Comment Form and previous submittal responses

City of Sparks:

2 copies 11" x 17" 100 Percent Design plans, Design Exception Summary (if necessary)

1 copy 90 Percent Technical Specifications
 1 copy Engineer's opinion of probable construction cost estimate
 2 CDs with 22" x 34" .pdf of 100 Percent Design plans; Engineer's estimate; full version of Hydraulic Report; full version of Geotechnical Report
 1 Electronic Distribution of Review and Comment Form and previous submittal responses

Utility Agencies:

1 copy 11" x 17" 100 Percent Design plans
 1 copy of the Technical Specifications
 1 Electronic Distribution of Review and Comment Form and previous submittal responses

For the 100 Percent Design submittal CONSULTANT will provide a full sized .pdf and a .pdf of the Technical Specifications to the RTC for posting on their e-bid system for advertisement.

CONSULTANT will submit a 11" x 17" hard copy of the 100 Percent Design plans and 1 hard copy of the Technical Specifications to the RTC and City of Sparks.

11.11. 100 Percent Design Review Comment Resolution

CONSULTANT will prepare for and attend one in-person meeting with RTC and City of Sparks staff to discuss the 100 Percent Design. CONSULTANT will consolidate and provide responses to the 90 Percent Design plan review comments with the 100 Percent Design deliverables.

11.12. Final Design

Once the agencies verify that all review comments have been addressed and no additional changes are required, CONSULTANT will sign and stamp the design plans and technical specifications for use as an advertised project.

11.13. NDOT Encroachment Permit

CONSULTANT will prepare and process an encroachment permit package through the Nevada Department of Transportation for Phase 2 construction for the portions of the project within NDOT right-of-way. CONSULTANT will participate in a pre-permit meeting before submitting the permit application. Any revisions required by NDOT will be made on the plans before finalizing the permit. The RTC and the local agency will be the co-applicants on the permit and will provide all applicant fees, signatures and submittal documentation needed by the CONSULTANT to process the permit.

12. PHASE 2 BIDDING SERVICES

CONSULTANT will be available during the bidding process to respond to Requests for

Information (RFIs) and will attend the RTC hosted pre-bid meeting. All questions and responses will be documented and provided to the RTC, and prepare and provide any addenda, if required. All questions regarding legal aspects of the contract documents will be referred directly to the RTC. CONSULTANT will prepare and provide a summary of the pre-bid meeting, as directed by the RTC.

CONSULTANT will attend the bid opening, review the bids received for irregularities, and provide a recommendation for award. CONSULTANT will tabulate bid results into a MS Excel spreadsheet to verify the quantities and costs of the bid items.

After bid opening and award, CONSULTANT will prepare a conformed set of specifications for distribution to the project and construction teams. All RTC and Contractor signed pages and any addenda will be incorporated into a final set of project specifications. CONSULTANT will also prepare a conformed set of plans, if any changes are required resulting from RFIs during the bidding process.

<u>Deliverables</u> – Pre-Bid meeting minutes, bid review tabulation, conformed set of design plans and specifications.

13. PHASE 2 DESIGN SERVICES DURING CONSTRUCTION (OPTIONAL - NOT INCLUDED)

CONSULTANT will provide services during construction for Phase 2 of the project. Depending on the final scope of Phase 2, a specific scope of services and associated fee will be developed prior to the start of construction. The fee associated with this task is not included and will be amended prior to construction.

14. DESIGN CONTINGENCY

This is a contingency for miscellaneous increases within the scope of this contract in performance of services under Task 1 through Task 8 and Task 11. If CONSULTANT determines that it is necessary to perform work outside of the scope covered in Task 1 through Task 8 and Task 11, 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.

15. MISCELANEOUS SERVICES (OPTIONAL)

15.1. Photographic Renderings

CONSULTANT will prepare up to ten (10) photo renderings of the final design to show new intersection and roadway alignments. The locations for each rendering will be discussed with the RTC Project Manager. One draft version of each rendering will be provided to the RTC for review and comment prior to each rendering being completed.

<u>Deliverables</u> - Up to 10 Photographic Renderings

15.2. Video Simulations

CONSULTANT will create up to three (3) 30-second to one-minute animated 3-dimentional (3D) video simulations of proposed intersection improvements to show new roadway alignments and traffic patterns at use during agency, stakeholder and public meetings, as well as, be available on the website.

CONSULTANT will utilize UAV drone to build the 3D environment, create animations of key locations highlighting proposed improvements among existing and future development as necessary.

CONSULTANT will submit each video for RTC approval before they become available to the public. Video productions will be copyrighted to CONSULTANT with rights given to the RTC.

Deliverables - Up to 3 Draft and Final Video Simulations

15.3. Phase 1 Final Geotechnical Evaluation

If necessary, CONSULTANT will perform Phase 1 Final Design geotechnical investigations and associated laboratory testing to develop geotechnical design recommendations.

All field work within the Sparks Boulevard roadway area will occur during night time hours on weekdays, and daytime hours on weekends.

All explorations, completed by exploratory borings, will follow AASHTO guidelines, RTC Flexible Pavement Design Manual, 2007, and NDOT standards, where applicable.

It is anticipated that exploration will include:

Phase 1 Final Design – twenty (20) exploratory borings to depths of 5 to 50 feet below the existing grade surface for a total of 610 lineal feet

Upon completion of field, laboratory, and office studies, an updated geotechnical investigation report will be completed for the project.

Introduction, Site and Geologic conditions, and Laboratory Testing:
Seismicity
Geotechnical Design Parameters
Structural Section
Construction Recommendations

A final report will be issued addressing the comments; only one round of review and comments is scoped. After addressing any comments, final Phase 1 Final Design Geotechnical Investigation Report will be completed.

<u>Deliverables</u> – Draft and Final Phase 1 Final Design Geotechnical Investigation Reports

15.4. Phase 2 Final Geotechnical Evaluation

If necessary, CONSULTANT will perform Phase 2 Final Design geotechnical investigations and associated laboratory testing to develop geotechnical design recommendations.

The preliminary investigation will cover the entire roadway alignment. The final investigation includes the entire alignment except for the I-80 corridor. The I-80 corridor boundaries extends from the railroad tracks on the southside to the I-80 overpass north abutment.

Except for the I-80 north abutment area, field exploration for the I-80 corridor area is not included. This includes the existing center bent, on and off ramps, and south abutment. It is assumed that after the preliminary investigation has been completed, this area will be reevaluated including input from NDOT on further improvements. CONSULTANT will provide a revised proposal for this area after the new improvements have been determined; however, CONSULTANT assumes exploration at the I-80 southern abutment and center bent during the Phase 2 final investigation phase.

All field work within the Sparks Boulevard roadway area will occur during night time hours on weekdays, and daytime hours on weekends.

All explorations, completed by exploratory borings, will follow AASHTO guidelines, RTC Flexible Pavement Design Manual, 2007, and NDOT standards, where applicable.

It is anticipated that exploration will include:

Phase 2 Final Design – six (6) exploratory borings to depths of 20 to 100 feet below the existing grade surface for a total of 420 lineal feet

Upon completion of field, laboratory, and office studies, an updated geotechnical investigation report will be completed for the project.

Introduction, Site and Geologic conditions, and Laboratory Testing:
Seismicity
Geotechnical Design Parameters
Structural Section
Construction Recommendations

A final report will be issued addressing the comments; only one round of review and comments is scoped. After addressing any comments, final Phase 2 Final Design Geotechnical Investigation Report will be completed.

<u>Deliverables</u> – Draft and Final Phase 2 Final Design Geotechnical Investigation Reports

15.5. Preliminary Sound Wall Design

If needed as determined in Task 3.2.4, CONSULTANT will develop sound wall plans to a 50

Percent Design level of completion. At 50 Percent Design, sound wall plans will present enough information to define overall dimensions and ties to other discipline improvements. Reinforcing steel details may or may not be shown at this stage. CONSULTANT assumes one (1) continuous section for the entirety of the sound wall layout.

15.6. Right-of-Way Engineering Services

It is estimated up to two-hundred (200) parcels will require permanent and/or temporary easements and/or potentially partial fee takes to construct the planned improvements.

Upon completion of the 50 Percent Design CONSULTANT will present the proposed right-of-way needs to the RTC for concurrence. CONSULTANT will perform boundary surveying including preparation of full Metes and Bounds descriptions of two-hundred (200) individual parcels. This will include property record research, drafting of property boundaries from record descriptions, calculation of search coordinates for field boundary survey, field boundary survey on each affected parcel, post processing and reduction of field data, boundary resolution based upon field findings, preparation of legal descriptions and exhibit maps of individual affected parcels. CONSULTANT will obtain Title Reports and updates as required and will invoice the RTC for these items as reimbursable expenses.

Right-of-Way Appraisal, Property Owner Negotiations, Escrow Coordination and Title Clearance is not included within this task.

<u>Deliverables</u> – Property Boundary for 200 parcels, Exhibit Maps, Legal Descriptions.

15.7. Sound Wall 90 Percent Design, 100 Percent Design, and Final Design

If needed as determined in Task 3.2.4, CONSULTANT will develop sound wall plans to a 90 Percent Design level of completion. For the 90 Percent Design submittal, CONSULTANT will respond to and incorporate comments from the 50 Percent Design submittal and develop final sound wall plans. Bill of material sheets will not be prepared for walls. Rather, quantities will be summarized in tables incorporated into selected detail sheets.

16. CONSTRUCTION CONTINGENCY (AMENDMENT 3)

This is a contingency for miscellaneous increases within the scope of this contract in the performance of services under Task 10. If CONSULTANT determines that it is necessary to perform work outside of the scope covered in Task 10, CONSULTANT shall provide a letter detailing the need, scope, and not-to-exceed budget for any proposed work. Work under this task shall proceed only with the RTC Project Manager's written approval.

Exhibit B-2 Fee Summary - RTC20-10 Sparks Boulevard Capacity Project

			Original Contract Summary														Amendment Summ			
Task No	Item No.	Task	Atkins Hours	Atkins Labor	Atkins Expense	Atkins	CA Group Hours	CA Group Expense	CA Group	CME	PK Electrical	KCI	Aerotech	Total Subs	Total Price	Contract Adjusted Price	Amendment 3 Price	New Contract Total Price		
1	1	Project Management	3868	\$844,418	\$1,000	\$845,418	700	\$0	\$174,720	\$0	\$0	\$0	\$0	\$174,720	\$1,020,137.60	\$888,647.60	\$0.00	\$888,647.60		
2	2	Public and Agency Involvement	1436	\$185,650	\$1,550	\$187,200	52	\$0	\$12,147	\$0	\$0	\$0	\$0	\$12,147	\$199,347.60	\$237,647.97	\$0.00	\$237,647.97		
3	3	Environmental and Permitting	5745	\$908,414	\$14,850	\$923,264	8	\$(\$1,997	\$0	\$0	\$0	\$0	\$1,997	\$925,260.80	\$784,754.52	\$0.00	\$784,754.52		
4	4	Investigation of Existing Conditions	1114	\$173,420	\$500	\$173,920	36	\$0	\$6,958	\$614,250	\$0	\$122,254	\$24,300	\$767,762	\$941,681.60	\$957,888.96	\$0.00	\$957,888.96		
5	5	Preliminary Studies	932	\$173,222	\$500	\$173,722	752	\$(\$112,258	\$0	\$0	\$0	\$0	\$112,258	\$285,980.00	\$395,282.50	\$0.00	\$395,282.50		
6	6	Preliminary Design	9232	\$1,429,542	\$200	\$1,429,742	2232	\$0	\$320,362	\$0	\$22,500	\$0	\$0	\$342,862	\$1,772,604.00	\$1,422,793.02	\$0.00	\$1,422,793.02		
7	7	Phase 1 Final Design	7400	\$1,074,975	\$300	\$1,075,275	0	\$0	\$0	\$0	\$45,000	\$0	\$0	\$45,000	\$1,120,275.20	\$1,547,381.71	\$0.00	\$1,547,381.71		
8	8	CLOMR & LOMR	312	\$55,411	\$15,000	\$70,411	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70,411.20	\$70,411.20	\$0.00	\$70,411.20		
9	9	Phase 1 Bidding Services	88	\$16,973	\$100	\$17,073	0	\$0	\$0	\$0	· ·	\$0	\$0	\$0	\$17,072.80	\$17,072.80	\$0.00	\$17,072.80		
10	10	Phase 1 Design Services During Construction (Amendment 3)	0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	\$0.00	\$767,902.00	\$767,902.00		
	10.1	Project Management	370	\$93,310	\$1,222	\$94,532	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$94,532.00		\$94,532.00	\$94,532.00		
	10.2	Public Information	330	\$46,530	\$500	\$47,030	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$47,030.00		\$47,030.00	\$47,030.00		
	10.3	Engineering Services During Construction	2728.5	\$515,460	\$0	\$515,460	2754	\$0	\$372,715	\$0	\$15,000	\$0	\$0	\$395,215	\$530,460.00		\$530,460.00	\$530,460.00		
	10.4	Record Drawings	226	\$36,810	\$0	\$36,810	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$36,810.00		\$36,810.00	\$36,810.00		
	10.5	Wetland Mitigation Monitoring	346	\$57,100	\$1,970	\$59,070	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$59,070.00		\$59,070.00	\$59,070.00		
11	11	Phase 2 Final Design	4444	\$713,066	\$350	\$713,416	2754	\$0	70.00	\$0		\$0		\$395,215	. , ,	\$314,691.48				
12	12	Phase 2 Bidding Services	88	\$16,973	\$100	\$17,073	0	\$0	\$0	\$0		\$0	\$0	\$0	\$17,072.80	\$16,393.64	\$0.00	\$16,393.64		
13	13	Phase 2 Design Services During Construction (Optional)	0	\$0	\$0	\$0	0	\$0		\$0	· ·	\$0	\$0	\$0		\$0.00	\$0.00	\$0.00		
14	14	Design Contingency (Partially Authorized)	0	\$200,000	\$0	\$200,000	0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000	\$250,000.00	\$1,075,509.60	\$0.00	\$1,075,509.60		
15	15	Miscellaneous Services (Partially Authorized)	2164	\$283,691	\$174,450	\$423,691	0	\$0	\$1,001,156	\$936,415	\$90,000	\$122,254	\$24,300	\$322,165	\$745,856.20	\$745,856.00	\$0.00	\$745,856.00		
16	16	Construction Contingency (Amendment 3)	0	\$0	\$0	\$0	0	\$0	+ 1,001,100	\$614,250		\$122,254	\$24,300	•	\$1,851,960.00	\$0.00	. ,	* ,		
	16	Construction Contingency	0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	\$0.00	\$50,000.00	\$50,000.00		
		Totals	36,823	\$6,075,756	\$208,900	\$6,250,206	6534	\$0	\$2,052,312	\$1,550,665	\$180,000	\$244,508	\$48,600	\$2,224,125	\$8,474,331	\$8,474,331.00	\$817,902.00	\$9,292,233.00		

Exhibit B-3 Fee Summary Detail - RTC20-10 Sparks Boulevard Capacity Project

		1																				Survey	1								
			Management and Design Personnel																			Personnel									
Task No. Item No.	Task	Sr. Project Director	Sr. Engineer IV	Sr. Engineer II	Sr. Engineer I	Engineer II	Engineer I	Sr. ITS Manager	Sr. Structural Engineer II	Structural Engineer II	Sr. Landscape Architect	Sr. Landscape Architect	Landscape Architect II	NEPA Technical Director	Sr. GIS Analyst	Sr. Scientist/Biologist	Scientist/Biologist	Public Information Lead	Sr. Public Information Specialist	Public Information Specialist	Graphics	Professional Land Surveyor	Atkins Hours	Atkins Labor	Atkins Expense	Atkins	PK Electrical T	otal Subs	Total Price		
		Staff Staff	Matt Nussbaumer Kerri Lanza	Pankaj Maheshwari Tarin Velotta	Maria Evans	Sam Schnorbus	Eden Ansell Kashif Farman Rob Whelan	Brad Slocum	Krishanthi Alagiyawanna	Tracy Busigny/Conley	Lindzay Green	Ronald Pizmont	Lizhen Jin	Kirk Webb	James Lawson	Keith Hidalgo	Hayden Ripple	Susan Berkley	Adrienne Packer	Sydney Wendt	Tina Brand	Brett Jefferson									
	Bill f	Rates (2025 - 2026) \$280.00	\$230.00	\$215.00	\$175.00	\$160.00	\$135.00	\$250.00	\$205.00	\$150.00	\$200.00	\$185.00	\$135.00	\$270.00	\$175.00	\$200.00	\$140.00	\$210.00	\$140.00	\$110.00	\$135.00	\$230.00									
	Phase 1 Design Services During Construction	537						80	100	184	60	20	74	56	20	138	212	66	66	132	66	40	4000.5				\$15,000	\$15,000			
	Project Management	25	54	26	3	26	24															40	370	, ,	\$1,222			\$0	\$94,532.00		
	Public Information																	66	66	132	66		330			\$47,030		\$0	\$47,030.00		
10.3	Engineering Services During Construction	279	.5 28	146	112	1344	16	72	92	164	52	20	64	40		40							2728.5			\$515,460	\$15,000	\$15,000	\$530,460.00		
	Record Drawings		4	8 8	3 28	36	88	8	8	20	8		10										226	\$36,810		\$36,810		\$0	\$36,810.00		
10.5	Wetland Mitigation Monitoring													16	20	98	212						346	\$57,100	\$1,970	\$59,070		\$0	\$59,070.00		
	Construction Contingency	537	.5 29	95 180	140	1406	128	80	100	184	60	20	74	56	20	138	212	66	66	132	66	40	0	\$50,000		φου,σοσ	\$0	\$0	\$50,000.00		
16	Construction Contingency																						0	\$50,000		\$50,000		\$0	\$50,000.00		
	Total Hours	538	8 29	5 180	140	1,406	128	80	100	184	60	20	74	56	20	138	212	66	66	132	66	40									
	Total Cost	\$150,50	\$67,85	\$38,700	\$24,500	\$224,960	\$17,280	\$20,000	\$20,500	\$27,600	\$12,000	\$3,700	\$9,990	\$15,120	\$3,500	\$27,600	\$29,680	\$13,860	\$9,240	\$14,520	\$8,910	\$9,200	4,001	\$799,210	\$3,692	\$802,902	\$15,000	\$15,000	\$817,902.00		

EXHIBIT B-1

SPARKS BOULEVARD 2020 HOURLY RATE FEE SCHEDULE

MANAGEMENT AND DESIGN PERSONNEL	
Project Principal/CRA Expert	\$260.00/hr.
Project Director	\$240.00/hr.
Design Manager	\$240.00/hr.
Quality Manager	\$240.00/hr.
Senior Engineer IV	\$190.00/hr.
Senior Engineer III	\$190.00/hr.
Senior Engineer II	\$180.00/hr.
Senior Engineer I	\$155.00/hr.
Engineer III	\$145.00/hr.
Engineer II	\$135.00/hr.
Engineer I	\$120.00/hr. \$240.00/hr.
Structures Manager Senior Structures Engineer III	\$240.00/hr. \$190.00/hr.
Senior Structures Engineer II Senior Structures Engineer II	\$190.00/hr. \$180.00/hr.
Senior Structures Engineer I	\$155.00/hr.
Structures Engineer III	\$135.00/hr. \$145.00/hr.
Structures Engineer II	\$135.00/hr.
Structures Engineer I	\$120.00/hr.
Senior Landscape Architect Engineer III	\$190.00/hr.
Senior Landscape Architect Engineer III	\$135.00/hr.
Senior Landscape Architect Engineer II	\$120.00/hr.
Landscape Architect Designer	\$85.00/hr.
Public Information Specialist	\$85.00/hr.
Clerical	\$80.00/hr.
Intern	\$65.00/hr.
ENIVIODNIMENTAL DEDCOMMEL	
Environmental Managar	\$240.00/hr.
Environmental Manager Senior NEPA Specialist	\$240.00/hr. \$190.00/hr.
NEPA Specialist	\$180.00/hr.
Senior GIS Analyst	\$155.00/hr.
Senior Scientist/Biologist	\$155.00/hr.
Scientist/Biologist	\$120.00/hr.
Senior Historian	\$155.00/hr.
Historian	\$120.00/hr.
Senior Archaeologist	\$155.00/hr.
Archaeologist	\$120.00/hr.
Planner III	\$145.00/hr.
Planner II	\$135.00/hr.
Planner I	\$120.00/hr.
Graphics	\$135.00/hr.
Technical Editor	\$100.00/hr.
Word Processing	\$85.00/hr.
CONSTRUCTION MANAGEMENT PERSONNEL	
Scheduler/Estimator	\$200.00/hr.
Senior Inspector	\$140.00/hr.
Office Engineer	\$130.00/hr.
Office Administrator	\$100.00/hr.
Inspector	\$100.00/hr.
SURVEY PERSONNEL	
Survey Group Manager	\$190.00/hr.
Professional Land Surveyor	\$150.00/hr.
Senior Party Chief	\$110.00/hr.
•	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

Senior Survey Technician	\$100.00/hr.
Survey Technician	\$75.00/hr.
1 Person Survey Crew	\$140.00/hr.*
2 Person Survey Crew	\$190.00/hr.*
3 Person Survey Crew	\$250.00/hr.*

^{*} Survey crew rates include vehicle mileage and all standard survey equipment

MISCELLANEOUS

CM and Inspector's Company Vehicle

Inspector's Mobile Phone and Computer

Mileage

NTE \$70.00/work day
100.00/month
GSA rate

NOTES:

Overtime for CM field staff and time spent on projects in litigation, in depositions and/or providing expert testimony will be charged at the standard rate times 1.5. Personnel rates shown apply to project charges during calendar year 2020. On January 1st of each subsequent year, labor rates invoiced will be increased to reflect annual cost of labor increases not to exceed 3%.

SPARKS BOULEVARD 2025-2026 HOURLY RATE FEE SCHEDULE

MANAGEMENT AND DESIGN PERSONNEL

Sr. Project Director	\$280.00/hr.
Sr. ITS Manager	\$250.00/hr.
Professional Land Surveyor	\$230.00/hr.
Senior Engineer IV	\$230.00/hr.
Senior Structural Engineer III	\$220.00/hr.
Senior Engineer II	\$215.00/hr.
Public Information Lead	\$210.00/hr.
Senior ITS/Traffic Engineer II	\$200.00/hr.
Senior Surveyor III	\$200.00/hr.
Senior Landscape Architect III	\$200.00/hr.
Senior Structural Engineer II	\$205.00/hr.
Senior Landscape Architect II	\$185.00/hr.
Senior Engineer I	\$175.00/hr.
Engineer II	\$160.00/hr.
Structural Engineer II	\$150.00/hr.
Senior Public Information Specialist	\$140.00/hr.
Engineer I	\$135.00/hr.
Landscape Architect II	\$135.00/hr.
Graphics	\$135.00/hr.
Survey Tech. II	\$115.00/hr.
Public Information Specialist	\$110.00/hr.

ENVIORNMENTAL PERSONNEL

NEPA Technical Director \$2	270.00/hr.
Technical Manager \$2	265.00/hr.
Senior Planner IV \$2	225.00/hr.
Senior Scientist/Biologist \$2	200.00/hr.
Senior Scientist III \$1	185.00/hr.
Senior GIS Analyst \$1	175.00/hr.
Senior Planner III \$1	170.00/hr.
Senior Planner I \$1	155.00/hr.
Scientist/Biologist \$1	140.00/hr.
Scientist II \$1	130.00/hr.
GIS Analyst II \$1	130.00/hr.
Technical Writer/Editor \$1	105.00/hr.

EXPENSES

Travel and associated expenses	As incurred
Direct expenses (e.g. title reports)	As incurred
Mileage	GSA rate

NOTES:

- 1. Categories and rates not shown on the table will be determined at the time of need.
- 2. Rates shown good for the 2025-2026 calendar years. CONSULTANT may be escalated 3% for each calendar year starting in 2027.

Meeting Date: 2/21/2025 Agenda Item: 4.3.11

To: Regional Transportation Commission

From: Jessica Dover, Project Manager

SUBJECT: Arrowcreek Parkway and Wedge Parkway Rehabilitation PSA Amendment No. 1

RECOMMENDED ACTION

Approve Amendment No. 1 to the contract with Lumos and Associates, Inc., for engineering during construction services needed in connection with the Arrowcreek Parkway and Wedge Parkway Rehabilitation Project, in the amount of \$665,840, for a new total not-to-exceed amount of \$1,550,860.

BACKGROUND AND DISCUSSION

On October 20, 2023, the RTC and Lumos & Associates, Inc., (Lumos) entered into a Professional Services Agreement (PSA) for engineering design services through final design and bidding for the Arrowcreek Parkway and Wedge Parkway Rehabilitation Project. The project design remains on schedule, with the construction bid anticipated this spring.

Amendment No. 1 expands the scope to include engineering during construction (EDC) services, adding \$784,915. Additionally, efficiencies during preliminary and final design resulted in approximately \$139,000 in budget savings, which is being reallocated to EDC services. As a result, PSA Amendment No. 1 provides a net increase of \$665,840 to support EDC services for the project improvements.

While the schedule may fluctuate, the targeted schedule for these services is as follows:

- Alternatives Analysis: Complete
- Preliminary Design: Complete
- Final Design: February 2025
- NTP Construction: March/April 2025

All other provisions of the PSA as previously amended shall remain in full force and effect.

FISCAL IMPACT

Appropriations are included in the FY 25 Board approved budget and FY 25 Program of Projects.

PREVIOUS BOARD ACTION

10/20/2023 Approved a contract with Lumos and Associates, Inc., for professional engineering services for the Arrowcreek Parkway and Wedge Parkway Rehabilitation Project, in an amount not-to-exceed \$885,020.

AMENDMENT NO. 1

The Regional Transportation Commission of Washoe	e County ("RTC") and Lumos and Associates
Inc. ("CONSULTANT") entered into an agreement	dated October 20, 2023 (the "Agreement")
This Amendment No. 1 is dated and effective as of	•

RECITALS

WHEREAS, RTC and CONSULTANT entered into the Agreement in order for CONSULTANT to provide design engineering and engineering during construction services in connection with the Arrowcreek Parkway and Wedge Parkway Rehabilitation Project (the "Project");

WHEREAS, the term of the Agreement, is through December 31, 2025;

WHEREAS, the parties have determined that there is a need to amend the Agreement to extend the expiration date to March 31, 2026, due to the amount of work remaining;

WHEREAS, the CONSULTANT is providing design and engineering services to construct eligible improvements per the Street & Highway Program Policy on Wedge Parkway (Mt. Rose Highway to Whites Creek Lane) and Arrowcreek Parkway (+/- 825' northeast of Wedge Parkway to Thomas Creek Road), including, but not limited to: pavement reconstruction, portions of sidewalk, curb, gutter, medians, driveways, pedestrian ramps, utility adjustments, minor storm water infrastructure modifications, striping and signage modifications, Golden Gate Drive intersection improvements, and possible construction of a shared use path on a portion of the east side of Wedge Parkway;

WHEREAS, the parties have determined that there is a need to amend the Agreement in order to provide an additional \$665,840 of budget for EDC services, required to construct the improvements;

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 3.2 shall be replaced in its entirety with the following:

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

Design Services	\$705,945.00
Optional Design Services	\$0.00
Design Contingency	\$40,000.00
EDC	\$764,915.00
Optional EDC	\$0.00
EDC Contingency	\$40,000.00
Total Not-to-Exceed Amount	\$1,550,860.00

- 2. Exhibit A Scope of Services of the Agreement is replaced in its entirety with the version of Exhibit A attached hereto.
- 3. Exhibit B Compensation of the Agreement is replaced in its entirety with the version of Exhibit B attached hereto.
- 4. All other provisions of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have made and executed this amendment.

REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY

Ву:
Bill Thomas, AICP, Executive Director
LUMOS & ASSOCIATES, INC.
Ву:
Steven G. Moon, P.E.
Director, Construction Services

EXHIBIT A-1 through A-3

EXHIBIT A-1: SCOPE OF SERVICES

EXHIBIT A-2: PROJECT TEAM

EXHIBIT A-3: SCHEDULE OF SERVICES

EXHIBIT A-1

SCOPE OF SERVICES

FOR THE

ARROWCREEK PARKWAY & WEDGE PARKWAY REHABILITATION PROJECT AMENDMENT NO.1

Original Contract: The Regional Transportation Commission (RTC) has identified the following roadways are in need of corrective maintenance and/or rehabilitation/reconstruction: Wedge Parkway (PKWY) from N/S Whites Creek Lane to N/S Mount Rose Highway and Arrowcreek Parkway from ±815' West of Geyser Road to ±825' Northeast of Wedge PKWY. An additional Section of Arrowcreek, from 815' West of Geyser RD to Thomas Creek RD, will be evaluated for appropriate pavement maintenance treatment options.

Wedge PKWY from Whites Creek LN to Mount Rose HWY is depicted as City of Reno Right-of-Way per the Washoe Regional Mapping System. Mount Rose Highway (HWY) is Nevada Department of Transportation (NDOT) Right-of-Way. Arrowcreek PKWY from 815' West of Geyser RD to 825' East of Wedge PKWY is City of Reno Right-of-Way. Approximately 815' West of Geyser RD to Thomas Creek RD is Washoe County Right-of-Way.

The Scope of Services for the Arrowcreek PKWY and Wedge PKWY Rehabilitation Project (Project) is anticipated to include eligible Improvements per the 2023 Street & Highway Program Policy, including but not limited to: portions of sidewalk, curb, gutter, median, driveway, and pedestrian ramp evaluation and replacement, pavement corrective and/or rehabilitative treatments, utility adjustments, potential storm drain inlet upgrades, striping modifications, and signage.

Amendment No.1: The Section of Arrowcreek, from 815' West of Geyser RD to Thomas Creek RD was incorporated into Final Design. Additionally, the Wedge PKWY and Golden Gate Drive intersection traffic signal is being modified to include permitted/protected left turn signal phasing and upgraded pedestrian push buttons. Finally, a Multi-Use Path along Wedge PKWY has been incorporated into the Project. Task No. 9 Design Contingency was used to design the MUP through 90%. Task 7.3 will be added through Amendment No. 1 to complete the final design phase of the MUP.

1. PROJECT MANAGEMENT

<u>Original Contract</u>: Management of the overall project will include scheduling of CONSULTANT staff resources, coordinating with agencies, specifically City of Reno and Washoe County, scheduling, invoicing, and general project administration. Detailed monthly invoices will be prepared to document work performed during the invoicing period.

CONSULTANT'S Project Manager will facilitate and assist in coordination of: Project Kick off meeting, alternative analysis meeting, and preliminary design, 90% and 100% design review meetings, as required by RTC. CONSULTANT will compile agendas and provide meeting minutes.

CONSULTANT'S Project Manager will keep the RTC Project Manager well informed of Project progress with bi-weekly informal briefings via email or phone call. Formal progress meetings will be conducted on occasion.

It is assumed the Project preliminary design duration will be Approximately thirteen (13) months.

Deliverables:

- Various meeting agendas and minutes
- Monthly invoices and summaries

Amendment No.1: No change.

2. TOPOGRAPHIC MAPPING

Original Contract: CONSULTANT will establish a horizontal and vertical survey control network on-site, referenced to the Nevada State Plane Coordinate System, West Zone, NAD83 and based on the City of Reno Benchmarks using a local combined scale factor to establish ground values for the project. Existing survey monuments will be located and re-established in the field. CONSULTANT will utilize the survey control network to complete a topographic survey within: Wedge PKWY roadway Right-of-Way from Mt. Rose HWY to Whites Creek LN and Arrowcreek PKWY roadway Right-of-Way from approximately 825' Northeasterly of Wedge PKWY to Thomas Creek RD. Cross streets will be surveyed approximately 50' beyond the returns along Arrowcreek PKWY and Wedge PKWY.

A project basemap will be created using aerial photogrammetry and ground collected survey field shots. The project will be surveyed at a point density and accuracy intended to obtain a horizontal scale of 1"=40' with a 1' contour interval consistent with National Map Accuracy Standards. The survey will consist of gathering survey data associated with ground topography and drainage features, property corners, existing improvements, evidence of existing utilities, planometrics (buildings, fences, trees, power poles, etc.), and any other pertinent physical features as determined applicable. A surface and topographic basemap will be generated from the collected data and utilized for design purposes as outlined in Task 6 and Task 7.

CONSULTANT will investigate and locate all overhead utilities within the roadway right of way and areas reasonably affected. Deliverable will include depiction of all overhead utilities within the roadway right-of-way on plans developed under Task 6, Preliminary Design.

CONSULTANT will investigate and locate subsurface utilities within the roadway right-of-way, and areas reasonably affected, in accordance with the American Society of Civil Engineers Standard guideline for the Collection and Depiction of Existing Subsurface Utility Data, Quality Level C. Catch basins and storm drain manholes will be dipped as needed for inclusion into the base map. Lumos will request the most recent City of Reno and Washoe County dip sheets to supplement field information. This data will be included on plans developed under Task 6 and Task 7. Lumos will provide traffic control for subsurface utility investigation.

The record Right-of-Way information will be shown on the project plans. No resolution of Right-of-Way is included in this task.

<u>Task 2.1 Amendment No.1:</u> The Project realized a budget savings in Task 2 using the photogrammetry method; as a result, \$32,650 of the \$124,350 budget is being reallocated to Construction Services Tasks 10 through 14.

3. RIGHT-OF-WAY ENGINEERING

Wedge PKWY from Mt. Rose HWY to Whites Creek LN and Arrowcreek PKWY from approximately 825' Northeasterly of Wedge PKWY to Thomas Creek RD shall be the limits associated with Work under Task 3.

3.1. Preliminary Title Reports

Original Contract: It is estimated that a total of up to (12) Temporary Construction Easements (TCEs), Permanent Easements (PEs) and/or Permission to Construct Agreements may be required for construction of roadway, pedestrian path sidewalk, and ramp improvements. CONSULTANT will obtain up to eight (8) preliminary title reports (linked, if available) including exceptions and updates. CONSULTANT will review the assessor parcel map, address, and owner information within the title reports and verify the document links within the title report are correct and functioning. CONSULTANT will coordinate necessary revisions to the preliminary title reports with the title company. CONSULTANT will deliver the electronic preliminary title reports to RTC. CONSULTANT assumes one update to each of the (8) title reports will be required for the duration of the project. CONSULTANT will coordinate the updates with the title company and deliver the updated linked title reports to RTC.

<u>Task 3.5 Amendment No.1</u>: The Project realized a budget savings in Task 3.1 due to streamlined coordination with the Title Company; as a result, \$1,470 of the \$13,680 budget is being reallocated to Construction Services Tasks 10 through 14.

3.2. Boundary Survey and Legal Descriptions

<u>Original Contract</u>: CONSULTANT will review title reports for up to eight (8) subject parcels to identify existing encumbrances, record mapping, parcel boundary and/or easement legal descriptions detailed within the exceptions portion of said reports. CONSULTANT will utilize County records to obtain deeds and other record data for the parcels to be surveyed. CONSULTANT will use this information to create digital AutoCAD boundary line work necessary for generating search survey coordinates for boundary monuments associated with the subject subdivisions and parcels.

CONSULTANT will then perform field boundary surveys of the subject parcels. During the field survey, existing property corners, section corners, and Right-of-Way monuments, including centerline, will be located as required to resolve the legal boundaries of the subject parcels.

CONSULTANT will utilize record boundary information in conjunction with the data gathered in the field to prepare a digital boundary base map for the subject parcels. The digital base map will depict parcel boundaries, easement boundaries, street Right-of-Ways and found boundary monuments.

CONSULTANT will utilize the boundary base map to prepare up to 12 legal descriptions and exhibit figures.

Right-of-Way appraisal, property owner negotiations, escrow coordination and title clearance are not included within this task.

<u>Task 3.5 Amendment No.1</u>: The Project realized a budget savings in Task 3.2 due to less easements being needed for the Project than originally assumed; as a result, \$38,030 of the \$73,000 budget is being reallocated to Construction Services Tasks 10 through 14.

3.3. Right-of-Way Setting

Original Contract: CONSULTANT will participate in a meeting to set the Right-of-Way requirements for the project. CONSULTANT will prepare a meeting agenda and meeting summary. CONSULTANT will prepare a Right-of-Way summary in excel format identifying all easements necessary to construct the project including acquisitions, partial acquisitions, permanent easements, public utility easements, temporary construction easements, and permissions to construct. The summary will include APN, property owner, address, easement type, easement size, easement purpose and estimated acquisition valuation and estimated Offer amount; (valuation/estimated Offer information to be provided by RTC). The summary will be updated as needed throughout the project to reflect updated vesting deeds and final easements.

<u>Task 3.5 Amendment No.1</u>: The Project realized a budget savings in Task 3.3 due to streamlined coordination with the LPA's during Right-of-Way Setting discussions; as a result, \$780 of the \$5,780 budget is being reallocated to Construction Services Tasks 10 through 14.

3.4. Right-of-Way Maps

<u>Original Contract</u>: CONSULTANT will prepare Right-of-Way maps including existing and proposed easements, existing right-of-way, APN, owner information, and size and type of proposed easement. The right-of-way maps will be updated as needed throughout the project to reflect updated vesting deeds and final easements.

Deliverables:

- Preliminary title reports and updated vesting deeds
- Right-of-way setting meeting agenda and summary
- Right-of-way summary in excel format
- Right-of-way maps
- Legal descriptions and exhibits

<u>Task 3.5 Amendment No.1</u>: The Project realized a budget savings in Task 3.4 due to less easements being needed for the Project than originally assumed; as a result, \$13,570 of the \$22,150 budget is being reallocated to Construction Services Tasks 10 through 14.

4. INVESTIGATION of EXISTING CONDITIONS

Wedge PKWY from Mt. Rose HWY to Whites Creek LN and Arrowcreek PKWY from approximately 825' Northeasterly of Wedge PKWY to Thomas Creek RD shall be the limits associated with Work under Task 4.

4.1. Visual Condition Survey

<u>Original Contract:</u> CONSULTANT will visually evaluate and document the condition of the existing pavement to include cracking, potholes, rutting and raveling. Drainage observations will also be documented where ponding issues or insufficient flow is observed. Proposed pavement coring locations will be identified during this site visit.

CONSULTANT will evaluate median curb/flatwork, curb and gutter, sidewalk, valley gutters and driveway approaches based upon RTC criteria. The CONSULTANT shall also evaluate existing

pedestrian ramps for compliance with current ADA standards. CONSULTANT shall also evaluate the pedestrian access routes including existing pedestrian ramps, sidewalks, and driveway aprons within the project limits for compliance with current ADA standards and potential safety issues, such as sight distance and/or visibility, based upon RTC criteria.

CONSULTANT shall identify catch basin structures to be upgraded to Type 4R catch basin structures. Existing manhole covers will be evaluated within City Right-of-Way and the project limits for potential upgrades, such as, existing 36" SSMH covers being converted to 24" with adapter, or incorrect covers.

CONSULTANT shall recommend replacement limits for items evaluated as part of this task based on RTC and/or Local Entity criteria. CONSULTANT shall utilize Visual Condition Survey data in combination with coring/boring analysis conducted per Task 4.3 to determine potential permanent full depth patch limits, which will assist in developing quantities and planning level cost estimates, required under Task 4.4.

Task 4.1.2 Amendment No.1: The Project realized a budget savings in Task 4.1 due to the good condition of the concrete in the existing corridors; as a result, \$6,175 of the \$25,680 budget is being reallocated to Construction Services Tasks 10 through 14.

4.2. Traffic Data

Original Contract: Traffic data is needed to estimate future 18-kip ESAL applications that will be required for rehabilitation/reconstruction design. It is assumed that all the information on average daily traffic (current and future), truck percentages and truck factors will be available from the Regional Transportation Commission, City of Reno and/or the Nevada DOT traffic records. CONSULTANT and RTC will determine count locations prior to obtaining data.

Amendment No.1: No change.

4.3. Pavement Structural Investigation

Original Contract: Information from the visual condition surveys will be reviewed and locations for pavement coring and boring will be identified by CONSULTANT and reviewed and approved by the RTC. USA Dig will be contacted prior to starting coring/boring. CONSULTANT proposes a field investigation that will consist of approximately ten (10) test pits and fifteen (15) core excavations. Exploration depth for test pits will range from one (1) to five (5) feet below ground surface and depth of cores will be two (2) feet, or practical refusal, whichever comes first. CONSULTANT will collect samples of each soil type encountered within the test pits and core excavations and document the existing pavement structural section. CONSULTANT will obtain a no-cost encroachment permit from the applicable Local Entity (anticipated to be City of Reno and Washoe County) for coring/soil sampling. Traffic Control (lane closure) will be provided. CONSULTANT to provide asphalt patching per applicable specification or as directed per Encroachment/Excavation Permit requirements.

The primary objective of the coring program will be to establish pavement layer thickness, determine cracking depth, and determine if stripping is present. Results will be summarized in the project pavement design report.

Representative samples of the subgrade soils encountered will be used for the following laboratory testing: soil classification, PI, moisture, gradation, and R-values. Per the 2021 RTC Structural Design Guide for

Flexible Pavements, two (2) R-value tests will be conducted per sampling location. If the two (2) tests (at a location) do not fall within the ASTM D2844 precision statement, an additional R-value test will be conducted.

Results of the investigation will be summarized in a written report discussing site conditions, field investigation and associated laboratory testing, conclusion, and recommendations. The Pavement Structural Investigation will be supervised by, and the report will be signed/sealed by a registered Professional Engineer in the State of Nevada.

<u>Task 4.3.1 Amendment No.1</u>: The Project realized a budget savings in Task 4.3 due to minimal revisions and acceptance of the sections from the LPA's; as a result, \$810 of the \$69,220 budget is being reallocated to Construction Services Tasks 10 through 14.

4.4. Develop Feasible Design Alternatives

<u>Original Contract</u>: CONSULTANT will identify feasible pavement rehabilitation and/or reconstruction alternatives for the project based upon data obtained and recommendations developed resulting from Task 4.1 – Task 4.3. Among the alternatives that will be considered are:

- Permanent patching and Mill and Fill (plus AC overlay)
- Full Reconstruction
- Roadbed modification (reconstruction)
- Inclusion of Arrowcreek PKWY from 815' West of Geyser RD to Thomas Creek RD

Upon completion of the draft Pavement Structural Investigation, CONSULTANT will meet with RTC to present feasible rehabilitation alternatives. CONSULTANT will apply the design procedures contained in the 1993 AASHTO Guide for Design of Pavement Structures and the 2021 RTC Structural Design Guide for Flexible Pavement to generate the design layer thickness associated with each pavement alternative.

CONSULTANT will compile a Summary Memorandum, including: description of alternatives analyzed, opportunities and limitations of each alternative, preliminary construction cost estimates for each alternative based on recent bid tab data, and any other pertinent information that may directly impact development and consensus of the preferred design alternative. The draft Pavement Structural Investigation and the Summary Memorandum shall be submitted to RTC prior to scheduling the meeting to discuss rehabilitation alternatives.

CONSULTANT will document concurrence reached by RTC, City of Reno, Washoe County and other Stakeholders as applicable. The process of identifying the preferred design alternative shall be included in the final Alternatives Report Submittal. Findings and recommendations of CONSULTANT for all tasks identified in Task 4, with the exception of Task 4.5, Utility Investigation/Coordination, shall be submitted by report with backup documentation. The pavement design shall also be submitted to the Local Entity if the recommended pavement section varies from the Entity's standards.

<u>Task 4.4.1 Amendment No.1</u>: The Project realized a budget savings in Task 4.4 due to minimal comments and general consensus by the LPA's on the preferred alternative; as a result, \$4,380 of the \$27,710 budget is being reallocated to Construction Services Tasks 10 through 14.

4.5. Utility Investigation/Coordination

4.5.1. Utility Coordination

Original Contract: Based on field investigation, CONSULTANT will provide RTC a list of utility companies whose utilities are likely to be within the project limits or reasonably affected by the project. RTC will issue the initial notification to the utility agencies on the list and CONSULTANT will coordinate with the utility agencies for upcoming work, facility relocation and new installation, and to ensure utilities likely affected by the project are drawn on the plan and profile, evaluate potential conflicts through field investigation, investigate conflict resolution strategies. CONSULTANT will assist in relocation of utilities with prior rights by facilitating meetings and reviewing utility's design/cost for incorporation into a reimbursement agreement and/or incorporation of the utility work into the RTC plans.

Monthly utility coordination meetings will be held with the RTC and affected utility companies. CONSULTANT will coordinate the meetings with the RTC Project Manager, prepare and distribute meeting agendas, and provide and distribute meeting summaries following the meeting. It is assumed four (4) utility coordination meetings will be held.

CONSULTANT will distribute design review submittals (50% and 90%) to utility agencies for review and comment. CONSULTANT will track which utility agencies were provided design review submittals as part of the design review comment matrix for each round of submittals. CONSULTANT will track and incorporate all Utility Agency review comments received into the review comment matrix for each submittal. CONSULTANT will incorporate comments received from Utility Agencies, as appropriate.

<u>Task 4.5.3 Amendment No.1</u>: The Project realized a budget savings in Task 3.4 due to less utility providers being impacted by the proposed improvements; as a result, \$8,860 of the \$13,880 budget is being reallocated to Construction Services Tasks 10 through 14.

4.5.2. Utility Pothole Exploration

Original Contract: Should insufficient information be available from existing records to determine whether or not conflicts between the proposed work and existing utilities will occur, the CONSUTLANT shall request approval from RTC to pothole a sufficient number of locations to make such a determination, as part of Task 9, Design Contingency. CONSULTANT will obtain a no-cost encroachment permit from the applicable Local Entity to complete the work. USA Dig will be contacted prior to starting of potholing activities. Traffic Control (lane closure) will be provided. CONSULTANT to provide asphalt patching per applicable specification or as directed per Encroachment/Excavation Permit requirements.

Deliverables (PDF format):

- Visual Condition Survey Markups
- Traffic Count Report (OPTIONAL)
- Pavement Structural Investigation Report
 - draft and final
- Feasible Design Alternatives Summary Memorandum
 - draft and final

<u>Task 4.5.3 Amendment No.1</u>: Budget from Task 7.1 will be reallocated to this Task to accommodate pothole exploration necessary to support MUP alignment and to verify identified subsurface conflicts with NV Energy, TMWA, and Washoe County utilities do not occur where excavation is anticipated.

5. PUBLIC OUTREACH

5.1. Public Information Meeting

<u>Original Contract</u>: CONSULTANT will prepare applicable exhibits for and attend one (1) public information meeting. A virtual presentation will be made by RTC to properties adjacent to the project work zone to discuss project improvements, limits, scope, tentative schedule, traffic controls, driveway access, public notification requirements, and concerns of adjacent properties before the plans and specifications are finalized.

CONSULTANT will also participate in and provide a meeting summary for one (1) pre public information meeting with RTC Staff to discuss and review exhibits, topics, and appropriate responses to questions. CONSULTANT will provide RTC with all publicly viewed information two weeks prior to their public release for review and comment.

It is assumed RTC will identify appropriate venues, design and place print ads, prepare mailers and press releases, cover the direct costs associated with the meeting venues, print ads, court reporter, Spanish translator, and mailers and those costs are not included as part of the CONSULTANT'S fee.

Deliverables:

- Public information meeting exhibits
- Pre public information meeting summary

Amendment No.1: No change.

5.2. One-on-One Meetings with Community Stakeholders

<u>Original Contract</u>: CONSULTANT will be available for one-on-one briefings/meetings with and presentations to community stakeholders as requested by the RTC Project Manager. It is anticipated that the CONSULTANT will attend up to two (2) one-on-one presentations and/or meetings during this Project. RTC Project Manager will coordinate, set up, and conduct the meetings. CONSULTANT will provide meeting minutes as directed by RTC.

Deliverables:

• Community stakeholder meeting exhibits and summaries

Amendment No.1: No change.

6. PRELIMINARY DESIGN

6.1. Plans and Estimate

Original Contract: CONSULTANT will prepare 50% preliminary Plans and a preliminary cost estimate suitable for RTC and Local Entity review. Curb, gutter, and sidewalk that are deficient according to both RTC and Local Entity standards shall be identified. Utility Improvements identified to date and Right-of-Way limits will be included in the 50% Submittal. Vertical design and grading details are excluded from the 50% Submittal. Preliminary Design per this Task does not include the Section of Arrowcreek

PKWY from 815' West of Geyser RD to Thomas Creek RD. Preliminary design review meeting will be performed under Task 1.

Deliverables:

• Preliminary plans and cost estimate

<u>Amendment No.1</u>: Preliminary design included the additional Section of Arrowcreek PKWY from 815' West of Geyser RD to Thomas Creek RD. No change in budget.

7. FINAL DESIGN

7.1. Prepare Final Plans and Specifications

Original Contract: CONSULTANT will prepare Final Construction Plans, Contract Documents and Technical Specifications suitable for construction bid advertisement for the approved alignment in accordance with RTC standards and requirements. RTC will provide the boilerplate via email in MS Word format. The RTC, Local Entity and Quality Control review comments will be incorporated into the final Plans and Specifications. Final Design per this Task excludes the Section of Arrowcreek PKWY from 815' West if Geyser RD to Thomas Creek RD.

The final construction plans will be on 22" x 34" size sheets and will show all elements of the Project construction, including plan/profile view, right-of-way lines, cross-sections, and construction/slope limits. The final plan set will include, as a minimum:

- Cover Sheet
- Legend, General Notes, and Abbreviations
- Plan/Profile Sheets (at 1"=20' scale)
- Intersection, Grading, and Pedestrian Ramp Sheets (at 1"=20' scale)
- Signage and Striping Sheets (at 1"=20' scale)
- Detail Sheets (scale as noted)

Depths of existing sanitary sewer, storm drain and water utilities will be checked and noted on the plans if there is any reason to expect conflict due to vertical clearances. All located, existing underground utilities will be shown on the Plan Sheets accompanied with the following: "Note: Subsurface utilities are depicted by their Quality Levels in accordance with American Society of Civil Engineers Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data (CI/ASCE 38-02). All utility information shown hereon is depicted to Quality Level "C", unless otherwise noted."

The Contract Documents and Technical Specifications will reference the latest edition of Standard Specifications for Public Works Construction (Orange Book) for standard construction items. Technical provisions will be prepared for approved deviations from the Orange Book and unique construction items not adequately covered in the Orange Book. The final plans and specifications will be signed and sealed by a Nevada Registered Professional Civil Engineer in responsible charge of preparation. Plans and specifications will be submitted to the RTC, City of Reno, Washoe County, utility agencies and other affected parties for review at the 50%, 90%, 100% and final stages of completion per the following:

- 50% & 90% Plans Electronic (PDF); (1) half size and (1) full size set to RTC, Local Entity, and to each utility agency and other affected parties
- 90% Specifications Electronic (PDF, zipped folder with individual documents in Word format)

- to RTC, and Electronic PDF to Local Entity
- 100% Plans Electronic (PDF); (1) half size and (1) full size set to RTC, Local Entity, and to each utility agency and other affected parties
- 100% Specifications Electronic (PDF, zipped folder with individual documents in Word format) to RTC, and Electronic PDF to Local Entity
- Final Working Plan Set Electronic (PDF); (1) half size and (1) full size set to RTC, Local Entity, and to each utility agency and other affected parties
- Final Working Specification Document Electronic (PDF, zipped folder with individual documents in Word format) to RTC, and Electronic PDF to Local Entity
- 50%, 90%, 100%, IFB Engineer's Opinion of Probable Construction Costs Electronic (PDF, Excel spreadsheet format) to RTC
- 50%, 90%, 100% Submittal Comments will be tracked, addressed, and incorporated as applicable into the subsequent plan set by the CONSULTANT, utilizing a comment resolution matrix. CONSULTANT will assist in distributing the comment resolution matrix in Excel spreadsheet format to appropriate agencies and stakeholders, as directed by RTC.

90% Plans shall include Right-of-Way sheets, detail sheets, existing surface features, existing and proposed subsurface utilities (per paragraph, above), surface Improvements, plan and profile sheets with final roadway design (horizontal and vertical) identified for the Project. Striping and signage plans, pedestrian ramp grading, and any other details necessary for Construction shall be included with the 90% Submittal.

The 90% Submittal will address and incorporate as applicable, all comments generated from the 50% Submittal review.

100% and Issued for Bids (IFB) Submittal will address and incorporate as applicable, all comments generated from the 90% and 100% Submittal reviews, respectively. 90% and 100% design review meetings will be performed under Task 1.

The final plans and specifications will be signed and sealed by a Nevada Registered Professional Civil Engineer in responsible charge of the Project. CONSULTANT will prepare final signed and sealed plans and specifications and distribute as indicated above. The RTC will upload the documents to the ProcureWare system.

CONSULTANT will perform a quality control review of the plans, contract documents, technical specifications and Opinion of Probable Construction Costs and Time, which will focus on technical aspects of the plans, specifications and OPCC and will ensure that all items of work are adequately covered. A 2-hour constructability review meeting is anticipated near the 90% submittal to review any elements of design that warrant additional discussion in the field.

<u>Task 7.4 Amendment No.1</u>: Final design included the Section of Arrowcreek PKWY from 815' West of Geyser RD to Thomas Creek RD. The Wedge PKWY and Golden Gate Drive traffic signal modifications were also accommodated under this Task. Reallocating a portion of the remaining budget to other tasks. The Project realized budget savings in Task 7.1 due to minimal concrete improvements and minimal grade changes; as a result, \$69,850 of the \$270,000 budget is being reallocated to new design Tasks 4.5.2 and 7.3, as well as Construction Services Tasks 10 through 14.

7.2. Final Engineer's Opinion of Probable Construction Costs and Time

Original Contract: CONSULTANT will provide a final Engineer's opinion of probable construction

costs for the Project based on the final design and any alternatives or options, as part of the 90%, 100% and Issued for Bid (IFB) Submittal. The cost opinion will be in the same format as the bid proposal form included in the contract documents. The CONSULTANT will also estimate the number of working or calendar days, as appropriate, for the construction of the Project.

<u>Task 7.4 Amendment No.1</u>: 90% OPCC included the Section of Arrowcreek PKWY from 815' West of Geyser RD to Thomas Creek RD and the Golden Gate Drive traffic signal modifications. The Project realized budget savings in Task 7.2 due to less improvements and bid items in the Project than originally assumed; as a result, \$3,660 of the \$13,850 budget is being reallocated to Construction Services Tasks 10 through 14.

7.3. Final Design: MUP Plans, Specifications, and Opinion of Probable Construction Costs

Original Contract: Not included

Task 7.3 Amendment No.1: This task was created to advance the Wedge PKWY Multi-Use Path design beyond 90% through Bid Documents. The MUP structural section was also evaluated. MUP design up to 90% was included in Task 9 Design Contingency.

8. BIDDING SERVICES

8.1. Plan Set and Specification Distribution

Original Contract: CONSULTANT will provide RTC with final plans and specifications, including addenda, in Portable Document Format (PDF), for use in the ProcureWare system. CONSULTANT will issue and distribute the Conformed Set of Plans once the Contract for Construction has been awarded to the successful bidder.

Amendment No.1: No Change.

8.2. Pre-bid Meeting

<u>Original Contract</u>: CONSULTANT will be available during the bidding process to answer technical questions and will hold the pre-bid meeting. All questions and responses will be documented and provided to RTC. CONSULTANT will prepare and provide PDF addenda, if required. All questions regarding legal aspects of the contract documents will be referred directly to RTC. CONSULTANT will prepare and provide a PDF Summary of the pre-bid meeting, as directed by the RTC.

Amendment No.1: No Change.

8.3. Bid Opening

<u>Original Contract</u>: CONSULTANT will attend and participate in the bid opening and review the bids received for irregularities. CONSULTANT will provide a recommendation for award. CONSULTANT will tabulate bid results into an Excel spreadsheet and check multiplication and addition of bid items.

Amendment No.1: No change.

9. DESIGN CONTINGENCY

<u>Original Contract</u>: This task is a contingency for miscellaneous increases within the scope of this contract in the performance of services under Tasks 1 through 8 if authorized. If CONSULTANT determines that it is necessary to perform work to be paid out of contingency, CONSULTANT shall provide a letter detailing the need, scope, and not-to-exceed budget for any proposed work. Work under this task shall proceed only with the RTC Project Manager's prior written approval. Work will be performed on a time and materials basis in accordance with CONSULTANT'S fee schedule as included per Exhibit B-1.

Amendment No.1: RTC authorized Lumos to provide design of the Multi-Use path to 90% level using the Design Contingency Task. 100% and Issued for Bid plans, specifications, and OPCC will be provided under a new Task 7.3.

10. CONSTRUCTION ADMINISTRATION

Original Contract: Not included

Amendment No.1: CONSULTANT will provide contract administration services as follows:

- Coordinate and lead a preconstruction meeting prior to commencement of work and will prepare and issue via PDF an agenda and meeting summary.
- Coordinate and lead weekly construction progress meetings either on site, at the RTC Terminal building, or via Microsoft Teams, whichever venue may be appropriate. Prepare and issue via PDF an agenda and meeting summary for each weekly meeting.
 - o Anticipated 26 weekly meeting occurrences in this Task.
- Perform construction coordination
- Review and provide recommendations on contractor's traffic control plans
- Review contractor submittals for conformance to the contract documents
- Review and provide recommendations on test results
- Review and provide recommendations on contractor's construction schedule and work progress
- Review construction for acceptance and/or mitigation
- Provide verification and approval of contractor's monthly pay request
- Supervise the inspection and material testing activities
- Provide recommendations to the RTC for any necessary construction changes due to field conditions
- Assist in change order review and approval

11. CONSTRUCTION STAKING

Original Contract: Not included

<u>Amendment No.1:</u> CONSULTANT will provide construction staking at offsets designated by the contractor for the curb and gutter, driveway aprons, pedestrian ramps, catch basins, MUP alignment, manholes, reconstruction limits, and finish grade of the roadways. This will be limited to one (1) set of finish grade stakes.

CONSULTANT will provide record of survey for survey monuments installed in the affected roadways. Additionally, any survey markers required for the RoW dedication at Geyser Road is included in this

task. Control for the project will be referenced to the Nevada Coordinate System, West Zone, NAD83 using local combined scale factor to establish ground values for the project. Punch marks along with a "PLS' number will be placed on newly installed street centerline monuments. A Record of Survey will be prepared and filed with the Office of the Washoe County Recorder depicting the survey monuments that have been re-established.

12. CONSTRUCTION INSPECTION

Original Contract: Not included

<u>Amendment No.1:</u> The following staffing shall be provided for the duration of project construction:

• Provide Inspector(s) that have the appropriate certification required by the Nevada Alliance for Quality Transportation Construction (NAQTC). Provide one full-time Senior Inspector, ten (10) hour workdays for One Hundred Forty-Five (145) shifts, for a total of 1,450 hours and one part-time materials technician/supplemental inspector, four (4) hour workdays for One Hundred (100) shifts, for a total of 440 hours.

The inspectors will:

- Attend the preconstruction conference
- Monitor the work performed by the Contractor and verify that the work is in accordance with the plans and specifications
- Assist in problem resolution with the RTC, contractor personnel, utility agencies, the public and others
- Prepare daily inspection reports, submitted weekly to RTC and CC'd to the appropriate government jurisdiction(s).
- Provide quantity reports and assist in review of contractor's monthly progress payments
- Provide verification of the distribution of public relation notices required to be delivered by the contractor
- Assist in preparation of the Punch List
- Maintain a field blue line set of drawings to incorporate contractor record drawing mark-ups

13. MATERIALS TESTING

Original Contract: Not included

<u>Amendment No.1:</u> CONSULTANT will provide Materials Testing for compliance with the specifications per the Standard Specifications for Public Works Construction, Revision 8 of the 2012 Edition (Orange Book) testing requirements.

The following tests and frequencies shall be performed:

- Materials to be tested will include asphalt concrete, aggregate base, native subgrade material, structural fill, pipe bedding, and Portland Cement Concrete. Test reports, accompanied with CONSULTANT's recommendation regarding acceptance/mitigation of materials, shall be submitted promptly to the RTC and CC'd to appropriate governmental jurisdiction(s). Laboratory tests are anticipated to include cement treated base compression tests, moisture density curves, Atterberg limits, sieve analysis, and concrete compression tests.
- Provide On-site Nuclear Gauge Testing & Sampling during the placement of aggregate base and fill materials, on-site thin-lift Nuclear Gauge testing & sampling for asphalt concrete placement, and on-site PCC testing & sampling. Four hundred forty (440) hours of field testing are anticipated.
- Provide AC Testing. Provide asphalt concrete tests at a frequency of every five hundred (500) tons

- placed. Laboratory tests shall include ignition oven extraction, aggregate gradation, maximum theoretical specific gravity, flow & stability, and Marshall unit weight. Seventy-Three (73) hot mix samples are anticipated.
- Provide Asphalt Concrete Coring and Lab Testing. Lab test shall include core unit weight. Two Hundred Forty-Eight (248) asphalt cores, including joint cores are anticipated. Test reports will also include percent compaction.

14. RECORD DRAWINGS AND PROJECT CLOSEOUT

Original Contract: Not included

Amendment No.1: CONSULTANT shall provide record drawings based on Contractor and Inspector field markups for the completed project. An electronic plan set, in PDF format (11" x 17), will be provided to RTC for its files and distribution to local agencies as appropriate.

The final record drawings must be identified, dated and signed as the record drawings and must also contain the engineer's signature. These drawings may include either:

1. The final revisions on the original engineer-stamped/signed reproducible drawings, which will then also be identified as the record drawings, or

The record drawings shall include a copy of the original title sheet (including the appropriate signatures by RTC, local government, signed and stamped by the CONSULTANT) and identified as record drawings.

CONSULTANT will prepare a project closeout package with signed/sealed cover sheet/summary letter for the RTC that includes as-built drawings along with compiled testing and inspection reports, meeting summaries, substantial completion recommendation and final acceptance and relief of maintenance recommendation.

15. CONSTRUCTION SERVICES CONTINGENCY (OPTIONAL)

Original Contract: Not included

<u>Amendment No.1:</u> This task is contingency for miscellaneous increases within the scope of this contract in the performance of services. If CONSULTANT determines that it is necessary to perform work to be paid out of contingency, CONSULTANT shall provide a letter detailing the need, scope, and not-to-exceed budget for any proposed work. Work under this task shall proceed only with the RTC Project Manager's prior written approval. This task may or may not be used at the sole discretion of the RTC.

ASSUMPTIONS/EXCLUSIONS:

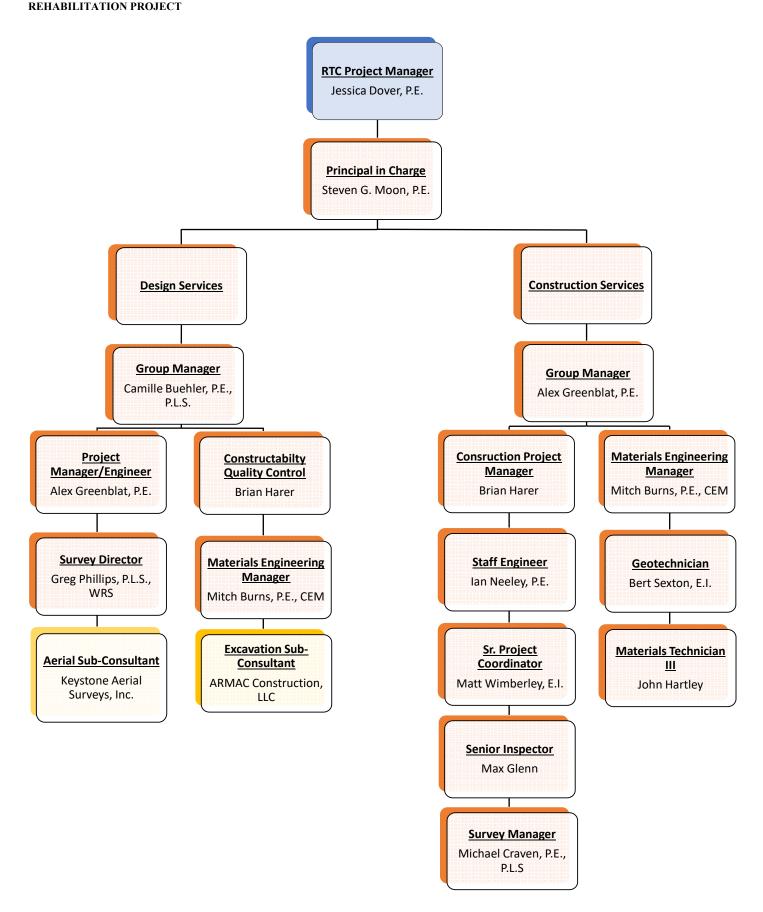
Original Contract:

- Construction Services, including but not limited to: Construction Administration, Construction Surveying/Staking, Construction Inspection, Materials Testing, and As-Built Information may be evaluated for inclusion as part of a future Amendment to the PSA.
- Subsequent to completion of Task 4.4, Develop Feasible Design Alternatives, and upon RTC's receipt of the final report resulting from Task 4.6, should applicable Entities, Agencies and other stakeholders as appropriate decide to incorporate this Section of Arrowcreek PKWY into final Project limits, CONSULTANT will provide a proposal for design of this segment. CONSUTLANT will advance this segment through preliminary/final design concurrently and in accordance with

- plan, specification and Engineer's Opinion of Probable Construction Costs per requirements outlined in Tasks 6 through 7.
- Work outside the established scope of work can be performed on a time and materials basis in accordance with Exhibit B-1
- RTC will coordinate directly with NDOT during the preliminary design phase.
- Scope excludes drainage analysis for the project

Amendment No. 1:

• Work outside the established scope of work can be performed on a time and materials basis in accordance with Exhibit B-1



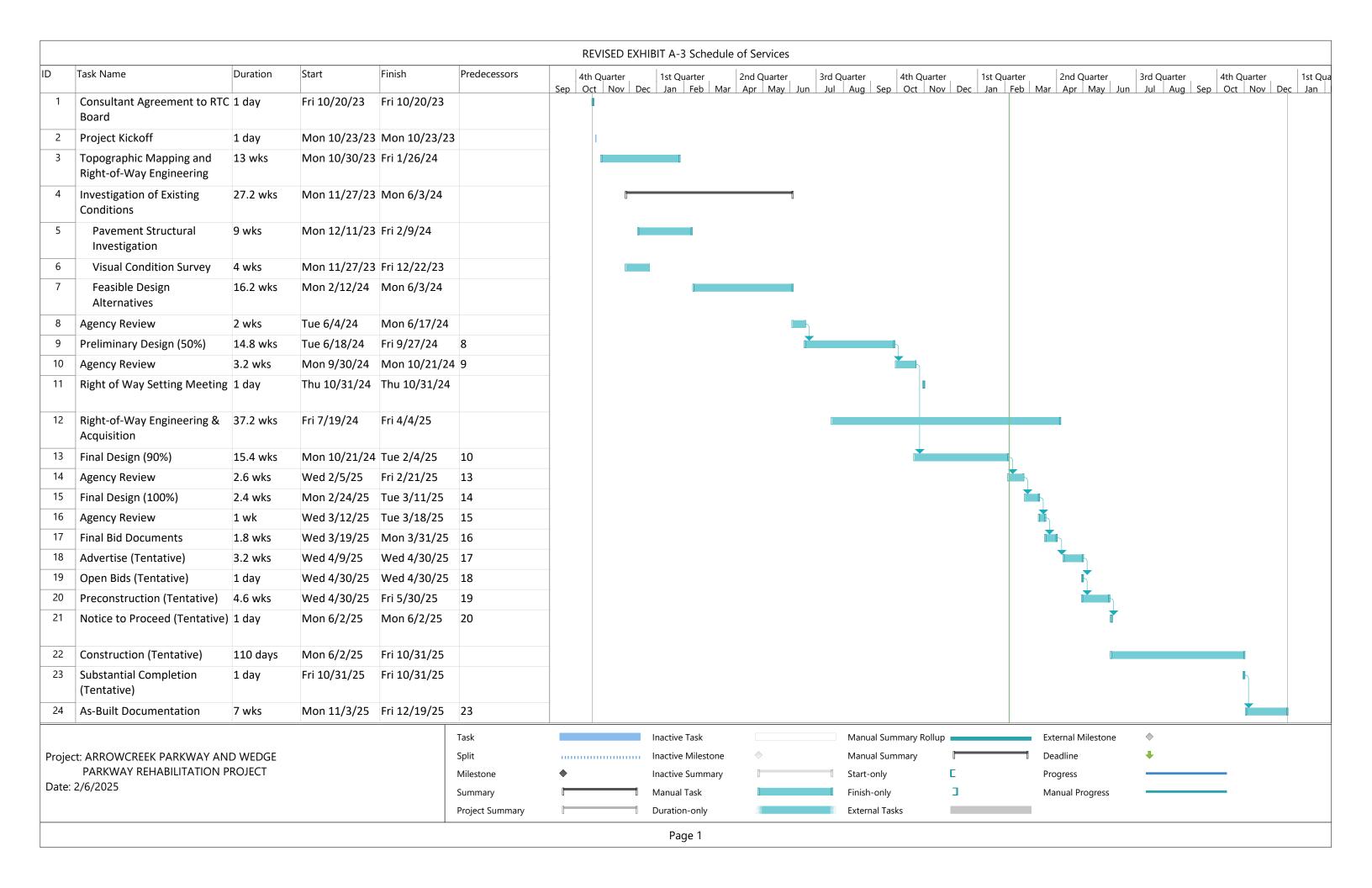


EXHIBIT B-1 through B-2

EXHIBIT B-1: HOURLY RATE FEE SCHEDULE

EXHIBIT B-2: FEE DETAIL





Engineering	Per Hour
Group Manager	\$265
Senior Project Manager	235
Project / Senior Engineer	190/200
Senior Project Coordinator	180
Project / Senior Project Designer	155/165
Engineering Technician II / III	135/145
Construction/Testing/Inspection	Per Hour
Director	\$280
Materials Engineering Manager	235
Senior Project Manager	235
Geotechnical Engineer	190
Senior Project Coordinator	180
Geotechnician	160
Inspector / Senior Inspector (includes nuclear gauge)	140/150
Construction Technician II /III	130/140
Materials Technician II / III (includes nuclear gauge)	120/130
Surveying	Per Hour
Group Manager	\$265
Project Manager	210
Staff Surveyor	170
Photogrammetry Manager	165
Surveying Technician II	125
2-Man Crew	250
Administrative	Per Hour
Administrator	\$95
Clerical	85



Particle Size Testing For Soils/Aggregates		Each
Sieve Analysis	(ASTM C-136/C-117)	\$200
Wash	(ASTM C-117)	150
Grain Size Analysis Soils	(ASTM D-421/422)	300
Sieve Analysis/Wash (coarse combined)	(ASTM C-136/C-117)	250

Soils & Aggregate Testing		Each
Specific Gravity & Absorption — Coarse or Fine Aggregate	(ASTM C-127/C-128)	\$150
Sand Equivalent	(ASTM D-2419)	200
Fractured Faces	(NDOT T-230)	100
L.A. Abrasion	(ASTM C-131)	250
Sodium Sulfate Soundness (5 cycles)	(ASTM C-88)	500
Moisture Content	(ASTM C-566)	50
Plastic Index	(ASTM D-4318)	225
Expansion Index	(ASTM D-4829)	300
R-Value	(ASTM D-2844)	350
Soluble Sulfates		Quote on request
рН	(ASTM D-4972)	Quote on request
Resistivity		Quote on request
Cement Treated Base Compression Test		75
Fine Durability Index	(ASTM D-3744)	250
Coarse Durability Index	(ASTM D-3744)	300
Cleanness Value	(CAL 229)	250

Moisture Density Testing		Each
Compaction	(ASTM D-698 or ASTM D-1557)	\$275
Rock Correction	(ASTM D-4718)	150
Check Point	(ASTM D-1557)	125

Emulsion Testing		Each
% Residue By Evaporation/Softening Point (Ring & Ball)	(AASHTO T-53 & T-59) 24 hr. turnaround	\$400
% Residue By Evaporation/Softening Point (Ring & Ball)	(AASHTO T-53 & T-59) 3-day turnaround	350
Saybolt Furol Viscosity Test @ 122°	(AASHTO T-59)	275
Rotational Paddle Viscosity	(ASTM D-7226 & AASHTO T-382)	500

Concrete Testing	Each	
Compression Concrete Cylinders	(ASTM C-39)	\$40
Hold Cylinder (Cured but not tested)		30
Compression, Concrete Core	(ASTM C-42)	40

Asphalt Concrete Testing						
Sieve Analysis	(ASTM D-5444)	\$125				
Unit Weight on Compacted Sample	(ASTM D-2726)	50				
Unit Weight on Core	(ASTM D-2726)	75				
Marshall Stability & Flow	(ASTM D-1559)	50				
Max. Theoretical Specs. Gravity	(ASTM D-2041)	100				
Bitumen Content	(ASTM D-6307)	150				
Asphalt Concrete Mix Design		Quote on request				
A.C. Series (Marshall)		675				
Oven Correction	(ASTM D-6307)	300				

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Annahed Sub Total Hay Annahed Sub Total Hay Annahed Sub Total Hay As Total Hay By			¢1 990															
Annesded Sub Total \$ 970			\$1,000				\$5,600	\$10,000										
1			3			12	32	80)									127
Perform Partic Counts and Generate Report 8uh Total Hrs. 18	Amended Sub Total \$		\$705			\$2,160	\$4,640	\$12,000										\$19,505
Sub Total His. Sub														,				
Sub Total Sub							4										\$1,000	
1.5 1.5	Sub Total Hrs.		16				4	20										40
Field Investigation	Sub Total \$		\$3,760				\$580	\$3,000									\$1,000	\$8,340
Field Investigation	4.3 - Pavement Structural Investigation													· I				
Draft Report & Lab Testing				4					32	12	2						\$20,200	\$27,820
Report Modifications & Meeting with RTC S			2	8	3													\$4,270
4.3.1 - Amendment No.1 Original Sub Total 15 Original Sub Total 15 S3,290 F7,050 Amended Sub Total 15 Amended Sub Total 15 S470 F1,050 F1,050			4	10)				36	32	!						\$16,600	\$31,330
Original Sub Total Fis.	·		8	8	1				8									\$5,800
Company Comp										-4						-0		
Amended Sub Total Hrs. Annended Sub Total S Annended Sub Total S S470 S11,750 S10,750 S8,40 S5,200 S S5,200 S S1,770 S36,00 S8,41 S1,770 S36,00	5		* * *								<u> </u>							200
Amended Sub Total \$ \$470 \$11,750 \$ \$ \$ \$ \$12,80 \$5.200 \$ \$ \$ \$ \$ \$1,750 \$36,800 \$88,41 \$44. Develop Feasible Design Alternatives Alternatives Analysis \$ 20 \$ 40 \$ 20 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Original Sub Total \$		\$3,290	\$7,050					\$14,080	\$5,720						\$2,280	\$36,800	\$69,220
A4-Develop Feasible Design Alternatives	Amended Sub Total Hrs.		2	50					78	40						18		188
A4-Develop Feasible Design Alternatives	Amended Sub Total \$		\$470	\$11 750					\$12.480	\$5,200						\$1 710	\$36,800	\$68 410
Alternatives Analysis Summary Memorandum and Exhibits Summary Memorandum and Summary S			ψ11.5	Ţ.1,100				-	Ų. <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	+3,200						Ψ1,1 10	\$30,030	400,110
Summary Memorandum and Exhibits 16			20		40		20				T							\$15,600
Criginal Sub Total Hrs. S	Summary Memorandum and Exhibits				20													\$12,110
Original Sub Total \$8,460			28															(\$4,380)
Amended Sub Total Hrs. 64 11 42 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Original Sub Total Hrs.		36		60		50											146
Amended Sub Total Hrs. 64 11 42 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Original Sub Total \$		\$8,460		\$12,000		\$7,250											\$27,710
Amended Sub Total \$ \$15,040 \$ \$2,000 \$ \$6,090 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$																		117
4.5 - Utility Investigation/Coordination 4.5.1 - Utility Coordination 32 28 8 8 8 8 8 9 \$13,88 4.5.2 - Pothole Exploration 6					• •													
4.5.1 - Utility Coordination 32 28 8 8 8 8 9 \$13,88 4.5.2 - Pothole Exploration 9 <t< td=""><td></td><td></td><td>φ10,040</td><td></td><td>φ∠,∠00</td><td></td><td>φυ,υ90</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>φ∠3,330</td></t<>			φ10,040		φ∠,∠00		φυ,υ90											φ∠3,330
4.5.2 - Pothole Exploration			201		T	201		1	1	ı	T) I	1	ı			¢42.000
4.5.3 - Amendment No. 1		1	32			28		1			1			<u> </u>				ক । ১,৪৪८
Original Sub Total Hrs. 32 28 8 8 8 9 6 6 Original Sub Total \$ \$7,520 \$5,040 9 9 \$1,320 9 9 9 \$13,88 Amended Sub Total Hrs. 16 7 20 9 <td< td=""><td></td><td>1</td><td>-16</td><td></td><td></td><td>-21</td><td></td><td>20</td><td></td><td></td><td>+</td><td></td><td>1</td><td>1</td><td></td><td></td><td>\$21 900</td><td>\$16 040</td></td<>		1	-16			-21		20			+		1	1			\$21 900	\$16 040
Original Sub Total \$ \$7,520 \$5,040 \$ \$ \$1,320 \$ \$ \$13,88 Amended Sub Total Hrs. 16 7 20 8 8 9 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>20</td> <td></td> <td></td> <td></td> <td>-0</td> <td></td> <td></td> <td></td> <td></td> <td>Ψ21,500</td> <td>\$10,040 68</td>								20				-0					Ψ21,500	\$10,040 68
Amended Sub Total Hrs. 16 7 20 20 20 20 20 20 20 20 20 20 20 20 20	Ÿ																	
			\$7,520			\$5,040						\$1,320						\$13,880
Amended Sub Total \$ \$3,760 \$1,260 \$3,000 \$21.900 \$29.92	Amended Sub Total Hrs.		16			7		20										43
	Amended Sub Total \$		\$3,760			\$1,260		\$3,000									\$21,900	\$29,920

ARROWCREEK PKWY & WEDGE PKWY							EXHIB	IT B-2.1									
REHABILITATION PROJECT							FEE D	ETAIL									
							Amendm	nent No.1								DATE: 3	2/10/2025
BUDGET ESTIMATE	MANA	GEMENT		ENGIN	EERING		(ONSTRUCTIO	N		SUR	VEY	ADMIN	OTHER	TOTALS		
FEE	\$265	\$235	\$235	\$200	\$180	\$145	\$150	\$160	\$130	\$210	\$165	\$170	\$250	\$125	\$95		
																SUBS	
TITLE	GROUP		MATERIALS			ENGR	SENIOR	GEO	MATERIALS		PHOTOGRAMMETRY		2 MAN	SURVEY	ADMINISTRATOR	LAB COSTS	
TASK	MANAGER	MANAGER	MANAGER	ENGINEER	COORDINATOR	TECH III	INSPECTOR	TECHNICIAN	I ECHNICIAN II	MANAGER	MANAGER	SURVEYOR	CREW	TECH II		OTHER	TOTAL
5.1 - Public Information Meeting and Exhibits		8				16							1			I	\$4,200
5.2 - One-on-One Meetings with Stakeholders		8				16											\$4,200
· · · · · · · · · · · · · · · · · · ·																	
Preliminary Plan Sheets (50%), & Estimate		16		120	180	200											\$89,160
																<u> </u>	
7.1 - Final Design: Plans and Specs	19	130	29	334	440	480	80										\$270,000
7.2 - Final Design: OPCC	1	10	1	26		40											\$13,850
7.3 - Final Design: MUP Plans, Specs, and OPCC		12		44		32											\$16,260
7.4 - Amendment No.1	-20		-20	120	-440	-40	-80									\$25,000	(\$73,510)
Original Sub Total Hrs.	20		30		440		80										1590
Original Sub Total \$	\$5,300	\$32,900	\$7,050	\$72,000	\$79,200	\$75,400	\$12,000										\$283,850
Amended Sub Total Hrs.		86	10	524		512											1132
Amended Sub Total \$		\$20,210	\$2,350	\$104,800		\$74,240										\$25,000	\$226,600
8 - Bidding Services																	
RFIs/Addendums/Bid Tabs/Attendance in Pre-bid and opening		24		12		12											\$9,780
Sub Total Hrs.		24		12		12											48
Sub Total \$		\$5,640		\$2,400		\$1,740											\$9,780
9 - Design Contingency																	
Design Contingency (MUP design through 90%)																\$40,000	\$40,000
Sub Total Hrs.																	
Sub Total \$																\$40,000	\$40,000
																_	
OrignaL Total Hrs.	38		60							240				260			4372
ORIGINAL TOTAL DESIGN SERVICES	\$10,070	\$139,590	\$14,100	\$122,400	\$116,640	. ,	\$33,000	\$14,080	\$5,720	\$50,400		\$18,360		\$32,500	\$2,280	\$92,850	\$885,020
Amended Total Hrs.	16	541	60	679	199	854	120	78	40	166	120	16	170	224	18	0.100.775	3301
AMENDED TOTAL DESIGN SERVICES	\$4,240	\$127,135	\$14,100	\$135,800	\$35,820	\$123,830	\$18,000	\$12,480	\$5,200	\$34,860	\$19,800	\$2,720	\$42,500	\$28,000	\$1,710	\$139,750	\$745,945

ARROWCREEK PKWY & WEDGE PKWY
REHABILITATION PROJECT

EXHIBIT B-2.2 FEE DETAIL

150 Calenday Days	Amendment No.1													DATE: 2/10/2025			
BUDGET ESTIMATE	MANA	GEMENT	ENGINEERING			C	CONSTRUCTION SUR						SURVEY ADMIN				
FEE	\$265	\$235	\$235	\$200	\$180	\$145	\$150	\$160	\$130	\$265	\$165	\$170	\$250	\$125	\$95		
																SUBS	
TITLE		SR. PROJECT	MATERIALS		SR. PROJECT	ENGR	SENIOR	GEO	MATERIALS	SURVEY	PHOTOGRAMMETR'		2 MAN	SURVEY	ADMINISTRATOR	LAB COSTS	
TASK	MANAGER	MANAGER	MANAGER	ENGINEER	COORDINATOR	TECH III	INSPECTOR	TECHNICIAN	TECHNICIAN II	MANAGER	MANAGER	SURVEYOR	CREW	TECH II		OTHER	TOTAL
10 - Construction Administration					T					1		T					
Construction Administration	60		30			40			2	:	2				30		\$151,640
Sub Total Hrs.	60	200	30			40			2		2				30		606
Sub Total \$	\$15,900	\$68,150	\$7,050	\$24,000	\$10,800	\$5,800	\$300		\$260	\$530					\$2,850		\$151,640
11 - Construction Staking																	
Construction Staking		10								6		36		150			\$91,870
Record of Survey										18	~		36	36			\$18,270
Sub Total Hrs.		10								78	*	36		186			355
Sub Total \$		\$2,350								\$20,670		\$6,120	\$57,750	\$23,250			\$110,140
12 - Construction Inspection																_	
Inspection Coordination and Oversight		90			60												\$31,950
Construction Inspection							1450		440								\$274,700
Sub Total Hrs.		90			60		1450		440								2040
Sub Total \$		\$21,150			\$10,800		\$217,500		\$57,200								\$306,650
13 - Materials Testing																	
Materials Testing Coordination and Oversight			60												70		\$20,750
Materials Testing (Field)								30	440								\$62,000
Materials Testing (Lab)																\$101,935	\$101,935
Sub Total Hrs.			60					30	440						70		600
Sub Total \$			\$14,100					\$4,800	\$57,200						\$6,650		\$184,685
14 - Record Drawings and Project Closeout										•			<u> </u>				
Record Drawings	4	4		40			12										\$11,800
Sub Total Hrs.	4	4		40			12										60
Sub Total \$	\$1,060	\$940		\$8,000			\$1,800										\$11,800
15 - Construction Services Contingency		·			l l					l .	- I	1	l l				· · · · ·
Construction Contingency													I			\$40,000	\$40,000
Sub Total Hrs.																, ,,,,,	, ,,,,,,
Sub Total \$																\$40,000	\$40,000
- Cub Fotal \$																Ţ . I , 0 0 0	‡ 11,000
Total Hrs.	64	394	90	160	120	40	1464	30	882	8	0	36	231	186	100		3877
TOTAL CONSTRUCTION SERVICES:	\$16.960	\$92.590	\$21,150	\$32.000		\$5.800		\$4.800	\$114.660	\$21,200		\$6.120		\$23.250	\$9,500	\$157,935	\$804,915
TOTAL CONCINCOTION CENTROLS.	Ψ10,000	Ψ02,000	Ψ21,100	Ψ02,000	Ψ21,000	Ψ0,000	Ψ2 10,000	ψ-1,000	Ψ114,000	Ψ21,200		ψ0, 120	ψ01,100	Ψ20,200	ψ0,000	Ψ101,000	ψ00 -1 ,010

Meeting Date: 2/21/2025 Agenda Item: 4.3.12

To: Regional Transportation Commission

From: Dale Keller, Director of Engineering

SUBJECT: Settlement – Alltaken, Inc. - Mill Street Capacity and Safety Project

RECOMMENDED ACTION

Approve a settlement between RTC and Alltaken, Inc., dba Wienerschnitzel Store Number 612, in the amount of \$450,000, to resolve any and all claims related to a business displaced by the Mill Street Capacity and Safety Project.

BACKGROUND AND DISCUSSION

RTC is in the process of acquiring property needed for the Mill Street Capacity and Safety Project (the "Project"). Alltaken, Inc. owns and operates the Wienershnitzel business that will be displaced by the project. RTC and Alltaken, Inc. have negotiated the attached settlement agreement. Under the terms of the settlement, RTC will pay Alltaken, Inc. \$450,000 to resolve any and all claims regarding the Project and the amounts it may or may not be entitled to under applicable law. 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 costs of the settlement are included in the FY 2025 budget.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

SETTLEMENT AGREEMENT

This Settlement Agreement (this "Agreement") is made this February 21, 2025 ("Effective Date") and entered into by and between Regional Transportation Commission of Washoe County ("RTC") and Alltaken, Inc. ("Alltaken"). RTC and Alltaken are sometimes referred to collectively herein as the "Parties" and individually as a "Party."

WHEREAS, the RTC acquired a fee simple interest in the entirety of the parcel described at the time as Assessor's Parcel Number 013-082-19 under the threat of exercise of the power of eminent domain and as part of its efforts to acquire the property interests needed to construct the Mill Street Capacity and Safety Project (the "Project");

WHEREAS, Alltaken owned and operated a Wienerschnitzel franchise business, store number 612 (the "Business") on the parcel and leased the premises from the former owner of the parcel;

WHEREAS, RTC notified Alltaken that the Business would be displaced by the Project and that Alltaken was entitled to relocation assistance under RTC's policy for relocation assistance as required by NRS chapter 342;

WHEREAS, as a result of various circumstances and factors that may or may not be in dispute among the Parties, the Business has not been relocated, will not be relocated, and did close on or about January 31, 2025;

WHEREAS, without any admission of fault or liability on the part of either Party, the Parties have negotiated this Agreement to resolve any and all potential claims and litigation related to the Project and the amounts that Alltaken 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. <u>Incorporation</u>. The foregoing recitals are true and correct and incorporated herein by reference.
- Settlement Amount. The Parties agree RTC will pay Alltaken the sum of \$450,000
 ("Settlement Amount") no later than 15 days after the Effective Date.
- 3. <u>No Further Relocation Assistance</u>. Alltaken vacated the premises on February 5, 2025, and moved its personal property from the premises into storage. RTC has or will reimburse Alltaken for the agreed upon cost of that move. Alltaken has no other claims for relocation assistance related to the Project, and it shall have no further claim for, or right to, payment or reimbursement of relocation-related expenses.
- 4. 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.

- 5. <u>No Admission of Fault or Liability</u>. 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.
- 6. <u>No Assignment</u>. 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.
- 7. <u>Franchise Obligations</u>. Alltaken shall be solely responsible for any and all obligations related to its franchise agreement with Galardi Group Franchise Corp. Alltaken shall indemnify, defend and hold harmless the RTC and its officers, directors, and employees from and against any claims, demands, causes of actions, suits, and proceedings initiated by the Galardi Group Franchise Corp. or its successor or assigns that may arise from, be related to, or are in connection with the franchise, the franchise agreement, this Agreement, or the Project.
- 8. <u>Each Party Solely Responsible for Tax Consequences</u>. 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.
- 9. <u>Joint Drafting</u>. 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.

- 10. 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.
- 11. 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.
- 12. <u>Choice of Law</u>. 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.

13. 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.

14. 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.

15. <u>Waiver</u>. 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.

16. <u>Notices</u>. All notices and other communications hereunder shall be in writing and

shall be personally delivered or mailed by first-class registered or certified mail, postage prepaid,

or sent by Federal Express or another nationally recognized overnight courier service that

guarantees next day delivery and provides a receipt, addressed to the respective party as the case

may be at the respective addresses set forth below, or at such other address as either party shall

have furnished to the other in writing as herein set forth:

If to Alltaken: Anthony Coltin, President

351 Brownlee Lane Sun Valley, NV 89433

If to RTC: Bill Thomas, Executive Director

1105 Terminal Way Reno, NV 89502

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17. <u>Signatures</u>. Each Party represents that it and, if applicable, its undersigned representative, are duly authorized and empowered to sign this Agreement.

18. <u>Counterparts</u>. 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.

IN WITNESS WHEREOF, the Parties have executed this Agreement to be effective as of the Effective Date.

REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY

Bill Thomas, Executive Director
ALLTAKEN, INC.
Anthony Coltin, President

Meeting Date: 2/21/2025 12:00:00 AM **Agenda Item:** 4.3.13

To: Regional Transportation Commission

From: Michele Payne, Property Agent

SUBJECT: Administrative Settlement - Marina Marketplace 2, LLC - Sparks Boulevard Capacity Improvement Project

RECOMMENDED ACTION

Approve an administrative settlement in the amount of \$79,286 authorizing RTC to acquire certain property interests related to APN: 037-020-42 from Marina Marketplace 2, LLC, for the Sparks Boulevard Capacity Improvement Project.

BACKGROUND AND DISCUSSION

RTC is in the process of acquiring property needed for the Sparks Blvd Capacity Improvement Project. RTC and the property owner, Marina Marketplace 2, LLC, have negotiated an agreement to purchase certain property interests related to APN 037-020-42, contingent upon Board approval. The proposed purchase price is \$186,715, which represents a proposed administrative settlement of \$79,286 above RTC's original appraised value and offer of \$107,429. RTC Management Policy P-55 requires Board approval of administrative settlements in excess of \$50,000.

Staff recommends approval of the settlement. If the Board approves the settlement, the Executive Director will execute the attached agreement and RTC will acquire the property interests. If the Board does not approve the settlement, staff will continue to attempt to negotiate for the purchase of the property interests until it becomes necessary to file a complaint in eminent domain.

FISCAL IMPACT

The costs to acquire the subject property interests are included in the FY 2025 budget.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

Sparks Boulevard Improvement Project – North Phase Project #: 227001 Parcel: 037-020-42

Situs: 1475 E. Prater Way

PUBLIC HIGHWAY AGREEMENT

THIS PUBLIC HIGHWAY AGREEMENT ("AGREEMENT") made this ______ day of ______, 2024 (the "EFFECTIVE DATE"), by and between, MARINA MARKETPLACE 2, LLC, a Nevada limited liability company, hereinafter called the ("OWNER"), and the REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY, hereinafter called the ("RTC").

WITNESSETH:

- 1. That the OWNER, for and in consideration of the covenants to be performed and payments to be paid as herein provided, represents the following:
- (a) OWNER is the owner of that certain real property located in Washoe County, Nevada, described as Assessor's Parcel Number 037-020-42 (the "OWNER PROPERTY").
- (b) OWNER owns fee title to OWNER PROPERTY and there are no prior encumbrances, liens, restrictions, covenants or conditions applicable to the OWNER PROPERTY which will frustrate or interfere with the purposes of this AGREEMENT.
- (c) That there are no leases, licenses, conditions, actions or threatened or pending litigation related to the OWNER PROPERTY which will frustrate or interfere with the purposes of this AGREEMENT.
- 2. That the OWNER, for and in consideration of the covenants to be performed and payments to be paid as herein provided, agrees as follows:
- (a) To sell and convey a portion of the OWNER PROPERTY to the RTC, free and clear of any liens or encumbrances created by OWNER, by way of a grant, bargain and sale deed in substantially the form attached hereto as <u>Schedule 1</u>; this real property is described on Exhibit "A" to <u>Schedule 1</u> and depicted on Exhibit "B" to Schedule 1, attached hereto and made a part hereof (the "LAND").
- (b) To grant a permanent easement to the RTC upon, over and across a portion of the OWNER PROPERTY by way of a permanent easement document in substantially the form attached hereto as <u>Schedule 2</u>; this permanent easement is described on Exhibit "A" to <u>Schedule 2</u> and depicted on Exhibit "B" to <u>Schedule 2</u>, attached hereto and made a part hereof (the "PERMANENT EASEMENT AREA").
- (c) To grant a temporary construction easement to the RTC upon, over and across a portion of the OWNER PROPERTY by way of a temporary construction easement document in substantially the form attached hereto as <u>Schedule 3</u>; this temporary construction easement is described on Exhibit "A" to <u>Schedule 3</u> and depicted on Exhibit "B" to <u>Schedule 3</u>, attached hereto and made a part hereof (the "TCE EASEMENT AREA").
- (d) To deliver to AtkinsRéalis at 10509 Professional Circle, Ste 103, Reno, NV 89521 (Attn: Ray M. Luciani), hereinafter called the "CONSULTANT", all the aforementioned documents, fully executed and notarized where required.
- (e) To deliver to CONSULTANT such other documentation as CONSULTANT may reasonably require to close the transaction and consummate the property rights transfers in accordance with the terms of this AGREEMENT.

- (f) To be responsible for the LAND, PERMANENT EASEMENT AREA and TCE EASEMENT AREA, including risk and liability for loss and damage, including all repairs to the premises prior to the CLOSING DATE.
- (g) To acknowledge and hereby does acknowledge, that a public highway and the necessary incidents thereto (the "PROJECT"), are to be located upon, over, and across the LAND.
- (h) To waive, and hereby does waive, all claims and rights that OWNER may have to seek consequential, special and/or punitive damages in relation to any breach of the obligations contemplated in this AGREEMENT and acknowledges that nothing in this AGREEMENT is intended to or shall it be construed to waive the rights, limitations and immunities of the RTC under Nevada Revised Statutes Chapter 41.
- 3. The RTC, in consideration of the promises and covenants of the OWNER herein set forth, agrees as follows:
- (a) To pay to the OWNER the sum of ONE HUNDRED EIGHTY-SIX THOUSAND SEVEN HUNDRED FIFTEEN AND NO/100 DOLLARS (\$186,715.00), which shall be the total purchase price for the LAND, PERMANENT EASEMENT AREA AND TCE EASEMENT AREA, together with improvements (7 trees) located within the acquisition areas, and an Administrative Settlement.
- (b) To deliver to CONSULTANT such other documentation as CONSULTANT may reasonably require to close the transaction and consummate the property rights transfers in accordance with the terms of this AGREEMENT.
- (c) To acknowledge, and hereby does acknowledge, that the real property conveyed hereby is transferred and sold "AS IS", "WHERE IS", WITH ALL FAULTS AND CONDITIONS THEREON, and that OWNER has not made and specifically disclaims any representations, warranties, promises, covenants or guaranties of any kind or character whatsoever, whether express or implied, oral or written, past, present or future with respect to the LAND, PERMANENT EASEMENT AREA and TCE EASEMENT AREA, and hereby waives any right to make any claim against OWNER based on any of the foregoing.
- (d) To leave the TCE EASEMENT AREA in as neat and presentable a condition as existed prior to RTC's entry.
- 4. In the event of any default by OWNER under this AGREEMENT, the RTC may, as its sole and exclusive remedy for such default, either: (1) terminate this AGREEMENT in its entirety by delivery of notice of termination to OWNER and receive a refund of all amounts paid by RTC to the OWNER, or (2) continue this AGREEMENT pending the RTC's action for injunctive relief and/or specific performance hereunder provided appropriate proceedings are commenced by the RTC within ninety (90) days following RTC's written notice to OWNER of OWNER's default. Nothing in this Section shall limit or impair the rights of the RTC to condemn or exercise its power of condemnation and eminent domain with respect to real property interests needed for the PROJECT including, but not limited to, the LAND, PERMANENT EASEMENT AREA and TCE EASEMENT AREA.
- 5. With respect to the PROJECT, it is mutually agreed and understood by the RTC and by the OWNER as follows:
- (a) Based upon the best information available to RTC for the time frame of the PROJECT, the term of the TCE EASEMENT AREA shall commence on March 1, 2025 and shall continue through and including February 29, 2028. The RTC shall have the option, at its sole discretion, to extend the term of the TCE EASEMENT AREA under the same terms and conditions of this AGREEMENT, for One (1) additional successive term of Twelve (12) months, for a total TCE EASEMENT AREA term not to exceed four (4) years, by delivering written notice to OWNER not later than January 31, 2028. The RTC's exercise of the term extension option shall not be effective or binding upon the RTC unless and until the same has been approved by the appropriate official action of the RTC and communicated in writing to the OWNER.

- (b) In the event the RTC exercises its option to extend the term of the TCE EASEMENT AREA, the rental rate price to be paid by the RTC to the OWNER shall be: FIFTY DOLLARS AND 50/100 (\$50.00) per square foot for Assessor Parcel No. 037-020-42 multiplied by a rental rate of TWELVE percent (12%) multiplied by ONE (1) year, for a total amount of SIXTEEN THOUSAND ONE HUNDRED SEVENTY-SIX AND NO/100 DOLLARS (\$16,176.00). Payment of the foregoing sum to OWNER by the RTC shall be a condition to the effectiveness of the option to extend the term of the TCE EASEMENT AREA. Upon completion of the Project, the RTC will execute any documentation as may be reasonably necessary to cause the TCE EASEMENT AREA to be released of record.
- (c) That as soon as reasonably practicable following the EFFECTIVE DATE hereof, the RTC shall commence and thereafter shall use its commercially reasonable best efforts to complete the PROJECT within the timeline (as may be extended) previously provided to OWNER and as provided for by all applicable laws and standards.
 - 6. It is further mutually agreed and understood by the RTC and by the OWNER as follows:
- (a) The laws of the State of Nevada shall be applied in interpreting and construing this AGREEMENT. The party's consent to the exclusive jurisdiction and venue of the Second Judicial District Court in and for the State of Nevada, located in Washoe County, Nevada, for the enforcement of this AGREEMENT.
- (b) This AGREEMENT shall constitute the entire contract between the parties hereto, and no modification hereof shall be binding upon the parties unless the same is in writing and signed by the respective parties hereto.
- (c) All covenants and agreements herein contained shall extend to and be obligatory upon the heirs, executors, administrators, successors, and assigns, as the case may be, of the respective parties.
- (d) As used herein the term OWNER shall include the plural as well as the singular, and the feminine as well as the masculine and the neuter.
 - (e) The covenants and agreements expressed in the AGREEMENT shall survive the Close.
- (f) The regulations pertaining to nondiscrimination and Title VI of the Civil Rights Act of 1964, as contained in Title 23, Code of Federal Regulations Part 200, and Title 49, Code of Federal Regulations Part 21, are hereby incorporated by reference and made a part of this AGREEMENT.
- (g) Except as otherwise provided for by law or this AGREEMENT, the rights and remedies of the parties hereto shall not be exclusive and are in addition to any other rights and remedies provided by law or equity.
- (h) That the persons signing this AGREEMENT and all related documents on behalf of the RTC and OWNER are duly authorized to so sign and have the full power and authority to bind them, and to enter into and perform the obligations hereunder.
 - (i) That this AGREEMENT may be executed in counterpart.
- (j) Notices. Except as otherwise expressly specified in this AGREEMENT, all notices, requests, consents, approvals, agreements, authorizations, acknowledgments, waivers and other communications required or permitted hereunder shall be in writing to the addresses set forth below and shall be deemed given: (i) immediately when delivered by hand; (ii) the next business day when sent by overnight delivery by internationally recognized express courier such as Federal Express or UPS; or (iii) three (3) days after deposit in the United States mail postage prepaid, registered or certified mail, return receipt requested:

To RTC:

Regional Transportation Commission of Washoe County Attn: Michele Payne 1105 Terminal Way, Suite 108 Reno, NV 89502

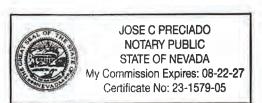
To OWNER:

Marina Marketplace 2, LLC Attn: Victor and Evye Szanto PO Box 11274 Zephyr Cove, NV 89448

Signature Pages Follow

IN WITNESS WHEREOF the parties hereto have executed this AGREEMENT the day and year first above written. OWNER: MARINA MARKETPLACE 2, LLC, a Nevada limited liability company Victor Szanto, Manager Evve Szanto, Manager STATE OF News SS. COUNTY OF DO by Victor Szanto as Manager of MARINA MARKETPLACE 2, LLC, a Nevada limited liability company. S JOSE C PRECIADO E notarial officer **NOTARY PUBLIC** A STATE OF NEVADA y Commission Expires: 08-22-27 Certificate No: 23-1579-05 STATE OF News COUNTY OF 160 9 This instrument was acknowledged before me on _ by Evye Szanto as Manager of MARINA MARKETPLACE 2, LLC, a Nevada limited liability company.

S E A L



Signature of notarial officer

yose e. Meciza

RTC Signature Page Follows

RTC:		
REGIONAL TRANSPORTATION CO	DMMISSION OF WASHOE COUNTY	
Bill Thomas, Executive Director		
STATE OF NEVADA)	
COUNTY OF WASHOE) ss.)	
This instrument was acknowl	edged before me on	
by Bill Thomas as Executive Directo	r of the Regional Transportation Commission of Washoe County.	
S E A L	Signature of notarial officer	
	Print Name	



10509 Professional Circle, Ste. 103 Reno, Nevada 89521

Telephone: 775.828.1622

atkinsrealis.com

EXHIBIT "A"

LEGAL DESCRIPTION RIGHT-OF-WAY ACQUISITION APN 037-020-42

THAT PORTION OF THE REAL PROPERTY DESCRIBED IN THAT CERTAIN GRANT, BARGAIN, AND SALE DEED, DOCUMENT NUMBER 4637176, BEING PARCEL B-1 OF PARCEL MAP 3860, OFFICIAL RECORDS, WASHOE COUNTY, NEVADA, SITUATE IN THE SOUTHEAST QUARTER (SE1/4) OF SECTION 3, TOWNSHIP 19 NORTH, RANGE 20 EAST, M.D.M., CITY OF SPARKS, NEVADA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID PARCEL B-1, SAME BEING ON THE SOUTHERLY RIGHT-OF-WAY OF PRATER WAY, AS SHOWN BY SAID PARCEL MAP; THENCE DEPARTING SAID SOUTHERLY RIGHT-OF-WAY, SOUTH 00°11'20" WEST ALONG THE EASTERLY LINE OF SAID PARCEL B-1, A DISTANCE OF 12.92 FEET; THENCE DEPARTING SAID EASTERLY LINE, NORTH 89°54'04" WEST, A DISTANCE OF 148.82 FEET; THENCE NORTH 01°58'42" EAST, A DISTANCE OF 15.20 FEET TO SAID SOUTHERLY RIGHT-OF-WAY; THENCE SOUTH 88°01'18" EAST, ALONG SAID RIGHT-OF-WAY, A DISTANCE OF 65.24 FEET; THENCE SOUTH 89°48'41" EAST, CONTINUING ALONG SAID RIGHT-OF-WAY, A DISTANCE OF 83.14 FEET TO THE POINT OF BEGINNING.

CONTAINING 2,004 SQUARE FEET (0.05 ACRES), MORE OR LESS, AS DETERMINED BY COMPUTER METHODS. AS SHOWN ON EXHIBIT "B" ATTACHED HERETO AND MADE A PART HEREOF.

BASIS OF BEARINGS

THE BASIS OF BEARINGS AND COORDINATE REFERENCE FOR THIS PROJECT IS THE NORTH AMERICAN DATUM OF 1983 ESTABLISHED FROM FEDERAL BASE NETWORK/COOPERATIVE BASE NETWORK OBSERVATIONS IN 1994 (ALSO KNOWN AS NAD83/94), NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE, HOLDING WASHOE COUNTY PUBLISHED LATITUDE 39°32′16.44843″ NORTH AND LONGITUDE 119°53′08.87676″ WEST FOR REGIONAL GPS CONTINUOUS OPERATING REFERENCE STATION (CORS) "RNO1" (WASHOE COUNTY IDENTIFIER N74SM01028) AND UTILIZING A GRID-TO-GROUND COMBINED FACTOR OF 1.000197939 TO PROJECT STATE PLANE COORDINATES TO GROUND EQUIVALENT COORDINATE VALUES AND CONVERTED TO U.S. SURVEY FEET.

END OF DESCRIPTION.

10509 Professional Circle, Suite 103 Reno, Nevada 89521

Telephone: 775.828.1622

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EXPIRES: 06/30/2025 03/23/2024

BRETT K. JEFFERSON, P.L.S. NEVADA LICENSE NUMBER 8421

PHONE: (702) 551-0296

EMAIL: <u>BRETT.JEFFERSON@ATKINSREALIS.COM</u>

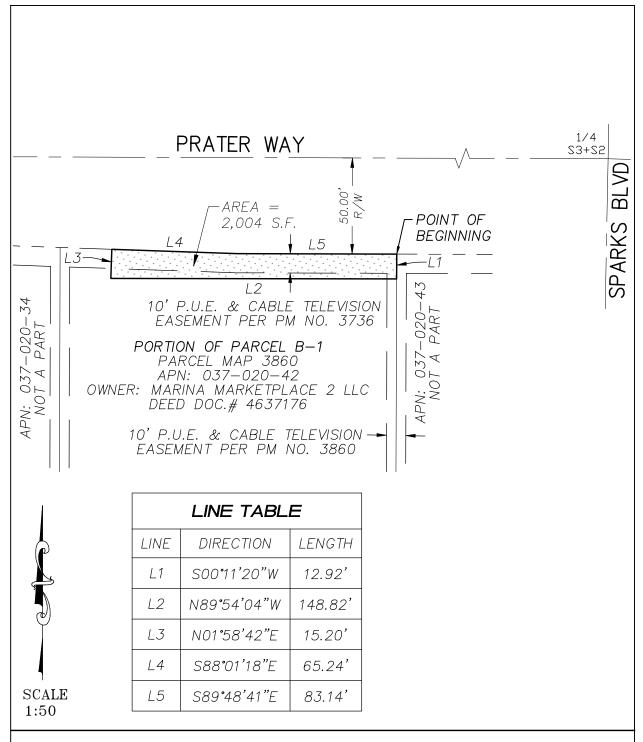


EXHIBIT "B"

SPARKS BLVD RTC PROJECT RIGHT-OF-WAY ACQUISITION

APN: 037-020-42

A PORTION OF PARCEL B-1 OF PARCEL MAP 3860 IN THE SOUTHEAST 1/4 OF SECTION 3, T. 19 N., R. 20 E., M.D.M., CITY OF SPARKS, NEVADA

SHEET 1 OF 1

AtkinsRéalis

10509 Professional Circle, Suite 103 Reno, Nevada 89521 Telephone: 775/828-1622 Fax: 775/851-1687

APN: 037-020-42

Point of Beginning: North: 14872860.8954' East: 2305525.4277'

Segment #1: Line

Course: S0° 11' 20"W Length: 12.92'

North: 14872847.9755' East: 2305525.3851'

Segment #2 : Line

Course: N89° 54' 04"W Length: 148.82' North: 14872848.2323' East: 2305376.5653'

Segment #3 : Line

Course: N1° 58' 42"E Length: 15.20'

North: 14872863.4233' East: 2305377.0900'

Segment #4 : Line

Course: S88° 01' 18"E Length: 65.24'

North: 14872861.1711' East: 2305442.2912'

Segment #5 : Line

Course: S89° 48' 41"E Length: 83.14'

North: 14872860.8974' East: 2305525.4307'

Perimeter: 325.32' Area: 2003.96 Sq. Ft.

Error Closure: 0.0036 Course: N56° 36' 37"E

Error North: 0.00199 East: 0.00302

Precision 1: 90366.67



10509 Professional Circle, Ste. 103 Reno, Nevada 89521

Telephone: 775.828.1622

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EXHIBIT "A"

LEGAL DESCRIPTION PERMANENT EASEMENT APN 037-020-42

THAT PORTION OF THE REAL PROPERTY DESCRIBED IN THAT CERTAIN GRANT, BARGAIN, AND SALE DEED, DOCUMENT NUMBER 4637176, BEING PARCEL B-1 OF PARCEL MAP 3860, OFFICIAL RECORDS, WASHOE COUNTY, NEVADA, SITUATE IN THE SOUTHEAST QUARTER (SE1/4) OF SECTION 3, TOWNSHIP 19 NORTH, RANGE 20 EAST, M.D.M., CITY OF SPARKS, WASHOE COUNTY, NEVADA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING (P.O.C.) AT THE NORTHWEST CORNER OF SAID PARCEL B-1, SAME BEING ON THE SOUTHERLY RIGHT-OF-WAY LINE OF PRATER WAY, AS SHOWN BY SAID PARCEL MAP; THENCE DEPARTING SAID SOUTHERLY RIGHT-OF-WAY LINE, SOUTH 00°11'20" WEST ALONG THE WESTERLY LINE OF SAID PARCEL B-1, A DISTANCE OF 10.16 FEET; THENCE DEPARTING SAID WESTERLY LINE, SOUTH 89°48'40" EAST, A DISTANCE OF 5.00 FEET TO THE EASTERLY LINE OF THAT CERTAIN 10.00 FOOT WIDE PUBLIC UTILITY EASEMENT (P.U.E.) AND CABLE TELEVISION EASEMENT PER PARCEL MAP #3736, ALSO BEING THE POINT OF BEGINNING (P.O.B.); THENCE DEPARTING SAID EASTERLY LINE, SOUTH 88°01'18" EAST ALONG THE SOUTHERLY LINE OF SAID P.U.E. AND CABLE TELEVISION EASEMENT, A DISTANCE OF 5.20 FEET; THENCE SOUTH 89°54'04" EAST, A DISTANCE OF 143.82 FEET TO THE WESTERLY LINE OF THAT CERTAIN 10.00 FOOT WIDE P.U.E. AND CABLE TELEVISION EASEMENT PER SAID PARCEL MAP 3860; THENCE SOUTH 00°11'20" WEST, ALONG SAID WESTERLY LINE, A DISTANCE OF 4.48 FEET; THENCE DEPARTING SAID WESTERLY LINE, NORTH 90°00'00" WEST, A DISTANCE OF 87.59 FEET; THENCE THE FOLLOWING FOUR (4) COURSES AND DISTANCES:

- (1) SOUTH 02°16'40" WEST, 9.12 FEET;
- (2) NORTH 87°43'20" WEST, 6.00 FEET;
- (3) NORTH 02°16'40" EAST, 9.12 FEET;
- (4) NORTH 85°19'20" WEST, 71.92 FEET TO THE EASTERLY LINE OF SAID P.U.E. AND CABLE TELEVISION EASEMENT PER SAID PARCEL MAP #3736;

THENCE NORTH 00°11′20″ EAST ALONG SAID EASTERLY LINE, A DISTANCE OF 4.57 FEET TO THE **POINT OF BEGINNING (P.O.B.).**

CONTAINING 711 SQUARE FEET (0.02 ACRES), MORE OR LESS, AS DETERMINED BY COMPUTER METHODS. AS SHOWN ON EXHIBIT "B" ATTACHED HERETO AND MADE A PART HEREOF.

10509 Professional Circle, Suite 103 Reno, Nevada 89521

Telephone: 775.828.1622

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BASIS OF BEARINGS

THE BASIS OF BEARINGS AND COORDINATE REFERENCE FOR THIS PROJECT IS THE NORTH AMERICAN DATUM OF 1983 ESTABLISHED FROM FEDERAL BASE NETWORK/COOPERATIVE BASE NETWORK OBSERVATIONS IN 1994 (ALSO KNOWN AS NAD83/94), NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE, HOLDING WASHOE COUNTY PUBLISHED LATITUDE 39°32′16.44843″ NORTH AND LONGITUDE 119°53′08.87676″ WEST FOR REGIONAL GPS CONTINUOUS OPERATING REFERENCE STATION (CORS) "RNO1" (WASHOE COUNTY IDENTIFIER N74SM01028) AND UTILIZING A GRID-TO-GROUND COMBINED FACTOR OF 1.000197939 TO PROJECT STATE PLANE COORDINATES TO GROUND EQUIVALENT COORDINATE VALUES AND CONVERTED TO U.S. SURVEY FEET.

END OF DESCRIPTION.

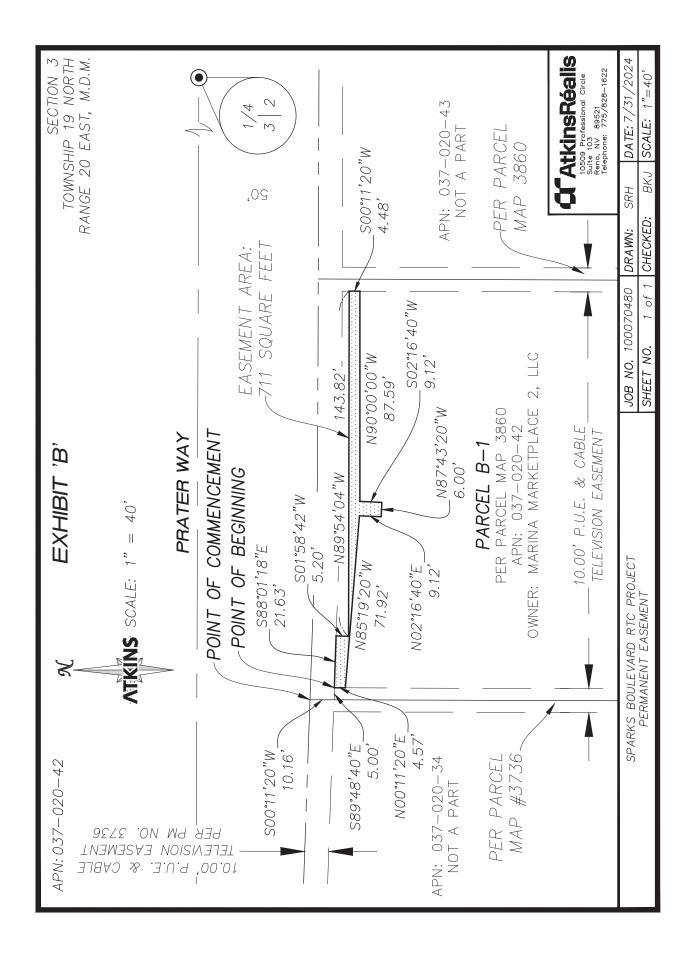


EXPIRES: 06/30/2025 07/31/2024

BRETT K. JEFFERSON, P.L.S. NEVADA LICENSE NUMBER 8421

PHONE: (702) 551-0296

EMAIL: BRETT.JEFFERSON@ATKINSREALIS.COM



APN 037-020-42 - PERMANENT EASEMENT

North: 14872854.174' East: 2305355.127'

Segment #1: Line

Course: S88° 01' 18"E Length: 21.63' North: 14872853.427' East: 2305376.744'

Segment #2: Line

Course: S01° 58' 42"W Length: 5.20' North: 14872848.230' East: 2305376.564'

Segment #3: Line

Course: S89° 54' 04"E Length: 143.82' North: 14872847.982' East: 2305520.384'

Segment #4: Line

Course: S00° 11' 20"W Length: 4.48' North: 14872843.502' East: 2305520.369'

Segment #5: Line

Course: N90° 00' 00"W Length: 87.59' North: 14872843.502' East: 2305432.779'

Segment #6: Line

Course: S02° 16' 40"W Length: 9.12' North: 14872834.389' East: 2305432.417'

Segment #7: Line

Course: N87° 43' 20"W Length: 6.00' North: 14872834.627' East: 2305426.422' Segment #8: Line

Course: N02° 16' 40"E Length: 9.12'

North: 14872843.740' East: 2305426.784'

Segment #9: Line

Course: N85° 19' 20"W Length: 71.92' North: 14872849.606' East: 2305355.104'

Segment #10: Line

Course: N00° 11' 20"E Length: 4.57'

North: 14872854.175' East: 2305355.119'

Perimeter: 363.44' Area: 710.59 Sq. Ft.

Error Closure: 0.008 Course: N76° 58' 39"W

Error North: 0.0019 East: -0.0080

Precision 1: 45431.25



10509 Professional Circle, Ste. 103 Reno, Nevada 89521

Telephone: 775.828.1622

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EXHIBIT "A"

LEGAL DESCRIPTION TEMPORARY CONSTRUCTION EASEMENT APN 037-020-42

THAT PORTION OF THE REAL PROPERTY DESCRIBED IN THAT CERTAIN GRANT, BARGAIN, AND SALE DEED, DOCUMENT NUMBER 4637176, BEING PARCEL B-1 OF PARCEL MAP 3860, OFFICIAL RECORDS, WASHOE COUNTY, NEVADA, SITUATE IN THE SOUTHEAST QUARTER (SE1/4) OF SECTION 3, TOWNSHIP 19 NORTH, RANGE 20 EAST, M.D.M., CITY OF SPARKS, NEVADA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID PARCEL B-1, SAME BEING ON THE SOUTHERLY RIGHT-OF-WAY OF PRATER WAY, AS SHOWN BY SAID PARCEL MAP; THENCE DEPARTING SAID SOUTHERLY RIGHT-OF-WAY, SOUTH 00°11'20" WEST ALONG THE EASTERLY LINE OF SAID PARCEL B-1, A DISTANCE OF 12.92 FEET TO THE **POINT OF BEGINNING**; THENCE CONTINUING SOUTH 00°11'20" WEST ALONG SAID EASTERLY LINE, A DISTANCE OF 3.21 FEET; THENCE DEPARTING SAID EASTERLY LINE, ALONG THE FOLLOWING FIVE (5) COURSES:

- (1) NORTH 89°48'41" WEST, 51.40 FEET;
- (2) SOUTH 00°11'19" WEST, 2.02 FEET;
- (3) NORTH 89°48'41" WEST, 81.53 FEET;
- (4) SOUTH 01°58'42" WEST, 36.34 FEET;
- (5) NORTH 88°01'18" WEST, 41.23 FEET TO THE WESTERLY LINE OF SAID PARCEL B-1;

THENCE NORTH 00°11'20" EAST ALONG SAID WESTERLY LINE, A DISTANCE OF 56.06 FEET TO SAID SOUTHERLY RIGHT-OF-WAY; THENCE SOUTH 88°01'18" EAST ALONG SAID SOUTHERLY RIGHT-OF-WAY, A DISTANCE OF 26.94 FEET; THENCE DEPARTING SAID SOUTHERLY RIGHT-OF-WAY, SOUTH 01°58'42" WEST, A DISTANCE OF 15.20 FEET; THENCE SOUTH 89°54'04" EAST, A DISTANCE OF 148.82 FEET TO THE **POINT OF BEGINNING**.

CONTAINING 2,696 SQUARE FEET (0.06 ACRES), MORE OR LESS, AS DETERMINED BY COMPUTER METHODS. AS SHOWN ON EXHIBIT "B" ATTACHED HERETO AND MADE A PART HEREOF.

10509 Professional Circle, Suite 103 Reno, Nevada 89521

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BASIS OF BEARINGS

THE BASIS OF BEARINGS AND COORDINATE REFERENCE FOR THIS PROJECT IS THE NORTH AMERICAN DATUM OF 1983 ESTABLISHED FROM FEDERAL BASE NETWORK/COOPERATIVE BASE NETWORK OBSERVATIONS IN 1994 (ALSO KNOWN AS NAD83/94), NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE, HOLDING WASHOE COUNTY PUBLISHED LATITUDE 39°32′16.44843″ NORTH AND LONGITUDE 119°53′08.87676″ WEST FOR REGIONAL GPS CONTINUOUS OPERATING REFERENCE STATION (CORS) "RNO1" (WASHOE COUNTY IDENTIFIER N74SM01028) AND UTILIZING A GRID-TO-GROUND COMBINED FACTOR OF 1.000197939 TO PROJECT STATE PLANE COORDINATES TO GROUND EQUIVALENT COORDINATE VALUES AND CONVERTED TO U.S. SURVEY FEET.

END OF DESCRIPTION.



EXPIRES: 06/30/2025 03/23/2024

BRETT K. JEFFERSON, P.L.S. NEVADA LICENSE NUMBER 8421

PHONE: (702) 551-0296

EMAIL: BRETT.JEFFERSON@ATKINSREALIS.COM

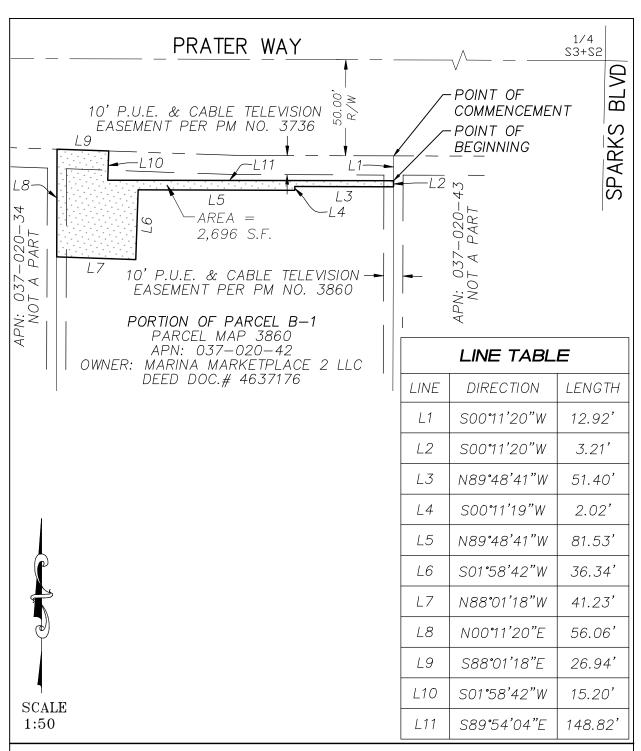


EXHIBIT "B"

SPARKS BLVD RTC PROJECT
TEMPORARY CONSTRUCTION EASEMENT
APN: 037-020-42

A PORTION OF PARCEL B-1 OF PARCEL MAP 3860 IN THE SOUTHEAST 1/4 OF SECTION 3, T. 19 N., R. 20 E., M.D.M., CITY OF SPARKS, NEVADA

SHEET 1 OF 1

AtkinsRéalis

10509 Professional Circle, Suite 103 Reno, Nevada 89521 Telephone: 775/828-1622 Fax: 775/851-1687

APN: 037-020-42

Point of Beginning: North: 14872847.9750' East: 2305525.3851'

Segment #1: Line

Course: S0° 11' 20"W Length: 3.21'

East: 2305525.3745' North: 14872844.7651'

Segment #2 : Line

Course: N89° 48' 41"W Length: 51.40' East: 2305473.9748' North: 14872844.9343'

Segment #3 : Line

Course: S0° 11' 19"W Length: 2.02'

North: 14872842.9143' East: 2305473.9681'

Segment #4: Line

Course: N89° 48' 41"W Length: 81.53' East: 2305392.4386' North: 14872843.1827'

Segment #5 : Line

Course: S1° 58' 42"W Length: 36.34'

North: 14872806.8643' East: 2305391.1841'

Segment #6: Line

Course: N88° 01' 18"W Length: 41.23' North: 14872808.2877' East: 2305349.9786'

Segment #7: Line

Course: N0° 11' 20"E Length: 56.06'

North: 14872864.3473' East: 2305350.1635'

Segment #8 : Line

Course: S88° 01' 18"E Length: 26.94'

North: 14872863.4173' East: 2305377.0874'

Segment #9 : Line

Course: S1° 58' 42"W Length: 15.20'

North: 14872848.2264' East: 2305376.5627'

Segment #10: Line

Course: S89° 54' 04"E Length: 148.82'

North: 14872847.9695' East: 2305525.3825' -----

Perimeter: 462.75' Area: 2696.45 Sq. Ft.

Error Closure: 0.0061 Course: S25° 38' 21"W

Error North: -0.00551 East: -0.00264

Precision 1: 75860.66

Meeting Date: 2/21/2025 Agenda Item: 4.3.14

To: Regional Transportation Commission

From: Michele Payne, Property Agent

SUBJECT: Administrative Settlement - Gage Village Commercial Development, LLC et al, AM-GSR Holdings, LLC and AM-GSR Exchange, LLC

RECOMMENDED ACTION

Approve an administrative settlement in the amount of \$373,023.67 authorizing RTC to acquire certain property interests related to APN: 012-211-28, 012-220-20, 012-220-37 from Gage Village Commercial Development LLC et al, AM-GSR Holdings, LLC, and AM-GSR Exchange, LLC, for the Mill Street Capacity and Safety Project.

BACKGROUND AND DISCUSSION

RTC is in the process of acquiring property needed for the Mill Street Capacity and Safety Project. RTC and Gage Village Commercial Development, LLC et al, AM-GSR Holdings, LLC, and AM-GSR Exchange, LLC have negotiated agreements to purchase certain property interests related to APN 012-211-28, 012-220-20, 012-220-37, contingent upon Board approval. The proposed purchase price is \$595,723.67, which represents a proposed administrative settlement of \$373,023.67 above RTC's original appraisal and offer of \$222,700. Per RTC Management Policy P-55, Board approval is required for administrative settlements exceeding \$50,000.

Staff recommends approval of the settlement. If the Board approves the settlement, the Executive Director will execute the attached agreements and RTC will acquire the property interests. If the Board does not approve the settlement, staff will continue to attempt to negotiate for the purchase of the property interests until it becomes necessary to file a complaint in eminent domain.

FISCAL IMPACT

The costs to acquire the subject property interests have been budgeted.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

Project: Mill Street Capacity

& Safety Project
Project #: 0211007
Parcel(s): 012-211-28
Situs: 2500 E. 2nd Street

PUBLIC HIGHWAY AGREEMENT

This PUBLIC HIGHWAY AGREEMENT (this "AGREEMENT") is made and entered into this 21st day of February, 2025 (the "EFFECTIVE DATE"), by and between, Gage Village Commercial Development, LLC, a California limited liability company as to an undivided 68.1979% and AM-GSR Holdings, LLC, a Nevada limited liability company, as to an undivided 31.8021% ("OWNER"), and the REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY ("RTC").

WITNESSETH:

- 1. That the OWNER, for and in consideration of the covenants to be performed and payments to be paid as herein provided, represents the following:
- (a) OWNER is the owner of that certain real property located in Washoe County, Nevada, described as Assessor's Parcel Number 012-211-28 (the "OWNER PROPERTY").
- (b) OWNER owns fee title to OWNER PROPERTY and there are no prior encumbrances, liens, judgement liens, restrictions, covenants or conditions applicable to the OWNER PROPERTY which will frustrate or interfere with the purposes of this AGREEMENT.
- (c) OWNER has secured evidence of lender consent for any and all security agreements relating to the OWNER PROPERTY.
- (d) That there are no leases, licenses, conditions, actions or threatened or pending litigation related to the OWNER PROPERTY which will frustrate or interfere with the purposes of this AGREEMENT.
- 2. That the OWNER, for and in consideration of the covenants to be performed and payments to be paid as herein provided, agrees as follows:
- (a) To sell and convey a portion of the OWNER PROPERTY to the RTC, free and clear of any liens or encumbrances created by OWNER, by way of a grant, bargain and sale deed in substantially the form attached hereto as <u>Schedule 1</u>; the real property is described on Exhibit "A" to <u>Schedule 1</u> and depicted on Exhibit "B" to <u>Schedule 1</u> attached hereto and made a part hereof (the "LAND").
- (b) To grant a permanent utility easement to the Sierra Pacific Power Company and its assigns upon, over and across a portion of the OWNER PROPERTY, by way of a permanent utility easement document in substantially the form attached hereto as <u>Schedule 2</u>; this easement is described on Exhibit "A" to <u>Schedule 2</u> and depicted on Exhibit "B" to <u>Schedule 2</u> attached hereto and made a part hereof (the "PUE EASEMENT").

- (c) To grant a temporary construction easement to the RTC upon, over and across a portion of the OWNER PROPERTY by way of a temporary construction easement document in substantially the form attached hereto as <u>Schedule 3</u>; this temporary construction easement is described on Exhibit "A" and Exhibit "B" to <u>Schedule 3</u> and depicted on Exhibit "C" to <u>Schedule 3</u> attached hereto and made a part hereof (the "TCE EASEMENT").
- (d) To deposit into escrow with Stewart Title, 5390 Kietzke Lane, Suite 101, Reno, Nevada 89511 (Attn: Roberta Crown Rogers) (the "ESCROW AGENT"), all the aforementioned documents, fully executed and notarized where required, on or prior to March 7, 2025, as such date may be modified pursuant to mutual agreement of the OWNER and the RTC (the "ESCROW CLOSING DATE").
- (e) To deliver to ESCROW AGENT such other documentation as ESCROW AGENT may reasonably require to close the escrow and consummate the real property transfers in accordance with this AGREEMENT.
- (f) To be responsible for all necessary maintenance and repair and all risk and liability for loss and damage related to the LAND, PUE EASEMENT and TCE EASEMENT resulting prior to the ESCROW CLOSING DATE.
- (g) To acknowledge and hereby does acknowledge, that a public highway and the necessary incidents thereto (the "PROJECT"), are to be located upon, over, and across the LAND.
- (h) To waive, and hereby does waive, all claims and rights that OWNER may have to seek consequential, special and/or punitive damages in relation to any breach of the obligations contemplated in this AGREEMENT and acknowledges that nothing in this AGREEMENT is intended to or shall it be construed to waive the rights, limitations and immunities of the RTC under Nevada Revised Statutes Chapter 41.
- 3. The RTC, in consideration of the promises and covenants of the OWNER herein set forth, agrees as follows:
- (a) To pay to the OWNER the sum of THREE HUNDRED THREE THOUSAND FOUR HUNDRED TWENTY-TWO DOLLARS (\$303,422), which shall be the total purchase price for the LAND, PUE EASEMENT, and TCE EASEMENT, which sum was calculated as an administrative settlement.
- (b) To deliver to ESCROW AGENT such other documentation as ESCROW AGENT may reasonably require to close the escrow and consummate the real property transfers in accordance with the terms of this AGREEMENT.
- (c) To acknowledge, and hereby does acknowledge, that the real property conveyed hereby is transferred and sold "AS IS", "WHERE IS", WITH ALL FAULTS AND CONDITIONS THEREON, and that OWNER has not made and specifically disclaims any representations, warranties, promises, covenants or guaranties of any kind or character whatsoever, whether express or implied, oral or written, past, present or future with respect to the LAND, PUE EASEMENT and TCE EASEMENT, and hereby waives any right to make any claim against OWNER based on any of the foregoing.

- (d) To be responsible for all necessary maintenance and repair and all risk and liability for loss and damage related to the LAND and its use of the PUE EASEMENT, and TCE EASEMENT resulting after the closing and through construction and, in the case of the TCE EASEMENT through the term of the easement.
- (e) To allow access ingress and egress into OWNER's property at all times during construction.
- (f) To leave the TCE EASEMENT area in as neat and presentable condition as existed prior to RTC's entry including restoration of all sidewalks, decorative gravel and shrubs.
- 4. In the event of any default by OWNER under this AGREEMENT, the RTC may, as its sole and exclusive remedy for such default, either: (1) terminate this AGREEMENT in its entirety by delivery of notice of termination to OWNER and receive a refund of all amounts paid by RTC to the OWNER, or (2) continue this AGREEMENT pending the RTC's action for injunctive relief and/or specific performance hereunder provided appropriate proceedings are commenced by the RTC within ninety (90) days following RTC's written notice to OWNER of OWNER's default. Nothing in this Section shall limit or impair the rights of the RTC to condemn or exercise its power of condemnation and eminent domain with respect to real property interests needed for the PROJECT including, but not limited to, the LAND, the PUE EASEMENT and TCE EASEMENT.
- 5. With respect to the PROJECT, it is mutually agreed and understood by the RTC and by the OWNER as follows:
- (a) The term of the TCE EASEMENT shall be for a two and one-half (2 $\frac{1}{2}$) year period from the date the TCE EASEMENT is recorded. Upon completion of the PROJECT, the RTC will execute any documentation as may be reasonably necessary to cause the TCE EASEMENT to be released of record.
- (b) That as soon as reasonably practicable following the EFFECTIVE DATE hereof, the RTC shall commence and thereafter shall use its commercially reasonable best efforts to complete the PROJECT within the timeline (as may be extended) previously provided to OWNER and as provided for by all applicable laws and standards.
- 6. It is further mutually agreed and understood by the RTC and by the OWNER as follows:
- (a) The laws of the State of Nevada shall be applied in interpreting and construing this AGREEMENT. The parties consent to the exclusive jurisdiction and venue of the Second Judicial District Court in and for the State of Nevada, located in Washoe County, Nevada, for the enforcement of this AGREEMENT.
- (b) This AGREEMENT shall constitute the entire contract between the parties hereto, and no modification hereof shall be binding upon the parties unless the same is in writing and signed by the respective parties hereto.
- (c) All covenants and agreements herein contained shall extend to and be obligatory upon the heirs, executors, administrators, successors, and assigns, as the case may

be, of the respective parties.

- (d) As used herein the term OWNER shall include the plural as well as the singular, and the feminine as well as the masculine and the neuter.
- (e) The covenants and agreements expressed in the AGREEMENT shall survive the consummation of the property transfers.
- (f) The regulations pertaining to nondiscrimination and Title VI of the Civil Rights Act of 1964, as contained in Title 23, Code of Federal Regulations Part 200, and Title 49, Code of Federal Regulations Part 21, are hereby incorporated by reference and made a part of this AGREEMENT.
- (g) Except as otherwise provided for by law or this AGREEMENT, the rights and remedies of the parties hereto shall not be exclusive and are in addition to any other rights and remedies provided by law or equity.
- (h) That the persons signing this AGREEMENT and all related documents on behalf of the RTC and OWNER are duly authorized to so sign and have the full power and authority to bind them, and to enter into and perform the obligations hereunder.
 - (i) That this AGREEMENT may be executed in counterpart.
- 7. Except as otherwise expressly specified in this AGREEMENT, all notices, requests, consents, approvals, agreements, authorizations, acknowledgments, waivers and other communications required or permitted hereunder shall be in writing to the addresses set forth below and shall be deemed given: (i) immediately when delivered by hand; (ii) the next business day when sent by overnight delivery by internationally recognized express courier such as Federal Express or UPS; or (iii) three (3) days after deposit in the United States mail postage prepaid, registered or certified mail, return receipt requested:

To RTC:

Regional Transportation Commission Attn: Michele Payne 1105 Terminal Way, Suite 108 Reno, NV 89502

To OWNER:

Gage Village Commercial Development, LLC & AM-GSR Holdings, LLC Attn: Alex Meruelo 2500 East Second Street Reno, NV 89595

Signature Pages Follow

IN WITNESS WHEREOF the parties hereto have executed this AGREEMENT the day and year first above written.

OWNER: Gage Village Commercial Development, LLC, a California limited liability company, as to an undivided 68.1979% and AM-GSR Holdings, LLC, a Nevada limited liability company, as to an undivided 31.8021%

Gage Village Commercial Development	, LLC, a California limited liability company
Name: ALEX MERUELO Its: president of manager	-
Its: <u>president of manage</u>	
STATE OF NEVADA)	
COUNTY OF WASHOE)	•
This instrument was acknowledged bef	ore me on
by, as	of Gage Village Commercial
Development, LLC, a California limited I	iability company.
	Notary Public
S E A L	
My commission expires:	
	A CONTRACTOR OF THE CONTRACTOR

_		
AM-GSR Holdings, LLC, a N	levada limited liability comp	pany
Ву:	<u> </u>	
Name: ALEX ME	ruelo_	
Its: <u>Manager</u>		
STATE OF NEVADA)) ss.	
COUNTY OF WASHOE)	
This instrument was acknow	ledged before me on	
by	, as	of AM-GSR
Holdings, LLC, a Nevada lim	nited liability company.	
S		Notary Public
S E A L		
My commission expires:		

RTC Signature Page Follows

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California County of LOS Angeles)
on February 12, 2025 befo	re me, Lauren Nicole Lustyan, Notar (insert name and title of the officer) Public

personally appeared <u>Nex Werdeld</u>, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

LAUREN NICOLE LUSTYAN
Notary Public - California
Los Angeles County
Commission # 2447829
My Comm. Expires May 25, 2027

Signature (Sec

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California County of LOS Angeles	
on February 12,2025 before me, Lauren Nicole Lustyan, Nota (insert name and title of the officer) p	ary
nersonally appeared ATEX MEXILETO	זקטי

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature (Seal)

LAUREN NICOLE LUSTYAN
Notary Public - California
Los Angeles County
Commission # 2447829
My Comm. Expires May 25, 2027

RTC:	
REGIONAL TRANSPORTATION COMMISSION	
William Thomas, Executive Director	_
STATE OF NEVADA	
COUNTY OF WASHOE	
This instrument was acknowledged before	e me on by
William Thomas as Executive Director of the Reg	ional Transportation Commission of Washoe
County.	
S E	Management of the second secon
E A	Notary Public
L	
My commission expires:	

SCHEDULE 1

FORM OF GRANT, BARGAIN AND SALE DEED

Ptn. of APN 012-211-28

WHEN RECORDED RETURN TO: Regional Transportation Commission of Washoe County Attn: Michele Payne 1105 Terminal Way, Suite 108 Reno, NV 89502

MAIL TAX STATEMENTS TO: Exempt

LEGAL DESCRIPTION PREPARED BY: HALANA D. SALAZAR, PLS JACOBS ENGINEERING 50 W. LIBERTY STREET, SUITE 205 RENO, NV 89501

Project: Mill Street Capacity & Safety Project

Project #: 0211007

Parcel: Ptn. of APN 012-211-28

GRANT BARGAIN AND SALE DEED

This GRANT BARGAIN AND SALE DEED, made this ______ day of _______, 2025, between Gage Village Commercial Development, LLC, a California limited liability company, as to an undivided 68.1979% and AM-GSR Holdings, LLC, a Nevada limited liability company, as to an undivided 31.8021%, hereinafter called GRANTOR, and the REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY, hereafter called GRANTEE.

WITNESSETH:

That the GRANTOR, for and in consideration of the sum of ONE DOLLAR (\$1.00), lawful money of the United States of America, and other good and valuable consideration, the receipt whereof is hereby acknowledged, does by this presents grant, bargain, sell and convey unto the GRANTEE and to its assigns forever, the real property described in Exhibit "A" and depicted on Exhibit "B", attached hereto and made a part hereof (the "Property").

TOGETHER with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues, and profits thereof.

TO HAVE AND TO HOLD all and singular the Property, together with the appurtenances, unto the said GRANTEE and to any of its heirs, successors and assigns forever; and GRANTOR does hereby bind GRANTOR, and GRANTOR's successors and assigns, to WARRANT and FOREVER DEFEND, all and singular, the Property, unto GRANTEE, and GRANTEE's successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, by, through or under GRANTOR, but not otherwise.

IN WITNESS WHEREOF said GRANTOR has hereunto signed on the day and year first above written.

Gage Village Commercial Development, LLC, a California limited liability Company

Ву:				
Name:				
Title:				
STATE OF NEVADA)) ss. COUNTY OF WASHOE)				
This instrument was acknowledged before	me on			by
, as	of Gage	Village	Commercial	Development,
LLC, a California limited liability company.				
S E A L	_		Notary	Public
L				

AM-G	SR Holdings	s, LLC,	a Nevada limited	d liability	comp	any				
Ву:										
Name	•									
Title: _										
	E OF NEVAI)) ss.)							
			acknowledged							
	d liability con		as			_of Al	M-GSR	Holdings,	LLC, a l	Nevada
S E A L								Nota	ary Public	
Му со	mmission ex	kpires:								

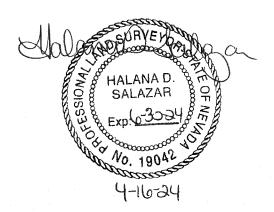
EXHIBIT "A" LEGAL DESCRIPTION

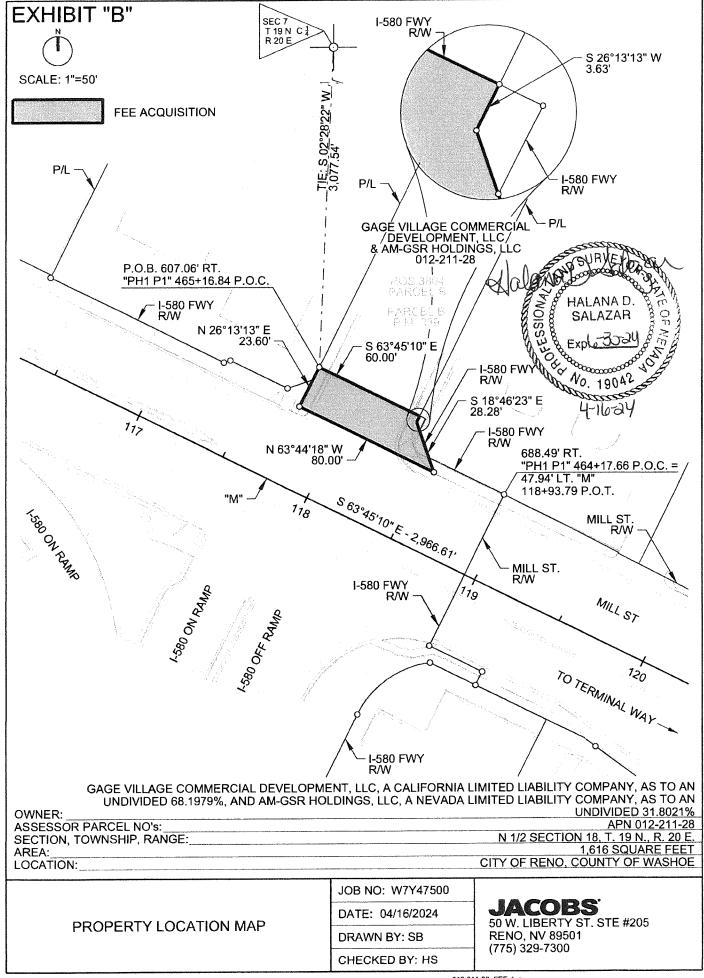
Ptn. of APN 012-211-28 Fee Parcel

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 N 1/2 of Section 18, T. 19 N., R. 20 E., M.D.M.; and further described as being a portion of PARCEL A shown on that certain RECORD OF SURVEY FOR FHR CORPORATION C.I.P. REAL ESTATE, LLC, Survey Map No. 3804, File No. 2458502, filed for record on June 23, 2000, in the Official Records of Washoe County, Nevada and a portion of PARCEL "B" shown on that certain SECOND PARCEL MAP FOR M.G.M. GRAND HOTEL - RENO, Parcel Map No. 339, File No. 434452, filed for record on November 10, 1976, in the Official Records of Washoe County, Nevada and more fully described by metes and bounds as follows:

BEGINNING at a point on the right or easterly right-of-way line of I-580 Freeway and the westerly boundary line of said PARCEL "B" of Parcel Map No. 339, 607.06 feet right of and measured radially from Highway Engineer's Station "PH1 P1" 465+16.84 P.O.C.; said point of beginning further described as bearing S. 02°28'22" W. a distance of 3,077.54 feet from the center guarter corner of Section 7, T. 19 N., R. 20 E., M.D.M.; 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 right or easterly right-of-way line of I-580 Freeway, a distance of 60.00 feet to a point on the easterly boundary line of said PARCEL "B"; thence S. 26°13'13" W., along said easterly boundary line, a distance of 3.63 feet; thence S. 18°46'23" E., continuing along said easterly boundary line, a distance of 28.28 feet to the former right or easterly right-of-way line of said I-580 Freeway; thence N. 63°44'18" W., along said former right or easterly right-of-way line, a distance of 80.00 feet to said westerly boundary line; thence N. 26°13'13" E., along said westerly boundary line, a distance of 23.60 feet to the point of beginning; said parcel contains an area of 1,616 square feet (0.04 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.





SCHEDULE 2 FORM OF PERMANENT UTILITY EASEMENT DEED

Ptn. of APN 012-211-28

WHEN RECORDED RETURN TO: Regional Transportation Commission of Washoe County Attn: Michele Chrystal 1105 Terminal Way, Suite 108 Reno, NV 89502

MAIL TAX STATEMENTS TO: Exempt

LEGAL DESCRIPTION PREPARED BY: Halana D. Salazar, PLS Jacobs Engineering 50 W. Liberty Street, Suite 205 Reno, NV 89501

Project: Mill Street Capacity & Safety Project

Project #: 0211007

Parcel: Ptn. of APN 012-211-28

PERMANENT UTILITY EASEMENT DEED

This DEED, made this _____ day of _______, 2025, between Gage Village Commercial Development, LLC, a California limited liability company as to an undivided 68.1979% and AM-GSR Holdings, LLC, a Nevada limited liability company, as to an undivided 31.8021%, hereinafter called GRANTOR, and Sierra Pacific Power Company, a Nevada corporation, dba NV Energy, hereinafter called GRANTEE.

WITNESSETH:

That the GRANTOR, for and in consideration of the sum of ONE DOLLAR (\$1.00), lawful money of the United States of America, and other good and valuable consideration, the receipt whereof is hereby acknowledged, does by these presents grant unto the GRANTEE and to its assigns forever:

1) To construct, operate, add to, modify, maintain and remove communication facilities and electric line systems for the distribution and transmission of electricity above ground and underground, consisting of poles, other structures, wires, cables, bollards, transformers, anchors, guys and other equipment, fixtures, apparatus, and improvements ("Utility Facilities"), and service boxes, meter panels, cabinets, bollards, and other equipment, fixtures, apparatus, and improvements and slope improvements ("Additional Utility Facilities") upon, over, under and through the property legally described in Exhibit "A" and depicted on Exhibit "B", attached hereto and by this reference made a part of this Permanent Utility Easement Deed ("Easement Area");

- 2) For ingress and egress to, from, over and across the Easement Area for the allowed purposes defined in numbered paragraph 1 above for all other activities permitted by this agreement, inclusive;
- 3) To remove, clear, cut or trim any obstruction or material (including trees, other vegetation and structures) from the surface or subsurface of the Easement Area as GRANTEE may deem necessary or advisable for the safe and proper use and maintenance of Utility Facilities or the Additional Utility Facilities within the Easement Area.

GRANTEE will be responsible for any damages, proximately caused by GRANTEE negligently constructing, operating, adding to, maintaining or removing Utility Facilities and/or the Additional Utility Facilities, to any tangible, personal property or improvements owned by GRANTOR and located on the Easement Area on the date GRANTOR signs the Permanent Utility Easement Deed. However, this paragraph does not apply to, and GRANTEE is not responsible for, any damages caused when GRANTEE exercises its rights under numbered paragraph 3 above.

GRANTOR covenants for the benefit of GRANTEE, its successors and assigns, that no building, structure or other real property improvements will be constructed or placed on or within the Easement Area without the prior written consent of GRANTEE, such structure and improvements to include, but not be limited to, drainage, trees, bridges, signage, roads, fencing, storage facilities, parking canopies, and other covered facilities. GRANTEE and GRANTOR must document GRANTEE's consent by both singing GRANTEE's standard, recordable use agreement. GRANTOR retains, for its benefit, the right to maintain, use and others landscape the Easement Area for its own purposes; provided, however, that all such purposes and uses does not interfere with GRANTEE's rights herein and are in all respects consistent with the GRANTEE's rights herein, GRANTEE's electrical practices, and the National Electrical Safety Code. GRANTEE may use this easement to provide service to any of its customers.

To the fullest extent permitted by law, GRANTOR and GRANTEE waive any right each may have to a trial by jury in respect of litigation directly or indirectly arising out of, under or in connection with this Grant of Easement. GRANTOR and GRANTEE further waive any right to consolidate any action in which a jury trial has been waived with any other action in which a jury trial cannot be or has not been waived.

TOGETHER with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof; with the exception of any and all reservations as are previously hereinabove expressly excepted from this conveyance.

To hereby waive, with full knowledge, that a public roadway and the necessary incidents thereto are to be located upon, over and across the lands hereinabove described, any claim for any and all damages to the remaining adjacent lands and property of the GRANTOR by reason of the location, construction, landscaping and maintenance of said roadway and appurtenances in said location.

TO HAVE AND TO HOLD all and singular the said real property, together with the appurtenances, unto the said GRANTEE and to any heirs, successors and assigns forever.

IN WITNESS WHEREOF said GRANTOR has hereunto signed on the day and year first above written.

above written.						
Gage Village Commercial Deve	lopment	, LLC, a C	alifornia	limited	liability C	ompany
Ву:						
Name:						
Title:						
STATE OF NEVADA)					
COUNTY OF WASHOE) ss.)					
This instrument was acknowle	edged b	efore me	on			by
, as _			of	Gage	Village	Commercia
Development, LLC, a California	limited I	liability co	mpany.			
0			### **********************************		Notary	Public
S E A L						
My commission expires:						

AM-GSR Holdings, LLC, a Nev	ada iimiled iiabiiily company	1
Ву:		
Name:		
Title:		
STATE OF NEVADA)) ss.	
COUNTY OF WASHOE)	
This instrument was acknown	wledged before me on	by
, as		of AM-GSR Holdings, LLC, a
Nevada limited liability comp	any.	
		Notary Public
S E A L		
My commission expires:		

EXHIBIT "A" NV ENERGY PERMANENT EASEMENTS "PEa", "PEb" and "PEc" LEGAL DESCRIPTION

Ptns. of APN 012-211-28

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 N 1/2 of Section 18, T. 19 N., R. 20 E., M.D.M.; and further described as being a portion of PARCEL A shown on that certain RECORD OF SURVEY FOR FHR CORPORATION C.I.P. REAL ESTATE, LLC, Survey Map No. 3804, File No. 2458502, filed for record on June 23, 2000, in the Official Records of Washoe County, Nevada and more fully described by metes and bounds as follows:

PERMANENT EASEMENT "PEa"

BEGINNING at a point on the right or easterly right-of-way line of I-580 Freeway, 163.48 feet right of and measured radially from Highway Engineer's Station "PH1 P1" 468+40.43 P.O.C.; said point of beginning further described as bearing S. 12°19'10" W. a distance of 2,925.87 feet from the center quarter corner of Section 7, T. 19 N., R. 20 E., M.D.M.; 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 N. 09°34'59" W., along said easterly right-of-line, a distance of 18.76 feet; thence S. 63°45'10" E. a distance of 49.80 feet; thence S. 26°15'08" W. a distance of 15.22 feet to said right or easterly right-of-way line of I-580 Freeway; thence N. 63°44'18" W., along said easterly right-of-way line, a distance of 38.82 feet to the point of beginning; said parcel contains an area of 674 square feet (0.02 of an acre).

PERMANENT EASEMENT "PEb"

BEGINNING at a point on the right or easterly right-of-way line of I-580 Freeway, 318.43 feet right of and measured radially from Highway Engineer's Station "PH1 P1" 467+23.76 P.O.C.; said point of beginning further described as bearing S. 08°44'50" W. a distance of 2,977.71 feet from the center quarter corner of Section 7, T. 19 N., R. 20 E., M.D.M.; 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 N. 26°14'38" E. a distance 36.35 feet; thence S. 63°45'22" E. a distance of 17.25 feet to the westerly boundary line of PARCEL B shown on said RECORD OF SURVEY FOR FHR CORPORATION C.I.P.

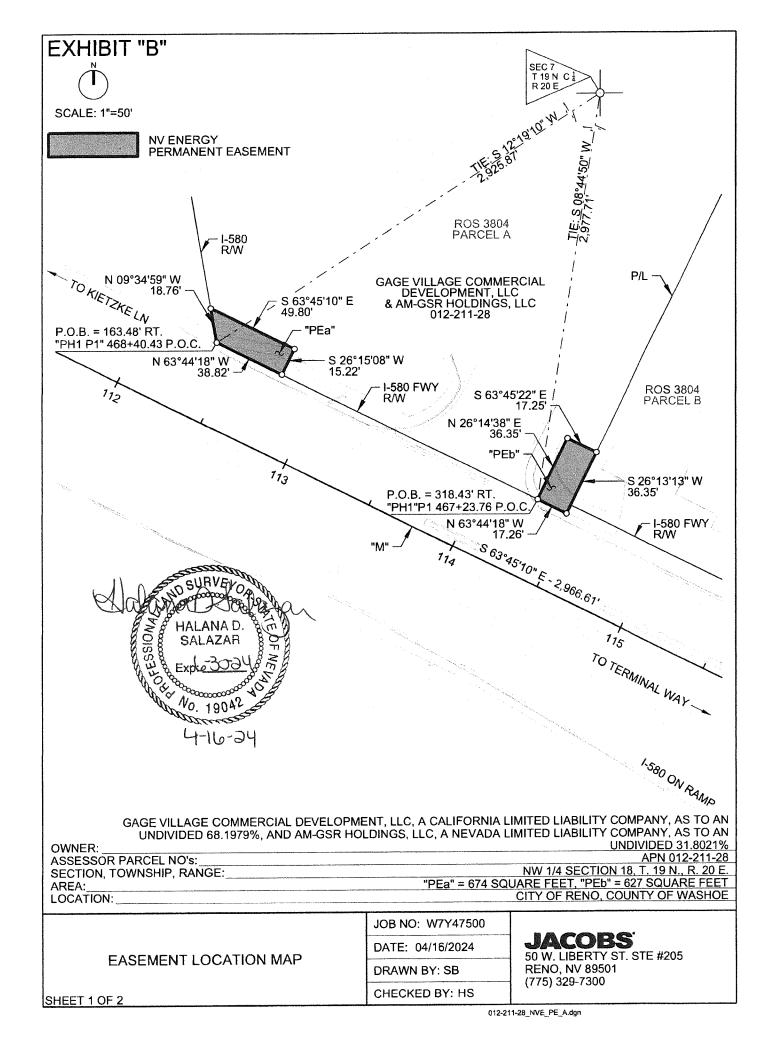
REAL ESTATE, L.L.C.; thence S. 26°13'13" W., along said westerly boundary line, a distance of 36.35 feet to said right or easterly right-of-way line ofl-580 Freeway; thence N. 63°44'18" W., along said easterly right-of-way line, a distance of 17.26 feet to the point of beginning; said parcel contains an area of 627 square feet (0.01 of an acre).

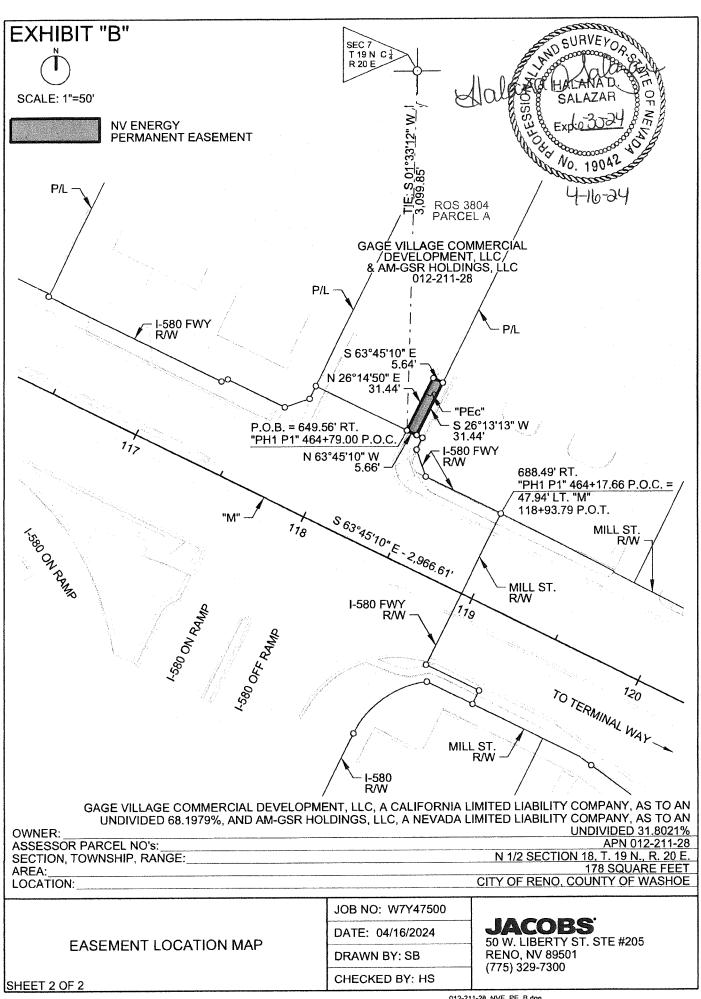
PERMANENT EASEMENT "PEc"

BEGINNING at a point on the right or easterly right-of-way line of I-580 Freeway, 649.56 feet left of and measured radially from Highway Engineer's Station "PH1 P1" 464+79.00 P.O.C.; said point of beginning further described as bearing S. 01°33'12" W. a distance of 3,099.85 feet from the center quarter corner of Section 7, T. 19 N., R. 20 E., M.D.M.; 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 N. 26°14'50" E. a distance of 31.44 feet; thence S. 63°45'10" E. a distance of 5.64 feet to the easterly boundary line of said PARCEL A; thence S. 26°13'13" W., along said easterly boundary line, a distance of 31.44 feet to said right or easterly right-of-way line ofl-580 Freeway; N. 63°45'10" W., along said easterly right-of-way line, a distance of 5.66 feet to the point of beginning; said parcel contains an area of 178 square feet.

The Basis of Bearing for these descriptions is the NEVADA STATE PLANE COORDINATE SYSTEM, NAD 83/94 DATUM, West Zone as determined by the State of Nevada, Department of Transportation.

SURVEROND HALANA D. STANDERS SALAZAR OF NO. 19042





SCHEDULE 3

FORM OF TEMPORARY CONSTRUCTION EASEMENT DEED

Ptn. of APN 012-211-28

WHEN RECORDED RETURN TO:

Regional Transportation Commission of Washoe County

Attn: Michele Payne

1105 Terminal Way, Suite 108

Reno, NV 89502

MAIL TAX STATEMENTS TO:

Regional Transportation Commission of Washoe County

Attn: Michele Payne

1105 Terminal Way, Suite 108

Reno, NV 89502

LEGAL DESCRIPTION PREPARED BY:

Halana D. Salazar, PLS Jacobs Engineering 50 W. Liberty Street, Suite 205 Reno. NV 89501

Project:

Mill Street Capacity & Safety Project (the "Project")

Project #:

0211007

Parcel:

Ptn. of APN 012-211-28

TEMPORARY CONSTRUCTION EASEMENT DEED

This DEED, made this ______ day of ______, 2025 between, Gage Village Commercial Development LLC, a California limited liability company as to an undivided 68.1979% and AM-GSR Holdings, LLC, a Nevada limited liability company, as to an undivided 31.8021%, hereinafter called GRANTOR, and the REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY, hereinafter called GRANTEE.

WITNESSETH:

That the GRANTOR, for and in consideration of the sum of ONE DOLLAR (\$1.00), lawful money of the United States of America, and other good and valuable consideration, the receipt whereof is hereby acknowledged, does by these presents grant unto the GRANTEE and to its assigns a temporary easement upon, over and across the real property described on Exhibit "A" and "B" depicted on Exhibit "C" attached hereto and made a part hereof by reference (the "Temporary Easement), for the purposes of:

the construction of roadway widening improvements along Mill Street and a new road connection between Mill Street and Market Street. This work includes construction of sidewalk, curb and gutter, curb ramps, asphalt roadway, traffic signal, lighting, drainage improvements, utility relocations, demolition activities of existing building structures, removal and stub of existing utilities to the site, removal of fencing, removal of landscaping, grading, and all other construction work necessary to complete the Project.

The term of the Temporary Easement shall be thirty (30) months from the date of recording of this Temporary Easement Deed with the Washoe County Recorder's Office.

TO HAVE AND TO HOLD all and singular the said real property, together with the appurtenances, unto the said GRANTEE and to any heirs, successors and assigns for the term of this Temporary Easement.

IN WITNESS WHEREOF, GRANTOR has hereunto signed on the day and year first above written.

Gage Village Commercial Deve	elopmen	t, LLC, a	Californ	nia	limited	liability C	ompany
Ву:							
Name:							
Title:	-						
STATE OF NEVADA)						
COUNTY OF WASHOE) ss.)						
This instrument was acknowled	edged l	pefore m	ne on _		***************************************		by
, as _			(of	Gage	Village	Commercia
Development, LLC, a California	limited	liability o	ompan	y.			
0						Notary	Public
S E A							
L.							
My commission expires:							

AM-GSR Holdings, LLC, a Nevada	a iimite	а павшту	com	pany	y
Ву:					
Name:	ourseres				
Title:					
STATE OF NEVADA)) ss				
COUNTY OF WASHOE)	•			
This instrument was acknowled	edged	before	me	on	by
, as					of AM-GSR Holdings, LLC, a
Nevada limited liability company	y.				
					Notary Public
S E A					
L					
My commission expires:					

EXHIBIT "A" TEMPORARY CONSTRUCTION EASEMENT 1 LEGAL DESCRIPTION

Ptn. of APN 012-211-28

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 NW 1/4 of Section 18, T. 19 N., R. 20 E., M.D.M.; and further described as being a portion of PARCEL A shown on that certain RECORD OF SURVEY FOR FHR CORPORATION C.I.P. REAL ESTATE, LLC Map No. 3804, File No. 2458502, filed for record on June 23, 2000, in the Official Records of Washoe County, Nevada and more fully described by metes and bounds as follows:

BEGINNING at a point on the westerly boundary line of PARCEL B shown on said RECORD OF SURVEY FOR FHR CORPORATION C.I.P. REAL ESTATE, L.L.C. and the right or easterly right-of-way line of I-580 Freeway, 332.31 feet right of and measured radially from Highway Engineer's Station"PH1 P1" 467+12.92 P.O.C.; said point of beginning further described as bearing S. 08°25'52" W. a distance of 2,982.95 feet from the center quarter corner of Section 7, T. 19 N., R. 20 E., M.D.M.; 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 N. 63°44'18" W., along said right or easterly right-of-way line of I-580 Freeway, a distance of 208.43 feet; thence N. 09°34'59" W., continuing along said right or easterly right-of-line, a distance of 13.61 feet; thence along the following six (6) courses and distances:

- 1) S. 63°44'26" E. 27.16 feet;
- 2) S. 77°47'06" E. 19.31 feet;
- 3) S. 43°43'50" E. 12.23 feet;
- 4) S. 63°44'26" E. 56.31 feet;
- from a tangent which bears N. 85°32'58" E., curving to the left with a radius of 20.00 feet, through an angle of 52°15'57", an arc distance of 18.24 feet;
- 6) S. 63°45'10" E. 93.06 feet to said westerly boundary line of PARCEL B;

thence S. 26°13'13" W., along said westerly boundary line, a distance of 26.31 feet to the point of beginning; said parcel contains an area of 3,918 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.

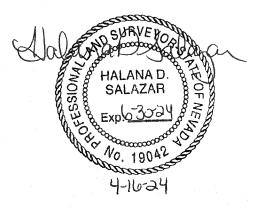


EXHIBIT "B" TEMPORARY CONSTRUCTION EASEMENT 2 LEGAL DESCRIPTION

Ptn. of APN 012-211-28

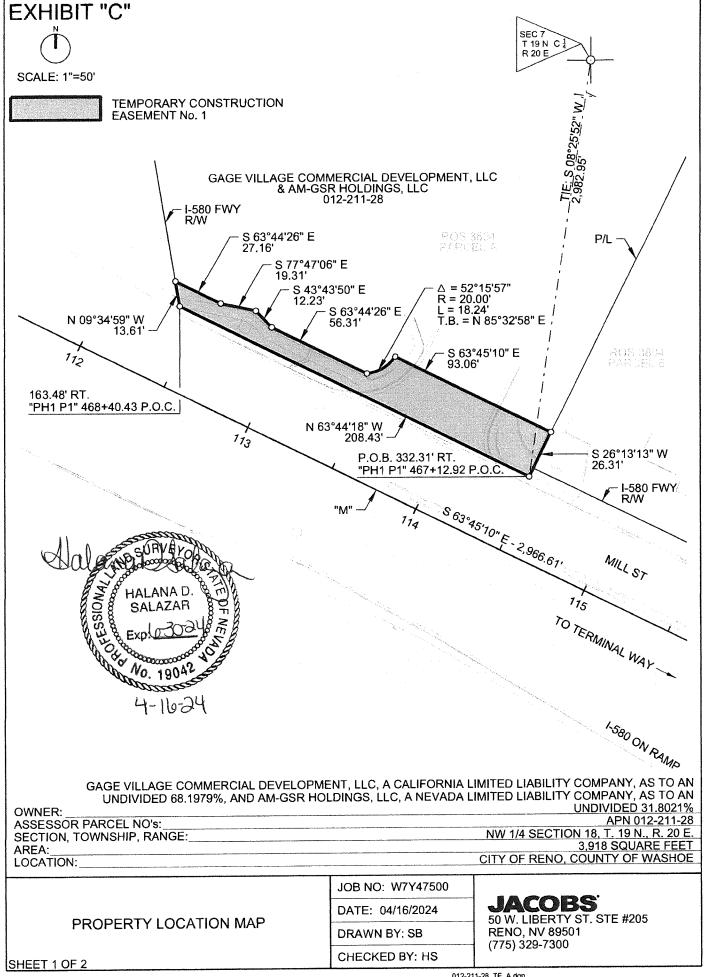
Situate, lying and being in the City of Reno, County of Washoe, State of Nevada, and more particularly described as being a portion of the N 1/2 of Section 18, T. 19 N., R. 20 E., M.D.M.; and further described as being a portion of PARCEL A shown on that certain RECORD OF SURVEY FOR FHR CORPORATION C.I.P. REAL ESTATE, LLC Survey Map No. 3804, File No. 2458502, filed for record on June 23, 2000, in the Official Records of Washoe County, Nevada and more fully described by metes and bounds as follows:

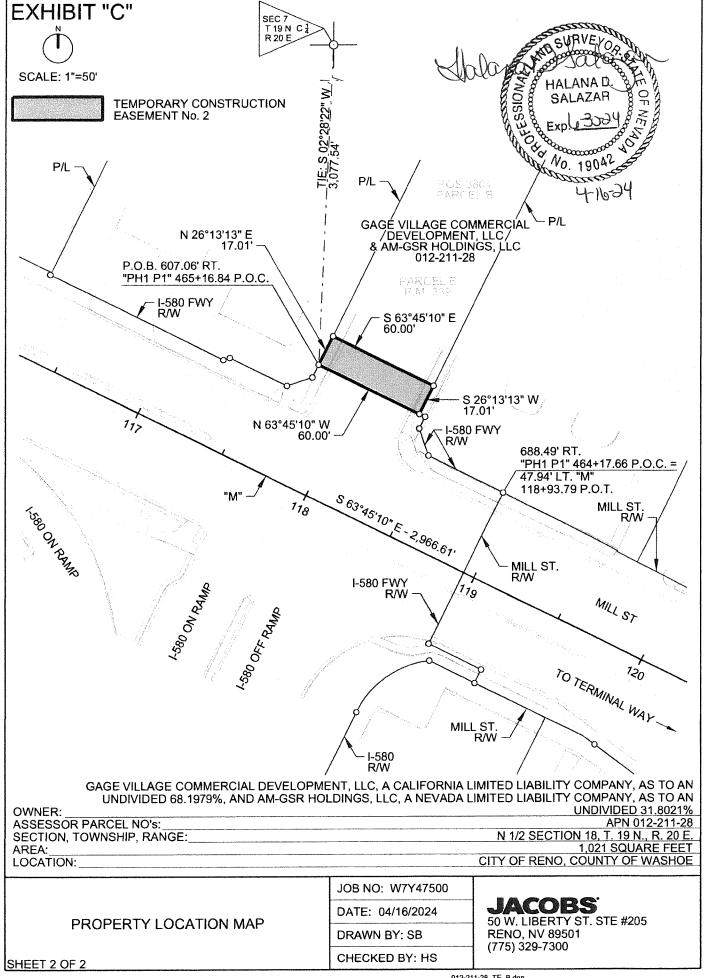
BEGINNING at a point on the right or easterly right-of-way line of I-580 Freeway and the westerly boundary line of said PARCEL A, 607.06 feet right of and measured radially from Highway Engineer's Station "PH1 P1" 465+16.84 P.O.C.; said point of beginning further described as bearing S. 02°28'22" W. a distance of 3,077.54 feet from the center quarter corner of Section 7, T. 19 N., R. 20 E., M.D.M.; 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 N. 26°13'13" E., along said westerly boundary line of PARCEL A, a distance of 17.01 feet; thence S. 63°45'10" E., a distance of 60.00 feet to a point on the easterly boundary line of said PARCEL A; thence S. 26°13'13" W., along said easterly boundary line, a distance of 17.01 feet to said right or easterly right-of-way line of I-580 Freeway; thence N. 63°45'10" W., along said easterly right-of-way line, a distance of 60.00 feet to the point of beginning; said parcel contains an area of 1,021 square feet (0.02 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.

Page 1 of 1





Project: Mill Street Capacity

& Safety Project
Project #: 0211007
Parcel(s): 012-211-20
Situs: 2515 & 2525 Mill

Street

PUBLIC HIGHWAY AGREEMENT

This PUBLIC HIGHWAY AGREEMENT (this "AGREEMENT") is made and entered into this 21st day of February, 2025 (the "EFFECTIVE DATE"), by and between, AM-GSR Holdings, LLC, a Nevada limited liability company ("OWNER"), and the REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY ("RTC").

WITNESSETH:

- 1. That the OWNER, for and in consideration of the covenants to be performed and payments to be paid as herein provided, represents the following:
- (a) OWNER is the owner of that certain real property located in Washoe County, Nevada, described as Assessor's Parcel Number 012-211-20 (the "OWNER PROPERTY").
- (b) OWNER owns fee title to OWNER PROPERTY and there are no prior encumbrances, liens, judgement liens, restrictions, covenants or conditions applicable to the OWNER PROPERTY which will frustrate or interfere with the purposes of this AGREEMENT.
- (c) OWNER has secured evidence of lender consent for any and all security agreements relating to the OWNER PROPERTY.
- (d) That there are no leases, licenses, conditions, actions or threatened or pending litigation related to the OWNER PROPERTY which will frustrate or interfere with the purposes of this AGREEMENT.
- 2. That the OWNER, for and in consideration of the covenants to be performed and payments to be paid as herein provided, agrees as follows:
- (a) To sell and convey a portion of the OWNER PROPERTY to the RTC, free and clear of any liens or encumbrances created by OWNER, by way of a grant, bargain and sale deed in substantially the form attached hereto as <u>Schedule 1</u>; the real property is described on Exhibit "A" to <u>Schedule 1</u> and depicted on Exhibit "B" to <u>Schedule 1</u> attached hereto and made a part hereof (the "LAND").
- (b) To grant a permanent utility easement to the Sierra Pacific Power Company, Spectrum Pacific West, LLC, and Nevada Bell Telephone Company and their assigns upon, over and across a portion of the OWNER PROPERTY, by way of a permanent utility easement document in substantially the form attached hereto as Schedule 2; this easement is described on Exhibit "A" to Schedule 2 and depicted on Exhibit "B" to Schedule 2 attached hereto and made a part hereof (the "PUE EASEMENT").

- (c) To grant a temporary construction easement to the RTC upon, over and across a portion of the OWNER PROPERTY by way of a temporary construction easement document in substantially the form attached hereto as <u>Schedule 3</u>; this temporary construction easement is described on Exhibit "A" to <u>Schedule 3</u> and depicted on Exhibit "B" to <u>Schedule 3</u> attached hereto and made a part hereof (the "TCE EASEMENT").
- (d) To deposit into escrow with Stewart Title, 5390 Kietzke Lane, Suite 101, Reno, Nevada 89511 (Attn: Roberta Crown Rogers) (the "ESCROW AGENT"), all the aforementioned documents, fully executed and notarized where required, on or prior to March 7, 2025, as such date may be modified pursuant to mutual agreement of the OWNER and the RTC (the "ESCROW CLOSING DATE").
- (e) To deliver to ESCROW AGENT such other documentation as ESCROW AGENT may reasonably require to close the escrow and consummate the real property transfers in accordance with this AGREEMENT.
- (f) To be responsible for all necessary maintenance and repair and all risk and liability for loss and damage related to the LAND, PUE EASEMENT and TCE EASEMENT resulting prior to the ESCROW CLOSING DATE.
- (g) To acknowledge and hereby does acknowledge, that a public highway and the necessary incidents thereto (the "PROJECT"), are to be located upon, over, and across the LAND.
- (h) To waive, and hereby does waive, all claims and rights that OWNER may have to seek consequential, special and/or punitive damages in relation to any breach of the obligations contemplated in this AGREEMENT and acknowledges that nothing in this AGREEMENT is intended to or shall it be construed to waive the rights, limitations and immunities of the RTC under Nevada Revised Statutes Chapter 41.
- The RTC, in consideration of the promises and covenants of the OWNER herein set forth, agrees as follows:
- (a) To pay to the OWNER the sum of ONE HUNDRED TWENTY-EIGHT THOUSAND EIGHTY DOLLARS (\$128,080), which shall be the total purchase price for the LAND, PUE EASEMENT, and TCE EASEMENT, which sum was calculated as an administrative settlement.
- (b) To deliver to ESCROW AGENT such other documentation as ESCROW AGENT may reasonably require to close the escrow and consummate the real property transfers in accordance with the terms of this AGREEMENT.
- (c) To acknowledge, and hereby does acknowledge, that the real property conveyed hereby is transferred and sold "AS IS", "WHERE IS", WITH ALL FAULTS AND CONDITIONS THEREON, and that OWNER has not made and specifically disclaims any representations, warranties, promises, covenants or guaranties of any kind or character whatsoever, whether express or implied, oral or written, past, present or future with respect to the LAND, PUE EASEMENT and TCE EASEMENT, and hereby waives any right to make any claim against OWNER based on any of the foregoing.

- (d) To be responsible for all necessary maintenance and repair and all risk and liability for loss and damage related to the LAND and its use of the PUE EASEMENT, and TCE EASEMENT resulting after the closing and through construction and, in the case of the TCE EASEMENT through the term of the easement.
- (e) To allow access ingress and egress into OWNER's property at all times during construction.
- (f) To leave the TCE EASEMENT area in as neat and presentable condition as existed prior to RTC's entry including restoration of all sidewalks, decorative gravel and shrubs.
- 4. In the event of any default by OWNER under this AGREEMENT, the RTC may, as its sole and exclusive remedy for such default, either: (1) terminate this AGREEMENT in its entirety by delivery of notice of termination to OWNER and receive a refund of all amounts paid by RTC to the OWNER, or (2) continue this AGREEMENT pending the RTC's action for injunctive relief and/or specific performance hereunder provided appropriate proceedings are commenced by the RTC within ninety (90) days following RTC's written notice to OWNER of OWNER's default. Nothing in this Section shall limit or impair the rights of the RTC to condemn or exercise its power of condemnation and eminent domain with respect to real property interests needed for the PROJECT including, but not limited to, the LAND, the PUE EASEMENT and TCE EASEMENT.
- With respect to the PROJECT, it is mutually agreed and understood by the RTC and by the OWNER as follows:
- (a) The term of the TCE EASEMENT shall be for a two and one-half year (2 ½) period from the date the TCE EASEMENT is recorded. Upon completion of the PROJECT, the RTC will execute any documentation as may be reasonably necessary to cause the TCE EASEMENT to be released of record.
- (b) That as soon as reasonably practicable following the EFFECTIVE DATE hereof, the RTC shall commence and thereafter shall use its commercially reasonable best efforts to complete the PROJECT within the timeline (as may be extended) previously provided to OWNER and as provided for by all applicable laws and standards.
- 6. It is further mutually agreed and understood by the RTC and by the OWNER as follows:
- (a) The laws of the State of Nevada shall be applied in interpreting and construing this AGREEMENT. The parties consent to the exclusive jurisdiction and venue of the Second Judicial District Court in and for the State of Nevada, located in Washoe County, Nevada, for the enforcement of this AGREEMENT.
- (b) This AGREEMENT shall constitute the entire contract between the parties hereto, and no modification hereof shall be binding upon the parties unless the same is in writing and signed by the respective parties hereto.
- (c) All covenants and agreements herein contained shall extend to and be obligatory upon the heirs, executors, administrators, successors, and assigns, as the case may

be, of the respective parties.

- (d) As used herein the term OWNER shall include the plural as well as the singular, and the feminine as well as the masculine and the neuter.
- (e) The covenants and agreements expressed in the AGREEMENT shall survive the consummation of the property transfers.
- (f) The regulations pertaining to nondiscrimination and Title VI of the Civil Rights Act of 1964, as contained in Title 23, Code of Federal Regulations Part 200, and Title 49, Code of Federal Regulations Part 21, are hereby incorporated by reference and made a part of this AGREEMENT.
- (g) Except as otherwise provided for by law or this AGREEMENT, the rights and remedies of the parties hereto shall not be exclusive and are in addition to any other rights and remedies provided by law or equity.
- (h) That the persons signing this AGREEMENT and all related documents on behalf of the RTC and OWNER are duly authorized to so sign and have the full power and authority to bind them, and to enter into and perform the obligations hereunder.
 - (i) That this AGREEMENT may be executed in counterpart.
- 7. Except as otherwise expressly specified in this AGREEMENT, all notices, requests, consents, approvals, agreements, authorizations, acknowledgments, waivers and other communications required or permitted hereunder shall be in writing to the addresses set forth below and shall be deemed given: (i) immediately when delivered by hand; (ii) the next business day when sent by overnight delivery by internationally recognized express courier such as Federal Express or UPS; or (iii) three (3) days after deposit in the United States mail postage prepaid, registered or certified mail, return receipt requested:

To RTC:

Regional Transportation Commission Attn: Michele Payne 1105 Terminal Way, Suite 108 Reno, NV 89502 To OWNER:

AM-GSR Holdings, LLC Attn: Alex Meruelo 2500 East Second Street Reno, NV 89595

Signature Pages Follow

IN WITNESS WHEREOF the parties hereto have executed this AGREEMENT the day and year first above written. OWNER: AM-GSR Holdings, LLC, a Nevada limited liability company Name: ALEX L STATE OF NEVADA COUNTY OF WASHOE This instrument was acknowledged before me on _____ of AM-GSR Holdings, LLC, a Nevada limited liability company. Notary Public

RTC Signature Page Follows

My commission expires:

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of Califo	mia OS Angeles)	

on February 12, 2025 before me, Lauren Nicole Lustyan, Notary (insert name and title of the officer) Public

personally appeared Alex Mervelo who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature

(Seal)

LAUREN NICOLE LUSTYAN Notary Public - California

Los Angeles County Commission # 2447829 My Comm. Expires May 25, 2027

RTC:	
REGIONAL TRANSPORTATION COMMISSION	
William Thomas, Executive Director	÷
STATE OF NEVADA COUNTY OF WASHOE	
This instrument was acknowledged before	me on by
William Thomas as Executive Director of the Region	onal Transportation Commission of Washoe
County.	
S	
S E A	Notary Public
î	
My commission expires:	

SCHEDULE 1 FORM OF GRANT, BARGAIN AND SALE DEED

Ptn. of APN 012-220-20

WHEN RECORDED RETURN TO:
Regional Transportation Commission of Washoe County
Attn: Michele Payne
1105 Terminal Way, Suite 108
Reno, NV 89502

MAIL TAX STATEMENTS TO: Exempt

LEGAL DESCRIPTION PREPARED BY: HALANA D. SALAZAR, PLS JACOBS ENGINEERING 50 W. LIBERTY STREET, SUITE 205 RENO, NV 89501

Project: Mill Street Capacity & Safety Project

Project #: 0211007

Parcel: Ptn. of APN 012-220-20

GRANT BARGAIN AND SALE DEED

This GRANT BARGAIN AND SALE DEED, made this _____ day of _____. 2025, between AM-GSR Holdings, LLC, a Nevada limited liability company, hereinafter called GRANTOR, and the REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY, hereafter called GRANTEE.

WITNESSETH:

That the GRANTOR, for and in consideration of the sum of ONE DOLLAR (\$1.00), lawful money of the United States of America, and other good and valuable consideration, the receipt whereof is hereby acknowledged, does by this presents grant, bargain, sell and convey unto the GRANTEE and to its assigns forever, the real property described in Exhibit "A" and depicted on Exhibit "B", attached hereto and made a part hereof (the "Property").

TOGETHER with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues, and profits thereof.

TO HAVE AND TO HOLD all and singular the Property, together with the appurtenances, unto the said GRANTEE and to any of its heirs, successors and assigns forever; and GRANTOR does hereby bind GRANTOR, and GRANTOR's successors and assigns, to WARRANT and FOREVER DEFEND, all and singular, the Property, unto GRANTEE, and GRANTEE's successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, by, through or under GRANTOR, but not otherwise.

IN WITNESS WHabove written.	TEREOF said GF	RANTOR has	hereunto signed	d on the day and ye	ar first
AM-GSR Holdings, LLC,	a Nevada limite	d liability comp	oany		
By:					
Name:					
Title:					
STATE OF NEVADA COUNTY OF WASHOE)) ss)				
This instrument was	as			Holdings, LLC, a N	by levada
S E A L				Notary Public	
My commission expires.					
+					

EXHIBIT "A" LEGAL DESCRIPTION

Ptn. of APN 012-220-20 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 N 1/2 of Section 18, T. 19 N., R. 20 E., M.D.M.; and more fully described by metes and bounds as follows:

BEGINNING at a point on Grantor's westerly boundary line and the right or easterly right-of-way line of I-580 Freeway, 476.48 feet right of and measured radially from Highway Engineer's Station "PH1 P1" 466+00.91 P.O.C.; said point of beginning further described as bearing S. 05°12'51" W. a distance of 3,038.91 feet from the center quarter corner of Section 7, T. 19 N., R. 20 E., M.D.M.; 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. 63°45'10" E. 103.31 feet;
- 2) N. 71°14'50" E. 3.54 feet;
- 3) S. 63°45'10" E. 34.19 feet;
- 4) N. 71°14'50" E. 14.14 feet to Grantor's easterly boundary line:

thence S. 26°13'13" W., along said easterly boundary line, a distance of 16.04 feet to Grantor's southerly boundary line; thence N. 63°44'18" W., along said southerly boundary line, which is coincident with the former right or easterly right-of-way line of said I-580 Freeway, a distance of 150.00 feet to said Grantor's westerly boundary line; thence N. 26°13'13" E., along said westerly boundary line, a distance of 3.51 feet to the point of beginning; said parcel contains an area of 692 square feet (0.02 of an acre).

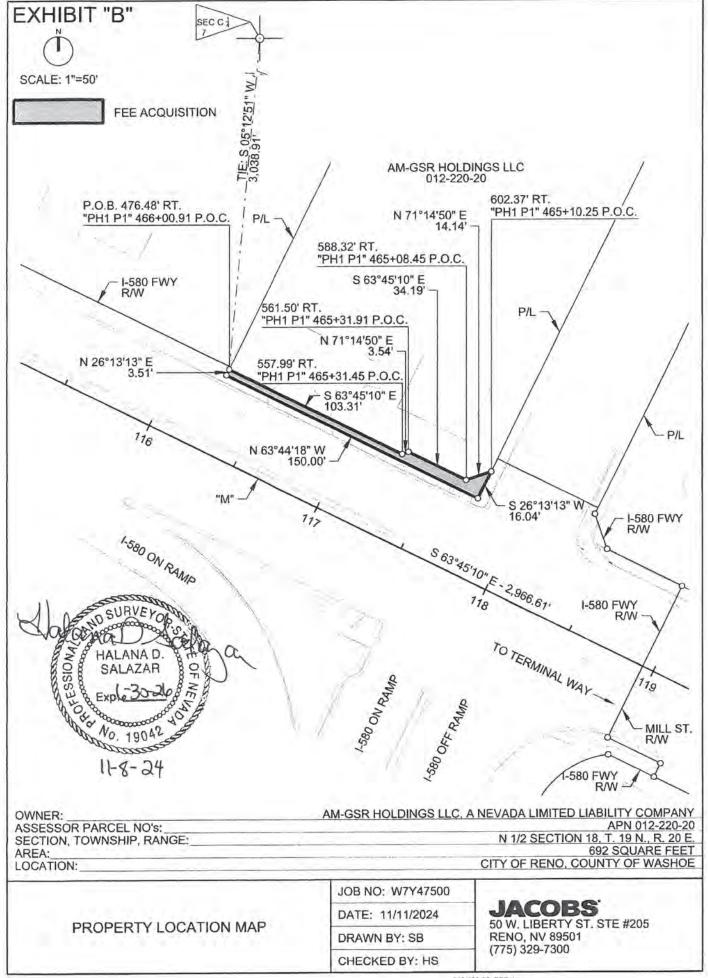
The Basis of Bearing for this description is the NEVADA STATE PLANE COORDINATE SYSTEM, NAD 83/94 DATUM, West Zone as determined by the State of Nevada, Department of Transportation.

HALANA D. SALAZAR

EXPLOSOR

VO. 19042

11-8-24



SCHEDULE 2 FORM OF PERMANENT UTILITY EASEMENT DEED

Ptn. of APN 012-220-20

WHEN RECORDED RETURN TO: Regional Transportation Commission of Washoe County Attn: Michele Chrystal 1105 Terminal Way, Suite 108 Reno, NV 89502

MAIL TAX STATEMENTS TO: Exempt

LEGAL DESCRIPTION PREPARED BY: Halana D. Salazar, PLS Jacobs Engineering 50 W. Liberty Street, Suite 205 Reno, NV 89501

Project: Mill Street Capacity & Safety Project

Project #: 0211007

Parcel: Ptn. of APN 012-220-20

PERMANENT UTILITY EASEMENT DEED

This DEED, made this _____ day of _______, 2025, between AM-GSR Holdings, LLC, a Nevada limited liability company, hereinafter called GRANTOR, and Sierra Pacific Power Company, a Nevada corporation, dba NV Energy, Spectrum Pacific West, LLC, dba Charter or Spectrum, and Nevada Bell Telephone Company, dba AT&T Nevada, individually and collectively referred to hereinafter as GRANTEE.

WITNESSETH:

That the GRANTOR, for and in consideration of the sum of ONE DOLLAR (\$1.00), lawful money of the United States of America, and other good and valuable consideration, the receipt whereof is hereby acknowledged, does by these presents grant unto the GRANTEE and to its assigns forever:

1) To construct, operate, add to, modify, maintain and remove communication facilities and electric line systems for the distribution and transmission of electricity above ground and underground, consisting of poles, other structures, wires, cables, bollards, transformers, anchors, guys and other equipment, fixtures, apparatus, and improvements ("Utility Facilities"), and service boxes, meter panels, cabinets, bollards, and other equipment, fixtures, apparatus, and improvements and slope improvements ("Additional Utility Facilities") upon, over, under and through the property legally described in Exhibit "A" and depicted on Exhibit "B", attached hereto and by this reference made a part of this Permanent Utility Easement Deed ("Easement Area");

- For ingress and egress to, from, over and across the Easement Area for the allowed purposes defined in numbered paragraph 1 above for all other activities permitted by this agreement, inclusive;
- 3) To remove, clear, cut or trim any obstruction or material (including trees, other vegetation and structures) from the surface or subsurface of the Easement Area as GRANTEE may deem necessary or advisable for the safe and proper use and maintenance of Utility Facilities or the Additional Utility Facilities within the Easement Area.

GRANTEE will be responsible for any damages, proximately caused by GRANTEE negligently constructing, operating, adding to, maintaining or removing Utility Facilities and/or the Additional Utility Facilities, to any tangible, personal property or improvements owned by GRANTOR and located on the Easement Area on the date GRANTOR signs the Permanent Utility Easement Deed. However, this paragraph does not apply to, and GRANTEE is not responsible for, any damages caused when GRANTEE exercises its rights under numbered paragraph 3 above.

GRANTOR covenants for the benefit of GRANTEE, its successors and assigns, that no building, structure or other real property improvements will be constructed or placed on or within the Easement Area without the prior written consent of GRANTEE, such structure and improvements to include, but not be limited to, drainage, trees, bridges, signage, roads, fencing, storage facilities, parking canopies, and other covered facilities. GRANTEE and GRANTOR must document GRANTEE's consent by both singing GRANTEE's standard, recordable use agreement. GRANTOR retains, for its benefit, the right to maintain, use and others landscape the Easement Area for its own purposes; provided, however, that all such purposes and uses does not interfere with GRANTEE's rights herein and are in all respects consistent with the GRANTEE's rights herein, GRANTEE's electrical practices, and the National Electrical Safety Code. GRANTEE may use this easement to provide service to any of its customers.

To the fullest extent permitted by law, GRANTOR and GRANTEE waive any right each may have to a trial by jury in respect of litigation directly or indirectly arising out of, under or in connection with this Grant of Easement. GRANTOR and GRANTEE further waive any right to consolidate any action in which a jury trial has been waived with any other action in which a jury trial cannot be or has not been waived.

TOGETHER with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof; with the exception of any and all reservations as are previously hereinabove expressly excepted from this conveyance.

To hereby waive, with full knowledge, that a public roadway and the necessary incidents thereto are to be located upon, over and across the lands hereinabove described, any claim for any and all damages to the remaining adjacent lands and property of the GRANTOR by reason of the location, construction, landscaping and maintenance of said roadway and appurtenances in said location.

TO HAVE AND TO HOLD all and singular the said real property, together with the appurtenances, unto the said GRANTEE and to any heirs, successors and assigns forever.

IN WITNESS WHEREOF said GRANTOR has hereunto signed on the day and year first above written.

AM-GSR Holdings, LLC, a Nevada limited liability company

By:			
Name:			
Title:	_		
STATE OF NEVADA)		
COUNTY OF WASHOE) ss.)		
This instrument was acknow	wledged before me on		by
, as		of AM-GSR Holding	ıs, LLC, a
Nevada limited liability compa	any.		
		Notary Pu	blic
S E A L		Notary Fu	ibilic
My commission expires:			

LEGAL DESCRIPTION PREPARED BY: HALANA D. SALAZAR, PLS JACOBS ENGINEERING 50 W. LIBERTY ST., SUITE 205 RENO, NV 89501

EXHIBIT "A" NV ENERGY PERMANENT EASEMENT LEGAL DESCRIPTION

Ptn. of APN 012-220-20

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 N 1/2 of Section 18, T. 19 N., R. 20 E., M.D.M.; and more fully described by metes and bounds as follows:

BEGINNING at a point on the right or easterly right-of-way line of I-580 Freeway, 589.49 feet right of and measured radially from Highway Engineer's Station "PH1 P1" 465+08.60 P.O.C.; said point of beginning further described as bearing S. 02°45'12" W. a distance of 3,089.19 feet from the center quarter corner of Section 7, T. 19 N., R. 20 E., M.D.M.; 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 N. 26°13'13" E. a distance of 36.73 feet; thence S. 63°46'47" E. a distance of 9.17 feet to Grantor's easterly boundary line; thence S. 26°13'13" W., along said easterly boundary line, a distance of 27.57 feet to said right or easterly right-of-way line of I-580 Freeway; thence S. 71°14'50" W., along said easterly right-of-way line, a distance of 12.96 feet to the point of beginning; said parcel contains an area of 295 square feet (0.01 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.

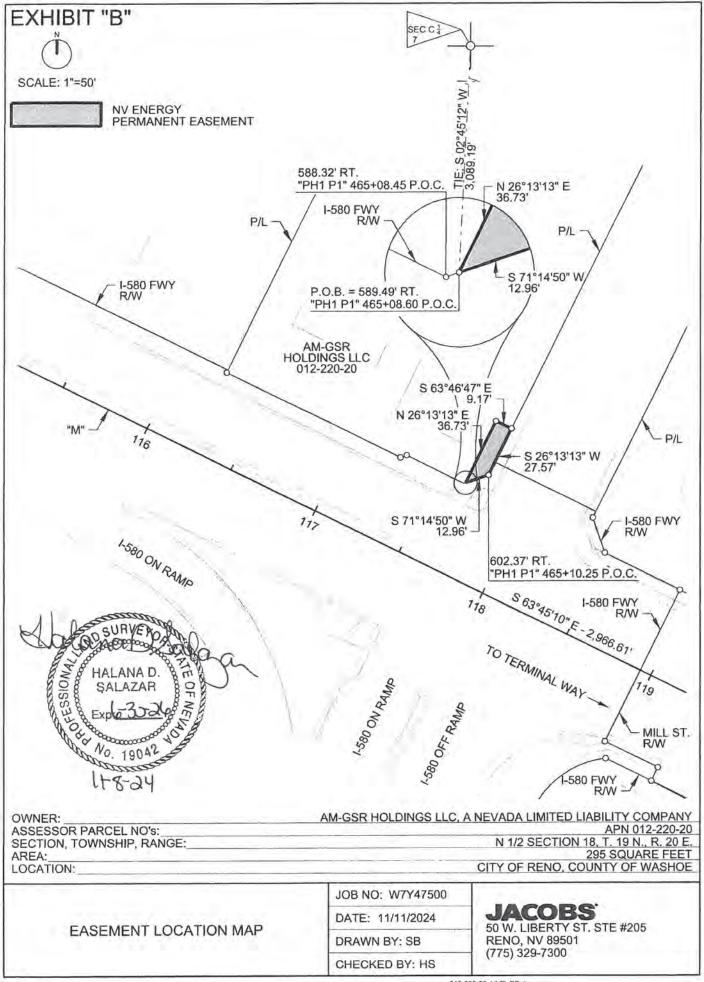
HALANA D. SALAZAR

SALAZAR

OR NO. 19042

IL 8-24

Page 1 of 1



SCHEDULE 3

FORM OF TEMPORARY CONSTRUCTION EASEMENT DEED

Ptn. of APN 012-220-20

WHEN RECORDED RETURN TO: Regional Transportation Commission of Washoe County Attn: Michele Payne 1105 Terminal Way, Suite 108 Reno, NV 89502

MAIL TAX STATEMENTS TO: Regional Transportation Commission of Washoe County Attn: Michele Payne 1105 Terminal Way, Suite 108 Reno, NV 89502

LEGAL DESCRIPTION PREPARED BY: Halana D. Salazar, PLS Jacobs Engineering 50 W. Liberty Street, Suite 205 Reno, NV 89501

Project: Mill Street Capacity & Safety Project (the "Project")

Project #: 0211007

Parcel: Ptn. of APN 012-220-20

TEMPORARY CONSTRUCTION EASEMENT DEED

This DEED, made this ______ day of ______, 2025 between, AM-GSR Holdings, LLC, a Nevada limited liability company, hereinafter called GRANTOR, and the REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY, hereinafter called GRANTEE.

WITNESSETH:

That the GRANTOR, for and in consideration of the sum of ONE DOLLAR (\$1.00), lawful money of the United States of America, and other good and valuable consideration, the receipt whereof is hereby acknowledged, does by these presents grant unto the GRANTEE and to its assigns a temporary easement upon, over and across the real property described on Exhibit "A" and depicted on Exhibit "B" attached hereto and made a part hereof by reference (the "Temporary Easement), for the purposes of:

the construction of roadway widening improvements along Mill Street and a new road connection between Mill Street and Market Street. This work includes construction of sidewalk, curb and gutter, curb ramps, asphalt roadway, traffic signal, lighting, drainage improvements, utility relocations, demolition activities of existing building structures, removal and stub of existing utilities to the site, removal of fencing, removal of landscaping, grading, and all other construction work necessary to complete the Project.

The term of the Temporary Easement shall be thirty (30) months from the date of recording of this Temporary Easement Deed with the Washoe County Recorder's Office.

TO HAVE AND TO HOLD all and singular the said real property, together with the appurtenances, unto the said GRANTEE and to any heirs, successors and assigns for the term of this Temporary Easement.

IN WITNESS WHEREOF, GRANTOR has hereunto signed on the day and year first above written.

AM-GSR Holdings, LLC, a Nevada limited liability company

By:		
Name:		
Title:	-	
STATE OF NEVADA)	
COUNTY OF WASHOE) ss.)	
This instrument was ackn	owledged before me	on by
, as		of AM-GSR Holdings, LLC, a
Nevada limited liability com	pany.	
		Notary Public
S		, , , , , , , , , , , , , , , , , , , ,
S E A		
ï		
My commission expires:		

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 012-220-20

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 N 1/2 of Section 18, T. 19 N., R. 20 E., M.D.M.; and more fully described by metes and bounds as follows:

BEGINNING at a point on Grantor's westerly boundary line and the right or easterly right-of-way line of I-580 Freeway, 476.48 feet right of and measured radially from Highway Engineer's Station "PH1 P1" 466+00.91 P.O.C.; said point of beginning further described as bearing S. 05°12'51" W. a distance of 3,038.91 feet from the center quarter corner of Section 7, T. 19 N., R. 20 E., M.D.M.; 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 N. 26°13'13" E., along said westerly boundary line, a distance of 17.92 feet; thence along the following seven (7) courses and distances:

- 1) S. 63°45'10" E. 79.18 feet;
- S. 26°14'50" W. 3.62 feet;
- 3) S. 63°45'10" E. 19.97 feet;
- 4) N. 26°14'50" E. 6.70 feet;
- 5) S. 63°45'10" E. 43.46 feet;
- N. 26°02'33" E. 16.07 feet;
- 7) S. 63°45'11" E. 7.44 feet to Grantor's easterly boundary line:

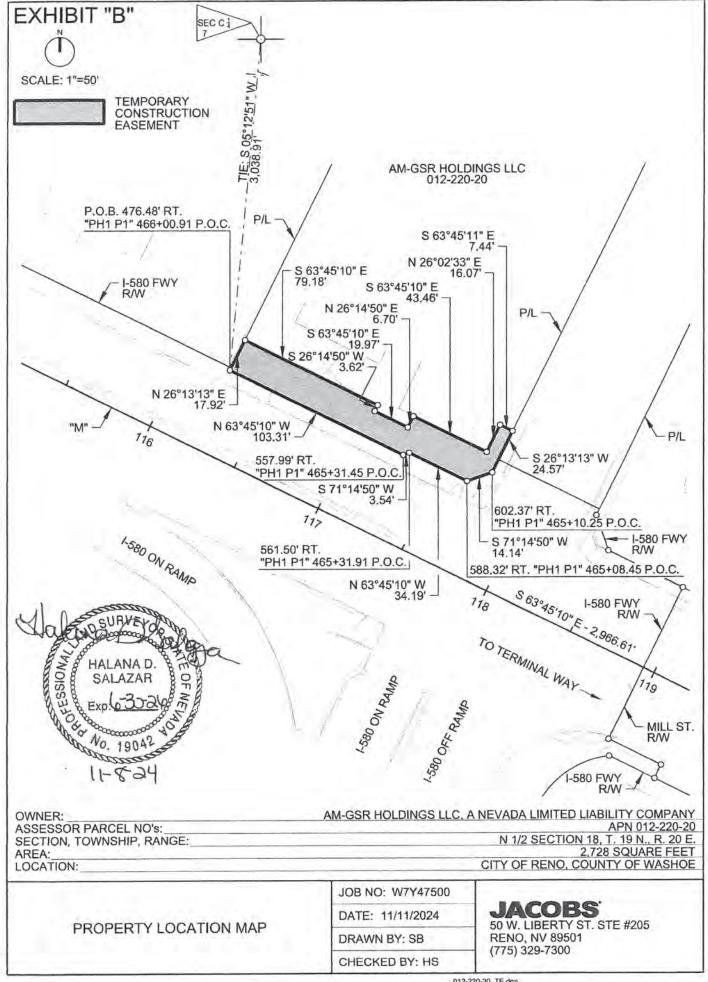
thence S. 26°13'13" W., along said easterly boundary line, a distance of 24.57 feet to said right or easterly right-of-way line of I-580 Freeway; thence along said easterly right-of-way line the following four (4) courses and distances:

1) S. 71°14'50" W. - 14.14 feet;

- 2) N. 63°45'10" W. 34.19 feet;
- 3) S. 71°14'50" W. 3.54 feet;
- 4) N. 63°45'10" W. 103.31 feet to the point of beginning;

said parcel contains an area of 2,728 square feet (0.06 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.



Project: Mill Street Capacity

& Safety Project Project #: 0211007 Parcel(s): 012-211-37 Situs: 2505 Mill Street

PUBLIC HIGHWAY AGREEMENT

This PUBLIC HIGHWAY AGREEMENT (this "AGREEMENT") is made and entered into this 21st day of February, 2025 (the "EFFECTIVE DATE"), by and between, AM-GSR Exchange, LLC, a Nevada limited liability company ("OWNER"), and the REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY ("RTC").

WITNESSETH:

- That the OWNER, for and in consideration of the covenants to be performed and payments to be paid as herein provided, represents the following:
- (a) OWNER is the owner of that certain real property located in Washoe County, Nevada, described as Assessor's Parcel Number 012-211-37 (the "OWNER PROPERTY").
- (b) OWNER owns fee title to OWNER PROPERTY and there are no prior encumbrances, liens, judgement liens, restrictions, covenants or conditions applicable to the OWNER PROPERTY which will frustrate or interfere with the purposes of this AGREEMENT.
- (c) OWNER has secured evidence of lender consent for any and all security agreements relating to the OWNER PROPERTY.
- (d) That there are no leases, licenses, conditions, actions or threatened or pending litigation related to the OWNER PROPERTY which will frustrate or interfere with the purposes of this AGREEMENT.
- That the OWNER, for and in consideration of the covenants to be performed and payments to be paid as herein provided, agrees as follows:
- (a) To sell and convey a portion of the OWNER PROPERTY to the RTC, free and clear of any liens or encumbrances created by OWNER, by way of a grant, bargain and sale deed in substantially the form attached hereto as Schedule 1; the real property is described on Exhibit "A" to Schedule 1 and depicted on Exhibit "B" to Schedule 1 attached hereto and made a part hereof (the "LAND").
- (b) To grant a permanent utility easement to the Sierra Pacific Power Company, Spectrum Pacific West, LLC, and Nevada Bell Telephone Company and their assigns upon, over and across a portion of the OWNER PROPERTY, by way of a permanent utility easement document in substantially the form attached hereto as Schedule 2; this easement is described on Exhibit "A" to Schedule 2 and depicted on Exhibit "B" to Schedule 2 attached hereto and made a part hereof (the "PUE EASEMENT").

- (c) To grant a temporary construction easement to the RTC upon, over and across a portion of the OWNER PROPERTY by way of a temporary construction easement document in substantially the form attached hereto as <u>Schedule 3</u>; this temporary construction easement is described on Exhibit "A" to <u>Schedule 3</u> and depicted on Exhibit "B" to <u>Schedule 3</u> attached hereto and made a part hereof (the "TCE EASEMENT").
- (d) To deposit into escrow with Stewart Title, 5390 Kietzke Lane, Suite 101, Reno, Nevada 89511 (Attn: Roberta Crown Rogers) (the "ESCROW AGENT"), all the aforementioned documents, fully executed and notarized where required, on or prior to March 7, 2025, as such date may be modified pursuant to mutual agreement of the OWNER and the RTC (the "ESCROW CLOSING DATE").
- (e) To deliver to ESCROW AGENT such other documentation as ESCROW AGENT may reasonably require to close the escrow and consummate the real property transfers in accordance with this AGREEMENT.
- (f) To be responsible for all necessary maintenance and repair and all risk and liability for loss and damage related to the LAND, PUE EASEMENT and TCE EASEMENT resulting prior to the ESCROW CLOSING DATE.
- (g) To acknowledge and hereby does acknowledge, that a public highway and the necessary incidents thereto (the "PROJECT"), are to be located upon, over, and across the LAND.
- (h) To waive, and hereby does waive, all claims and rights that OWNER may have to seek consequential, special and/or punitive damages in relation to any breach of the obligations contemplated in this AGREEMENT and acknowledges that nothing in this AGREEMENT is intended to or shall it be construed to waive the rights, limitations and immunities of the RTC under Nevada Revised Statutes Chapter 41.
- The RTC, in consideration of the promises and covenants of the OWNER herein set forth, agrees as follows:
- (a) To pay to the OWNER the sum of ONE HUNDRED SIXTY-FOUR THOUSAND TWO HUNDRED THIRTY-SEVEN DOLLARS (\$164,237), which shall be the total purchase price for the LAND, PUE EASEMENT, and TCE EASEMENT, which sum was calculated as an administrative settlement.
- (b) To deliver to ESCROW AGENT such other documentation as ESCROW AGENT may reasonably require to close the escrow and consummate the real property transfers in accordance with the terms of this AGREEMENT.
- (c) To acknowledge, and hereby does acknowledge, that the real property conveyed hereby is transferred and sold "AS IS", "WHERE IS", WITH ALL FAULTS AND CONDITIONS THEREON, and that OWNER has not made and specifically disclaims any representations, warranties, promises, covenants or guaranties of any kind or character whatsoever, whether express or implied, oral or written, past, present or future with respect to the LAND, PUE EASEMENT and TCE EASEMENT, and hereby waives any right to make any claim against OWNER based on any of the foregoing.

- (d) To be responsible for all necessary maintenance and repair and all risk and liability for loss and damage related to the LAND and its use of the PUE EASEMENT, and TCE EASEMENT resulting after the closing and through construction and, in the case of the TCE EASEMENT through the term of the easement.
- (e) To allow access ingress and egress into OWNER's property at all times during construction.
- (f) To leave the TCE EASEMENT area in as neat and presentable condition as existed prior to RTC's entry including restoration of all sidewalks, decorative gravel and shrubs.
- 4. In the event of any default by OWNER under this AGREEMENT, the RTC may, as its sole and exclusive remedy for such default, either: (1) terminate this AGREEMENT in its entirety by delivery of notice of termination to OWNER and receive a refund of all amounts paid by RTC to the OWNER, or (2) continue this AGREEMENT pending the RTC's action for injunctive relief and/or specific performance hereunder provided appropriate proceedings are commenced by the RTC within ninety (90) days following RTC's written notice to OWNER of OWNER's default. Nothing in this Section shall limit or impair the rights of the RTC to condemn or exercise its power of condemnation and eminent domain with respect to real property interests needed for the PROJECT including, but not limited to, the LAND, the PUE EASEMENT and TCE EASEMENT.
- With respect to the PROJECT, it is mutually agreed and understood by the RTC and by the OWNER as follows:
- (a) The term of the TCE EASEMENT shall be for a two one-half (2 ½) year period from the date the TCE EASEMENT is recorded. Upon completion of the PROJECT, the RTC will execute any documentation as may be reasonably necessary to cause the TCE EASEMENT to be released of record.
- (b) That as soon as reasonably practicable following the EFFECTIVE DATE hereof, the RTC shall commence and thereafter shall use its commercially reasonable best efforts to complete the PROJECT within the timeline (as may be extended) previously provided to OWNER and as provided for by all applicable laws and standards.
- It is further mutually agreed and understood by the RTC and by the OWNER as follows:
- (a) The laws of the State of Nevada shall be applied in interpreting and construing this AGREEMENT. The parties consent to the exclusive jurisdiction and venue of the Second Judicial District Court in and for the State of Nevada, located in Washoe County, Nevada, for the enforcement of this AGREEMENT.
- (b) This AGREEMENT shall constitute the entire contract between the parties hereto, and no modification hereof shall be binding upon the parties unless the same is in writing and signed by the respective parties hereto.
- (c) All covenants and agreements herein contained shall extend to and be obligatory upon the heirs, executors, administrators, successors, and assigns, as the case may

be, of the respective parties.

- (d) As used herein the term OWNER shall include the plural as well as the singular, and the feminine as well as the masculine and the neuter.
- (e) The covenants and agreements expressed in the AGREEMENT shall survive the consummation of the property transfers.
- (f) The regulations pertaining to nondiscrimination and Title VI of the Civil Rights Act of 1964, as contained in Title 23, Code of Federal Regulations Part 200, and Title 49, Code of Federal Regulations Part 21, are hereby incorporated by reference and made a part of this AGREEMENT.
- (g) Except as otherwise provided for by law or this AGREEMENT, the rights and remedies of the parties hereto shall not be exclusive and are in addition to any other rights and remedies provided by law or equity.
- (h) That the persons signing this AGREEMENT and all related documents on behalf of the RTC and OWNER are duly authorized to so sign and have the full power and authority to bind them, and to enter into and perform the obligations hereunder.
 - (i) That this AGREEMENT may be executed in counterpart.
- 7. Except as otherwise expressly specified in this AGREEMENT, all notices, requests, consents, approvals, agreements, authorizations, acknowledgments, waivers and other communications required or permitted hereunder shall be in writing to the addresses set forth below and shall be deemed given: (i) immediately when delivered by hand; (ii) the next business day when sent by overnight delivery by internationally recognized express courier such as Federal Express or UPS; or (iii) three (3) days after deposit in the United States mail postage prepaid, registered or certified mail, return receipt requested:

To RTC:

Regional Transportation Commission Attn: Michele Payne 1105 Terminal Way, Suite 108 Reno, NV 89502

To OWNER:

AM-GSR Exchange, LLC Attn: Alex Meruelo 2500 East Second Street Reno, NV 89595

Signature Pages Follow

IN WITNESS WHEREOF the parties hereto have executed this AGREEMENT the day and year first above written.

OWNER:

AM-GSR Exchange, LLC, a Nevada limited liability company

Name: ALEX META Its: Manager	ZUELO	
STATE OF NEVADA COUNTY OF WASHOE)) ss.)	
This instrument was acknow	ledged before me on	
by	, as	of AM-GSR
Exchange, LLC, a Nevada li	mited liability compan	Notary Public
S E A L		notally 1 date
My commission expires:		

RTC Signature Page Follows

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California County of LOS ANGELES	
on February 12, 202 Sefore me, Las	Iren Nicole Lustyan, Notari
personally appeared <u>Alex Mervelo</u> who proved to me on the basis of satisfactory eviden subscribed to the within instrument and acknowledge his/her/their authorized capacity(ies), and that by his/person(s), or the entity upon behalf of which the person	d to me that he/she/they executed the same in her/their signature(s) on the instrument the
I certify under PENALTY OF PERJURY under the law paragraph is true and correct.	vs of the State of California that the foregoing
WITNESS my hand and official seal.	LAUREN NICOLE LUSTYAN Notary Public - California Los Angeles County Commission # 2447829 My Comm. Expires May 25, 2027

(Seal)

RTC:	
REGIONAL TRANSPORTATION COMMISSION	N .
William Thomas, Executive Director	
STATE OF NEVADA COUNTY OF WASHOE	
This instrument was acknowledged before	ore me onby
William Thomas as Executive Director of the Re	egional Transportation Commission of Washoe
County.	
6	
S E A	Notary Public
Ā	1,000
L	
My commission expires:	

SCHEDULE 1 FORM OF GRANT, BARGAIN AND SALE DEED

Ptn. of APN 012-220-37

WHEN RECORDED RETURN TO: Regional Transportation Commission of Washoe County Attn: Michele Payne 1105 Terminal Way, Suite 108 Reno, NV 89502

MAIL TAX STATEMENTS TO: Exempt

LEGAL DESCRIPTION PREPARED BY: HALANA D. SALAZAR, PLS JACOBS ENGINEERING 50 W. LIBERTY STREET, SUITE 205 RENO, NV 89501

Project: Mill Street Capacity & Safety Project

Project #: 0211007

Parcel:

Ptn. of APN 012-220-37

GRANT BARGAIN AND SALE DEED

This GRANT BARGAIN AND SALE DEED, made this ______ day of ______, 2025, between AM-GSR Exchange, LLC, a Nevada limited liability company, hereinafter called GRANTOR, and the REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY, hereafter called GRANTEE.

WITNESSETH:

That the GRANTOR, for and in consideration of the sum of ONE DOLLAR (\$1.00), lawful money of the United States of America, and other good and valuable consideration, the receipt whereof is hereby acknowledged, does by this presents grant, bargain, sell and convey unto the GRANTEE and to its assigns forever, the real property described in Exhibit "A" and depicted on Exhibit "B", attached hereto and made a part hereof (the "Property").

TOGETHER with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues, and profits thereof.

TO HAVE AND TO HOLD all and singular the Property, together with the appurtenances, unto the said GRANTEE and to any of its heirs, successors and assigns forever; and GRANTOR does hereby bind GRANTOR, and GRANTOR's successors and assigns, to WARRANT and FOREVER DEFEND, all and singular, the Property, unto GRANTEE, and GRANTEE's successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, by, through or under GRANTOR, but not otherwise.

IN WITNESS WHEREOF said GRANTOR has hereunto signed on the day and year first above written.

AM-GSR Exchange, LLC, a Nevada limited liability company

By:			
Name:			
Title:	_		
STATE OF NEVADA)) ss.		
COUNTY OF WASHOE)		
This instrument was	acknowledged as	me	
limited liability company.			_ OF AMI-GON Exchange, ELG, a Nevada
			Notary Public
S E A L			Notary Public
Ā			
L			
My commission expires:			

LEGAL DESCRIPTION PREPARED BY: HALANA D. SALAZAR, PLS JACOBS ENGINEERING 50 W. LIBERTY ST., SUITE 205 RENO, NV 89501

EXHIBIT "A" LEGAL DESCRIPTION

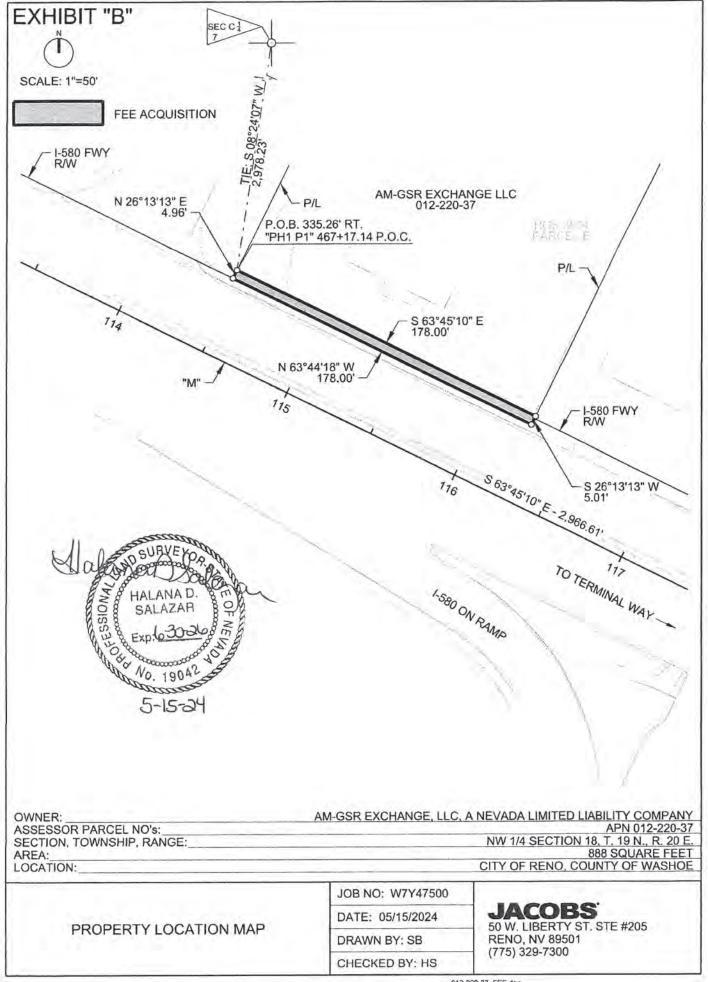
Ptn. of APN 012-220-37 Fee Parcel

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 NW 1/4 of Section 18, T. 19 N., R. 20 E., M.D.M.; and further described as being a portion of PARCEL B shown on that certain RECORD OF SURVEY FOR FHR CORPORATION C.I.P. REAL ESTATE, L.L.C., Map No. 3804, File No. 2458502, filed for record on June 23, 2000, in the Official Records of Washoe County, Nevada and more fully described by metes and bounds as follows:

BEGINNING at a point on the westerly boundary line of said PARCEL B and the left or northerly right-of-way line of Mill Street, 47.20 feet left of and at right angles to Highway Engineer's Station "M" 114+46.89 P.O.T.; said point of beginning further described as bearing S. 08°24'07" W. a distance of 2,978.23 feet from the center quarter corner of Section 7, T. 19 N., R. 20 E., M.D.M.; 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 northerly right-of-way line, a distance of 178.00 feet to the easterly boundary line of said PARCEL B; thence S. 26°13'13" W., along said easterly boundary line, a distance of 5.01 feet to the former left or northerly right-of-way line of said Mill Street; thence N. 63°44'18" W., along said former northerly right-of-way line, a distance of 178.00 feet to said westerly boundary line of PARCEL B; thence N. 26°13'13" E., along said westerly boundary line, a distance of 4.96 feet to the point of beginning; said parcel contains an area of 888 square feet (0.02 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.

No. 1904'2 Page 1 of 1



SCHEDULE 2

FORM OF PERMANENT UTILITY EASEMENT DEED

Ptn. of APN 012-220-37

WHEN RECORDED RETURN TO: Regional Transportation Commission of Washoe County Attn: Michele Chrystal 1105 Terminal Way, Suite 108 Reno, NV 89502

MAIL TAX STATEMENTS TO: Exempt

LEGAL DESCRIPTION PREPARED BY: Halana D. Salazar, PLS Jacobs Engineering 50 W. Liberty Street, Suite 205 Reno, NV 89501

Project: Mill Street Capacity & Safety Project

Project #: 0211007

Parcel: Ptn. of APN 012-220-37

PERMANENT UTILITY EASEMENT DEED

This DEED, made this _____ day of _______, 2025, between AM-GSR Holdings, LLC, a Nevada limited liability company, hereinafter called GRANTOR, and Sierra Pacific Power Company, a Nevada corporation, dba NV Energy, Spectrum Pacific West, LLC, dba Charter or Spectrum, and Nevada Bell Telephone Company, dba AT&T Nevada, individually and collectively referred to hereinafter as GRANTEE.

WITNESSETH:

That the GRANTOR, for and in consideration of the sum of ONE DOLLAR (\$1.00), lawful money of the United States of America, and other good and valuable consideration, the receipt whereof is hereby acknowledged, does by these presents grant unto the GRANTEE and to its assigns forever:

1) To construct, operate, add to, modify, maintain and remove communication facilities and electric line systems for the distribution and transmission of electricity above ground and underground, consisting of poles, other structures, wires, cables, bollards, transformers, anchors, guys and other equipment, fixtures, apparatus, and improvements ("Utility Facilities"), and service boxes, meter panels, cabinets, bollards, and other equipment, fixtures, apparatus, and improvements and slope improvements ("Additional Utility Facilities") upon, over, under and through the property legally described in Exhibit "A" and depicted on Exhibit "B", attached hereto and by this reference made a part of this Permanent Utility Easement Deed ("Easement Area");

- For ingress and egress to, from, over and across the Easement Area for the allowed purposes defined in numbered paragraph 1 above for all other activities permitted by this agreement, inclusive;
- 3) To remove, clear, cut or trim any obstruction or material (including trees, other vegetation and structures) from the surface or subsurface of the Easement Area as GRANTEE may deem necessary or advisable for the safe and proper use and maintenance of Utility Facilities or the Additional Utility Facilities within the Easement Area.

GRANTEE will be responsible for any damages, proximately caused by GRANTEE negligently constructing, operating, adding to, maintaining or removing Utility Facilities and/or the Additional Utility Facilities, to any tangible, personal property or improvements owned by GRANTOR and located on the Easement Area on the date GRANTOR signs the Permanent Utility Easement Deed. However, this paragraph does not apply to, and GRANTEE is not responsible for, any damages caused when GRANTEE exercises its rights under numbered paragraph 3 above.

GRANTOR covenants for the benefit of GRANTEE, its successors and assigns, that no building, structure or other real property improvements will be constructed or placed on or within the Easement Area without the prior written consent of GRANTEE, such structure and improvements to include, but not be limited to, drainage, trees, bridges, signage, roads, fencing, storage facilities, parking canopies, and other covered facilities. GRANTEE and GRANTOR must document GRANTEE's consent by both singing GRANTEE's standard, recordable use agreement. GRANTOR retains, for its benefit, the right to maintain, use and others landscape the Easement Area for its own purposes; provided, however, that all such purposes and uses does not interfere with GRANTEE's rights herein and are in all respects consistent with the GRANTEE's rights herein, GRANTEE's electrical practices, and the National Electrical Safety Code. GRANTEE may use this easement to provide service to any of its customers.

To the fullest extent permitted by law, GRANTOR and GRANTEE waive any right each may have to a trial by jury in respect of litigation directly or indirectly arising out of, under or in connection with this Grant of Easement. GRANTOR and GRANTEE further waive any right to consolidate any action in which a jury trial has been waived with any other action in which a jury trial cannot be or has not been waived.

TOGETHER with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof; with the exception of any and all reservations as are previously hereinabove expressly excepted from this conveyance.

To hereby waive, with full knowledge, that a public roadway and the necessary incidents thereto are to be located upon, over and across the lands hereinabove described, any claim for any and all damages to the remaining adjacent lands and property of the GRANTOR by reason of the location, construction, landscaping and maintenance of said roadway and appurtenances in said location.

TO HAVE AND TO HOLD all and singular the said real property, together with the appurtenances, unto the said GRANTEE and to any heirs, successors and assigns forever.

IN WITNESS WHEREOF said GRANTOR has hereunto signed on the day and year first above written.

AM-GSR Exchange, LLC, a Nevada limited liability company

Ву:		
Name:		
Title:		
STATE OF NEVADA)) ss.	
COUNTY OF WASHOE) 55.	
This instrument was acknowledged	owledged before me on	by
, as		of AM-GSR Exchange, LLC, a
Nevada limited liability comp	pany.	
		Notary Public
S E A		or and a survey
A		
My commission expires:		

LEGAL DESCRIPTION PREPARED BY: HALANA D. SALAZAR, PLS JACOBS ENGINEERING 50 W. LIBERTY ST., SUITE 205 RENO, NV 89501

EXHIBIT "A" PUBLIC UTILITY EASEMENT LEGAL DESCRIPTION

Ptn. of APN 012-220-37

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 NW 1/4 of Section 18, T. 19 N., R. 20 E., M.D.M.; and further described as being a portion of PARCEL B shown on that certain RECORD OF SURVEY FOR FHR CORPORATION C.I.P. REAL ESTATE, L.L.C., Survey Map No. 3804, File No. 2458502, filed for record on June 23, 2000, in the Official Records of Washoe County, Nevada and more fully described by metes and bounds as follows:

BEGINNING at a point on the right or easterly right-of-way line of I-580 Freeway, 451.96 feet right of and measured radially from Highway Engineer's Station "PH1 P1" 466+23.33 P.O.C.; said point of beginning further described as bearing S. 05°46'13" W. a distance of 3,026.15 feet from the center quarter corner of Section 7, T. 19 N., R. 20 E., M.D.M.; 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 N. 26°13'13" E. a distance of 36.82 feet; thence S. 63°46'42" E., a distance of 32.04 feet to the easterly boundary line of said PARCEL B; thence S. 26°13'13" W., along said easterly boundary line, a distance of 36.83 feet to said right or easterly right-of-way line of I-580 Freeway; thence N. 63°45'10" W., along said easterly right-of-way line, a distance of 32.04 feet to the point of beginning; said parcel contains an area of 1,180 square feet (0.03 of an acre).

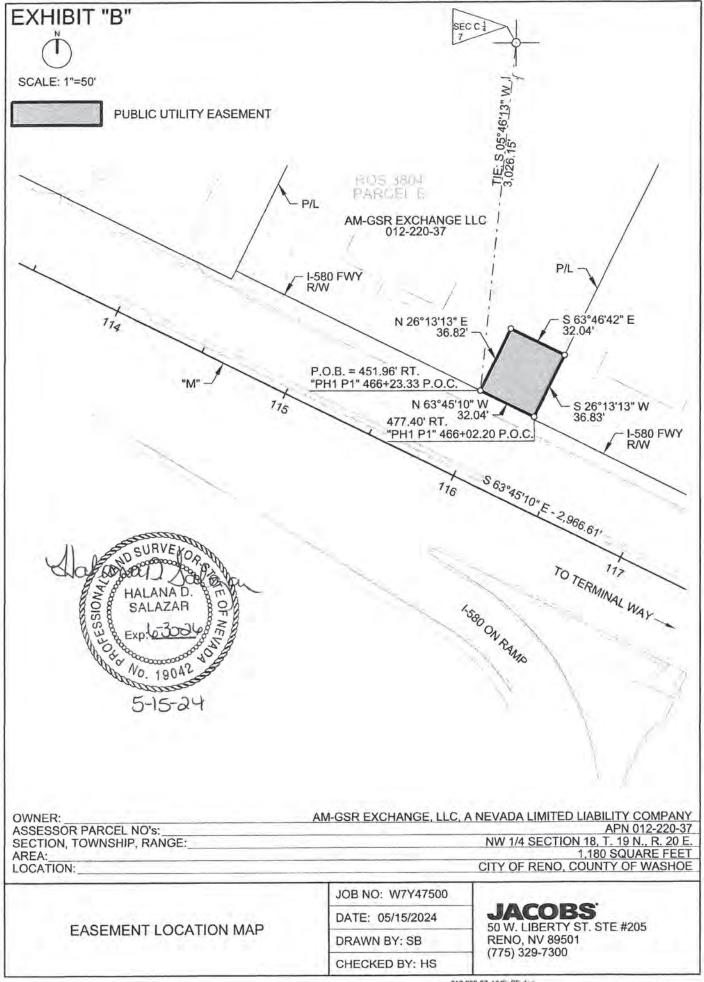
The Basis of Bearing for this description is the NEVADA STATE PLANE COORDINATE SYSTEM, NAD 83/94 DATUM, West Zone as determined by the State of Nevada, Department of Transportation.

or manoportation.

5-15-24

No. 19042

Page 1 of 1



SCHEDULE 3

FORM OF TEMPORARY CONSTRUCTION EASEMENT DEED

Ptn. of APN 012-220-37

WHEN RECORDED RETURN TO: Regional Transportation Commission of Washoe County Attn: Michele Payne 1105 Terminal Way, Suite 108 Reno, NV 89502

MAIL TAX STATEMENTS TO: Regional Transportation Commission of Washoe County Attn: Michele Payne 1105 Terminal Way, Suite 108 Reno, NV 89502

LEGAL DESCRIPTION PREPARED BY: Halana D. Salazar, PLS Jacobs Engineering 50 W. Liberty Street, Suite 205 Reno, NV 89501

Mill Street Capacity & Safety Project (the "Project") Project:

Project #:

0211007

Ptn. of APN 012-220-37 Parcel:

TEMPORARY CONSTRUCTION EASEMENT DEED

, 2025 between, AM-GSR This DEED, made this day of Exchange, LLC, a Nevada limited liability company, hereinafter called GRANTOR, and the REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY, hereinafter called GRANTEE.

WITNESSETH:

That the GRANTOR, for and in consideration of the sum of ONE DOLLAR (\$1.00), lawful money of the United States of America, and other good and valuable consideration, the receipt whereof is hereby acknowledged, does by these presents grant unto the GRANTEE and to its assigns a temporary easement upon, over and across the real property described on Exhibit "A" and depicted on Exhibit "B" attached hereto and made a part hereof by reference (the "Temporary Easement), for the purposes of:

the construction of roadway widening improvements along Mill Street and a new road connection between Mill Street and Market Street. This work includes construction of sidewalk, curb and gutter, curb ramps, asphalt roadway, traffic signal, lighting, drainage improvements, utility relocations, demolition activities of existing building structures, removal and stub of existing utilities to the site, removal of fencing, removal of landscaping, grading, and all other construction work necessary to complete the Project.

The term of the Temporary Easement shall be thirty (30) months from the date of recording of this Temporary Easement Deed with the Washoe County Recorder's Office.

TO HAVE AND TO HOLD all and singular the said real property, together with the appurtenances, unto the said GRANTEE and to any heirs, successors and assigns for the term of this Temporary Easement.

IN WITNESS WHEREOF, GRANTOR has hereunto signed on the day and year first above written.

AM-GSR Exchange, LLC, a Nevada limited liability company

Ву:		
Name:		
Title:	-	
STATE OF NEVADA)) ss.	
COUNTY OF WASHOE) 55.	
This instrument was acknowledge	owledged before me	on by
, as	1.11	of AM-GSR Exchange, LLC, a
Nevada limited liability comp	pany.	
		Notary Public
S E A		
A		
L		
My commission expires:		

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 012-220-37

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 NW 1/4 of Section 18, T. 19 N., R. 20 E., M.D.M.; and further described as being a portion of PARCEL B shown on that certain RECORD OF SURVEY FOR FHR CORPORATION C.I.P. REAL ESTATE, L.L.C., Map No. 3804, File No. 2458502, filed for record on June 23, 2000, in the Official Records of Washoe County, Nevada and more fully described by metes and bounds as follows:

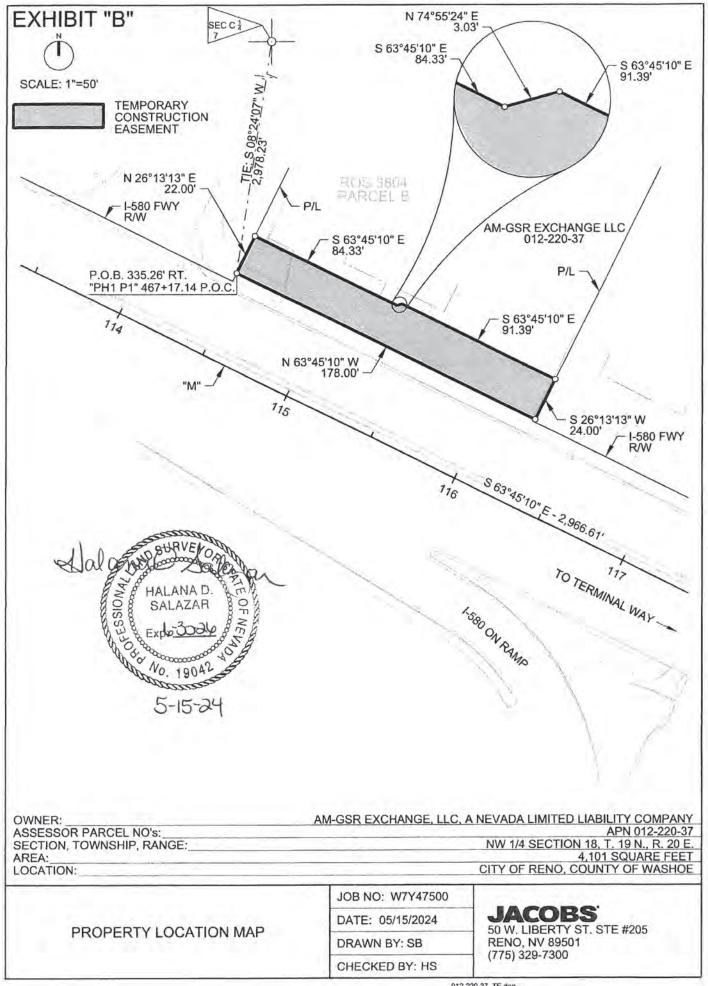
BEGINNING at a point on the westerly boundary line of said PARCEL B and the left or northerly right-of-way line of Mill Street, 47.20 feet left of and at right angles to Highway Engineer's Station "M" 114+46.89 P.O.T.; said point of beginning further described as bearing S. 08°24'07" W. a distance of 2,978.23 feet from the center quarter corner of Section 7, T. 19 N., R. 20 E., M.D.M.; 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 N. 26°13'13" E., along said westerly boundary line, a distance of 22.00 feet; thence along the following three (3) courses and distances

- S. 63°45'10" E. 84.33 feet;
- N. 74°55'24" E. 3.03 feet;
- S. 63°45'10" E. 91.39 feet to the easterly boundary line of said PARCEL B;

thence S. 26°13'13" W., along said easterly boundary line, a distance of 24.00 feet to said left or northerly right-of-way line of Mill Street; thence N. 63°45'10" W., along said northerly right-of-way line, a distance of 178.00 feet to the point of beginning; said parcel contains an area of 4,101 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.





Meeting Date: 2/21/2025 Agenda Item: 4.3.15

To: Regional Transportation Commission

From: Michele Payne, Property Agent

SUBJECT: Resolution of Condemnation - Owners of Springland Village 5 AMD

RECOMMENDED ACTION

Approve a Resolution of Condemnation authorizing RTC's legal counsel to commence condemnation proceedings to acquire a permanent easement and temporary construction easement on portions of APN 030-450-00 from the Owners of Springland Village 5 AMD, which are needed to construct the Sparks Boulevard Capacity Improvement project.

BACKGROUND AND DISCUSSION

The purpose of the project is to construct roadway and safety improvements along Sparks Boulevard between I-80 west off ramps and Baring Boulevard. The 100% design plans for the project are complete. The project is currently scheduled to begin construction in summer 2025.

Through an Interlocal Cooperative Agreement with the City of Sparks and Washoe County dated February 26, 2024, the RTC has been authorized to negotiate and/or initiate eminent domain proceedings to acquire property when necessary for the project. RTC needs to acquire these specific property interests from Owners of Springland Village 5 AMD in order to construct the Sparks Boulevard roadway improvements.

Owners of Springland Village 5 AMD 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 is included in the FY2025 budget; 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 25-06

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 Sparks Blvd Capacity Improvement Project (the "Project"); and

WHEREAS, pursuant to an Interlocal Cooperative Agreement ("ICA") between the RTC and the City of Sparks dated February 26, 2024, the City of Sparks 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, are the Owners of Springland Village 5 AMD; and

WHEREAS, RTC's property agent searched the records of the Washoe County Recorder's Office to identify the names and mailing addresses of the owners of the units in Springland Village 5 AMD that have a fractional ownership interest in the property interests to be acquired.

NOW, THEREFORE, BE IT RESOLVED, that the RTC does hereby find:

- 1. That RTC needs the following property interests to construct the Project: (1) a permanent easement on a portion of APN 030-450-00 and (2) a temporary construction easement on a portion of APN 030-450-00 (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 owners about the Property Rights through communications with the homeowners association that represents the owners. 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 February 5, 2025, proper notice of the RTC's intent to consider

eminent domain action to acquire the Property Rights of the above referenced owners 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 February 21, 2025.

Alexis Hill, Chair

Regional Transportation Commission of Washoe County

2

Attachments

- Exhibit "A" and "B" for Ptn. of APN 030-450-00 Permanent Easement
 Exhibit "A" and "B" for Ptn. of APN 030-450-00 Temporary Construction Easement



AtkinsRéalis

10509 Professional Circle, Ste. 103 Reno, Nevada 89521

Telephone: 775.828.1622

www.atkinsrealis.com

EXHIBIT "A"

LEGAL DESCRIPTION PERMANENT EASEMENT APN 030-450-00

THAT PORTION OF THE COMMON AREA, 2ND AMENDED PLAT, SPRINGLAND VILLAGE UNIT NO. 5, AS SHOWN ON THE MAP THEREOF, CONDOMINIUM TRACT MAP 2426, OFFICIAL RECORDS, WASHOE COUNTY, NEVADA, SITUATE IN THE SOUTHEAST QUARTER (SE1/4) OF SECTION 34, TOWNSHIP 20 NORTH, RANGE 20 EAST, M.D.M., CITY OF SPARKS, NEVADA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE MOST WESTERLY CORNER OF SAID PLAT, SAME BEING ON THE NORTHEASTERLY RIGHT-OF-WAY OF SPARKS BOULEVARD AS SHOWN BY SAID PLAT; THENCE DEPARTING SAID RIGHT-OF-WAY, NORTH 34°40'54" EAST ALONG THE NORTHWESTERLY LINE OF SAID PLAT, A DISTANCE OF 3.47 FEET; THENCE DEPARTING SAID NORTHWESTERLY LINE, SOUTH 55°09'46" EAST, A DISTANCE OF 105.89 FEET; THENCE SOUTH 33°43'50" WEST, A DISTANCE OF 1.43 FEET TO SAID NORTHEASTERLY RIGHT-OF-WAY; THENCE NORTH 56°16'10" WEST ALONG SAID RIGHT-OF-WAY, A DISTANCE OF 105.93 FEET TO THE **POINT OF BEGINNING**.

CONTAINING 259 SQUARE FEET (0.01 ACRES), MORE OR LESS, AS DETERMINED BY COMPUTER METHODS.

AS SHOWN ON EXHIBIT "B" ATTACHED HERETO AND MADE A PART HEREOF.

BASIS OF BEARINGS

THE BASIS OF BEARINGS AND COORDINATE REFERENCE FOR THIS PROJECT IS THE NORTH AMERICAN DATUM OF 1983 ESTABLISHED FROM FEDERAL BASE NETWORK/COOPERATIVE BASE NETWORK OBSERVATIONS IN 1994 (ALSO KNOWN AS NAD83/94), NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE, HOLDING WASHOE COUNTY PUBLISHED LATITUDE 39°32′16.44843″ NORTH AND LONGITUDE 119°53′08.87676″ WEST FOR REGIONAL GPS CONTINUOUS OPERATING REFERENCE STATION (CORS) "RNO1" (WASHOE COUNTY IDENTIFIER N74SM01028) AND UTILIZING A GRID-TO-GROUND COMBINED FACTOR OF 1.000197939 TO PROJECT STATE PLANE COORDINATES TO GROUND EQUIVALENT COORDINATE VALUES AND CONVERTED TO U.S. SURVEY FEET.

END OF DESCRIPTION.

AtkinsRéalis

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Telephone: 775.828.1622

atkinsrealis.com



EXPIRES: 06/30/2015 06/18/2024

BRETT K. JEFFERSON, P.L.S. NEVADA LICENSE NUMBER 8421

PHONE: (702) 551-0296

EMAIL: <u>BRETT.JEFFERSON@ATKINSREALIS.COM</u>

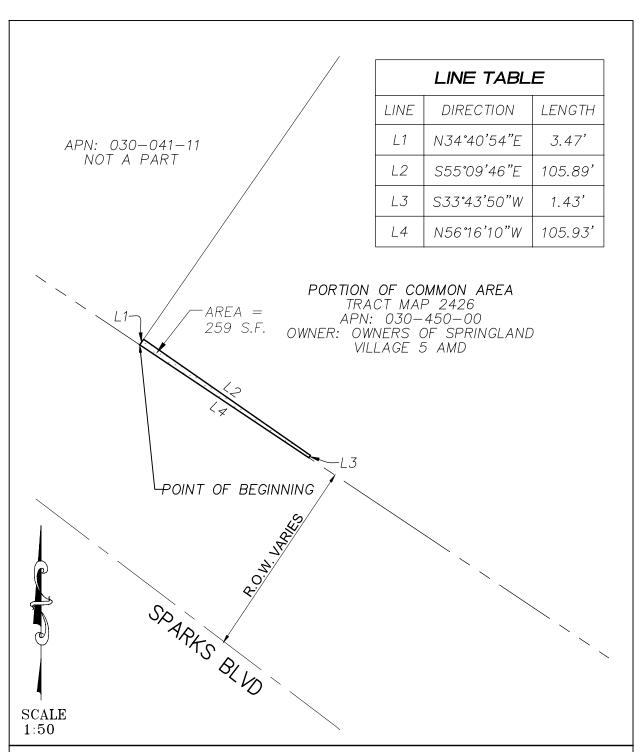


EXHIBIT "B"

SPARKS BLVD RTC PROJECT PERMANENT EASEMENT APN: 030-450-00

A PORTION OF THE COMMON AREA OF TRACT MAP 2426 IN THE SOUTHEAST 1/4 OF SECTION 34, T. 20 N., R. 20 E., M.D.M., WASHOE COUNTY, NEVADA SHEET 1 OF 1

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10509 Professional Circle, Suite 103 Reno, Nevada 89521 Telephone: 775/828-1622 Fax: 775/851-1687



AtkinsRéalis

10509 Professional Circle, Ste. 103 Reno, Nevada 89521

Telephone: 775.828.1622

atkinsrealis.com

EXHIBIT "A"

LEGAL DESCRIPTION TEMPORARY CONSTRUCTION EASEMENT APN 030-450-00

THAT PORTION OF THE COMMON AREA, 2ND AMENDED PLAT, SPRINGLAND VILLAGE UNIT NO. 5, AS SHOWN ON THE MAP THEREOF, CONDOMINIUM TRACT MAP 2426, OFFICIAL RECORDS, WASHOE COUNTY, NEVADA, SITUATE IN THE SOUTHEAST QUARTER (SE1/4) OF SECTION 34, TOWNSHIP 20 NORTH, RANGE 20 EAST, M.D.M., CITY OF SPARKS, NEVADA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE MOST WESTERLY CORNER OF SAID PLAT, SAME BEING ON THE NORTHEASTERLY RIGHT-OF-WAY OF SPARKS BOULEVARD AS SHOWN BY SAID PLAT; THENCE DEPARTING SAID RIGHT-OF-WAY, NORTH 34°40′54" EAST ALONG THE NORTHWESTERLY LINE OF SAID PLAT, A DISTANCE OF 3.49 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING ALONG SAID NORTHWESTERLY LINE, NORTH 34°40′54" EAST, A DISTANCE OF 2.76 FEET; THENCE DEPARTING SAID NORTHWESTERLY LINE, SOUTH 56°16′10" EAST, A DISTANCE OF 319.93 FEET; THENCE SOUTH 48°12′16" EAST, 28.61 FEET TO THE SOUTHEASTERLY LINE OF SAID PLAT; THENCE SOUTH 41°47′44" WEST ALONG SAID SOUTHEASTERLY LINE, A DISTANCE OF 6.18 FEET TO SAID NORTHEASTERLY RIGHT-OF-WAY; THENCE DEPARTING SAID SOUTHEASTERLY LINE, NORTH 48°12′16" WEST ALONG SAID NORTHEASTERLY RIGHT-OF-WAY, A DISTANCE OF 27.83 FEET; THENCE CONTINUING ALONG SAID RIGHT-OF-WAY, NORTH 56°16′10" WEST, A DISTANCE OF 214.02 FEET; THENCE DEPARTING SAID RIGHT-OF-WAY, NORTH 33°43′50" EAST, A DISTANCE OF 1.43 FEET; THENCE NORTH 55°09′46" WEST, A DISTANCE OF 105.89 FEET TO THE POINT OF BEGINNING.

CONTAINING 1,908 SQUARE FEET (0.04 ACRES), MORE OR LESS, AS DETERMINED BY COMPUTER METHODS.

AS SHOWN ON EXHIBIT "B" ATTACHED HERETO AND MADE A PART HEREOF.

AtkinsRéalis

10509 Professional Circle, Suite 103 Reno, Nevada 89521

Telephone: 775.828.1622

atkinsrealis.com

BASIS OF BEARINGS

THE BASIS OF BEARINGS AND COORDINATE REFERENCE FOR THIS PROJECT IS THE NORTH AMERICAN DATUM OF 1983 ESTABLISHED FROM FEDERAL BASE NETWORK/COOPERATIVE BASE NETWORK OBSERVATIONS IN 1994 (ALSO KNOWN AS NAD83/94), NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE, HOLDING WASHOE COUNTY PUBLISHED LATITUDE 39°32′16.44843″ NORTH AND LONGITUDE 119°53′08.87676″ WEST FOR REGIONAL GPS CONTINUOUS OPERATING REFERENCE STATION (CORS) "RNO1" (WASHOE COUNTY IDENTIFIER N74SM01028) AND UTILIZING A GRID-TO-GROUND COMBINED FACTOR OF 1.000197939 TO PROJECT STATE PLANE COORDINATES TO GROUND EQUIVALENT COORDINATE VALUES AND CONVERTED TO U.S. SURVEY FEET.

END OF DESCRIPTION.



EXPIRES: 06/30/2025 07/21/2024

BRETT K. JEFFERSON, P.L.S. NEVADA LICENSE NUMBER 8421

PHONE: (702) 551-0296

EMAIL: BRETT.JEFFERSON@ATKINSREALIS.COM

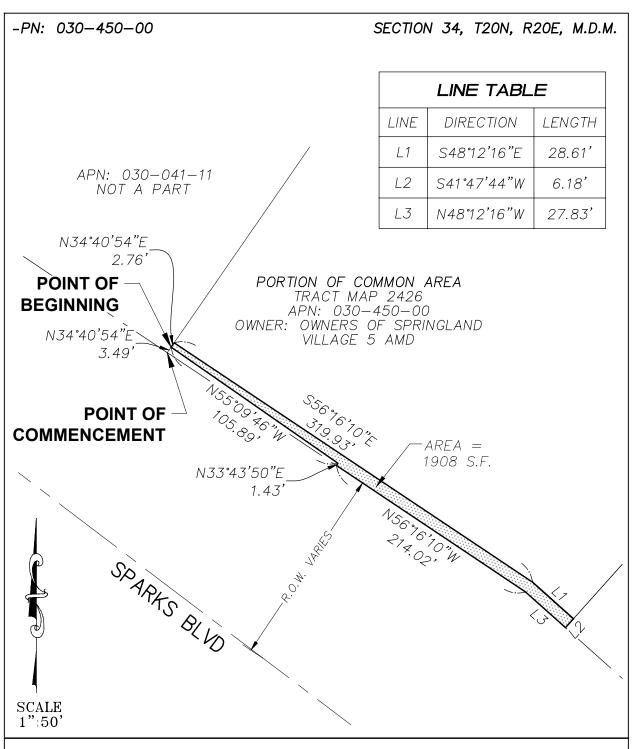


EXHIBIT "B"

SPARKS BLVD RTC PROJECT
TEMPORARY CONSTRUCTION EASEMENT
APN: 030-450-00
A PORTION OF THE COMMON AREA OF TRACT MAP
2426 IN THE SOUTHEAST 1/4 OF SECTION 34, T. 20
N., R. 20 E., M.D.M., WASHOE COUNTY, NEVADA

SHEET 1 OF 1

AtkinsRéalis

10509 Professional Circle, Suite 103 Reno, Nevada 89521 Telephone: 775/828-1622 Fax: 775/851-1687 Meeting Date: 2/21/2025 Agenda Item: 4.4.1

To: Regional Transportation Commission

From: James Gee, Director of Public Transportation and Operations

SUBJECT: Transit Optimization Plan Strategies (TOPS)

RECOMMENDED ACTION

Approve a contract with Transportation Management & Design Inc., (TMD) for the Transit Optimization Plan Strategies (TOPS) Study, in an amount not-to-exceed \$355,053.95.

BACKGROUND AND DISCUSSION

The FY2026-2030 Transit Optimization Plan Strategies (TOPS) is RTC's operating and capital program to guide transit delivery over the next 5-year period. The RTC typically updates the TOPS every five years. The last TOPS was approved by the Board in May 2021.

A Request for Proposal (RFP) was issued December 2, 2024. RTC received two proposals on January 6, 2025. The proposers were Transportation Management & Design, Inc. (TMD) and Parametrix. A three-person evaluation committee, comprised of RTC staff members, evaluated and rated proposals.

TMD scored highest with 277.67 out of 300 points possible for cost and technical evaluation.

With Board approval of the recommendation to award to TMD, RTC plans to begin work on the project in March. Staff will provide project updates in the Public Transportation Monthly Report and present a final draft of the TOPS and recommendations to the Board in spring of 2026.

This item supports Strategic Roadmap Goal #1, "Expand public transportation utilization" and FY2025 RTC Goal, "Initiate update to TOPS Plan".

FISCAL IMPACT

Federal FHWA funding for this project is included in the FY 2025 budget.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

AGREEMENT FOR GOODS AND SERVICES

PUBLIC TRANSPORTATION CONSULTANT FOR THE RTC TOPS PLAN

This agreement ("Agreement") is dated and effective as of _______, 2025, by and between the Regional Transportation Commission of Washoe County, Nevada ("RTC") and Transportation Management & Design, Inc. ("Contractor").

- **1. Term.** The term of this agreement shall commence on the effective date above and shall end on March 31, 2026.
- **Scope of Work.** Contractor shall provide the goods and services described in the scope of work attached as Exhibit A.
- **3. Time for Performance**. The work shall be completed by March 31, 2026, pursuant to the schedule of deliverables attached as Exhibit A at the latest.
- **4. Compensation**. RTC shall pay Contractor for the goods and services pursuant to, and in an amount not to exceed, the pricing and fee schedule attached as Exhibit B.
- **5. Proceeding with Work**. Contractor shall not proceed with work until both parties have executed this Agreement and RTC has issued a purchase order. If Contractor proceeds with work before those conditions have been satisfied, Contractor shall forfeit any and all right to reimbursement and payment for work performed during that period. In the event Contractor violates this section, Contractor waives any and all claims and damages against RTC, its employees, agents, and affiliates, including but not limited to monetary damages, and any other remedy available at law or in equity arising under the terms of this Agreement.
- **6. Invoices/Payment**. Contractor shall submit invoices to <u>accountspayable@rtcwashoe.com</u>. RTC's payment terms are 30 days after receipt of the invoice. Simple interest will be paid at the rate of half a percent (0.5%) per month on all invoices approved by RTC that are not paid within thirty (30) days of receipt of the invoice.

7. Legal/Regulatory Compliance.

- a. Contractor shall comply with all applicable federal, state and local government laws, regulations and ordinances. Contractor shall be responsible for obtaining all necessary permits and licenses for performance of services under this Agreement. Upon request of RTC, Contractor shall furnish RTC certificates of compliance with all such laws, orders and regulations.
- b. Contractor represents and warrants that none of the services to be rendered pursuant to this Agreement constitute the performance of public work, as that term is defined by Section 338.010(17) of the Nevada Revised Statutes. To the extent Contractor does engage in such public work, Contractor shall be responsible for paying the prevailing wage as required by Chapter 338 of the Nevada Revised Statutes.

- **8. Insurance.** Contractor shall obtain all types and amounts of insurance set forth in Exhibit C, and shall comply with all of its terms. Contractor shall not commence any work or permit any employee/agent to commence any work until satisfactory proof has been submitted to RTC that all insurance requirements have been met.
- **9. Indemnification.** Contractor's obligations are set forth in Exhibit C. Said obligation would also extend to any liability of RTC resulting from any action to clear any lien and/or to recover for damage to RTC property.

10. Termination.

- a. <u>Mutual Assent</u>. This Agreement may be terminated by mutual written agreement of the parties.
- b. <u>Convenience</u>. RTC may terminate this Agreement in whole or in part for convenience upon written notice to Contractor.
- c. <u>Default</u>. Either party may terminate this Agreement for default by providing written notice of termination, provided that the non-defaulting party must first provide written notice of default and give the defaulting party and opportunity to cure the default within a reasonable period of time.

11. Rights, Remedies and Disputes

- a. RTC shall have the following rights in the event that RTC deems the Contractor guilty of a breach of any term under the Agreement:
 - i. The right to take over and complete the work or any part thereof as agency for and at the expense of the Contractor, either directly or through other contractors;
 - ii. The right to cancel this Agreement as to any or all of the work yet to be performed;
 - iii. The right to specific performance, an injunction or any other appropriate equitable remedy; and
 - iv. The right to money damages.
- b. Inasmuch as the Contractor can be adequately compensated by money damages for any breach of this Agreement, which may be committed by RTC, the Contractor expressly agrees that no default, act or omission of RTC shall constitute a material breach of this Contract, entitling Contractor to cancel or rescind the Agreement (unless RTC directs Contractor to do so) or to suspend or abandon performance.
- c. Disputes arising in the performance of this Agreement that are not resolved by agreement of the parties shall be decided in writing by the authorized representative of RTC's Executive Director. This decision shall be final and conclusive unless within 10 days from the date of receipt of its copy, Contractor mails or otherwise furnishes a written appeal to RTC's Executive Director. In connection with any such appeal, Contractor shall be afforded an opportunity to be heard and to offer evidence in support of its position. The decision of RTC's Executive Director shall be binding upon the Contractor and the Contractor shall abide be the decision.
- d. Unless otherwise directed by RTC, Contractor shall continue performance under this Agreement while matters in dispute are being resolved.

- 12. Ownership of Work. Plans, reports, studies, tracings, maps, software, electronic files, licenses, programs, equipment manuals, and databases and other documents or instruments of service prepared or obtained by Contractor in the course of performing work under this Agreement, shall be delivered to and become the property of RTC. Software already developed and purchased by Contractor prior to the execution of the Project that will be used in the Project and services rendered under this Agreement, is excluded from this requirement. Contractor and its subcontractors shall convey and transfer all copyrightable interests, trademarks, licenses, and other intellectual property rights in such materials to RTC upon completion of all services under this Agreement and upon payment in full of all compensation due to Contractor in accordance with the terms of this Agreement. Basic survey notes, sketches, charts, computations and similar data prepared or obtained by Contractor under this Agreement shall, upon request, also be provided to RTC.
- **13. Records.** Contractor will permit RTC access to any books, documents, papers and records of Contractor pertaining to this Agreement, and shall maintain such records for a period of not less than three years.
- 14. Exhibits. The exhibits to this Agreement, and any additional terms and conditions specified therein, are a material part hereof and are incorporated by reference as though fully set forth herein.
- **15. Exclusive Agreement.** This Agreement constitutes the entire agreement of the parties and supersedes any prior verbal or written statements or agreements between the parties.
- **16.** Amendment. No alteration, amendment or modification of this Agreement shall be effective unless it is in writing and signed by both parties.
- 17. No Assignment. Contractor shall not assign, sublease, or transfer this Agreement or any interest therein, directly or indirectly by operation of law, without the prior written consent of RTC. Any attempt to do so without the prior written consent of RTC shall be null and void, and any assignee, subleasee, or transferee shall acquire no right or interest by reason thereof.
- **18. Governing Law.** This Agreement shall be construed in accordance with and governed by the laws of the State of Nevada.
- **19. Venue.** Any lawsuit brought to enforce this Agreement shall be brought in the Second Judicial District Court of the State of Nevada, County of Washoe appropriate court in the State of Nevada.
- **20. Attorneys' Fees.** In the event of a dispute between the parties result in a proceeding in any Court of Nevada having jurisdiction, the prevailing party shall be entitled to an award of costs and any reasonable attorneys' fees.
- 21. Certification Required by Nevada Senate Bill 27 (2017). Contractor expressly certifies and agrees, as a material part of this Agreement, that it is not currently engaged in a boycott of Israel. Contractor further agrees, as a material part of this Agreement, it will not engage in a boycott of Israel for the duration of this Agreement. If, at any time during the formation or duration

of this Agreement, Contractor is engaged or engages in a boycott of Israel, it will constitute a material breach of this Agreement.

22. Federal Clauses. This Agreement is funded, in whole or in part, with federal funds. As a condition for receiving payment under this Agreement, Contractor agrees to comply with any and all applicable federal clauses attached as Exhibits D, E and F, and those clauses are incorporated herein by reference.

REGIONAL TRANSPORTATION
COMMISSION OF WASHOE COUNTY
COMMISSION OF WILDING COUNTY
BY:
Bill Thomas, AICP, Executive Director
TRANSPORTATION MANAGEMENT &
DESIGN, INC.
DESIGN, INC.
BY:
China, Langer, President
·
China, Langer, President
•

Exhibit AScope of Services



Task 1: Public Participation / Community Outreach

Task Lead: Gary Hewitt, TMD & Sandra Gonzalez, Celtis

For the 2026-2030 TOPS development, TMD and our outreach partner, Celtis, will implement a comprehensive two-phase engagement strategy that leverages both digital and in-person engagement tools. Central to our approach will be an interactive ESRI StoryMap that serves as a dynamic information hub for the project, updated throughout each phase to keep the community informed and engaged.

The first phase of outreach will focus on gathering input from current riders, potential riders, and key stakeholders about desired improvements across RTC's family of services. The StoryMap will introduce the project, share existing conditions analysis, and link to a survey for community members and customers to submit feedback. To drive traffic to the StoryMap and maximize survey participation, we will implement a paid social media campaign to ensure high visibility and engagement with these TOPS project resources. TMD and Celtis staff will travel to Reno to facilitate two in-person meetings. These face-to-face interactions will be complemented by two (2) virtual meetings scheduled at various times to maximize participation opportunities.

After analyzing community input and developing draft recommendations, our second phase of outreach will present proposed changes through updated StoryMap content featuring maps of proposed changes and a survey to gather feedback. Our team will return to Reno to conduct an open house where community members can review detailed service proposals and speak directly with project staff. A virtual meeting will provide an additional platform for those unable to attend in person. As with the first phase, we will leverage paid social media to ensure maximum participation and engagement.

Throughout both phases, we will maintain careful documentation of all outreach activities and feedback received, ensuring compliance with Title VI requirements. Key outreach materials including surveys and recommendations will be provided in Spanish. We will work with RTC to identify community organizations to help reach traditionally underserved populations. Special attention will be paid to engaging senior and disabled communities given the

plan's enhanced focus on specialized transportation services.

The TMD/Celtis team will prepare all presentation materials and coordinate closely with RTC staff throughout the outreach process. We will also facilitate up to four presentations to RTC Advisory Committees and the RTC Board at key project milestones. All public involvement activities and materials will be documented in a final technical memorandum that will inform the plan recommendations.

Deliverables

- Community Engagement and Participation Plan
- Development of outreach materials (two rounds)
- Staff Attendance and facilitation of outreach meetings (two rounds)
- Project StoryMap (two revisions)
- Project Manager attendance at RTC Board Meetings (up to three)
- Summary Outreach Report for Final Plan

Task 2: Comprehensive Review of Existing Public Transportation Services

Task Lead: Ankit Singh, TMD

Building on our comprehensive analysis from the 2023-2027 TOPS, TMD will perform an updated evaluation of RTC's transit services that incorporates new data sources and focuses on understanding how travel patterns have evolved. In addition to traditional ridership and performance metrics, we will utilize **Replica** travel demand data to gain deeper insights into regional mobility patterns and identify opportunities to better align transit service with current travel needs. As shown Figure 1 on the following page, weekday trips within the Reno area have increased by 19% compared to pre-pandemic levels. The largest percentage increases have been in the afternoon and early evening hours which have seen a 42% increase. TMD will also identify any updated planning documents from local and regional stakeholders and summarize any impacts they may have on existing and future transit demand.

Our analysis will evaluate all aspects of RTC's public transportation network, including fixed-route, BRT, paratransit (Task 9), and microtransit services. We will examine service efficiency measures such as passengers per revenue hour, farebox recovery ratios, and subsidy per passenger, while also considering service quality indicators like on-time performance and customer satisfaction. The Replica data will enhance this analysis by providing a broader context about travel patterns, helping identify potential markets where transit service could be more competitive.

Special attention will be paid to evaluating the success of changes implemented from the previous TOPS. TMD has existing data on the RTC fixed-route service from 2019 and 2021. We will add in more recent data and develop a PowerBI dashboard for project team staff to view critical service information. We will analyze ridership trends, demographic shifts, and travel pattern changes to determine which strategies have been most effective and where adjustments might be needed. This retrospective analysis will be particularly valuable in understanding how different market segments respond to service modifications.

For FlexRIDE service, we will conduct a detailed analysis of trip patterns to identify opportunities for improving efficiency while maintaining high-quality service. Our team will also examine the relationship between fixed-route and microtransit service to identify potential opportunities for making adjustments to routes or microtransit zones.

TMD will document all findings in a comprehensive technical memorandum that will serve as the foundation for service recommendations. This analysis will incorporate Title VI considerations throughout, ensuring that service evaluation and proposed changes promote equity across the system.

Deliverables

 Draft and Final Technical Memo Review of Existing Public Transportation Services

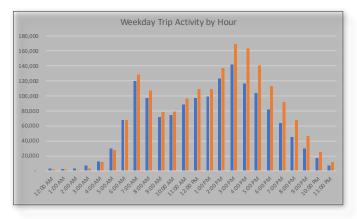


FIGURE 1: NUMBER OF RENO WEEKDAY TRIPS IN 2019 AND 2021

Task 3: Standards for Changes in Service ITask Lead: Gary Hewitt, TMD

TMD will build upon our successful review and update of service standards completed in 2022. We will evaluate how the current standards have performed over the past two years and identify any necessary adjustments based on changing conditions, particularly for fixed-route, paratransit, and microtransit services.

Working closely with RTC staff, we will refine the performance monitoring program that was previously implemented, ensuring it continues to provide meaningful metrics for ongoing service evaluation. Our recommendations will maintain consistency with Title VI requirements while incorporating lessons learned and emerging industry best practices to optimize RTC's service delivery standards for the 2026-2030 period.

Deliverables

Technical Memo - Service Standard and Performance Monitoring Review and Recommendations

Task 4: Peer Review

Mask Lead: Ankit Singh, TMD

TMD will leverage our experience from the last TOPS development by beginning with the previously peer agencies, while remaining open to adjustments based on current operating conditions and changes to operating modes. Our team will implement an innovative Power BI dashboard that provides RTC staff with dynamic access to peer National Transit Database (NTD) metrics, enabling analysis of peer performance across multiple years and different modes. This interactive tool will allow for deeper insights into key performance indicators, making peer comparisons more actionable and meaningful. We will analyze both fixed-route and demand response services, focusing on productivity and per capita measurements to provide RTC with valuable benchmarking insights. TMD will also reach out to peers as needed to understand major differences in performance.

Deliverable

• Technical Memo - Peer Review Summary

Task 5: Strategies for Retaining and Attracting New Riders

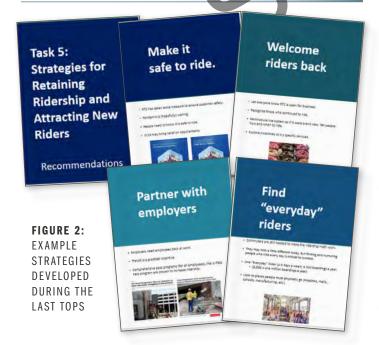
Task Lead: Matt Raymond, Celtis

Building on our successful partnership from the last TOPS, TMD will again collaborate with Celtis to refine and enhance strategies for rider retention and growth. Celtis will evaluate the effectiveness of previously implemented recommendations while incorporating emerging post-pandemic travel patterns, particularly the significant shift in non-commute travel. The team will develop targeted approaches for attracting discretionary riders, including midday, evening, and weekend travelers who increasingly comprise a vital market segment for transit agencies.

The analysis will incorporate both quantitative ridership data and qualitative feedback gathered through customer engagement to identify barriers and opportunities. Celtis will create comprehensive marketing and outreach strategies that highlight RTC's service quality and reliability to new market segments, while maintaining strong connections with existing riders. Special attention will be paid to identifying targeted campaigns that resonate with specific demographic groups and travel patterns, ensuring that RTC's message reaches potential riders at key decision-making moments in their travel choices.

Deliverables

 Technical Memo - Recommended Strategies for Growing Ridership



Task 6: Technology Review Report and Recommendations

Task Lead: Craig Jaffe, Four Nines

TMD will partner with Four Nines Technologies again to lead the technology review and recommendations task, building upon their comprehensive work from the last TOPS. Having developed a detailed technology inventory and system architecture understanding during the previous engagement, Four Nines brings unique institutional knowledge that will streamline and enhance this update. They will initiate this task by updating RTC's existing software and technology inventory using information collected in the earlier tasks. The inventory will include all of the agency's current transportation management software and systems. At the end of this task, we will update the technology diagram as necessary using this inventory.

Following the development of the draft inventory, Four Nines will conduct interviews with key stakeholders from the business and information technology groups. During these stakeholder interviews, they will confirm the information in the draft inventory and work to understand how current software and technology is used and how it does or does not meet RTC's needs. The technology assessment will focus on whether any potential changes are people, process, or technology related. Since these categories often overlap and can be confused with one another, it is important to distinguish between these three categories; for example, there is no point in making a software acquisition when a simple process change could solve the problem.

The Four Nines efforts will culminate in a technical memorandum describing the technologies in use today and recommendations for improvement based on the needs and gaps voiced by agency staff during stakeholder interviews and in earlier tasks as well as industry best practices.

Deliverables

 Technical Memo - Technology Review and Recommendations

Task 7: Fare Analysis and Capital Needs Task Lead: Amy Martin, Four Nines

Four Nines will review RTC's current fare system. Their current state analysis for this task will include:

- Review of RTC's current fare policy, fare structure and levels, fare collection system, and associated business processes for RTC RIDE, FlexRIDE, and ACCESS
- Analysis of the fare products sales and usage using any information available from recent rider surveys
- A high-level assessment of RTC's fare collection system costs, covering the expenses related to collecting cash on buses, mobile ticketing, magstripe passes, ticket books, and fare distribution
- Analysis of customer feedback and usage to identify customer challenges and opportunities for a revised fare structure or improved payment experience

Following the development of the current state analysis, they will work with RTC to identify a set of options for a revised fare structure and fare technology that will meet the needs of RTC and its riders. They will document and evaluate these options in an Alternatives Analysis interim deliverable. They will review these options with key RTC staff in a workshop to make initial selections among the alternatives for further analysis. Four Nines will model up to two alternative fare structures. The modeling results will provide:

- The distribution of riders among all fare segments available in the particular alternative/scenario (e.g., cash, passes, and/or stored value) based on the prices of each option
- Changes in ridership for each market segment based on industry standard fare elasticities
- Revenue impacts based on the ridership changes and the price levels of the different fare elements
- Any impacts on Title VI protected populations associated with the alternative fare structures (note: this will include the necessary Title VI analysis, but does not include completion of the Title VI Fare Equity Analysis report or any associated outreach or customer communication related to potential changes)

The modeling results will be reviewed with key RTC staff to gain input about a preferred path forward.

Four Nines will use the findings of earlier stages of this task, as well as the modeling results and RTC staff input, to craft final recommendations related to fare policies and technologies. They will develop a high-level transition plan for any proposed technology changes including considerations related to procurement, timing, possibilities for incremental changes, and the impacts of changes on riders and the agency.

The recommendations will guide RTC towards emerging trends over the next five years and consider the interaction between technology and policy, and ensure that the two are aligned to provide cost-effective, implementable options. They will identify new fare technology that may benefit RTC, for example cEMV (open payments) or fare capping, as well as other emerging solutions, such as moving away from onboard cash collection. They will also estimate the capital and operating costs of hardware and software requirements associated with our recommendations for inclusion in the capital and operating plan report.

Deliverables

 Fare Alternatives Presentation
 Draft and Final Technical Memo – Fare Analysis and Capital Needs

Task 8: RTC Washoe Senior Ride Program Review

Task Lead: Gary Hewitt. TMD

TMD brings extensive recent experience in evaluating and optimizing senior/disabled transportation programs, having completed similar assessments for the City of Pasadena, Sun Van (Tucson), and DART (Des Moines). We will apply these insights along with industry best practices documented in TCRP Report B-48 to conduct a thorough review of RTC's Washoe Senior Ride Program.

Our evaluation will begin with a comprehensive analysis of current program data, examining usage patterns, demographics, trip characteristics, and operational metrics. Drawing from TCRP B-48's findings on alternative service delivery models, we will assess opportunities to optimize service delivery while maintaining high-quality transportation options for seniors and individuals with disabilities.

The review will examine all aspects of the program including eligibility requirements, fare structure, service policies, and coordination with other RTC services. We will identify potential enhancements that could improve efficiency and customer experience while maintaining program sustainability. Our recommendations will incorporate successful strategies from peer programs, emerging industry trends, and proven approaches for integrating senior transportation services within the broader public transit network.

Deliverables

• Technical Memo –RTC Washoe Senior Ride Program Review

Task 9: ACCESS Service Evaluation and Recommendations

Task Lead: Jacob Fritz, TMD

TMD will conduct a comprehensive evaluation of RTC ACCESS service delivery to identify opportunities for enhancing operational efficiency while maintaining high-quality paratransit service. Our analysis will begin with a detailed review of performance data, examining key metrics including on-time performance, productivity, trip denials, and service costs. We'll utilize our on-demand service analysis process to identify patterns in trip characteristics, common origins/destinations. and peak demand periods.

Our Operations Planner, Jacob Fritz, will conduct extensive on-site observations to evaluate current scheduling practices, dispatch operations, and service delivery methods. This hands-on assessment will provide crucial insights into daily operations that may not be apparent from data analysis alone. Drawing from our recent experience optimizing paratransit operations at Sun Van (Tucson), DART (Des Moines), and MTS (San Diego), we will identify best practices that could benefit RTC's operations.

We will pay particular attention to opportunities for improving productivity through enhanced scheduling techniques, examining potential service adjustments to better match demand patterns, and evaluating current technology utilization. Our recommendations will focus on accommodating growing demand within existing financial constraints while maintaining full ADA compliance. The assessment will culminate in a detailed technical memorandum an action plan for service improvements, technology enhancements, and operational adjustments.

Deliverables

Technical Memo – RTC ACCESS Existing Conditions and Service Recommendations

Sun Van Service Evaluati

Post-COVID Trends (2019 vs 2023)

- Monthly boardings by client increased
 - No major shift in trips to top destination
 - 33% of clients are new since 2019
- Eligibility
 - Number of applications received und
 - Medical verification process overly complicated for staff and customers

Sun Van Service

Operations

- Not currently meeting On-Ti
 - (OTP) goal which is lowest o 5pm
 - Five-minute call outs to custo much time for dispatchers
 - Sun Van travel time compared travel time exceeds current po weekday trips

Sun Van Service Evaluation

- Reservations
 - Calls take longer than typical because of how trips are scheduled
 - Social service agencies making many trips reservations per call which takes additional time
 - Trip negotiation not being used effectively
 - which make schedule less efficient - Pick-up times round to every five minutes which
 - is also less efficient

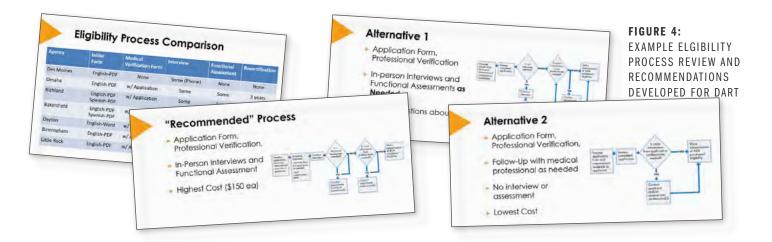
Satisfaction/Importance

- Exceeding expectations for cost, comfort,
- Not meeting expectation for the on-time performance and ride scheduling

Sun Van Client: Importance and Satisfaction Scores (1 to 5)

FIGURE 3:

EXAMPLE SERVICE EVALUATION PRESENTATION PREPARED FOR SUNVAN IN TUCSON



Task 10: Eligibility and Travel Training Evaluation and Recommendations

Task Lead: Gary Hewitt, TMD

TMD will comprehensively evaluate RTC's paratransit eligibility determination process and Travel Training program to enhance efficiency and effectiveness. Our analysis will examine current eligibility procedures, processing timelines, and determination outcomes to identify opportunities for streamlining while maintaining program integrity. We will analyze application metrics, approval rates, and appeals data to develop targeted recommendations for process improvements. TMD has recently developed eligibility program recommendations for DART (Des Moines) and Sun Van (Tucson).

For the Travel Training program, we will assess current methodologies, success rates, and participant feedback to optimize the program's effectiveness in supporting appropriate transitions to fixed-route service. Drawing from successful implementations at peer agencies, we will recommend proven strategies to increase program participation and successful outcomes.

Our recommendations will include specific implementation steps, performance metrics, and evaluation tools for both programs. Final recommendations will be coordinated with Tasks 8 and 9 findings to create a cohesive approach to specialized transportation service delivery that best serves RTC's community.

Deliverables

 Technical Memo – Eligibility and Travel Training Assessment and Recommendations

Task 11: Develop a Five-Year Capital and Operating Plan

Task Lead: Gary Hewitt, TMD

TMD will develop a flexible five-year operating and capital plan covering RTC's services from 2026 through 2030. Building on our experience from the previous TOPS development, we understand the importance of creating a plan that can adapt to changing financial conditions while maintaining service quality and system stability.

Working closely with RTC staff, we will develop revenue forecasting methodologies that consider multiple economic scenarios. Rather than creating a single fixed plan, we will develop a framework of prioritized service improvements and potential reductions that can be implemented based on available funding. This approach allows RTC to respond quickly to changing financial conditions without compromising the system's core functionality.

The plan will include detailed financial modeling in Microsoft Excel that enables RTC staff to perform "what-if" analyses for various scenarios. The model will incorporate each scenario's service hours, vehicle requirements, and ridership projections. We will develop clear trigger points that indicate when to implement specific service changes, ensuring transparent decision-making as conditions evolve.

For capital planning, we will prioritize investments that maintain the state of good repair while identifying opportunities for strategic expansion. The plan will include recommendations for the Fixed-Route Contingency Fleet Plan, Vehicle Management Plan, and Vehicle Replacement Schedule that can flex with different funding scenarios. Our approach will ensure that RTC can maintain essential services during potential downturns while being positioned to take advantage of growth opportunities when funding allows.

The final plan will provide RTC with a five-year work plan while maintaining the flexibility needed to navigate an uncertain funding environment.

Deliverables

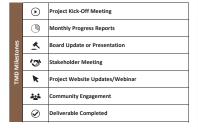
- Technical Memo Five-Year Capital and Operating Plan
- Five-Year Capital and Operating Plan Microsoft Excel Workbook

Project Timeline

TMD has prepared the following master schedule for the RTC 2026-2030 TOPS (see table below), incorporating all tasks and milestones defined in the scope of services and presented in our proposal. We propose to complete this effort over the course of twelve (12) months. The consultant's team-based approach allows for multiple tasks to be completed concurrently, making best use of time and resources. Should RTC Washoe select our team, we would review this timeline with staff and make any adjustments needed.

FIGURE 5: PROPOSED PROJECT SCHEDULE

TASK	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26
171011	1 2 3 4	5 6 7 8	9 10 11 12	13 14 15 16	17 18 19 20 21	22 23 24	25 26 27 28	29 30 31 32	33 34 35 36	37 38 39 40	41 42 43 44	45 46 47 48
Project Management	•	(3)	(9)	(9)	(3)		()		(9)	(9)	(3)	C
Task 1: Public Outreach / Community Outreach					×	(D)	44				k	<u> </u>
Task 2: Comprehensive Review of Existing Public Transportation Services				⊗	0							
Task 3: Standards for Changes in Service												
Task 4: Peer Review			⊗									
Task 5: Strategies for Retaining Ridership and Attracting New Riders					3	•				⊗		
Task 6: Technology Review Report and Recommendations				0							⊘	
Task 7: Fare Analysis and Capital Needs							⊗					
Task 8: RTC Washoe Senior Ride Program Review			0									
Task 9: ACCESS Service Evaluation and Recommendations					⊗							
Task 10: Eligibility and Travel Training Evaluation and Recommendations		4								⊗		
Task 11: Develop a Five-Year Capital and Operating Plan											⊗	



TMD uses two strategies to meet project milestones:

- Avoid delay through proactively managing the project team, anticipate potential delays, and maintain all necessary communication with our clients.
- In the case of unavoidable delay, communicate the issues and explanation to client as early as possible. As appropriate, reallocate staff and technology resources to accelerate the project completion within existing budget.

Exhibit B
Compensation



Exhibit B Compensation

2026 - 2030 Transit Optimization Plan Strategies (TOPS)

Fee Proposal 01/06/25

Task	Description	Classification	Hours	Rate	Total
Please feel	free to change classification	to your firm's job description a	nd/or title an	d to add lines as needed	
Task 1	Public Outreach / Community Outre	each			
		Project Principal	8	\$270.00	\$2,160.00
		Project Manager	48	\$164.22	\$7,882.56
		Operations Planner	0	\$115.88	\$0.00
		Lead Planner/ Data Analyst	36	\$101.20	\$3,643.20
		Graphic Designer	48	\$119.30	\$5,726.40
		Controller	2	\$181.82	\$363.64
		Task 1 Subtotal			\$19,775.80
Task 2	Comprehensive Review of Existing I Payment Methods, Technology, Titl	Studies, Plans, Fares,			
		Project Principal	16	\$270.00	\$4,320.00
		Project Manager	60	\$164.22	\$9,853.20
		Operations Planner	0	\$115.88	\$0.00
		Lead Planner/ Data Analyst	180	\$101.20	\$18,216.00
		Graphic Designer	48	\$119.30	\$5,726.40
		Controller	4	\$181.82	\$727.28
		Task 2 Subtotal			\$38,842.88
Task 3	Standards for Changes in Service				
		Project Principal	16	\$270.00	\$4,320.00
		Project Manager	24	\$164.22	\$3,941.28
		Operations Planner	16	\$115.88	\$1,854.08
		Lead Planner/ Data Analyst	0	\$101.20	\$0.00
		Graphic Designer	0	\$119.30	\$0.00
		Controller	2	\$181.82	\$363.64
		Task 3 Subtotal			\$10,479.00
Task 4	Peer Review				
		Project Principal	0	\$270.00	\$0.00
		Project Manager	24	\$164.22	\$3,941.28
		Operations Planner	0	\$115.88	\$0.00
		Lead Planner/ Data Analyst	60	\$101.20	\$6,072.00
		Graphic Designer	0	\$119.30	\$0.00
					<u>'</u>
		Controller	2	\$181.82	\$363.64
		Task 4 Subtotal		\$181.82	<u>'</u>
Task 5	Strategies for Retaining Ridership a	Task 4 Subtotal nd Attracting New Riders	2		\$363.64 \$10,376.92
Task 5	Strategies for Retaining Ridership a	Task 4 Subtotal nd Attracting New Riders Project Principal	0	\$270.00	\$363.64 \$10,376.92 \$0.00
Task 5	Strategies for Retaining Ridership a	Task 4 Subtotal nd Attracting New Riders Project Principal Project Manager	0 16	\$270.00 \$164.22	\$363.64 \$10,376.92 \$0.00 \$2,627.52
Task 5	Strategies for Retaining Ridership a	Task 4 Subtotal nd Attracting New Riders Project Principal Project Manager Operations Planner	0 16 0	\$270.00 \$164.22 \$115.88	\$363.64 \$10,376.92 \$0.00 \$2,627.52 \$0.00
Task 5	Strategies for Retaining Ridership a	Task 4 Subtotal nd Attracting New Riders Project Principal Project Manager Operations Planner Lead Planner/ Data Analyst	0 16 0	\$270.00 \$164.22 \$115.88 \$101.20	\$363.64 \$10,376.92 \$0.00 \$2,627.52 \$0.00 \$0.00
Task 5	Strategies for Retaining Ridership a	Task 4 Subtotal nd Attracting New Riders Project Principal Project Manager Operations Planner Lead Planner/ Data Analyst Graphic Designer	0 16 0 0	\$270.00 \$164.22 \$115.88 \$101.20 \$119.30	\$363.64 \$10,376.92 \$0.00 \$2,627.52 \$0.00 \$0.00 \$0.00
Task 5	Strategies for Retaining Ridership a	Task 4 Subtotal Ind Attracting New Riders Project Principal Project Manager Operations Planner Lead Planner/ Data Analyst Graphic Designer Controller	0 16 0	\$270.00 \$164.22 \$115.88 \$101.20	\$363.64 \$10,376.92 \$0.00 \$2,627.52 \$0.00 \$0.00 \$0.00 \$363.64
		Task 4 Subtotal Ind Attracting New Riders Project Principal Project Manager Operations Planner Lead Planner/ Data Analyst Graphic Designer Controller Task 5 Subtotal	0 16 0 0	\$270.00 \$164.22 \$115.88 \$101.20 \$119.30	\$363.64 \$10,376.92 \$0.00 \$2,627.52 \$0.00 \$0.00 \$0.00
Task 5	Strategies for Retaining Ridership a Technology Review Report and Rec	Task 4 Subtotal Ind Attracting New Riders Project Principal Project Manager Operations Planner Lead Planner/ Data Analyst Graphic Designer Controller Task 5 Subtotal Dommendations	0 16 0 0 0	\$270.00 \$164.22 \$115.88 \$101.20 \$119.30 \$181.82	\$363.64 \$10,376.92 \$0.00 \$2,627.52 \$0.00 \$0.00 \$0.00 \$363.64 \$2,991.16
		Task 4 Subtotal Ind Attracting New Riders Project Principal Project Manager Operations Planner Lead Planner/ Data Analyst Graphic Designer Controller Task 5 Subtotal Dommendations Project Principal	0 16 0 0 0 0 2	\$270.00 \$164.22 \$115.88 \$101.20 \$119.30 \$181.82	\$363.64 \$10,376.92 \$0.00 \$2,627.52 \$0.00 \$0.00 \$0.00 \$363.64 \$2,991.16
		Task 4 Subtotal Ind Attracting New Riders Project Principal Project Manager Operations Planner Lead Planner/ Data Analyst Graphic Designer Controller Task 5 Subtotal Dommendations Project Principal Project Manager	0 16 0 0 0 0 2	\$270.00 \$164.22 \$115.88 \$101.20 \$119.30 \$181.82 \$270.00 \$164.22	\$363.64 \$10,376.92 \$0.00 \$2,627.52 \$0.00 \$0.00 \$0.00 \$363.64 \$2,991.16 \$0.00 \$2,627.52
		Task 4 Subtotal Ind Attracting New Riders Project Principal Project Manager Operations Planner Lead Planner/ Data Analyst Graphic Designer Controller Task 5 Subtotal Dommendations Project Principal Project Manager Operations Planner	0 16 0 0 0 0 2	\$270.00 \$164.22 \$115.88 \$101.20 \$119.30 \$181.82 \$270.00 \$164.22 \$115.88	\$363.64 \$10,376.92 \$0.00 \$2,627.52 \$0.00 \$0.00 \$0.00 \$363.64 \$2,991.16 \$0.00 \$2,627.52 \$0.00
		Task 4 Subtotal Ind Attracting New Riders Project Principal Project Manager Operations Planner Lead Planner/ Data Analyst Graphic Designer Controller Task 5 Subtotal Dommendations Project Principal Project Manager Operations Planner Lead Planner/ Data Analyst	0 16 0 0 0 2	\$270.00 \$164.22 \$115.88 \$101.20 \$119.30 \$181.82 \$270.00 \$164.22 \$115.88 \$101.20	\$363.64 \$10,376.92 \$0.00 \$2,627.52 \$0.00 \$0.00 \$0.00 \$363.64 \$2,991.16 \$0.00 \$2,627.52 \$0.00 \$0.00
		Task 4 Subtotal Ind Attracting New Riders Project Principal Project Manager Operations Planner Lead Planner/ Data Analyst Graphic Designer Controller Task 5 Subtotal Dommendations Project Principal Project Manager Operations Planner	0 16 0 0 0 0 2	\$270.00 \$164.22 \$115.88 \$101.20 \$119.30 \$181.82 \$270.00 \$164.22 \$115.88	\$363.64 \$10,376.92 \$0.00 \$2,627.52 \$0.00 \$0.00 \$0.00 \$363.64 \$2,991.16 \$0.00 \$2,627.52 \$0.00

Task	Description	Classification	Hours	Rate	Total			
Task 7	Fare Analysis and Capital Needs							
		Project Principal	8	\$270.00	\$2,160.00			
		Project Manager	16	\$164.22	\$2,627.52			
		Operations Planner	0	\$115.88	\$0.00			
		Lead Planner/ Data Analyst	0	\$101.20	\$0.00			
		Graphic Designer	0	\$119.30	\$0.00			
		Controller	2	\$181.82	\$363.64			
	Task 7 Subtotal							
Task 8	RTC Washoe Senior Ride Program Revie							
		Project Principal	4	\$270.00	\$1,080.00			
		Project Manager	30	\$164.22	\$4,926.60			
		Operations Planner	20	\$115.88	\$2,317.60			
		Lead Planner/ Data Analyst	60	\$101.20	\$6,072.00			
		Graphic Designer	0	\$119.30	\$0.00			
		Controller	2	\$181.82	\$363.64			
		Task 8 Subtotal			\$14,759.84			
Task 9	Evaluate Current ACCESS Service Condit	ions						
		Project Principal	0	\$270.00	\$0.00			
		Project Manager	40	\$164.22	\$6,568.80			
		Operations Planner	60	\$115.88	\$6,952.80			
		Lead Planner/ Data Analyst	60	\$101.20	\$6,072.00			
		Graphic Designer	0	\$119.30	\$0.00			
		Controller	2	\$181.82	\$363.64			
		Task 9 Subtotal			\$19,957.24			
Task 10								
		Project Principal	0	\$270.00	\$0.00			
		Project Manager	40	\$164.22	\$6,568.80			
		Operations Planner	48	\$115.88	\$5,562.24			
		Lead Planner/ Data Analyst	80	\$101.20	\$8,096.00			
		Graphic Designer	0	\$119.30	\$0.00			
		Controller	2	\$181.82	\$363.64			
Task 10 Subtotal								
Task 11								
		Project Principal	24	\$270.00	\$6,480.00			
		Project Manager	60	\$164.22	\$9,853.20			
		Operations Planner	0	\$115.88	\$0.00			
		Lead Planner/ Data Analyst	160	\$101.20	\$16,192.00			
		Graphic Designer	60	\$119.30	\$7,158.00			
		Controller	4	\$181.82	\$727.28			
		Task 11 Subtotal			\$40,410.48			
				Tasks 1-11 Cost:	\$186,326.32			
		Additional Expenses						
		•	Per Diem Ra	tes for Washoe County)	\$9,500.00			
	\$2,500.00							
	\$48,050.00							
	\$76,400.00							
	\$32,277.63							
	\$0.00							
				Other (Describe)	\$0.00			
				TOPS TOTAL COST:	\$355,053.95			

Exhibit B

Cost Proposal Form (Celtis)

2026 - 2030 Transit Optimization Plan Strategies (TOPS)

Fee Proposal 01/06/25

Task	Description	Classification	Hours	Rate	Total			
Task 1	Task 1 Public Outreach / Community Outreach							
		Principal/Strategist	17	\$150.00	\$2,550.00			
		Task Lead	75	\$150.00	\$11,250.00			
		Task Support/Design Support	75	\$150.00	\$11,250.00			
	Task 1 Subtotal							
Task 5	Strategies for Retaining Ridership and At	tracting New Riders						
		Principal/Strategist	60	\$150.00	\$9,000.00			
		Task Support/Design Support	40	\$150.00	\$6,000.00			
	Task 5 Subtotal							
	Tasks 1-11 Cost:							
	Additional Expenses							
	Travel (GSA Per Diem Rates for Washoe County)							
	Printing							
	Sub Consultant (Name?)							
	Sub Consultant (Name?)							
	Profit/Fee							
	Social Media Buys							
	Other (Describe)							
	TOPS TOTAL COST:							

Exhibit B

Cost Proposal Form (Four Nines)

2026 - 2030 Transit Optimization Plan Strategies (TOPS)

Fee Proposal 01/06/25

Task	Description	Classification	Hours	Rate	Total			
Task 6	Technology Review Report and Recommendations							
		Principal	40	\$280.00	\$11,200.00			
		Senior Planner - Fare Collection	25	\$225.00	\$5,625.00			
	Task 6 Subtotal							
Task 7	k 7 Fare Analysis and Capital Needs							
		Principal	8	\$280.00	\$2,240.00			
		Senior Planner - Fare Collection	95	\$225.00	\$21,375.00			
		Senior Planner - Fare Policy	70	\$215.00	\$15,050.00			
		Associate	120	\$165.00	\$19,800.00			
		Task 7 Subtotal			\$58,465.00			
Task 8	RTC Washoe Senior Ride Program R	eview						
		Senior Planner - Fare Collection	2	\$225.00	\$450.00			
		Associate	4	\$165.00	\$660.00			
	Task 8 Subtotal							
Tasks 1-11 Cost:								
	Additional Expenses							
		Travel (GSA	Per Diem Ra	tes for Washoe County)	\$0.00			
	Printing							
	Sub Consultant (Name?)							
	Sub Consultant (Name?)							
	Profit/Fee							
	Other (Describe)							
	Other (Describe)							
				TOPS TOTAL COST:	\$76,400.00			

Exhibit C Indemnification and Insurance



Exhibit C

INDEMNIFICATION AND INSURANCE REQUIREMENTS FOR PROFESSIONAL SERVICE AGREEMENTS

1. INTRODUCTION

IT IS HIGHLY RECOMMENDED THAT CONSULTANTS CONFER WITH THEIR INSURANCE CARRIERS OR BROKERS TO DETERMINE THE AVAILABILITY OF THESE INSURANCE CERTIFICATES AND ENDORSEMENTS IN ADVANCE OF PROPOSAL SUBMISSION. IF THERE ARE ANY QUESTIONS REGARDING THESE INSURANCE REQUIREMENTS, IT IS RECOMMENDED THAT THE AGENT/BROKER CONTACT RTC'S FINANCE DIRECTOR AT (775) 335-1845.

2. INDEMNIFICATION

CONSULTANT agrees to defend, save and hold harmless and fully indemnify RTC, Washoe County, City of Reno, and City of Sparks, including their elected officials, officers, employees, and agents (hereafter, "Indemnitees") from and against any and all claims, proceedings, actions, liability and damages, including attorneys' fees and defense costs incurred in any action or proceeding (collectively "Damages") arising out of:

- A. Any breach of duty, neglect, error, misstatement, misleading statement or omission committed in the conduct of CONSULTANT'S profession, work or services rendered by (i) CONSULTANT, its employees, agents, officers, or directors, (ii) subconsultants (hereafter, "Subs"), or (iii) anyone else for which CONSULTANT may be legally responsible; and
- B. The negligent acts of CONSULTANT, its employees, agents, officers, directors, Subs, or anyone else for which CONSULTANT is legally responsible; and
- C. The infringement of any patent or copyright resulting from the use by the Indemnitees of any equipment, part, component or other deliverable (including software) supplied by CONSULTANT under or as a result of this Agreement, but excluding any infringement resulting from the modification or alteration by the Indemnitees of any equipment, part, component, or other deliverable (including software) except as consented to by CONSULTANT.

The Damages shall include, but are not limited to, those resulting from personal injury to any person, including bodily injury, sickness, disease or death and injury to real property or personal property, tangible or intangible, and the loss of use of any of that property, whether or not it is physically injured.

If the Indemnitees are involved in defending actions, CONSULTANT shall reimburse the Indemnitees for the time spent by such personnel at the rate the Indemnitees pay for such services.

If an Indemnitee is found to be liable in the proceeding, then CONSULTANT'S obligation hereunder shall be limited to the proportional share of the liability attributed to CONSULTANT.

In determining whether a claim is subject to indemnification, the incident underlying the claim shall determine the nature of the claim.

In the event of a violation or an infringement under paragraph 2.C above and the use is enjoined, CONSULTANT, at its sole expense, shall either (1) secure for the Indemnitees the right to continue using the materials by suspension of any injunction or by procuring a license or licenses for the Indemnitees; or (2) modify the materials so that they become non-infringing. This covenant shall survive the termination of this Agreement.

3. GENERAL REQUIREMENTS

Prior to the start of any work on a RTC project, CONSULTANT shall purchase and maintain insurance of the types and limits as described herein insuring against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by CONSULTANT, its Subs, or their employees, agents, or representatives. The cost of all such insurance shall be borne by CONSULTANT.

4. VERIFICATION OF COVERAGE

CONSULTANT shall furnish RTC with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth herein, on forms acceptable to RTC. All deductibles and self-insured retentions requiring RTC approval shall be shown on the certificate. All certificates and endorsements are to be addressed to RTC's Finance Director and be received by RTC before work commences. Upon request, the CONSULTANT agrees that RTC has the right to review CONSULTANT'S and the Sub's insurance policies, or certified copies of the policies. Copies of applicable policy forms or endorsements confirming required additional insured, waiver of subrogation and notice of cancellation provisions are required to be provided with any certificate(s) evidencing the required coverage.

5. NOTICE OF CANCELLATION

CONSULTANT or its insurers shall provide at least thirty (30) days' prior written notice to RTC prior to the cancellation or non-renewal of any insurance required under this Agreement. An exception may be included to provide at least ten (10) days' written notice if cancellation is due to non-payment of premium. CONSULTANT shall be responsible to provide prior written notice to RTC as soon as practicable upon receipt of any notice of cancellation, non-renewal, reduction in required limits or other material change in the insurance required under this Agreement.

6. SUBCONSULTANTS & SUBCONTRACTORS

CONSULTANT shall include all Subcontractors and Subconsultants (referred to collectively as "Subs") as insureds under its liability policies OR shall cause Subs employed by CONSULTANT to purchase and maintain separate liability coverages and limits of the types specified herein. If any Subs maintain separate liability coverages and limits, each shall include the RTC, Washoe County, City of Reno and City of Sparks as additional insureds under its commercial general liability policy, subject to the same requirements stated herein, without requiring a written contract or agreement between each of the additional insureds and any sub-consultant or sub-contractor.

Any separate coverage limits of liability maintained by Subs shall be at least \$1,000,000 per occurrence and at least \$2,000,000 for any applicable coverage aggregates or the amount customarily carried by the Sub, whichever is GREATER. If any Subs provide their own insurance with limits less than required of the Contractor, Contractor shall include Subs in their coverage up to the full limits required of the Contractor. When requested by RTC, CONSULTANT shall furnish copies of certificates of insurance evidencing coverage for each Sub. The CONSULTANT need not require its non-design subcontractors to carry Professional Errors and Omissions Liability insurance.

7. DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductibles or self-insured retentions that exceed \$25,000 per occurrence or claim must be declared to RTC's Finance Director prior to signing this Agreement. RTC is entitled to request and receive additional documentation, financial or otherwise, prior to giving its approval of the deductibles and self-insured retentions. Any changes to the deductibles or self-insured retentions made during the term of this Agreement or during the term of any policy must be declared to the RTC's Finance Director prior to the change taking effect.

8. ACCEPTABILITY OF INSURERS

Required insurance is to be placed with insurers with a Best's rating of no less than A-VII and acceptable to RTC. RTC may accept coverage with carriers having lower Best's ratings upon review of financial information concerning CONSULTANT and the insurance carrier. RTC reserves the right to require that CONSULTANT'S insurer(s) be licensed and admitted in the State of Nevada or meet any applicable state and federal laws and regulations for non-admitted insurance placements.

9. OTHER CONDITIONS

- A. Failure to furnish the required certificate(s) or failure to maintain the required insurance may result in termination of this Agreement at RTC's option.
- B. If CONSULTANT fails to furnish the required certificate or fails to maintain the required insurance as set forth herein, RTC shall have the right, but not the obligation, to purchase said insurance at CONSULTANT's expense.
- C. Any waiver of CONSULTANT's obligation to furnish such certificate or maintain such insurance must be in writing and signed by an authorized representative of RTC. Failure of RTC to demand such certificate or other evidence of full compliance with these insurance requirements or failure of RTC to identify a deficiency from evidence that is provided shall not be construed as a waiver of CONSULTANT's obligation to maintain such insurance, or as a waiver as to the enforcement of any of these provisions at a later date.

- D. By requiring insurance herein, RTC does not represent that coverage and limits will necessarily be adequate to protect CONSULTANT, and such coverage and limits shall not be deemed as a limitation on CONSULTANT's liability under the indemnities granted to RTC in this contract.
- E. If CONSULTANT'S liability policies do not contain the standard ISO separation of insureds condition, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.

10. COMMERCIAL GENERAL LIABILITY

CONSULTANT shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella insurance with a limit of not less than \$2,000,000 each occurrence. If such CGL insurance contains a general aggregate limit, it shall be increased to equal twice the required occurrence limit or revised to apply separately to this project.

CGL insurance shall be written on ISO occurrence form CG 00 01 04 13 (or a substitute form providing equivalent coverage) and shall cover liability arising from premises, operations, products-completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

RTC and any other Indemnitees listed in Section 2, INDEMNIFICATION of this Agreement shall be included as an additional insured under the CGL, using ISO additional insured endorsement CG 20 10 07/04 or CG 20 33 07/04 or a substitute providing equivalent coverage, and under the commercial umbrella, if any.

This insurance shall apply as primary insurance with respect to any other insurance or self-insurance programs afforded to RTC or any other Indemnitees under this Agreement.

CONSULTANT waives all rights against RTC and any other Indemnitees listed in Section 2. INDEMNIFICATION of this Agreement for recovery of damages to the extent these damages are covered by the commercial general liability or commercial umbrella liability insurance maintained pursuant to this agreement. CONSULTANT's insurer shall endorse CGL policy to waive subrogation against RTC with respect to any loss paid under the policy.

11. COMMERCIAL AUTOMOBILE LIABILITY

CONSULTANT shall maintain automobile liability and, if necessary, commercial umbrella liability insurance with a limit of not less than \$1,000,000 each accident. Such insurance shall cover liability arising out ofhired and non-owned autos.

Coverage shall be written on ISO form CA 00 01, CA 00 05, CA 00 25, or a substitute form providing equivalent liability coverage for all owned, leased, hired (rented) and non-owned vehicles (as applicable). RTC may agree to accept auto liability for non-owned and hired (rented) vehicles under the CGL if CONSULTANT does not own or operate any owned or leased vehicles.

CONSULTANT waives all rights against RTC, its officers, employees and volunteers for recovery of damages to the extent these damages are covered by the automobile liability or commercial umbrella liability insurance obtained by CONSULTANT pursuant to this Agreement.

12. INDUSTRIAL (WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY) INSURANCE

It is understood and agreed that there shall be no Industrial (Worker's Compensation and Employer's Liability) Insurance coverage provided for CONSULTANT or any Subs by RTC. The CONSULTANT, and any Subs, shall procure, pay for and maintain the required coverages.

CONSULTANT shall maintain workers' compensation and employer's liability insurance meeting the statutory requirements of the State of Nevada, including but not limited to NRS 616B.627 and NRS 617.210. The employer's liability limits shall not be less than \$1,000,000 each accident for bodily injury by accident or \$1,000,000 each employee for bodily injury by disease.

CONSULTANT shall provide a Final Certificate for itself and each Sub evidencing that CONSULTANT and each Sub maintained workers' compensation and employer's liability insurance throughout the entire course of the project.

If CONSULTANT, or any Sub is a sole proprietor, coverage for the sole proprietor must be purchased and evidence of coverage must appear on the Certificate of Insurance and Final Certificate.

CONSULTANT waives all rights against RTC, its elected officials, officers, employees and agents for recovery of damages to the extent these damages are covered by the workers compensation and employer's liability or commercial umbrella liability insurance obtained by Tenant pursuant to this agreement. CONSULTANT shall obtain an endorsement equivalent to WC 00 03 13 to affect this waiver.

13. PROFESSIONAL ERRORS AND OMISSIONS LIABILITY

CONSULTANT shall maintain professional liability insurance applying to liability for a professional error, omission, or negligent act arising out of the scope of CONSULTANT'S services provided under this Agreement with a limit of not less than \$1,000,000 each claim and annual aggregate. CONSULTANT shall maintain professional liability insurance during the term of this Agreement and, if coverage is provided on a "claims made" or "claims made and reported" basis, shall maintain coverage or purchase an extended reporting period for a period of at least three (3) years following the termination of this Agreement.

Exhibit D

Federally Required Clauses

1. **PROMPT PAYMENT PROVISION**

CONSULTANT must pay all subconsultants for satisfactory performance of their contracts no later than thirty (30) days from the receipt of payment made to CONSULTANT by RTC. Prompt return of retainage payments from CONSULTANT to the subconsultants will be made within fifteen (15) days after each subconsultant's work is satisfactorily completed. Any delay or postponement of payment among the parties may take place only for good cause and with RTC's prior written approval. If CONSULTANT determines the work of the subconsultant to be unsatisfactory, it must notify RTC's project manager immediately in writing and state the reasons. The failure by CONSULTANT to comply with this requirement will be construed to be a breach of the Contract and may be subject to sanctions as specified in the Contract or any other options listed in 49 C.F.R. 26.29.

2. **NONDISCRIMINATION**

During the performance of this Contract, CONSULTANT, for itself, its assignees, and successors in interest, agrees as follows:

- A. <u>Compliance with Regulations</u>. CONSULTANT shall comply with the regulations relative to nondiscrimination in DOT-assisted programs, 49 C.F.R. Part 21, as they may be amended from time to time (referred to in this section as the "Regulations"), which are herein incorporated by reference and made a part of this Contract.
- B. <u>Nondiscrimination</u>. CONSULTANT shall not discriminate on the grounds of age, race, color, sex, or national origin in the selection and retention of subconsultants, including procurement of materials and leases of equipment. CONSULTANT shall not participate, either directly or indirectly, in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the Contract covers a program set forth in Appendix B of the Regulations.
- C. <u>Solicitations for Subcontracts, including Procurement of Materials and Equipment.</u> In all solicitations, whether by competitive proposing or negotiation made by CONSULTANT for work to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subconsultant or supplier must be notified by CONSULTANT of CONSULTANT's obligations under this Contract and the Regulations relative to nondiscrimination on the grounds of age, race, color, sex, or national origin.
- D. <u>Information and Reports</u>. CONSULTANT must provide all information and reports required by the Regulations or directives issued pursuant thereto, and must permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by RTC to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information is required, or the information is in the exclusive possession of another

who fails or refuses to furnish this information, CONSULTANT must so certify to RTC, and must set forth what efforts it has made to obtain the information.

E. <u>Sanctions for Noncompliance</u>. In the event of CONSULTANT's noncompliance with the nondiscrimination provisions of this Contract, RTC shall impose such contract sanctions as it may determine to be appropriate, including, but not limited to: (1) withholding of payments to CONSULTANT under the Contract until CONSULTANT complies, and/or (2) cancellation, termination, or suspension of the Contract, in whole or in part.

CONSULTANT shall include the provisions of this clause in every subcontract. CONSULTANT must take such action with respect to any subcontract or procurement as RTC may direct as a means of enforcing those provisions, including sanctions for noncompliance. However, if CONSULTANT becomes involved in or is threatened with litigation with a subconsultant as a result of such direction, CONSULTANT may request RTC to enter into the litigation to protect the interests of RTC.

3. <u>AFFIRMATIVE ACTION IN EMPLOYMENT</u>

CONSULTANT shall comply with the provisions of Section 503 of the Rehabilitation Act of 1973 (the "Rehabilitation Act").

- A. CONSULTANT will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant for employment is qualified. CONSULTANT agrees to take affirmative action to employ, advance in employment and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices such as the following: employment, upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.
- B. CONSULTANT agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor pursuant to the Rehabilitation Act.
- C. In the event of CONSULTANT's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations, and relevant orders of the Secretary of Labor pursuant to the Rehabilitation Act.
- D. CONSULTANT agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the director, provided by or through the contracting officer. Such notices shall state CONSULTANT's obligation under the law to take affirmative action to employ and advance in employment qualified handicapped employees and applicants for employment, and the rights of applicants and employees.
- E. CONSULTANT shall include the provisions of this clause in every subcontract or purchase order of \$2,500 or more unless exempted by rules, regulations, or orders of the

Secretary of Transportation issued pursuant to Section 503 of the Rehabilitation Act, so that such provisions will be binding upon each subconsultant or vendor. CONSULTANT will take such action with respect to any subcontract or purchase order as the director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance (41 C.F.R. 60-741.4.4).

4. INTEREST OF MEMBERS OF, OR DELEGATES TO, CONGRESS

In accordance with 18 U.S.C. 431, no member of, or delegate to, the Congress of the United States shall be admitted to any share or part of this Contract or to any benefit arising therefrom.

5. <u>INTEREST OF PUBLIC OFFICIALS</u>

No member, officer, or employee of any public body, during his tenure, or for one (1) year thereafter, shall have any interest, direct or indirect, in this Contract or the benefits thereof.

6. <u>CIVIL RIGHTS</u>

The following requirements apply to the underlying Contract:

- A. <u>Nondiscrimination</u>. In accordance with Title VI of the Civil Rights Act, as amended, 42 U.S.C. 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. 6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. 12132, and Federal transit law at 49 U.S.C. 5332, CONSULTANT agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age or disability.
- B. <u>Equal Employment Opportunity</u>. The following equal employment opportunity requirements apply to the underlying contract:
 - (1) Race, Color, Creed, National Origin, Sex. In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. 2000e, and Federal transit laws at 49 U.S.C. 5332, CONSULTANT agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor", 41 C.F.R. Parts 60 et seq., (which implement Executive Order No. 11246, Equal Employment Opportunity", as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity", 42 U.S.C. 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. CONSULTANT agrees to take affirmative action to ensure that applicants are employed, and that employees are treated equally during employment, without regard to their race, color, creed, national origin, sex, or age. Such action must include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or

recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

- Age. In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. 623 and Federal transit law at 49 U.S.C. 5332, CONSULTANT agrees to refrain from discrimination against present and prospective employees for reason of age.
- (3) <u>Disabilities</u>. In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 U.S.C. 12112, CONSULTANT agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act", 29 C.F.R. Part 1630, pertaining to employment of persons with disabilities.
- C. CONSULTANT also agrees to include these requirements in each subcontract.

7. INELIGIBLE CONSULTANTS

In the event CONSULTANT is on the Comptroller General's List of Ineligible Consultants for Federally financed or assisted projects, this contract may be canceled, terminated, or suspended by RTC.

8. NOTICE OF FEDERAL REQUIREMENTS

New Federal laws, regulations, policies, and administrative practices may be established after the date of this Contract, which may apply to this Contract. If Federal requirements change, the changed requirements will apply to the Contract or the performance of work under the Contract as required. All standards or limits set forth in this Contract to be observed in the performance of the work are minimum requirements.

9. THIRD-PARTY RIGHTS

Notwithstanding anything herein to the contrary, the services provided under this Agreement shall not give rise to, nor shall be deemed to or construed so as to confer any rights on any other party, as a third-party beneficiary or otherwise.

10. RECORDS RETENTION; AUDIT AND INSPECTION OF RECORDS

A. CONSULTANT shall permit the authorized representatives of RTC, FHWA, the U.S. Department of Transportation's Inspector General, NDOT, and the Comptroller General of the United States, or any of their duly authorized representatives to inspect and audit all data and records of CONSULTANT relating to its performance under the contract until the expiration of three (3) years after final payment under this Contract.

- B. CONSULTANT further agrees to include in all subcontracts hereunder a provision to the effect that the subconsultant agrees that RTC, FHWA, the U.S. Department of Transportation's Inspector General, NDOT, and the Comptroller General of the United States, or any of their duly authorized representatives shall, until the expiration of three (3) years after final payment under the subcontract, have access to and the right to examine any books, documents, papers, and records of the subconsultant directly pertinent to this contract. The term "subcontract" as used in this clause excludes (1) purchase orders not exceeding \$10,000 and (2) subcontracts or purchase orders for public utility services at rates established for uniform applicability to the general public.
- C. The periods of access and examination described above, for records which relate to (1) appeals under the dispute clause of this Contract, (2) litigation or the settlement of claims arising out of the performance of this Contract, or (3) costs and expenses of this Contract to which an exception has been taken by the U.S. Comptroller General or any of his duly authorized representatives, shall continue until such appeals, litigation, claims or exceptions have been disposed of.

11. NO FEDERAL GOVERNMENT OBLIGATION TO THIRD PARTIES

- A. RTC and CONSULTANT acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying Contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this Contract and shall not be subject to any obligations or liabilities to RTC, Consultant, or any other party (whether or not a party to that Contract) pertaining to any matter resulting from the underlying Contract.
- B. CONSULTANT agrees to include the above clause in each subcontract. It is further agreed that the clause shall not be modified, except to identify the subconsultant who will be subject to its provisions.

12. <u>DEBARMENT, SUSPENSION, OTHER INELIGIBILITY AND VOLUNTARY EXCLUSION</u>

- A. This Contract is a covered transaction for purposes of 2 C.F.R. Part 1200 and 2 C.F.R. Part 180. As such, CONSULTANT is required to verify that none of CONSULTANT, its principals, as defined at 2 C.F.R. 180.995, or affiliates, as defined at 2 C.F.R. 180.905, are excluded or disqualified as defined at 2 C.F.R. 180.940 and 180.945.
- B. CONSULTANT is required to comply with 2 C.F.R. 180, Subpart C, and must include the requirement to comply with 2 C.F.R. 180, Subpart C, in all contracts for lower-tier transactions over \$25,000 and in all solicitations for lower tier contracts.
- C. CONSULTANT agrees that it shall not knowingly enter into any lower-tier covered transaction with a person or firm who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this contract.

13. COMPLIANCE WITH FEDERAL LOBBYING POLICY

Section 1352 of Title 31, United States Code, provides in part that no appropriated funds may be expended by the recipient of a federal contract, grant, loan, or cooperative agreement to pay any person by influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement.

Consultants who apply or bid for an award of \$100,000 or more shall file the certification required by 49 C.F.R. Part 20, "New Restrictions on Lobbying." Each tier certifies to the tier above that it will not and has not used federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any Federal Agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any federal Contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-federal funds with respect to that federal Contract, grant or award covered by 31 U.S.C. 1352. Such disclosures are forwarded from tier to tier up to the recipient.

CONSULTANT also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance.

14. REPORTING REQUIREMENTS

CONSULTANT shall provide all information and reports required by the Regulations, or directives issued pursuant shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its facilities as may be determined by RTC or the Federal Highway Administration (FHWA) to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of a Consultant is in the exclusive possession of another who fails or refuses to furnish this information, CONSULTANT shall so certify to RTC, or the FHWA as appropriate, and shall set forth what efforts it has made to obtain the information.

Exhibit E

During the performance of this contract, CONTRACTOR, for itself, its assignees, and successors in interest, agrees as follows:

- 1. **Compliance with Regulations:** The Consultant (hereinafter includes subconsultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration (FHWA), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
- 2. **Non-discrimination:** The Consultant, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subconsultants, including procurements of materials and leases of equipment. The Consultant will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 C.F.R. Part 21.
- 3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the Consultant for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subconsultant or supplier will be notified by the Consultant of the Consultant's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
- 4. **Information and Reports:** The Consultant will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the FHWA to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a Consultant is in the exclusive possession of another who fails or refuses to furnish the information, the Consultant will so certify to the Recipient or the FHWA, as appropriate, and will set forth what efforts it has made to obtain the information.
- 5. **Sanctions for Noncompliance:** In the event of a Consultant's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the Consultant under the contract until the Consultant complies; and/or
 - b. cancelling, terminating, or suspending a contract, in whole or in part.
- 6. **Incorporation of Provisions:** The Consultant will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant

thereto. The Consultant will take action with respect to any subcontract or procurement as the Recipient or the FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Consultant becomes involved in, or is threatened with litigation by a subconsultant, or supplier because of such direction, the Consultant may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the Consultant may request the United States to enter into the litigation to protect the interests of the United States.



Exhibit F

During the performance of this contract, CONSULTANT, for itself, its assignees, and successors in interest, agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 C.F.R. Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability), and 49 C.F.R. Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 U.S.C. § 471, Section 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and Consultants, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 12189) as implemented by Department of Transportation regulations at 49 C.F.R. Parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with

disproportionately high and adverse human health or environmental effects on minority and low-income populations;

- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. § 1681 et seq).



Meeting Date: 2/21/2025 Agenda Item: 4.4.2

To: Regional Transportation Commission

From: James Gee, Director of Public Transportation and Operations

SUBJECT: Construction/Maintenance Quarterly Update on Transit Stops

RECOMMENDED ACTION

Acknowledge receipt of this quarterly Construction/Maintenance update on Transit Stops as presented to the Citizens Multimodal Advisory Committee on February 5, 2025.

BACKGROUND AND DISCUSSION

The Citizens Multimodal Advisory Committee (CMAC) provides information and advice regarding the construction, installation and maintenance of benches, shelters and transit stops for passengers of the RTC transit system as required by Nevada Assembly Bill 214 (2023). The committee will have this topic as a discussion item at least four times a year.

At the CMAC meeting on February 5, 2025, RTC staff gave a presentation to the Citizens Multimodal Advisory Committee regarding the following:

Improvements Between November 2024 and January 2025

- A trash can was installed at EI Rancho Dr before Divot (Route 5).
- The bus stop at Mill and River Rock (Route 13, 14) was improved with a pad and a bench.
- The installation of new BRT signs and information kiosks at RTC 4th Street Station and Centennial Plaza has been completed.
- A permanent stop pole was installed at Stead Blvd before Sagewood (Route 7).
- Schedules were updated for the January Service Change.
- Eight shelters have been installed throughout the year.

Future/Ongoing Improvements

• NDOT is reviewing the permit application regarding the installation of bench at McCarran and Mae Anne (Route 11)

The following bus stops will be affected by development projects. RTC is coordinating with developers to ensure the stops are properly restored and improved:

Reviewed and Approved

- Sutro and 7th (65-unit Senior Housing)
- E. 2nd and Locust (Reno Sikh Temple)

Under Review/Discussion

- Terminal before Airmotive Way, and Terminal before Villanova (Reno Airport Consolidated Rental Car Facility)
- Stops at GSR (GSR Arena)

FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

Meeting Date: 2/21/2025 Agenda Item: 4.5.1

To: Regional Transportation Commission

From: Paul Nelson, Government Affairs Officer

SUBJECT: Kaempfer Crowell, LTD Legislative Services

RECOMMENDED ACTION

Approve a contract with Kaempfer Crowell, LTD, for Nevada government affairs services, in an amount not-to-exceed \$65,000 per year for two years.

BACKGROUND AND DISCUSSION

Staff seeks to retain Kaempfer Crowell, LTD (Consultant) to provide government affairs services related to Nevada legislative matters and executive branch matters. The Consultant will represent the RTC before the Nevada Legislature to present RTC's position on matters of funding, policy and regulation, and build strong legislative relationships on behalf of RTC. In addition, the Consultant will monitor appropriate Bill Draft Requests for potential impacts to the RTC and will also monitor the interim Legislative committees and studies in areas of interest to RTC. In addition, the Consultant will work with outside groups (construction industry, labor organizations, transportation agencies, etc.,) to educate them on RTC positions and legislative priorities.

The term of the contract is December 1, 2024 to November 30, 2026. The not-to-exceed cost of the contract is \$130,000, payable in equal monthly installments.

FISCAL IMPACT

Funding for year one of this item is included in the approved FY 2025 budget, and funding for year two will be included in the FY 2026 budget.

PREVIOUS BOARD ACTION

10/21/2022 Approved contract with Kaempfer Crowell, LTD, for Nevada Government Affairs Services, in an amount not-to-exceed \$65,000 per year for two years.

AGREEMENT FOR SUPPLEMENTAL LOBBYING SERVICES

THIS AGREEMENT is dated and effective as of December 1, 2024, by and between the Regional Transportation Commission of Washoe County ("RTC"), and Kaempfer Crowell, Ltd. ("CONSULTANT").

WITNESSETH:

WHEREAS, RTC desires to obtain the services of CONSULTANT to provide required supplemental government affairs services, all as more specifically described below; and

WHEREAS, CONSULTANT has the necessary experience and qualifications to perform the required supplemental government affairs services; and

WHEREAS, RTC and CONSULTANT desire to provide a full statement of their respective rights, obligations and duties in connection with the performance of CONSULTANT's duties hereunder.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the parties agree as follows:

A. SCOPE OF SERVICES

CONSULTANT shall perform and accomplish the professional services set forth in the Statement of Work attached hereto as Exhibit A (the Scope of Work) in a professional and timely manner.

B. TERM OF AGREEMENT

The term of this Agreement shall be from December 1, 2024 to November 30, 2026.

C. PAYMENTS TO CONSULTANT

- 1. <u>Compensation</u>. RTC shall pay the CONSULTANT for the work described in the Statement of Work in accordance with the Payment Schedule attached as Exhibit B.
- Compensation for Additional Services. If RTC makes a written request for additional
 tasks or services that CONSULTANT believes to be outside the scope of the work
 contemplated by this Agreement, CONSULTANT must submit its request for
 additional charges to the RTC Executive Director for approval prior to any cost being
 incurred.
- 3. <u>Method and Time of Payment</u>. Payment for services shall be made in the following manner:
 - a. CONSULTANT shall submit monthly progress reports and accompanying invoices to RTC. Invoices must be submitted to accountspayable@rtcwashoe.com.

- b. Subject to RTC review and approval of invoices, RTC shall pay CONSULTANT within thirty (30) calendar days after the date of the invoice.
- c. CONSULTANT shall maintain complete records supporting every request for payment that may become due. RTC shall have the right to receive and copy said records.
- 4. <u>Compensation after Termination</u>. If this Agreement is terminated, CONSULTANT shall be paid for services provided after the period covered by the last invoice through the date of receipt of written notice of termination.

D. <u>OTHER PROVISIONS</u>

- 1. <u>Time is of the Essence</u>. It is understood and agreed that all times stated and referred to herein are of the essence. The times stated and referred to may be extended by the RTC Executive Director for such additional periods as the RTC Executive Director may approve. No extension of time shall be valid unless reduced to writing and signed by the RTC Executive Director.
- 2. <u>Non-Transferability</u>. This Agreement is for CONSULTANT's professional services, and CONSULTANT's rights and obligations hereunder may not be subcontracted or assigned without the prior written consent of RTC.

3. Termination.

- a) RTC shall have the right to cancel this Agreement at its sole discretion upon thirty (30) days prior written notice given pursuant to Paragraph 6 of this section. In the event of such cancellation by RTC, CONSULTANT shall be paid pursuant to section C-1 for work completed through the effective date of termination.
- b) If CONSULTANT provides notice that it is unwilling or unable to complete the tasks or services contracted to herein, CONSULTANT shall be deemed to be in default. In such event, RTC shall have the option of declaring the contract terminated or hiring another consultant for the remainder of the existing term. CONSULTANT shall be liable to RTC for any reasonable additional consultant fees incurred to obtain replacement services.
- 4. <u>Hold Harmless</u>. CONSULTANT shall defend, and hold RTC, its officials, employees, and agents harmless from any and all claims, demands, or actions for personal injury or property damage to the extent they arise from CONSULTANT's acts or omissions, or the negligent performance of service under the Agreement. Should RTC be joined or named as a party in any claim, suit, action, or other legal proceedings arising out of the services performed by CONSULTANT under this Agreement, CONSULTANT shall hold RTC, its officials and employees harmless from same. This paragraph shall not apply to a situation where liability arises solely from the negligent or intentional acts, of any officer, employee or agent of RTC.

5. Relationship of Parties.

CONSULTANT is an independent contractor to RTC under this Agreement. CONSULTANT shall be free to contract to provide similar services for others while it is under contract to RTC, so long as said services and advocacy are not in direct conflict, as determined by the RTC Executive Director in the exercise of his reasonable discretion, with services being provided by CONSULTANT to RTC or significantly impede or impair CONSULTANT's ability to provide the services contracted for in this Agreement. CONSULTANT is not entitled to participate in any retirement, deferred compensation, health insurance plans, or other benefits RTC provides to its employees.

6. <u>Notices</u>. Any notice or communication required or permitted to be served on a party hereto may be served by personal delivery to the office of the person or persons identified below. Service may also be affected by registered or certified mail, by placing the notice or communication in an envelope addressed as indicated below, and depositing said envelope in the U.S. Mail.

RTC: Bill Thomas, AICP

Executive Director

Regional Transportation Commission

1105 Terminal Way Reno, Nevada 89520 (775) 348-0400

CONSULTANT: Michael D. Hillerby

Kaempfer Crowell, Attorneys at Law 50 West Liberty Street, Suite 700

Reno, Nevada 89501 (775) 852-3900

The person to be served and the address shown above may be changed at any time by notice to the other parties. Service shall be completed upon personal delivery or three (3) days following the time the notice is sent by U.S. Mail, registered or certified, with postage prepaid.

- 7. Nevada Law Applies. The provisions of this Agreement shall be governed and construed in accordance with the laws of the State of Nevada. The exclusive venue and court for all lawsuits concerning this Agreement shall be the Second Judicial District Court of the State of Nevada, County of Washoe and the parties hereto submit to the jurisdiction of that District Court.
- 8. Exclusive Agreement. There are no verbal agreements, representations, or understandings affecting this Agreement, and all negotiations, representations, and undertakings are set forth herein with the understanding that this Agreement constitutes the entire understanding by and between the parties.

- 9. <u>Amendments.</u> No alteration, amendment, or modification of this Agreement shall be effective unless it is in writing and signed by both parties.
- 10. <u>Regulatory Compliance</u>. CONSULTANT shall comply with all applicable federal, state and local government laws, regulations, and ordinances.
- 11. Any waiver or breach of a provision in this Agreement shall not be deemed a waiver of any other provision in this Agreement and no waiver is valid unless in writing and executed by the waiving party. An extension of the time for performance of any obligation or act shall not be deemed an extension of time for the performance of any other obligation or act. This Agreement inures to the benefit of and is binding upon the parties to this Agreement and their respective heirs, successors and assigns.

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

REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY

By: Bill Thomas, AICP, Executive Director

KAEMPFER CROWELL, LTD

Josh D. Correlli, Partner

EXHIBIT A SCOPE OF WORK

- 1. Represent RTC before the Nevada Legislature. Provide testimony as required and help prepare staff for appearances and testimony before Legislative committees.
- 2. Identify legislative bills and amendments that would impact RTC and help to develop appropriate responses to those initiatives.
- 3. Build strong legislative relationships on behalf of RTC.
- 4. Develop optimum political positioning for RTC by educating lawmakers on the unique role of RTC locally and as a part of the State's transportation system.
- 5. Monitor appropriate Bill Draft Requests for potential impact to RTC and transmit same to RTC.
- 6. Monitor interim Legislative committees and studies in areas of interest to RTC.
- 7. Monitor and engage as necessary with the Southern Nevada Forum (including public agency and legislator members) and RTC of Southern Nevada to understand their Legislative priorities and any impact these may have on RTC Washoe.
- 8. Work with outside groups (construction industry, labor organizations, transportation agencies...) to educate them on RTC positions and legislative priorities.
- 9. Assist as directed in RTC's strategic planning.
- 10. Participate in weekly Federal/State team calls.

EXHIBIT B COMPENSATION SCHEDULE

The total amount paid under this two-year Agreement shall not exceed Sixty-Five Thousand and No/100 Dollars (\$65,000.00) annually. For all professional services performed under this Agreement, RTC agrees to pay CONSULTANT in accordance with the following monthly payment schedule, with no additional charges for expenses:

Month/Year	<u>Amount</u>
December 2024	\$5,416.67
January 2025	\$5,416.67
February 2025	\$5,416.67
March 2025	\$5,416.67
April 2025	\$5,416.67
May 2025	\$5,416.67
June 2025	\$5,416.67
July 2025	\$5,416.67
August 2025	\$5,416.67
September 2025	\$5,416.67
October 2025	\$5,416.67
November 2025	\$5,416.63
December 2025	\$5,416.67
January 2026	\$5,416.67
February 2026	\$5,416.67
March 2026	\$5,416.67
April 2026	\$5,416.67
May 2026	\$5,416.67
June 2026	\$5,416.67
July 2026	\$5,416.67
August 2026	\$5,416.67
September 2026	\$5,416.67
October 2026	\$5,416.67
November 2026	\$5,416.63

Meeting Date: 2/21/2025 Agenda Item: 4.5.2

To: Regional Transportation Commission

From: Laura Freed, Director of Administrative Services

SUBJECT: Comp and Class Approval of Market Adjustments to Employee Pay for the Balance of FY25

RECOMMENDED ACTION

Approval of market adjustments to the salaries of nine RTC employees pursuant to Personnel Rule 5.8.1.iv.

BACKGROUND AND DISCUSSION

As the Board is aware, the RTC undertook a classification and compensation study beginning in late spring 2024. The report from the classification/compensation consultant was presented to the Board at its meeting of November 15, 2024. One of the tasks completed by the consultant was a market check of each position in the RTC. As noted in the report, most positions in the agency match or exceed the market's 50th percentile. Based upon findings from the consultant, the Executive Director identified nine positions that warranted compensation adjustment. These adjustments correct both the market lag and salary compaction issues. It should also be noted that pay adjustments resulting from this study were limited to those RTC employees who were hired prior to December 31, 2023.

The nine positions recommended for pay adjustments are:

- Deputy Director/Director of Engineering
- Director of Administrative Services
- Director of Finance/CFO
- Engineering Manager (2)
- Procurement and Contracts Analyst
- Senior IT Analyst
- Senior Technical Planner
- Senior Technical Transit Operations Planner

The total salary impact of all pay adjustments is \$67,135.32 annually. None of the pay adjustments would put the incumbents in these positions over their current pay band maximum.

This action is requested pursuant to RTC Personnel Rule 5.8.1.iv, which governs special salary adjustments. In subsection 1.iv., salary adjustments may be approved to correct salary inequities. If the Board approves these adjustments, the pay increases would take effect at the soonest pay cycle practicable.

This is the only current year adjustment to the compensation plan recommended by RTC staff. At a future Board meeting, the RTC staff will submit a classification and compensation plan for the Board's approval that would take effect in FY 2026 (July 1, 2025).

This item supports the FY2025 RTC Goal, "Complete comp. and class study...".

FISCAL IMPACT

These adjustments total \$67,135.32 in total yearly salary impact; however, since the fiscal year is half over, the actual salary impact to the RTC budget will be approximately 1/3 of this amount. Funding for this item is available through vacancy savings in the current year budget.

PREVIOUS BOARD ACTION

There has been no previous Board action taken.

Meeting Date: 2/21/2025 Agenda Item: 5.1.

To: Regional Transportation Commission

From: Vanessa Lacer, Planning Director

SUBJECT: Regional Transportation Plan (RTP) - Public Hearing and Approval Resolution

RECOMMENDED ACTION

Conduct a public hearing regarding approval of the 2050 Regional Transportation Plan (RTP); adopt a resolution approving the RTP.

BACKGROUND AND DISCUSSION

The RTP is the RTC's long-range transportation plan as required under Title 23, Part 450 of the Code of Federal Regulations (CFR) and state law. It contains major transportation projects and programs for Washoe County for all modes of travel. It functions as the major tool for implementing regional long-range transportation planning. The RTP captures the community's vision of the transportation system and identifies the projects, programs, and services necessary to achieve that vision.

The RTC initiated the development of the 2050 Regional Transportation Plan Update in the Fall of 2023. The planning process identifies long-term goals for the regional transportation system and identifies the projects, programs, and services that are expected to be implemented through 2050. The RTP is based on a robust community engagement process and conducted in collaboration with partner agencies. The RTP is required to address at least a 20-year planning timeframe and must include short and long-term strategies to foster the development of an integrated multi-modal regional transportation system that facilitates the safe and efficient movement of people and goods. Additional requirements of the RTP include a prioritized and fiscally constrained list of the transportation projects and services for the region that are needed over the next 20 years. Federal regulations require that the RTP be updated every four years. The current RTP approval extends through March 2025.

The draft plan was available for a 30-day public comment period from January 3, 2025, to February 1, 2025. The Draft RTP was presented to the RTC Citizens Multimodal Advisory Committee (CMAC) and the RTC Technical Advisory Committee (TAC) in January 2025. CMAC and TAC members reviewed and provided comments on the Draft Plan. The TAC recommended approval of the 2050 RTP at their meeting on February 12, 2025. All comments received, responses provided, and changes made to the final Plan as a result of the comments received are included as Attachment A. The final Plan is included as Attachment

B. RTC staff are recommending approval of the 2025 Update to the 2050 Regional Transportation Plan (RTP). An Approval Resolution is included as Attachment C.

This item supports Strategic Roadmap Goal #4, "Proactively manage congestion" and FY2025 RTC Goal, "Complete: Regional Transportation Plan Update".

FISCAL IMPACT

There is no fiscal impact related to this action.

PREVIOUS BOARD ACTION

01/17/2025	Received an update on the Draft 2050 Regional Transportation Plan (RTP) Update.
11/15/2024	Received an update on the 2050 Regional Transportation Plan (RTP) Update.
08/16/2024	Received an update on the 2050 Regional Transportation Plan (RTP) Update.
03/22/2024	Board Retreat: RTP process & community input.
12/15/2023	Received an update on the 2050 Regional Transportation Plan (RTP) Update.
03/19/2021	Adopted a resolution approving the 2050 Regional Transportation Plan (RTP).

ATTACHMENT A

Entity	Cor	nment	Response	Change Made in Plan (Y/N)
RTC Engineering Staff	1	Please make several minor changes for clarity to names/descriptions of private roadways.	Minor edits for clarity were made to names/descriptions of private roadways in Appendix B (p. 201).	Y
	2	Provide some additional information on types of projects that we deliver through the Traffic Intersection Improvements Program.	Information on project eligibility and prioritization was added to the Traffic Intersection Improvements and Intelligent Transportation Systems Program Section of Chapter 15 (p.147).	Y
	3	Please add and revise several roadways in the Pavement Preservation Roadway List Roadway in Appendix F.	Pavement Preservation Roadway List Roadway in Appendix F (p. 233) was revised to include the additional roadways and edits.	Y
	4	Please add a discussion of LOS definition and LOS standards to the new Appendix D.	A discussion of LOS definitions and local LOS standards was added to Appendix D (p.218).	Y
RTC Public Transportation Staff		Please add a third bullet to Ch 12 Passenger Facility Needs that says, "Improvements of existing BRT stations and construction of potential BRT expansion to correspond with development opportunities."	The following text was added to Chapter 12, as the third bullet under the Passenger Facility Needs section (p.115): "Improvements of existing BRT stations and construction of potential BRT expansion to correspond with development opportunities."	Y
CMAC Member		Please clarify Justice 40 areas on the EJ maps in Ch 10.	Chapter 10 maps showing the locations of environmental justice populations were created using the Environmental Protection Agency's (EPA) Environmental Justice Screening and Mapping Tool (EJScreen). The goal of the Justice40 Initiative is to provide 40 percent of the overall benefits of certain Federal investments to disadvantaged communities. Environmental justice populations shown on the maps in Chapter 10, may also be considered disadvantaged communities under the Justice40 initiative.	N
TMRPA Staff		We suggest some edits to how you characterize the Truckee Meadows Region and the focus area for the majority of the transportation planning work you undertake. The TMSA is a useful feature for describing the urbanized area of principal planning interest. To some extent, the regional characterization could be addressed through the maps you include. I think the maps generally look good, but there are a few different formats and some inconsistency in how data are presented. We noted a couple sections where you could add a sentence or two to acknowledge our new policies, NR 11 and NR 15, that address Regional Trails and Source Water Protection, respectively.	References to the Truckee Meadows Region in Ch 2 have been standardized for clarity. To account for all programs and services of the RTC we have retained the focus on the MPO planning boundary instead of a focus on the TMSA. Several maps are derived from source materials and therefore include some inconsistency with maps created by RTC. A reference to TMRPA policy NR 11 was added to Ch 12 (p. 108). A reference to TMRPA policy NR 15 was added to Ch 8 (p. 69).	Y

EPA Comments	1	Please provide the following information related to the travel demand model and MOVES assumptions to the EPA. The EPA recommends that RTC add these assumptions and calculation methods to the body of RTC's "2050 RTP Update," along with the date each assumption was last updated.	*Note: All EPA requested changes were made in Appendix C (p.202).	
	1A	The EPA recommends that RTC document the base years for housing, employment, and population in the body of the "2050 RTP Update."	The following information was added to the report: The base year for housing, employment, and population data from the Truckee Meadows Regional Planning Agency (TMRPA) is 2022.	Y
	1B	The EPA recommends that RTC document the assumptions used to forecast land use in the TDM in the body of the "2050 RTP Update."	The following information was added to the report: The model uses the 2024 Washoe County Consensus Forecast (CF) population and employment forecasts provided by TMRPA. The CF is produced biannually (every even year) using four independent growth predictions for Washoe County and forecasts both population and job growth over the next 20 years. As part of an approved shared work program, TMRPA provides the socioeconomic variables of each traffic analysis zone input into the RTC's travel demand model. The overall population and job growth increments from the CF are spatially disaggregated to individual parcels using a geographic information systems model. TMRPA's land use model is the result of years-long, collaborative work with local jurisdictions, affected entities, and partner organizations. The model selects parcels for future development using a robust accounting of existing land use entitlements and growth-related characteristics that influence a parcel's suitability for development. Results of the land use model are aggregated into traffic analysis zones for each travel demand model year.	Y

1C	Does RTC use traffic count data to validate the TDM? Are any adjustment factors used? If so, the EPA recommends that RTC document the base year of traffic count data used to validate the TDM, when the TDM was last validated, and any adjustment factors used in the body of the "2050 RTP Update."	The following information was added to the report: Caliper is under contract with the RTC Washoe to develop the travel demand model. In Q4 of 2024, Caliper completed the latest travel demand model for RTC. This hybrid model incorporates innovative methodologies, including machine learning for trip generation, nested destination choice models, and linkage of non-home-based trips to home-based trips by location and mode. The model was estimated, calibrated, and validated to represent an average weekday in October 2022. The Nevada Department of Transportation (NDOT) has several automatic traffic monitoring stations throughout the county. These continuous count stations provide average daily traffic counts for each month. For validation, Caliper utilized NDOT AADT traffic counts adjusted to October 2022 using seasonal factors developed from continuous count locations, and October transit ridership data for transit assignment. Socio-economic data, as well as roadway and transit networks for the model's 2022 base year, were provided by TMRPA and RTC. The 2022 base-year model demonstrated strong validation results against the traffic and transit counts collected during the same period. Because the travel demand model represents an average weekday in October, monthly factors are applied to adjust the data whenever other months are considered. The table below shows the monthly factors used in the modeling process normalized to October. HA 87 Fractions January 0.9279 February 0.9931 March 1.0017 April 1.0309 May 1.0356 June 1.0338 July 1.0128 August 1.0626 September 1.0332 October 1.0000 November 0.9471 December 0.9213	Y
1D	What speed data does RTC utilize in the air quality conformity analysis? The EPA recommends that RTC document the source of speed data used in the body of the "2050 RTP Update."	The following information was added to the report: Weekday speed data are from the travel demand model. Since the RTC travel demand model was calibrated to an average weekday, it does not provide accurate weekend speed data. Therefore, Weekend speed data are from MOVES default.	Y

1E	How is RTC Washoe characterizing source type population for Truckee Meadows (HA 87)? Does RTC Washoe utilize vehicle registration data in the air quality conformity analysis? The EPA recommends that RTC document the source of source type population, and the source type population by HPMS vehicle type in the body of the "2050 RTP Update."	The following information was added to the report: For the MOVES emission model, the 2025 model year source types 42, 43, and 51 are derived from 2023 local data provided by the Washoe County School District, RTC, and Waste Management. All other source types use MOVES default values. The numbers for source types 42, 43, and 51 are scaled proportionally to the default total vehicle population for future projections. MOVES defaults for age distribution and source types not listed above were determined to be more representative than local vehicle registration due to the local registration source type categories not aligning with MOVES HPMS categories, a change in data reporting methodology, and data quality concerns.	Y
1F	How is RTC characterizing vehicle age distribution? The EPA recommends that RTC document the source of vehicle age distribution, and vehicle age distribution used in the air quality conformity analysis in the body of the "2050 RTP Update."	The vehicle age distribution data is from MOVES default.	Y
1G	The EPA recommends that RTC document fuel data used in the air quality conformity analysis in the body of the "2050 RTP Update."	The following information was added to the report: The fuel data is from MOVES default.	Υ
2	Please provide the following information related to the emissions calculations presented in Table C-6 to the EPA and include the addition details in Appendix C: Air Quality Analysis and Conformity Determination.		
22A	On-Road Vehicle Exhaust (Tailpipe) PM10: As per the MOVES Technical Guidance (Page 39), temperature and relative humidity must be consistent with those used to establish motor vehicle emissions budgets in the applicable SIP: "Sources of temperature data and any methods used to adjust them to fit the requirements of MOVES should be documented in any official SIP submission or conformity determination documentation. Temperature assumptions used for regional conformity analyses must be consistent with those used to establish the motor vehicle emissions budget in the applicable SIP as required in the transportation conformity rule at 40 CFR 93.122(a)(6)." Are temperature and humidity data consistent with the most recent PM10 SIP as per the MOVES 5 Guidance? In this case, the most recent SIP that the EPA has taken action on is the Washoe County Health District's Redesignation Request and Maintenance Plan for the Truckee Meadows 24-Hour PM10 Non-Attainment Area (August 28, 2014).	Conducted new model runs. The following information and updated model run results were added to the report: Based on MOVES5 Technical Guidance, PM10 seasonal temperature and humidity data (November, December, and January) from the 2011 baseline inventory year that was used in the 2014 redesignation request and maintenance plan are the meteorological inputs used for the MOVES5 model run in this conformity analysis. Like Clark County, this data was from the NWS station at the Reno-Tahoe International Airport. Updated model run results were included in the report.	Y

2B	The EPA recommends that RTC document these assumptions and calculation methods to the body of RTC's "2050 RTP Update," along with the date each assumption was last updated. As per the MOVES Technical Guidance (Page 28), is MOVES5 being used for all other calculation methods related to on-road vehicle exhaust (tailpipe) PM10 emissions?	Yes, on-road vehicle exhaust emissions are estimated using MOVES5. A brief description was added to the report. A table below shows all pollutants and processes selected for PM10 in the model runs.	Y
2C	Paved Road Fugitives PM10: As per AP-42, Section 13.2.1, in order to calculate particulate emissions from paved roads, RTC Washoe must assume a silt loading factor for each road type (sL), and an average vehicle weight (W).	Appendix B.2 of the 1st PM10 Maintenance Plan details this methodology which was incorporated into the MVEB. Will reference and insert into this conformity analysis.	Y
2D	The EPA recommends that RTC add these assumptions to the body of RTC's "2050 RTP Update," along with the date each assumption was last updated. Unpaved Road Fugitive PM10: As per AP-42, section 13.2.2, PM10 emissions from unpaved roads must be estimated using unpaved road mileage, surface material silt content (%), mean vehicle weight (W), and mean vehicle speed.	Appendix B.3 of the 1st PM10 Maintenance Plan discusses assumptions used in the methodology. The last documented methodology used in the 2011 emissions inventory which is used in the PM10 maintenance plan was inserted into this conformity analysis.	Y
2E	The EPA recommends that RTC add these assumptions to the body of RTC's "2050 RTP Update," along with the date each assumption was last updated. Road Construction PM10: As per AP-42, section 13.2.3, in order to calculate particulate emissions from road construction, change in both roadway miles and lane miles between RTP analysis years associated with regionally significant projects should be estimated. In addition, this section lists multiple options for construction emissions factors. Will RTC also include the change in roadway miles and lane miles between each RTP analysis year used to estimate construction PM10?	Our road construction methodology, which was used in the 1st PM10 Maintenance Plan, was inserted into this conformity analysis.	Y

2F	CO: Which month is RTC using for temperature, and relative humidity? The EPA recommends that RTC add these assumptions to the body of RTC's "2050 RTP Update." As per the MOVES Technical Guidance (Page 39), temperature and relative humidity must be consistent with those used to establish motor vehicle emissions budgets in the applicable SIP: "Sources of temperature data and any methods used to adjust them to fit the requirements of MOVES should be documented in any official SIP submission or conformity determination documentation. Temperature assumptions used for regional conformity analyses must be consistent with those used to establish the motor vehicle emissions budget in the applicable SIP as required in the transportation conformity rule at 40 CFR 93.122(a)(6)." Are temperature and humidity data consistent with the most recent PM10 SIP as per the MOVES 5 Guidance? In this case, the most recent SIP that the EPA has taken action on is the Washoe County Health District's Second 10-Year Maintenance Plan for the Truckee Meadows 8-Hour Carbon Monoxide Attainment Area (August 28, 2014).	The following information and updated model run results were added to the report: Based on MOVES5 Technical Guidance, CO seasonal temperature and humidity data (November, December, and January) from the 2011 baseline inventory year that was used in the 2nd 10-Year maintenance plan are the meteorological inputs used for the MOVES5 model run in this conformity analysis. Like Clark County, this data was from the NWS station at the Reno-Tahoe International Airport.	Y
3	Can RTC provide an exempt projects list to the EPA? Will this list be shared with the public?	The full list of projects is included in the RTP that is currently posted for public comments (https://rtcwashoe.com/wp-content/uploads/2025/01/FINAL-DRAFT-2050-RTP-2025-PRINT-VERSION.pdf), while projects modeled for the conformity analysis are detailed in the conformity analysis report. I have also attached a list of projects that were not modeled because they do not impact network capacity in the model. These include:• Bike/pedestrian projects without lane changes (projects with lane changes, including those that reduce lanes, are included in the modeled list).• Operational improvements that do not add capacity.• Spot and intersection improvements that do not alter network capacity in the model.	Y
4	Can RTC provide EPA with a copy of the 2023-2024 Regional Household Travel Characteristics Study and 2024 Consensus Forecast? Will these be shared with the public alongside the "2050 RTP Update?"	The 2023-2024 Regional Household Travel Characteristics Study reports are available at: https://rtcwashoe.com/planning/2023-2024-rtc-regional-travel-characteristics-study/ . The 2024 CF report is available at: https://tmrpa.org/washoe-county-consensus-forecast/ . Approval of the CF is a public process that requires vetting the forecasted population growth versus identified sustainable water resources through public meetings of the Northern Nevada Water Planning Commission and the Western Regional Water Commission. Once completed, the CF is taken to a public meeting of the Regional Planning Commission for final adoption. All documents are available for public access on the RTC and TMRPA websites. Footnotes were added to the report to show links to these publicly available documents.	Y

Air Quality Management Division Northern Nevada Public Health (AQMD)	1	Ease of vehicle travel should be in addition to mode shift and trip reduction throughout the plan, especially in Chapter 7, Goal 3: Congestion Reduction. Congestion reduction should also incorporate mitigating the cause of congestion which, in our area, is large percentage of single-occupancy vehicles.	Congestion management in the context of the RTP is further discussed in Appendix D, RTC Congestion Management Plan. RTC transit services and the Smart Trips Program are focused on mode shift to transit. The RTP does not fully explore transit strategies, however the RTC TOPS plan (available at rtcwashoe.com) goes into greater detail.	N
	2	Page 60: The strategies to "reduce both recurring and non-recurring congestion" should include SOV reduction strategies such as HOV lanes, transit-only lanes, carpooling, and active transportation education and incentives. Shift the priority from the ease of movement to a reduced number of vehicles on the road. None of these VMT reduction strategies are listed in Appendix D, the Congestion Demand Management plan. RTC SNV includes these, for example.	RTC transit services and the Smart Trips Program are focused on mode shift to transit. Though Chapter 12 includes RTC initiatives of Local Multimodal Connectivity, Advanced Mobility and Innovation Efforts, and Transit Services (including transit, RTC Vanpool, SMART trips program) as ways to reduce VMT, the RTP does not fully explore transit strategies. The RTC TOPS document (available at rtcwashoe.com) goes into greater detail.	N
	3	Page 74: For the next update of the Regional Freight Plan, consider "clean freight corridors" under goal #4, "Provide for equity and sustainability in freight movement." This goal should also have a mitigation strategy like the others incorporating EV charging infrastructure.	Will consider for the next Regional Freight Plan update.	N
	4	Page 87: EJ perspective "considers adverse impacts." Could RTC planning also consider the "way to best and most effectively serve" EJ populations? Or seek input from EJ Communities about how to best meet their needs? There is one sentence about "understanding and properly addressing the unique needs." Could be expanded.	RTC uses several techniques for bridging language, cultural, and economic differences that affect participation. The RTC selects the approach that is best suited for each plan or project, which may include having translators available at public meetings, translating meeting materials, and targeted outreach to local community organizations. The RTC Public Participation Plan (available at rtcwashoe.com) describes these practices.	N
	5	Page 139: System Reliability and Resiliency. Goals should be to enhance existing infrastructure and weigh active transportation projects higher than it currently does or at least equal to the new road segment scoring.	A new road segment is included in the metric as an alternate route provides redundancy for the transportation network, which affects reliable travel times and the ability to detour in the event of an emergency or other event which closes the roadway. Infrastructure condition and bike/ped infrastructure are captured through other metrics.	N
	6	Page 216: Goal should be to reduce overall VMT instead of expand roadway facilities.	Thank you for this suggestion. VMT reduction efforts are ongoing through RTC transit services, our Active Transportation Program, which is focused on mode shift to bicycle and pedestrian trips, and the Smart Trips Program, which is focused on mode shift to transit.	N
	7	Pages 219-220: Congestion impacts look very similar in the build and no-build scenarios. Prioritize no-build and increase efforts to reduce vehicle miles traveled through active transportation, carpool, van pool, transit, trip avoidance, and congestion deterrents.	VMT reduction efforts are ongoing through RTC transit services, our Active Transportation Program, which is focused on mode shift to bicycle and pedestrian trips, and the Smart Trips Program, which is focused on mode shift to transit.	N

Washoe County Sustainability	1	Page 28: Include an image of current bicycle facilities. Possibly also sidewalk infrastructure if available, similar to the roadway classifications on pages 20 & 21	Thank you for this suggestion. Though not included in the RTP, a bike route map is available at rtcwashoe.com.	N
	2	Page 28: Include what classifications are used for active transportation: Federal Highway Administration's Bikeway Selection Guide? FHWA Highway Functional Classification Concepts is referenced for highways.	A national classification is not utilized to describe active transportation facilities in the RTP. Bicycle and pedestrian design standards are applied at the design stage of project implementation and facility typology is addressed through our complete streets policy and the RTC Active Transportation Plan.	N
	3	Page 32: Is the word "aspirational" necessary to convey RTC's target of 0 traffic fatalities and severe injuries (Vision Zero)? Appears again on page 100.	The term aspirational was utilized to distinguish between long- and short-term goals.	N
	4	Page 32: Only two Performance Targets are listed for RTC. All the others are listed for NDOT. Is NDOT accountable? Are these NDOT state-wide targets for which RTC Washoe is accountable in our region? Could clarify role of NDOT on this page.	RTC coordinates with NDOT on tracking performance measures and setting targets. Currently RTC supports NDOT's targets as we continue to evaluate the regional performance measures and targets.	N
	5	Page 35: consider also reviewing and including in your document review: o Washoe County Community-wide GHG Inventory o Washoe County Community Climate Action Plan (referenced elsewhere) o Nevada Department of Environmental Protection (NDEP) Statewide GHG Emissions inventory and projections, 1990 - 2042o NDEP State Priority Climate Action Plan o Reno's Sustainability & Climate Action Plan o Reno Sparks Indian Colony (RSIC) 2040 Comprehensive Plan	Thank you for this suggestion.	N
	6	Page 41: consider an objective of Vision Zero instead of "reduce traffic fatalities and serious injuries"	Thank you for this suggestion.	N
	7	Page 44: Consider an exploration of red-light cameras for slower / safer streets and an additional revenue source for Complete Streets improvements	Red light cameras are not legally permitted in Nevada at present.	N
	8	Page 54: Consider alternative funding sources like VMT or other road use fees. As soon as 2030, 10 - 25% of vehicles on the road may be electric. These vehicles will have the same use impact on the roads but without additional revenue to repair. This problem is acknowledged on page 55 but without an accompanying solution.	On page 137: The Nevada State Legislature and RTC are exploring potential alternative transportation funding methods, including a road usage charge for electric and hybrid vehicles and a tax on vehicle miles of travel. The Nevada Department of Transportation is undertaking a more detailed analysis of various funding options to supplement the fuel tax. Only existing revenue sources are included in the financial projections for this plan. RTC is also completing a study specific to local fuel tax replacement options.	N
	9	Page 54: Consider / commit to alternative cement to avoid excess CO2 emissions.	Thank you for this suggestion.	N

10	Page 60: the objectives to "reduce both recurring and non-recurring congestion" are good. The strategies should be expanded beyond signal timing, fiber optic network connectivity and traffic incident management to include SOV reduction strategies such as HOV lanes, transit-only lanes, carpooling education and incentives, congestion pricing, active transportation incentives. Shift the priority from the easy movement of a large (existing) number of vehicles to a reduced number of vehicles on the road. None of these VMT reduction strategies are listed in Appendix D, the Congestion Demand Management plan. RTC SNV includes non-SOV strategies, for example.	RTC transit services and the Smart Trips Program are focused on mode shift to transit. Though Chapter 12 includes RTC initiatives of Local Multimodal Connectivity, Advanced Mobility and Innovation Efforts, and Transit Services (including transit, RTC Vanpool, SMART trips program) as ways to reduce VMT, the RTP does not fully explore transit strategies. The RTC TOPS document (available at rtcwashoe.com) goes into greater detail.	N
11	Page 64: One might expect different content for System Reliability / "travel time predictability," maybe transit on-time stats or possibly data about on-time trips by personal vehicles. "Complete Streets" seems to be the solution for reliability.	The goal of system reliability and resiliency is achieved through its objective to: Integrate All Travel Modes and Increase Travel Options. This chapter describes the regional efforts and strategies to integrate all travel modes and increase travel options. Collectively, these efforts and strategies aim to achieve the goal of system reliability and resiliency.	N
12	Page 65: For "Resilience / ability to adapt," could the plan include demand-responsive route adjustments and / or dynamic response to service interruptions?" The section is very thorough on "Resilience / respond and recover quickly in emergency events" (Active Transportation Plan, Spot Improvements, Stormwater Management, Regional Resiliency Study, and Washoe County Floodplain Management, Truckee River Flood Project). Though for most, RTC's specific role in the initiatives or plans should be clarified.	Specific operational transit strategies to respond to emergency events are not within the scope of the RTP. Similarly, the RTC produces other plans that address emergency operating procedures and the RTC's role in emergency management. The role of the RTP in system reliability is to identify programs and facilities that will integrate all travel modes and increase travel options.	N
13	Page 68: The RTC Sustainability Plan and Washoe County Community Climate Action Plan (thank you for including!) could find a home in Chapter 10 / Goal #6: Equity and Environmental Sustainability instead of Goal #4: System Reliability and Resiliency. Perhaps an additional objective under Goal 6 focused on emissions reduction would accommodate the content? Or, Chapter 7 / Goal 3, "Congestion Management" for the CAP.	Thank you for this suggestion.	N
14	Page 68: Agree that a mixed fleet of alternatively fueled buses is resilient, as are solar bus shelters. We hope to continue seeing a 100% clean fleet through 2050.	On page 207: All RTC RIDE buses are comprised of electric, hybrid diesel-electric and bio-diesel vehicles. RTC currently has 2 hydrogen fuel cell vehicles in its fixed route fleet with 6 additional fuel cell vehicles scheduled for delivery and placement into service in spring 2025.RTC ACCESS cut-away vehicles are fueled by Compressed Natural Gas (CNG). These alternately fueled vehicles can reduce mobile emission totals.	N

15	Page 67: Consider having a public-friendly dashboard on RTC site that shows the Bicycle Level of Traffic Stress (BLTS) and Pedestrian Experience Index (PEI). Would also like to see public data about % vehicle, transit, walking, biking trips and air quality. Some metrics about road quality and congestion could be helpful.	Thank you for this suggestion.	N
16	Page 69: Washoe County Climate Action Plan *may* be adopted in Feb or March, so text could be updated to "has approved" pending release date of final RTP.	Thank you for this information. We will try to coordinate with these dates.	N
17	Page 74: For the next update of the Regional Freight Plan, consider "clean freight corridors" under goal #4, "Provide for equity and sustainability in freight movement." EV and hydrogen fueling stations in our region will fortify a cleaner nation-wide freight network. Goal 4 also talks only about the impacts of freight on local residents, but it does not suggest mitigation actions; Goal 4 is different from the other goals in this way.	We will consider this suggestion for the next Regional Freight Plan update.	N
18	Page 81: Are there opportunities for RTC to advocate for moving more freight from trucks to trains, which are currently much cleaner?	This suggestion can be explored during the next Regional Freight Plan update.	N
19	Page 87: When considering adverse impacts, could air quality and additional CO2e emissions be added to the list?	The Executive Orders directing government agencies to "consider adverse impacts" include impacts such as environmental health hazards and pollution. RTC complies with these orders through the consideration of potential adverse impacts of transportation projects on environmental justice populations.	N
20	Page 87: EJ perspective "considers adverse impacts." Could RTC planning also consider the "way to best and most effectively serve" EJ populations? Or seek input from EJ Communities about how to best meet their needs? There is one sentence about "understanding and properly addressing the unique needs." This could be expanded.	RTC uses several techniques for bridging language, cultural, and economic differences that affect participation. The RTC selects the approach that is best suited for each plan or project, which may include having translators available at public meetings, translating meeting materials, and targeted outreach to local community organizations. The RTC Public Participation Plan (available at rtcwashoe.com) describes these practices.	N
21	Page 94: If the EO is still in effect, could add other segments of EO14008, eg Climate Action Plan, net-zero global emissions by mid-century or before, etc.	Thank you for this suggestion.	N
22	Page 216: What is the "build" scenario? Goal should be to reduce overall VMT instead of expand roadway facilities.	The Congestion Management Plan (Appendix D) is required to include both a build and no-build scenario. Both project future traffic growth, with the build scenario assuming all projects included in the RTP will be constructed and the no-build scenario showing the conditions without any changes to current facility infrastructure. VMT reduction efforts are ongoing through RTC transit services, our Active Transportation Program, which is focused on mode shift to bicycle and pedestrian trips, and the Smart Trips Program, which is focused on mode shift to transit.	N

23	Page 219-220: Congestion impacts look very similar in the Build and No-Build scenarios. Prioritize No-Build and increase efforts to reduce vehicle miles traveled through active transportation, car pool, van pool, transit, trip avoidance, and congestion deterrents, e.g. peak pricing.	VMT reduction efforts are ongoing through RTC transit services, our Active Transportation Program, which is focused on mode shift to bicycle and pedestrian trips, and the Smart Trips Program, which is focused on mode shift to transit.	N
24	Page 100: Include a sentence about how Safety measures help reduce Project Delivery Delays. Content would fit well in Chapter 5 / Goal 1: Safety also (or instead). In general, could use context for almost all these KPIs about how they are used to reduce project delivery delays. Many seem like generally useful performance KPIs.	Thank you for this suggestion.	N
25	Page 101: "Collision" or "crash" instead of "accident."	On p. 101, "accidents" has been changed to "crashes."	Υ
26	Page 115: Could say something about the ease of customer payment and affordability to increase the accessibility and mobility of people on the multimodal transportation system?	The RTP does not fully explore transit operations strategies, however the RTC TOPS plan (available at rtcwashoe.com) goes into greater detail.	N
27	Page 138: Are there opportunities for the public to directly comment on proposed projects? If yes, explain (beyond general customer experience feedback in Appendix A). If no, include in future process?	For projects recommended through planning studies, there were public meetings to get public input. The RTP public comment period also allows the public to comment on specific projects. Additionally, once projects move forward to implementation, public meetings held at that time provide further opportunities for public input on projects.	N
28	Page 139: (4) System Reliability and Resiliency: Why do new road segments get such a high score (60)? Prefer the goals to be to enhance existing infrastructure and to weight bike / ped projects more highly.	A new road segment is included in the metric as an alternate route provides redundancy for the transportation network, which affects reliable travel times and the ability to detour in the event of an emergency or other event which closes the roadway. Infrastructure condition and bike/ped infrastructure are captured through other metrics.	N
29	Page 139: (6) Equity and EJ. Could reduce the weight of the very specific Ped /Bicycle Stress score (eg 20 instead of 60) and add a more inclusive line item "Does project decrease carbon emissions?" (yes - 40)	Thank you for this suggestion.	N
30	Page 187: Appendix B: Classify projects by the Goal(s) they support instead of /in addition to "Freeway," "Capacity," "Multimodal," "Spot and Intersection Improvements," which have not previously been introduced as a framework. The MTC RTP does a good job of this in their Exec Summary. Additional columns could be added for funded / unfunded. Add a column for CO2e impact.	All projects were evaluated based on plan goals. The highest scoring projects support multiple or all goals. The further categories of freeway, etc., help with the understanding of project types, and identify funding.	N
31	Pages 20 & 21: One image / 2-page spread + vertical orientation for easier legibility	Thank you for this suggestion.	N

	32	Page 28: Link sources where possible. Who wrote the 2023 Economic Impact Study? Is it available online?	The 2023 Economic Impact Study was produced by the Reno- Sparks Convention & Visitors Authority. This reference has been	Y
	33	Page 33: Repeat the table header on second page	added to Ch. 2 (p.28) Thank you for this suggestion.	N
	34	Page 33: What do the parentheticals mean in Infrastructure Condition, e.g. goal > 90% (<50%) actual: 73.9% (2.4%)	For Infrastructure Condition, (NDOT) Percent of pavement on the Interstate system in good (and poor) condition, >90% is the baseline or target for good condition and <50% is the baseline or target for poor condition. For Most Recently Available Performance, 73.9% is good condition and 2.4% is poor condition.	N
	35	Page 33: What are the units for the CMAQ emissions reductions?	The units are kg/day.	N
	36	Page 35: You mentioned the 2024 TMRPA plan earlier. The 2019 plan is listed here.	This reference has been corrected (p.35).	Υ
	37	Page 60: Congestion Management Plan is Appendix D, not C	This reference has been corrected (p. 60)	Υ
	38	Page 230+ repeat headers on new pages	Table headers have been added to all pages.	Υ
	39	Big picture, we encourage RTC to adopt a Net Zero 2050 policy in this plan. Both Washoe County and the City of Reno have Net Zero 2050 commitments, and our region has a better chance of meeting this target if other public agencies in Washoe County share the same goal. Our most recent community-wide greenhouse gas (GHG) inventory shows that transportation is responsible for 37% of GHG emissions in Washoe County. Onroad gas and diesel emissions account for two-thirds of these transportation emissions	Thank you for this suggestion. RTC has achieved our goal of a low or no-emission, 100% alternative fuel transit fleet, and efforts to reduce emissions through a reduction in VMT are ongoing through RTC transit services, our Active Transportation Program, which is focused on mode shift to bicycle and pedestrian trips, and the Smart Trips Program, which is focused on mode shift to transit. One of our Transit KPIs is GHG Emission Reductions. In October 2024, RTC transit services and initiatives succeeded in pollution savings of 3.78 million lbs. of CO2.	N
City of Sparks Staff	1	City of Sparks staff does not support the regional road list being identified as a pavement preservation list.	Previous versions of the RTP have utilized the term "Regional Roads" to describe roadways where both RTP projects and RTC programs were implemented. This RTP seeks to clarify and differentiate between eligibility requirements of regionally significant projects for inclusion in the RTP and the eligibility requirements of projects for programming activities of the RTC such as the Pavement Preservation Program. The function of the RTP is to identify regionally significant projects, however the RTC is also responsible for regional programs such as the Pavement Preservation Program. Roadways eligible for the Pavement Preservation Program, as shown in Appendix F, may include some roadways, as agreed to by the local jurisdictions, with the functional classification of local. Projects eligible for inclusion in the RTP, and for federal funding, must adhere to the federal definition of regional significance, the location of which aligns, in most cases, with a roadway functional classification of arterial or collector.	N
	2	City of Sparks staff does not support the approach in the draft plan to differentiate between regionally significant roads and regional roads.	Revisions have been made in Ch 2 (p. 18, 27) to clarify these terms with a focus on the federal definition of regionally significant projects and the functional classification of roadways where a regionally significant project may be located.	Y

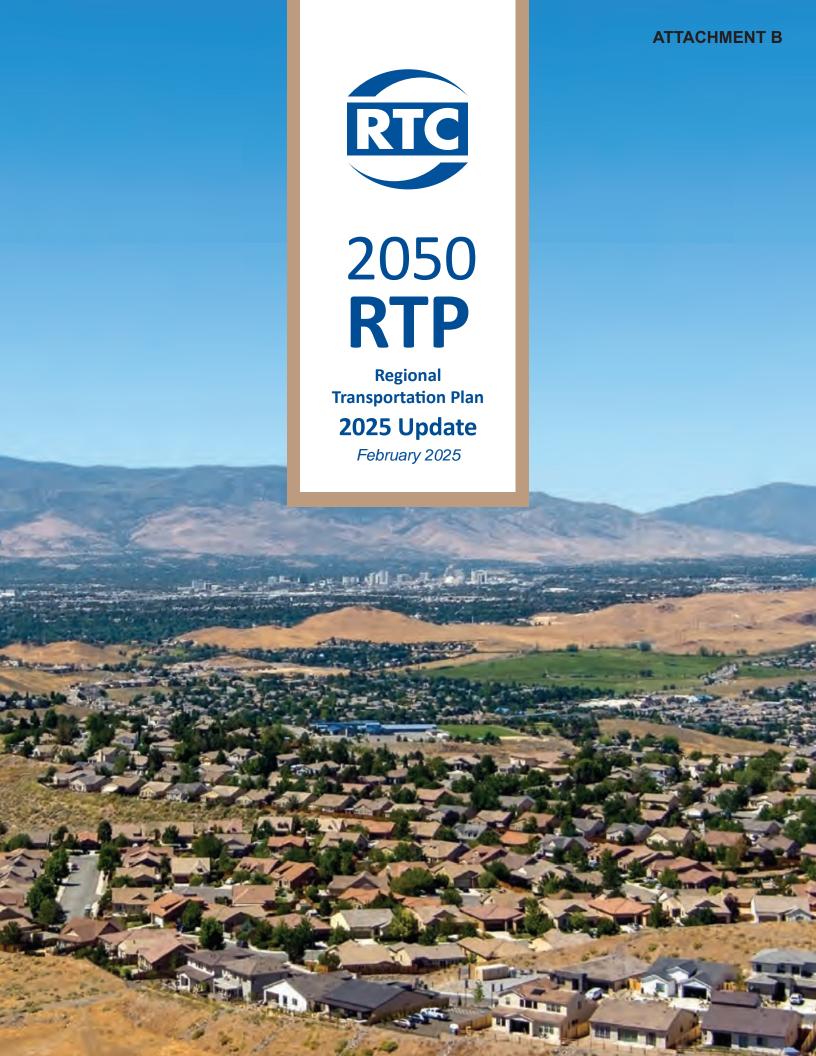
R Pierce	Thank you for taking the time to put this out. It appears to be an in-depth report but there are a few items that I personally wish could have been addressed before this item closed. First is, I wish there would have been a more dedicated approach to get public comment about this report from the first day it opened. Especially from the areas that appear to be changing the most, like the North Valleys. I live out here and I didn't hear about this plan nor did I hear about the comment period until a few days before it closed a few days ago. It is not because I wasn't paying attention as I am in	Our public participation process is compliant with federal regulations and follows our RTC Public Participation Plan. Outreach to citizens to notify them about public comment opportunities for this plan included ads in 3 newspapers, social media posts, email blasts, television ads and a webpage. This plan included two rounds of public input with the first occurring in spring of 2023 and the second concluding on February 1, 2025. You can learn more about how we conduct public engagement and keep up with future planning efforts by visiting our website at: https://rtcwashoe.com/planning/regional-planning/.	N
Russ Earle	In looking through the projected projects, both funded and unfunded, I do not see anywhere the improvements to North Virginia Street from Stead Blvd. to Red Rock Road. I do see in the unfunded section a project to improve North Virginia Street from Red Rock Rd. to White Lake parkway. Why is there a missing segment that is desperately needed with the currently approved building of well over 10,000 housing units on Red Rock Rd alone?	On page 198 of the Draft 2050 RTP, the project US 395 Widening - North, widens N. Virgina from Stead to Red Rock. This is an NDOT freeway facility project with an estimated cost of \$124,065,525 and funding is currently not identified for this project. It is included on the unfunded list because it is a need for our region and should be considered for implementation as funding becomes available in future.	N
Catherine Schmidt	Dear RTP Director of Planning Vanessa Lacer, The Truckee River Path is a major opportunity for safe alternative transportation in a beautiful corridor, free from car traffic. Please prioritize transportation funding for the Truckee River Path in the Regional Transportation Plan as it aligns with the Executive Summary that states that bicycle and pedestrian safety improvements are a top priority for our community. I am an avid walker and we desperately need safe and environmentally-friendly alternatives to driving in Washoe County.	Multiple projects from the Truckee River Vision Plan are included in the funded project list for the 2025-2034 timeframe. These can be found in Appendix B, page 189 of the Draft RTP.	N
Bob Tregilus	Dear RTP Director of Planning Vanessa Lacer - The Truckee River Path is a major opportunity for safe alternative transportation in a beautiful corridor, free from car traffic. Please prioritize transportation funding for the Truckee River Path in the Regional Transportation Plan as it aligns with the Executive Summary that states that bicycle and pedestrian safety improvements are a top priority for our community. Regards,	Multiple projects from the Truckee River Vision Plan are included in the funded project list for the 2025-2034 timeframe. These can be found in Appendix B, page 189 of the Draft RTP.	N

Ethan Crisp	The Truckee River Path is a major opportunity for safe alternative transportation in a beautiful corridor, free from car traffic. Please prioritize transportation funding for the Truckee River Path in the Regional Transportation Plan as it aligns with the Executive Summary that states that bicycle and pedestrian safety improvements are a top priority for our community. Once you leave downtown Reno going east, the path deteriorates, making travel unsafe and difficult. I would also love if work could be put into bike paths connecting Sparks across I-80 between Vista and Sutro Blvd.	Multiple projects from the Truckee River Vision Plan are included in the RTP and some have been identified for funding in the 2025-2034 timeframe. Sidewalk and bike lane improvements have been identified as a need by the RTP for Vista Blvd from Greg St. to Los Altos Pkwy, but no funding has been identified. Sidewalk and bike lane improvements have been identified as a need by the RTP for Greg St. from Mill St to Vista Blvd and funding has been identified in the 2035-2050 timeframe. These projects can be found in Appendix B, page 189 of the Draft RTP.	N
Jessica Fedin	Is there planned expansion between Reno (summit mall) and Incline Village for public transit? So many people would benefit from affordable access to Incline and back it's only a 35 minute drive yet no public transit currently exists.	The RTP does not include specific transit projects. RTC identifies transit projects through the Transit Optimization Plan Strategies (TOPS) plan (The current TOPS plan can be accessed at: https://rtcwashoe.com/wp-content/uploads/2023/11/RTC-TOPS-Final-Report.pdf). Public transit from Reno to Incline is currently not offered. The service has been attempted twice before but was not successful due to a lack of ridership. There are no current plans to offer the service, but a new TOPS planning effort will begin in spring of 2025. During the TOPS planning effort, community input will be sought, and transit routes will be assessed.	N
Mike Barrett	Dear RTP Project Manager Vanessa Lacer, The Executive Summary of the Proposed Regional Transportation Plan says on page 152 that surveys show a high demand for pedestrian and cyclist safety and that it is a top priority. However, this is not referenced in the Sustainability & Vehicles section of the plan. I just want to share with you that E- Bike sales have gone through the roof in our community and we will see more of our commuters taking to their E-Bikes. The bikes now have a range of up to 100 miles per charge. I think we need our streets prepared for the increase in bicyclist commuters - don't you? In the section titled Preventable Transit Accidents Per 100,000 Miles of Service, it says the RTC tracks the number of preventable crashes where the driver is at fault. Honestly - I believe that if we don't do something to improve safety for bicyclists, that number is going to increase Also, on page 168 it talks about improving the Truckee River corridor. Strong upgrades for bike paths would create a nice route for bicyclists trying to get to different neighborhoods and parts of our city. I think it'd be a really cool idea to create a few really long stretches of bike paths that would make commuting easier and help funnel bicycle commuters along planned and safe routes. Anyways - that's my 2-cents. Thanks for your service to our community and I wish you a great rest of the year. :-)	An example of how we make pedestrian and cyclist safety a priority, in addition to our complete streets policy (which includes appropriate bicycle and pedestrian infrastructure in every roadway construction project), is our newly formed Active Transportation Program. You can read more about this program in Chapter 15, Section 2. Though not addressed as a part of the RTP, detailed safety data will be collected, and solutions will be developed for identified issues through an upcoming Safety Action Plan which we have recently received a federal grant to complete. Multiple projects from the Truckee River Vision Plan are included in the RTP and some have been identified for funding in the 2025-2034 timeframe. These projects can be found in Appendix B, page 189 of the Draft RTP.	N

Lori Bellis	Dear RTP Project Manager Vanessa Lacer,I'm a hiker and cyclist. It's important to me that the Truckee Meadows has hiking and cycling routes throughout the region to allow for alternative travel beyond automobiles. The paved trail along the Truckee River and the bike trail along Veteran's Parkway are excellent examples of this. The Executive Summary of the Proposed Regional Transportation Plan says on page 152 that surveys show there is high demand for pedestrian and cyclist safety and that it is a top priority. However, this is not referenced in the Sustainability & Vehicles section of the plan. Please explain how you will make pedestrian and cyclist safety a priority to align with community demand. In the section titled Preventable Transit Accidents Per 100,000 Miles of Service, it says the RTC tracks the number of preventable crashes where the driver is at fault. Please include the available statistics over the years to inform the community if our region's safety is improving. On page 168 it says how to improve the river corridor. Please ensure that the Truckee River corridor remains a top priority as a safe, beautiful and direct route for vulnerable road users. Thank you,	An example of how we make pedestrian and cyclist safety a priority, in addition to our complete streets policy (which includes appropriate bicycle and pedestrian infrastructure in every roadway construction project), is our newly formed Active Transportation Program. You can read more about this program in Chapter 15, Section 2. Though not addressed as a part of the RTP, detailed safety data will be provided through an upcoming Safety Action Plan which we have recently received a federal grant to complete. Multiple projects from the Truckee River Vision Plan are included in the RTP and some have been identified for funding in the 2025-2034 timeframe. These projects can be found in Appendix B, page 189 of the Draft RTP.	N
Lauren Hotell	Dear RTP Project Manager Vanessa Lacer, The Executive Summary of the Proposed Regional Transportation Plan says on page 152 that surveys show there is high demand for pedestrian and cyclist safety and that it is a top priority. However, this is not referenced in the Sustainability & Vehicles section of the plan. Please explain how you will make pedestrian and cyclist safety a priority to align with community demand. In the section titled Preventable Transit Accidents Per 100,000 Miles of Service, it says the RTC tracks the number of preventable crashes where the driver is at fault. Please include the available statistics over the years to inform the community if our region's safety is improving. On page 168 it says how to improve the river corridor. Please ensure that the Truckee River corridor remains a top priority as a safe, beautiful and direct route for vulnerable road users. Thank you,	An example of how we make pedestrian and cyclist safety a priority, in addition to our complete streets policy (which includes appropriate bicycle and pedestrian infrastructure in every roadway construction project), is our newly formed Active Transportation Program. You can read more about this program in Chapter 15, Section 2. Though not addressed as a part of the RTP, detailed safety data will be collected, and solutions will be developed for identified issues through an upcoming Safety Action Plan which we have recently received a federal grant to complete. Multiple projects from the Truckee River Vision Plan are included in the RTP and some have been identified for funding in the 2025-2034 timeframe. These projects can be found in Appendix B, page 189 of the Draft RTP.	N

Ky Plaskon	Dear RTP Project Manager Vanessa Lacer, The Executive Summary of the Proposed Regional Transportation Plan says on page 152 that surveys show there is high demand for pedestrian and cyclist safety and that it is a top priority. However, this is not reflected in the Sustainability & Vehicles section of the plan. Please explain how you will make pedestrian and cyclist safety a priority to improve sustainability and to align with community demand. Please include a reference to outreach and how independent bicycle groups will be specifically solicited by the RTC to review plans and provide comment. Do not simply review your current process with CMAC presentations. Your current methods are ineffective and other groups have had to tell us about plans like the RTP and Active Transportation Plan. Inperson meetings with specifically TMBA have been very effective, but are not consistent. In the section titled Preventable Transit Accidents Per 100,000 Miles of Service, it says the RTC tracks the number of preventable crashes where the driver is at fault. Please include the available statistics over the years to inform the community if our region's safety is improving. On page 168 it says how to improve the river corridor. Please ensure that the Truckee River corridor remains a top priority as a safe, beautiful and direct route for vulnerable road users. The path is currently VERY dangerous (not family friendly) and should be a top priority within the next 1-5 years. Thank you, Ky Plaskon, Nevada Bicycle Coalition	An example of how we make pedestrian and cyclist safety a priority, in addition to our complete streets policy (which includes appropriate bicycle and pedestrian infrastructure in every roadway construction project), is our newly formed Active Transportation Program. You can read more about this program in Chapter 15, Section 2 of the Draft RTP. A summary of public engagement conducted for the RTP is included as Appendix A in the Draft Plan. For more information about our agency-wide outreach policies and practices please see our Public Participation Plan which can be accessed at: https://rtcwashoe.com/planning/public-participation-plan/. Though not addressed as a part of the RTP, detailed safety data will be collected, and solutions will be developed for identified issues through an upcoming Safety Action Plan which we have recently received a federal grant to complete. Multiple projects from the Truckee River Vision Plan are included in the RTP and some have been identified for funding in the 2025-2034 timeframe. These projects can be found in Appendix B, page 189 of the Draft RTP.	N
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Jay Howard	I would like to express general support for, not only the incorporation of properly designed Shared Use Paths into any newly designed roads or upgrades to existing roads, but the execution of priority projects for the sole purpose of creating Shared Use Paths in important areas of our region. I'd also like to share 2 areas I consider to be priority areas 1. First and most important is the Truckee River Path. This path must be upgraded to current standards, and made continuous throughout the TMSA. 2. The Downtown Bike Network. It is critical that we properly connect UNR, downtown, and midtown.	Multiple projects from the Truckee River Vision Plan are included in the RTP and some have been identified for funding in the 2025-2034 timeframe. These projects can be found in Appendix B, page 189 of the Draft RTP. Multiple bicycle projects near UNR, downtown and midtown are identified for funding in the RTP. You can view them in Appendix B of the Plan or find them on our clickable map here: https://rtcwashoe.com/planning/regional-planning/rtp/. Additionally, we are currently engaged in a Bike/Ped planning effort for Midtown Reno which you can learn more about here: https://rtcwashoe.com/planning/neighborhood-network-plan/	N
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LETTER FROM THE EXECUTIVE DIRECTOR

The Regional Transportation Commission of Washoe County (RTC) is pleased to present the 2050 Regional Transportation Plan Update (RTP). This RTP sets the course for transportation investment in our region over the next 25 years and includes projects and programs that can create economic opportunities, protect air quality, improve connectivity, increase mobility, and sustain a high quality of life.

This RTP reflects our community's long-range vision for transportation in the Truckee Meadows and was developed in coordination with policy makers, elected officials, stakeholders, and the public. I would like to thank the community, our regional partners and RTC staff for their commitment and participation during the planning process.

I also recognize and thank the RTC Board of Commissioners for their leadership and vision in guiding the future of transportation investment in the Truckee Meadows.

> Sincerely, Bill Thomas, AICP Executive Director

RTC BOARD



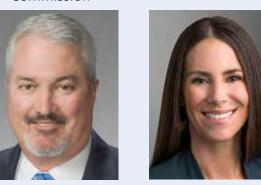
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A SPECIAL THANK YOU

A special thank you to our regional partners who served on the Agency Working Group, Inter-County Working Group, and the RTC staff who contributed to the development of this RTP!

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EXECUTIVE SUMMARY

INTRODUCTION

This Regional Transportation Plan (RTP) fulfills federal and state legal requirements by establishing a 25-year vision for transportation improvements within the Truckee Meadows region, including short- and long-term strategies, prioritized projects, and a fiscally constrained roadmap for implementation. In addition to meeting the federal requirements for a regional transportation plan, this RTP also serves as the long-range transportation plan for purposes of compliance with state law through its utilization by the Truckee Meadows Regional Plan (the Regional Plan) developed by the Truckee Meadows Regional Planning Agency (TMRPA).

This RTP serves as the foundation for addressing the region's current and future transportation needs, ensuring the safe, efficient, and sustainable movement of people and goods while supporting economic growth and improving quality of life. Additionally, this RTP, and the planning program it reflects, allows the region and its projects to be eligible for federal formula funding and to compete for federal discretionary grants.

As the designated Metropolitan Planning Organization (MPO) for Washoe County, the Regional Transportation Commission of Washoe County (RTC) is tasked with conducting continuing, cooperative, and comprehensive multimodal transportation planning for the Truckee Meadows region including the development of the RTP.

THE TRUCKEE MEADOWS REGION

The Truckee Meadows Region (the region) refers to the over 6,000 square mile area which includes all of Washoe County except the portion within the drainage basin of Lake Tahoe. To effectively address transportation need the unique dynamics of the region should be considered. One of the primary factors shaping transportation need is population growth. The recently adopted TMRPA 2024 Washoe County Consensus Forecast projects that Washoe County's total population will grow from 515,085 in 2024 to 602,455 in 2044. This translates to an average of about 4,500 new residents per year. Given this expected population increase, an overarching function of this RTP is to plan for the needed growth of transportation infrastructure, programs, and services in order to retain high levels of connectivity and accessibility across the region.

REGIONAL GOALS

This RTP outlines goals representing the desired state of the regional multimodal transportation system over the next 25 years. Federal law establishes seven national transportation goals, and MPOs are encouraged to align their long-range plans with these or develop equivalent goals, per United States Department of Transportation (USDOT) guidance. Additionally, ten federally required planning factors addressing priority community concerns must be integrated into the metropolitan transportation planning process.

This RTP includes nine unranked goals, representing the desired state of the region's transportation future. The goals were developed based on federal requirements, national objectives, and input from stakeholders and the public. They identify priorities for the region and also guide the creation of objectives and evaluation criteria used to prioritize transportation projects. Linking project selection to these goals ensures the resulting projects can address the region's transportation priorities. The nine RTP goals below are explored in detail through the goal chapters of this RTP.

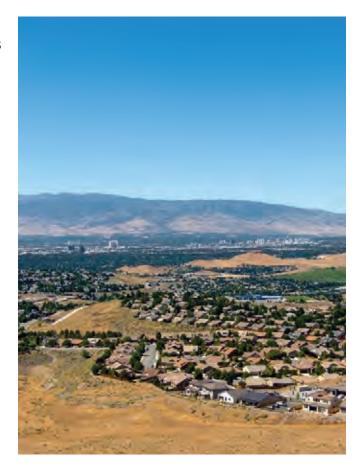
- RTP Goal #1: Safety
- RTP Goal #2: Maintain Infrastructure Condition
- RTP Goal #3: Congestion Reduction
- RTP Goal #4: System Reliability and Resiliency
- RTP Goal #5: Efficient Freight Movement and Economic Vitality
- RTP Goal #6: Equity and Environmental Sustainability
- RTP Goal #7: Reduced Project Delivery Delays
- RTP Goal #8: Accessibility and Mobility
- RTP Goal #9: Integrated Land-Use and Economic Development

FINANCIAL ELEMENT

This RTP determines if proposed transportation investments including roadways, transit, bike, pedestrian, and technology projects and services, are feasible and can be funded within the next 25 years. It includes a financial plan that projects future revenues, adjusts for inflation, and suggests additional funding strategies, if needed. Revenue estimates consider growth, inflation, and changes in fuel efficiency, using Year-of-Expenditure (YOE) dollars for accuracy.

Funding sources include federal programs under the Infrastructure Investment and Jobs Act (IIJA), state and local taxes, and local developer fees. While revenues are expected to grow modestly, funding gaps remain, especially for public transit projects. Project prioritization is critical to ensuring funds are allocated to those transportation investments that best position the region to meet the RTP's goals. Project prioritization is based on input from stakeholder agencies as well as the RTP goals and objectives. Transit system needs are identified through a short-range transit plan which aims to maintain current services while identifying future opportunities, such as extending bus lines and improving connections.

Funding does not exist for all projects identified through the RTP process, necessitating an unfunded list of projects. Unfunded projects are those that would be included in the RTP if additional funding resources were available and those that could be considered in the event additional funding is identified. As revenues from most funding sources are not keeping up with the growing need for transportation projects within the region, RTC faces a difficult challenge in setting priorities for future spending. However, this RTP provides the framework for future decision-making by identifying the projects most valuable to, and having the greatest impact on the region.



RESUMEN EJECUTIVO

INTRODUCCIÓN

El Plan de Transporte Regional (RTP, por sus siglas en inglés) cumple con los requisitos legales federales y estatales al establecer una visión a 25 años para la mejora del transporte en la Región de Truckee Meadows, incluyendo estrategias a corto y largo plazo, proyectos priorizados y con limitaciones fiscales, organizados dentro de un marco viable para su implementación. Además de satisfacer los requisitos federales para un plan de transporte regional, el RTP también actúa como un plan de largo plazo que respalda los propósitos de la legislación estatal, formando parte del Plan Regional de Truckee Meadows (Plan Regional de Truckee Meadows (TMRPA, por sus siglas en inglés).

El RTP es la herramienta clave para abordar las necesidades de transporte actuales y futuras en la región, asegurando el movimiento seguro, eficiente y sostenible de personas y bienes, al mismo tiempo respaldando el crecimiento económico y mejorando la calidad de vida de los habitantes. Además, el RTP y el programa de planificación que representa, permiten que la región y sus proyectos sean elegibles para recibir financiamientos federales y participar en programas federales de subvenciones discrecionales.

Como la Organización de Planificación Metropolitana (MPO, por sus siglas en inglés) designada para el condado de Washoe, la Comisión de Transporte Regional del Condado de Washoe (RTC, por sus siglas en inglés) tiene la tarea de llevar a cabo la planificación de transporte multimodal de manera continua, cooperativa e integral para la región de Truckee Meadows, incluyendo la elaboración del RTP.

LA REGIÓN DE TRUCKEE MEADOWS

La región de Truckee Meadows (la región) abarca un área de más de 6,000 millas cuadradas, que incluye todo el condado de Washoe, excepto la parte perteneciente a la cuenca del Lago Tahoe. Para abordar eficazmente las necesidades de transporte, es esencial tener en cuenta las dinámicas particulares de esta región. Uno de los factores más relevantes que influyen estas necesidades es el crecimiento poblacional. Según el Pronóstico de Consenso 2024 del Condado de Washoe, recientemente adoptado por TMRPA, se proyecta que la población total del Condado de Washoe aumentará de 515,085 en 2024 a 602,455 en 2044, lo que representa un promedio de aproximadamente 4,500 nuevos residentes por año. Dado este esperado crecimiento, la función primordial del RTP es planificar el desarrollo de la infraestructura, los programas y los servicios de transporte para mantener altos niveles de conectividad y accesibilidad en toda la región.

METAS REGIONALES

El RTP establece las metas que definen el estado deseado del sistema de transporte multimodal regional durante los próximos 25 años. La legislación federal establece siete metas nacionales de transporte, y fomenta a las MPO a alinear sus planes a largo plazo con estas metas o a desarrollar metas equivalentes, según la guía de la agencia USDOT. Además, durante el proceso de planificación de transporte metropolitano, se deben integrar diez factores de planificación requeridos por el gobierno federal, los cuales incluyen las prioridades e intereses de la comunidad.

El RTP establece nueve metas no priorizadas que representan el estado deseado para el futuro del transporte en la región. Estas metas se desarrollaron tomando en cuenta los requisitos federales, los objetivos nacionales, así como los aportes de las partes interesadas y la retroalimentación del público. Estas metas no solo identifican las prioridades para la región, sino que también orientan la creación de objetivos y criterios para evaluar y priorizar proyectos de transporte.

Al vincular la selección de proyectos a estas metas, se asegura que los proyectos se enfoquen en las prioridades más relevantes para la región.

Las nueve metas del RTP se exploran con mayor detalle en los capítulos correspondientes:

- RTP Meta #1: Seguridad
- RTP Meta #2: Mantener la condición de la infraestructura
- RTP Meta #3: Reducir la congestión
- RTP Meta #4: Fiabilidad y resiliencia del sistema
- RTP Meta #5: Movimiento eficiente de carga y vitalidad económica
- RTP Meta #6: Equidad y sustentabilidad ambiental
- RTP Meta #7: Reducir los retrasos de entrega del proyecto
- RTP Meta #8: Accesibilidad y movilidad
- RTP Meta #9: Integrar el uso de terrenos con desarrollo económico

ELEMENTO FINANCIERO

El RTP evalúa la viabilidad y financiación de las inversiones propuestas en transporte incluyendo proyectos y servicios relacionados con carreteras, tránsito, bicicletas, peatones y tecnología, para los próximos 25 años. Esto abarca un plan financiero que proyecta los ingresos futuros, ajusta los costos por inflación y propone estrategias de financiación adicionales si fuera necesario. Las estimaciones de ingresos consideran factores como el crecimiento, la inflación y los cambios en la eficiencia del combustible, utilizando el monto total de los gastos en dólares del año correspondiente (YOE, por sus siglas en inglés) para garantizar mayor precisión.

Las fuentes de financiación incluyen programas federales bajo la Ley de Inversión en Infraestructura y Empleo (IIJA, por sus siglas en inglés), así como impuestos estatales y locales, y tasas de impacto y permiso para desarrolladores inmobiliarios. Aunque se prevé un modesto aumento en los ingresos, persisten déficits financieros, especialmente en el ámbito de los proyectos de transporte público.

La priorización de proyectos es fundamental para asegurar que los fondos se asignen a las inversiones en transporte que mejor posicionan a la región para cumplir con las metas del RTP. Este proceso de priorización de proyectos se basa en los aportes de las agencias involucradas, así como en las metas y objetivos establecidos por el RTP. Las necesidades del sistema de transporte público se identifican a través de un plan de corto plazo, enfocado a mantener los servicios actuales mientras se exploran oportunidades futuras, como la expansión de las líneas de autobús y la mejora de las conexiones.

No se dispone de financiación suficiente para todos los proyectos identificados a través del proceso del RTP, por lo que es indispensable contar con una lista de proyectos sin financiamiento. Los proyectos sin financiamiento son aquellos que se incorporarían al RTP si se dispusiera de recursos adicionales y aquellos que podrían evaluarse en caso de identificarse fondos adicionales. Dado a que los ingresos provenientes de la mayoría de las fuentes de financiación no logran cubrir la creciente demanda de proyectos de transporte en la región, RTC enfrenta el difícil desafío de priorizar el gasto futuro. No obstante, el RTP ofrece un marco sólido para la toma de decisiones, al identificar los proyectos más relevantes y con mayor impacto en la región.



CHAPTER 1

Introduction

Why is the Regional Transportation Plan (RTP) important to the Truckee Meadows Region? Put simply, the RTP matters because transportation plays a vital role in both the region's quality of life and economic prosperity. Therefore, having a RTP is essential for identifying, prioritizing, and implementing the transportation projects, programs and services necessary to community mobility.

A RTP is required by federal and state law. The Regional Transportation Commission of Washoe County (RTC) is the entity responsible for developing the RTP, in collaboration with policy makers, elected officials, stakeholders, and the public. Public and stakeholder engagement is vital throughout the RTP development process, and the process itself is intended to build greater consensus around the RTP. The development of the RTP requires a regional, collective effort.

The RTP is required to address at least a 20-year planning timeframe. It must also include short- and long-term strategies to foster the development of an integrated multimodal regional transportation system that facilitates the safe and efficient movement of people and goods. Additional requirements of the RTP include a prioritized and fiscally constrained list of the transportation projects for the region that are needed over the next 20 years.

An update to the RTP is currently required every four years due to air quality regulations. This 2050 RTP Update serves as an update to the current plan which was adopted on March 19, 2021.

RTC is the designated Metropolitan Planning Organization (MPO) for the Truckee Meadows region and is therefore required by federal law to develop the RTP for the region. Federal law requires a MPO to be created when an urbanized area (as defined by the Census Bureau) reaches 50,000 in population. The MPO for the Washoe County area was first created in 1979 when the Census reported a population of 50,000 in the urbanized area.

Per 23 Code of Federal Regulations (CFR) 450.312, federally required MPO planning boundaries must include, at minimum, the Census defined urbanized area, "plus the contiguous area expected to become urbanized within a 20-year forecast period for the metropolitan transportation plan," but that boundary can be extended in order to foster effective transportation planning. Additionally, MPOs are required to review their planning boundaries every ten years when the Census determines new urbanized areas. The current MPO planning boundary includes the urbanized area and extends to encompass all of Washoe County, except the portion within the drainage basin of Lake Tahoe, an area over 6,000 square miles with an estimated population of 493,556, according to Truckee Meadows Regional Planning Agency (TMRPA) regional population estimates.



As the MPO, RTC conducts a continuing, cooperative, and comprehensive multimodal transportation planning program consistent with federal planning law. Federal planning law is largely found in Titles 23 and 49 of the United State Code (USC), and United States Department of Transportation (USDOT) Code of Federal Regulations (CFR). The RTP, and the planning program it reflects, allows the region and its projects to be eligible for federal formula funding and to compete for federal discretionary grants.

This RTP has been developed to comply with both federal and state planning requirements. In addition to meeting the federal requirements for a regional transportation plan, this RTP also serves as the long-range transportation plan for purposes of compliance with state law through its utilization by the Truckee Meadows Regional Plan (the Regional Plan) developed by the Truckee Meadows Regional Planning Agency (TMRPA). TMRPA shares a similar planning area to RTC and produces a regional land-use plan, the Regional Plan, which is a comprehensive plan for managing growth and development, inclusive of transportation facilities. For the purposes of the Regional Plan, state law requires the RTP to include transportation facilities that will be necessary to support future development as prioritized in the Regional Plan. The RTP must also establish the timeframe within which those transportation facilities would need to be made available to satisfy the requirements created by future development. The RTP must be found by TMRPA to be in conformance with their Regional Plan to ensure it supports TMRPA's efforts to plan for orderly growth and development in the region.

In addition to serving as the MPO and conducting the regional transportation planning program, RTC also delivers transportation projects and services. As required by federal law, the RTP identifies a prioritized and fiscally constrained list of the transportation projects and services that are needed in the region. The project list is included as Appendix B. RTC delivers many of the projects and services on that list and makes related decisions regarding the use of regional revenue sources that are dedicated to transportation purposes. RTC delivers roadway projects and other multimodal facilities as part of its regional street and highway program. RTC operates the regional transportation system including public transit and other transportation services. RTC also administers regional programs pursuant to interlocal cooperative agreements such as the Regional Pavement Preservation Program, and the Regional Road Impact Fee Program.







CHAPTER 2

The Truckee Meadows Region

The Truckee Meadows region (the region) refers to the over 6,000 square mile area which includes all of Washoe County except the portion within the drainage basin of Lake Tahoe. The region encompasses a diverse landscape, with the Sierra Nevada mountain range to the west and the expansive Great Basin to the east, it is also characterized by its unique blend of urban and rural environments. The region includes the urban hubs of the City of Reno and the City of Sparks as well as a mosaic of neighborhoods, each with its own distinct character. The region's proximity to Sacramento and the San Francisco Bay Area offers economic and tourism opportunities but can also create transportation challenges.

POPULATION

The region is home to a diverse range of ethnicities and cultures stemming from a strong immigrant history, proximity to diverse populations in Northern California, and a desirable quality of life. Just over 60 percent of Washoe County residents identify as White, non-Hispanic. Hispanic or Latino is the next largest demographic at nearly one-quarter of the population. The remaining population represents a broad cross-section of race and ethnicities.

Within the MPO planning area, the population is currently estimated at 493,556, reflecting an increase of 19 percent, or 78,936 residents since 2010, for an average of 6,568 new residents per year. The Nevada State Demographer's Office forecasts a population increase for Washoe County to 579,706 by 2042, an increase of 15.5 percent from the 2022 population or 78,071 residents. This equates to an average of 3,904 new residents per year. TMRPA's 2024 Washoe County Consensus Forecast (CF) on population growth incorporates the State Demographer's projection along with three other independent sources to minimize projection bias.

The recently adopted CF is more optimistic and projects that Washoe County's total population will grow from 515,085 in 2024 to 602,455 in 2044. This translates to an average of about 4,500 new residents per year and an average annual growth rate of 0.81 percent.

Population growth estimates for Washoe County outpace projected growth for the United States, which, according to the Congressional Budget Office, is expected to average approximately 0.3 percent annually between 2023 and 2053. As the population continues to increase, there will likely be greater overall pressure on the existing transportation system.

EMPLOYMENT

Between 2014 (when Tesla announced Storey County as their first Gigafactory location) and 2023, the region added an average of 7,100 jobs per year. This important period of industry diversification has significantly affected the distribution of job types in the Reno-Sparks economy. Businesses in the region, previously dominated by leisure and hospitality, have begun to shift toward a logistics and manufacturing hub. Secondary economic impacts, resulting from spending and hiring in these growing sectors, also created job gains in the Construction, Professional and Business Services, and Education and Health Care Services industries.

According to the State of Nevada's Current Employment Survey of employers, there were 271,900 jobs spread across worksites located in Storey and Washoe Counties, as of May 2024. The area also saw an additional 6,380 jobs (2.4 percent) added in January 2024 through May 2024, compared to the same period in 2023. Based on recent trends, increasing employment in Storey, Lyon and Washoe Counties can be expected to continue.

HOUSEHOLD INCOME

In 2022, 10.2 percent of households in Washoe County had incomes at or below the poverty level, which is lower than the state of Nevada at 12.5 percent, and lower than the national poverty rate of 11.5 percent, according to 2022 American Community Survey 1-year Estimates. A lower poverty rate for Washoe County stems from several factors such as a robust local economy consisting of opportunities for both professional and skilled labor, and employment diversity. In contrast, during the years leading up to the 2008 Great Recession, the County was dependent on just a few employment sectors.

HOUSING

As of 2022, Washoe County had around 192,420 households compared with 160,797 households in 2010, according to the US Census ACS 5-year Estimates. This represents a near 20 percent increase in households since 2010. The majority of residences are single-family homes at 65 percent, followed by multi-family housing at 29 percent, and finally, mobile homes around 6 percent. Like many communities, the demand for housing in the region outpaces supply, even with a strong residential construction sector. In fact, 2023 saw the City of Reno issue the highest number of new residential construction permits ever.

TRANSPORTATION

The transportation system in the region includes roadways, pedestrian and bicycle facilities, transit services and facilities, air, rail, and inter- and intrastate bus service. Based on 2023 Nevada Department of Transportation (NDOT) vehicle miles traveled (VMT) data, freeways dominate the traffic landscape, accounting for 44.0 percent of total vehicle VMT with 1,736,216,564 miles traveled across 87 miles of road in 2023. Major arterials and minor arterials together represent a significant portion of traffic, with 19.9 percent and 19.4 percent of the total VMT, respectively.

Local roads, despite their extensive mileage at a total of 1,561 miles, contribute only 11.4 percent to the total VMT. Major collectors and minor collectors play a smaller role, with 0.5 percent and 4.9 percent of the total VMT, respectively.



Regional Roadways

Previous versions of the RTP have utilized the term "Regional Roads" to describe roadways where both RTP projects and RTC programs were implemented. This RTP seeks to clarify and differentiate between eligibility requirements of regionally significant projects for inclusion in the RTP and the eligibility requirements of projects for programming activities of the RTC such as the Pavement Preservation Program. Roadways eligible for the Pavement Preservation Program, as shown in Appendix F, may include some roads, as agreed to by the local jurisdictions, with a roadway functional classification of local.

Projects eligible for inclusion in the RTP, and for federal funding, must adhere to the federal definition of regional significance, and project location aligns, in most cases, with a roadway functional classification of arterial or collector.

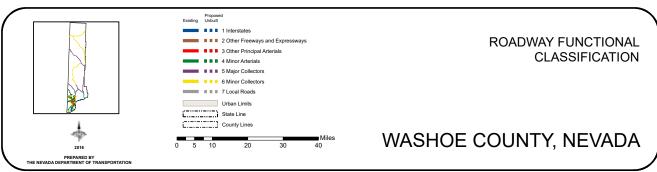
Roadway functional classifications are determined by the United States Department of Transportation (US DOT) Federal Highway Administration (FHWA). Functional classifications are based on the type of service the road provides, and the design elements of the roadway such lane widths, shoulder widths, and curve radii. The four main road functional classifications are: Principal Arterial, Minor Arterial, Collector, and Local.

Public roads that are functionally classified higher than rural minor collector, rural local, or urban local are eligible for federal-aid highway assistance. Rural minor collectors and local roads usually do not qualify, although certain federal funding sources can be used on bridges and tunnels that are not part of the Federal-aid highway system. The utilization of the functional classification system is also crucial for reporting on performance metrics. Map 2.1 and Map 2.2 show the functional classification of roads in the region. Table 2.1 summarizes the four main roadway functional classifications.

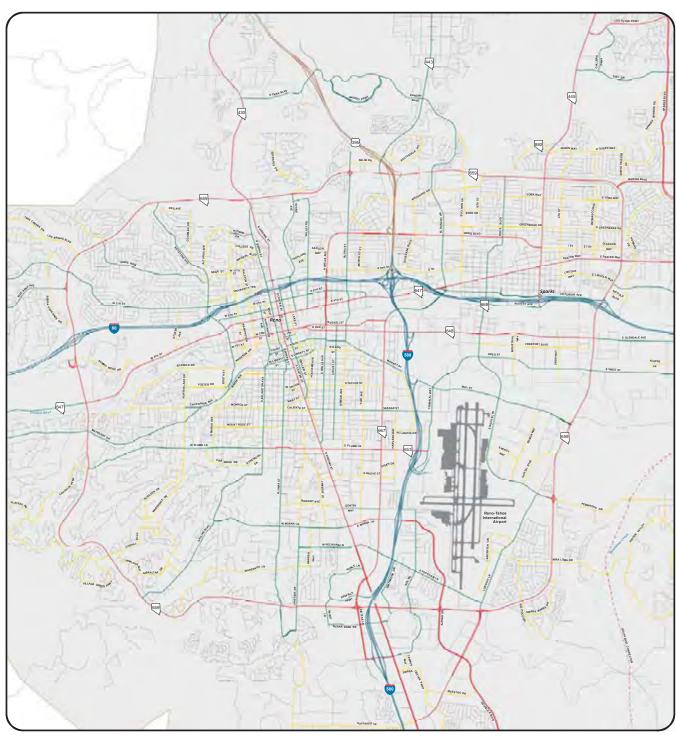


Map 2.1 NDOT 2016 Functional Roadway Classification





Map 2.2 NDOT 2016 Functional Roadway Classification Map Inset



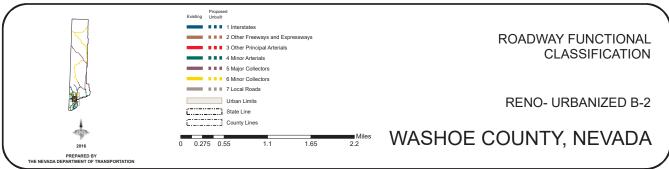


Table 2.1 Main Roadway Functional Classifications

Source: FHWA.DOT.GOV and FHWA Highway Functional Classification Concepts, Criteria and

Procedures 2023 Edition

Functional Classification	Description
Principal Arterial	 Interstate System, freeways and expressways Provide the highest level of mobility and the highest speeds over the longest uninterrupted distance Access is controlled with the fewest points of access Posted speeds generally between 55 and 75 mph
Minor Arterial	 Include multilane highways, and other important roadways that supplement the Interstate System Provide service for trips of moderate length, serve geographic areas that are smaller than their Principal Arterial counterparts and offer connectivity to the higher Arterial system Connect principal urbanized areas, cities, and industrial centers Access points are few Posted speed generally between 50 and 70 mph
Collectors	 Major and minor roads that connect local roads and streets with arterials Provide less mobility than arterials at lower speeds and for shorter distances They balance mobility with land access, with some access points Posted speeds generally between 35 and 55 mph
Local	 Provide limited mobility and direct access to residential areas, businesses, farms, and other local areas Access points are many Posted speeds generally between 20 and 35 mph

Access Management

Access Management Standards are used in the design of future improvements to regional roads and the classification of existing improvements for planning purposes. Access refers to the entry of vehicles to and from the traveled portion of a roadway. This access can be to/from homes or businesses adjacent to the road, from intersecting streets or from parking on the sides of the roadway. Access control is a proven safety measure, as it reduces the potential for vehicle conflict. Vehicles need to access the roadway, but they also interrupt the flow of traffic. The greater the number of these interruptions, the more impact they have on flow. Access management controls the amount of these interruptions and is a tradeoff between the need for access and the maintenance of traffic flow. The degree to which access is managed needs to be appropriate to the type of adjacent land uses, volume of traffic and purpose of the roadway.

Access management decisions are made based on the latest edition of the NDOT Access Management System and Standards manual, Transportation Research Board Access Management Manual, or locally-adopted standards, as directed the local jurisdiction. Access management can include an analysis of the functional area at signalized intersections.

Access management may typically involve exercising control over the number and location of driveways and turning movements. Related to this is the control of the type of movements allowed into or out of these driveways through such things as signage and medians. Access control may also involve control of parking adjacent to the travel lanes. The degree to which access of all types is controlled can have a substantial impact on the ability of a roadway to carry traffic. For example, consider the very limited access allowed on an interstate highway versus a neighborhood street. The degree of access is an important consideration in sizing the street and highway system. All other things being equal, the greater the degree of access control, the greater number of vehicles that can be accommodated per lane. When the degree of actual access significantly exceeds the original planning assumptions, significant unforeseen problems can occur, inducing additional congestion.

Access controls also have a direct impact on safety as shown in Table 2.3. Minimizing the number of turning movements across lanes of traffic has been demonstrated to reduce crashes.



Table 2.3
Effects of Access Management Techniques Access Management Technique

Access Management Technique	
1. Add continuous two way left turn lane (TWLTL)	35% reduction in total crashes 30% decrease in delay 30% increase in capacity
2. Add nontraversable median	55% reduction in total crashes 30% decrease in delay 30% increase in capacity
3. Replace TWLTL with a nontraversable median	15%-57% reduction in crashes on 4-lane roads 25%-50% reduction in crashes on 6-lane roads
4. Add a left-turn bay	25%-50% reduction in crashes on 4-lane roads Up to 75% reduction in total crashes at unsignalized access 25% increase in capacity
5. Type of left-turn improvementa. paintedb. separator or raised divider	32% reduction in total crashes 67% reduction total crashes
6. Add right-turn bay	20% reduction in total crashes Limit right-turn interference with platooned flow, increased capacity
7. Increase driveway speed from 5 mph to 10 mph	50% reduction in delay per maneuver; less exposure time to following vehicles
8. Visual cue at driveways, driveway illumination	42% reduction in crashes
9. Prohibition of on-street parking	30% increase in traffic flow 20%-40% reduction in crashes
10. Long signal spacing with limited access	42% reduction in total vehicle-hours of travel 59% reduction in delay 57,500 gallons fuel saved per mile per year

Source: TRB Access Management Manual

Design standards and operational standards (agreed to by implementing jurisdictions) can help facilitate trip movements. Some important considerations include the following:

- 1. On-street parking shall not be allowed on any new arterials. Elimination of existing on-street parking shall be considered a priority for major and minor arterials operating at or below the policy level of service.
- 2. Minimum signal spacing is for planning purposes only; additional analysis must be made of proposed new signals in the context of existing conditions, planned signalized intersections, and other relevant factors impacting corridor level of service.
- 3. Minimum spacing from signalized intersection/spacing from other driveways
- 4. If there are more than 30 inbound, right-turn movements during the peak-hour
- 5. If there are more than 60 inbound, right-turn movements during the peak-hour
- 6. Minimum spacing on collectors

Additional roadway design access elements that influence safety and traffic flow include the following:

- Number of through lanes
- Minimum signal spacing
- Left turn from a major street
- Right deceleration lanes at driveways
- Driveway spacing
- Number of signalized intersections per mile
- Design speed
- Bicycle facilities
- Left turn lanes
- Left turn from minor street or driveway
- Median type or existence of median

The Access Management Standards shown in Table 2.4 are used in the design of future improvements to regional roads and the classification of existing improvements for planning purposes.

Table 2.4 Access Management Standards

Access Management Class	Posted Speeds	Signals Per Mile and Spacing ²	Median Type	Left FromMajor Street? (Spacing from signal)	Left From Minor Street or Driveway?	Right Decel Lanes at Driveways	Driveway Spacing ³
High Access Control	45-55 mph	2 or less Minimum spacing 2350	Raised w/ channelized turn pockets	Yes 750 ft. minimum	Only at signalized locations	Yes ⁴	250 ft./500 ft
Moderate Access Control	40-45 mph	3 or less Minimum spacing 1590 feet	Raised or painted w/ turn pockets	Yes 500 ft. minimum	No, on 6- or 8- lane roadways w/o signal	Yes ⁵	200 ft./300 ft
Low Access Control	35-40 mph	5 or less Minimum spacing 900 feet	Raised or painted w/turn pockets or undivided w/painted turn pockets or two-way, left-turn lane	Yes 350 ft. minimum	Yes	0 Z	150 ft./200 ft.
Ultra-Low Access Control	30-35 mph	8 or less Minimum spacing 560 feet	Raised or painted w/turn pockets or undivided w/painted turn pockets ortwoway left-turn lane	Yes 350 ft. minimum	Yes	0 Z	150 ft./200 ft. 100 ft./100 ft. ⁶

Regionally Significant Projects

Federal law requires regional transportation plans to emphasize facilities that serve national and regional transportation functions. Per 23 CFR § 450.104: "Regionally significant project means a transportation project (other than projects that may be grouped in the TIP and/ or STIP or exempt projects as defined in EPA's transportation conformity regulations (40 CFR part 93, subpart A) that is on a facility that serves regional transportation needs (such as access to and from the area outside the region; major activity centers in the region; major planned developments such as new retail malls, sports complexes, or employment centers; or transportation terminals) and would normally be included in the modeling of the metropolitan area's transportation network. At a minimum, this includes all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel."

The core function of the MPO is to develop the RTP, through which the MPO is required to identify transportation projects that are considered critical for regional connectivity. This RTP addresses regional transportation issues involving the multimodal transportation system, identifying and prioritizing projects on existing or proposed roadways that handle high volumes of vehicle trips, facilitate connectivity across different jurisdictions, overcome significant travel barriers, or otherwise comply with the federal definition of regional significance. In terms of roadway functional classifications, RTC generally considers projects on the following roadways to be regionally significant:

- Principal arterial highways or minor arterials that are direct connections between freeways and other arterials, provide continuity throughout the region, and generally accommodate longer trips within the region, especially in the peak periods on high traffic volume corridors
- Collectors that cross a significant travel barrier or provide access to major existing or future regional facilities

Though functional classification often determines a project's regional significance, local conditions may also meet the federal definition of regional significance. As a result, projects are evaluated on a case-by-case basis to determine their eligibility for inclusion in the RTP.

This RTP does not identify projects on roadways that are functionally classified as local roads. The local jurisdictions (Washoe County, the City of Reno, and the City of Sparks) engage in planning efforts that focus on identifying and prioritizing projects on local roads. The function of the RTP is to identify regionally significant projects, however the RTC is also responsible for regional programs such as the Pavement Preservation Program. Roadways eligible for the Pavement Preservation Program, as shown in Appendix F, may include some roads, as agreed to by the local jurisdictions, with a roadway functional classification of local.

RTC and the local jurisdictions collaborate and cooperate to plan, construct, and maintain the regional road network. Varied goals and regulations require differing criteria for roadway planning and programming efforts. Transportation and air quality modeling, safety analysis and programming, and access management standards all have unique requirements and criteria. Likewise, criteria appropriate to regional RTC programs such as the Regional Pavement Preservation Program, the Regional Road Impact Fee Program, and RTC's overall regional street and highway program vary based on regulatory and other factors.

State Roadways

As outlined in the 2020 NDOT One Nevada Transportation Plan, the statewide transportation planning program focuses on the state highway system, which includes the four categories of regionally significant roadways listed below.

- Interstate Routes
- US Routes
- State Routes

Other state-owned roads that are regionally significant

The regionally significant state-owned roads in the region are referred to as state roads for purposes of this RTP. The RTC integrates NDOT planning for state roads and related projects into its transportation planning program and NDOT projects on state roads are included in the prioritized list of regionally significant projects that must be included in the RTP.

Pedestrian and Bicycle Facilities

The pedestrian and bicycle network in the region includes sidewalks, multi-use paths, bike lanes, bike paths, overpasses, crosswalks, and bike amenities. Roadway projects are planned and designed to include pedestrian and bicycle facilities for purposes related to vehicle capacity, safety, and accessibility and mobility, considering all users of the roadway. Pedestrian and bicycle facilities can provide greater accessibility and mobility options to further the interests of congestion management, public health, regional air quality, and quality of life. In some cases, pedestrian and bicycle facilities can also provide increased regional connectivity.

Transit Services and Facilities

RTC transit services include regional fixed-route, paratransit, and a micro-transit system. Facilities that support those services include transit stations, transit routes, dedicated roadway lanes for transit routes, bus stops, passenger transfer facilities, and park-and-ride locations. The RTC has two main transit stations, 4th Street Station in downtown Reno, and Centennial Plaza in downtown Sparks, as well as a passenger transfer station at Meadowood Mall in Reno. The fixed-route system has 20 routes on approximately 204 miles of roadway that connect approximately 136 square miles in the region. RTC's intercity transit service connects Washoe County and Carson City.

The RTC has two bus rapid transit (BRT) routes, one on Virginia Street connecting north and south Reno, and one on 4th Street and Prater Way connecting Reno and Sparks, that include BRT stations and dedicated transit lanes. There are over 800 bus stops in Reno and Sparks that are part of the public transit system. Regional parkand-ride facilities are located at the Summit Mall in Reno and in the North Valleys area. Map 2.3 shows RTC transit routes and the area of transit service.

Air, Rail, and Inter- and Intrastate Bus Service

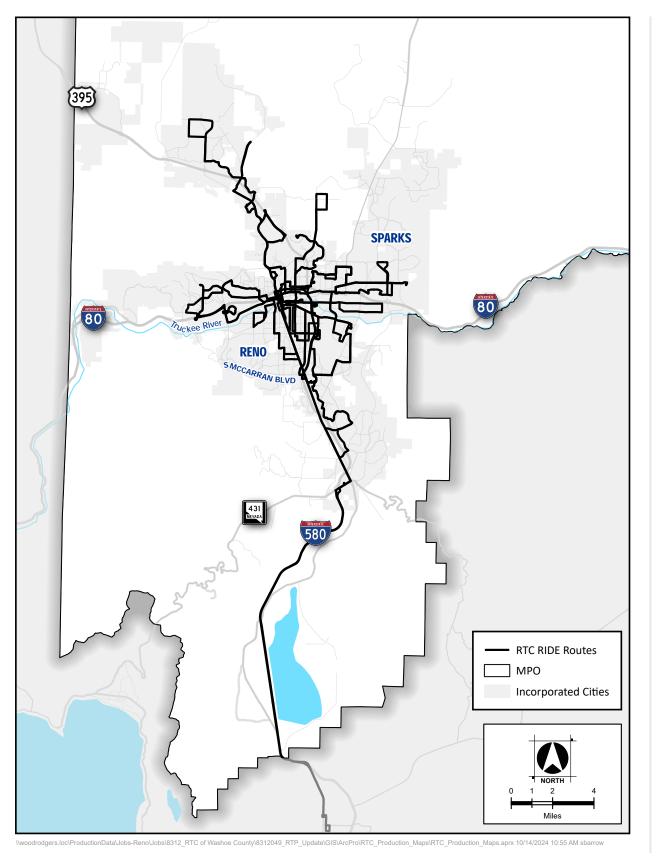
The Reno-Tahoe Airport Authority (RTAA) operates and maintains the Reno-Tahoe International Airport (RNO), as well as the Reno-Stead Airport which does not carry commercial airline traffic. RNO is the 62nd busiest airport in the United States, with approximately 4.6 million passengers per year, generating a total economic impact of \$3.6 billion annually, according to the Reno-Sparks Convention & Visitors Authority (RSCVA) 2023 Economic Impact Study. RNO hosts ten commercial airlines and three cargo carriers, which access more than 20 nonstop destinations that can link passengers to virtually anywhere in the world. RNO is vital for tourism in the region as it is a key entry point for people looking to explore the Reno and Lake Tahoe area. The billions of dollars generated annually by the airport translate into jobs, infrastructure development, and community investment that directly benefit Nevada's critical tourism industry.

The region is also served by passenger rail. Amtrak provides daily rail service via a station in downtown Reno under agreement with the Union Pacific Railroad (UPRR) to use its tracks. Train services generally cater to regional and cross-country travelers. The UPRR railyard in Sparks is an integral part of the railroad's 32,000-mile operation and has been a focal point for the safe and efficient operation of freight trains over Donner Summit. UPRR has nearly 1,200 miles of track and 600 employees in the state, and the UPRR railyard in Sparks plays a critical role in the efficient movement of goods in and

28 1 2050 R Tevada.

Inter- and intrastate bus service to the region is provided by Greyhound. Pick-up/drop-off locations include the Amtrak station in Downtown Reno, the RTC's Centennial Plaza, and the Reno-Tahoe International Airport.

Map 2.3 RTC Existing Transit Routes





CHAPTER 3

Performance Measures and Targets

Performance measures and targets help to support long-range investment and policy decision-making. The RTP must include a description of the performance measures and performance targets used in assessing the performance of the transportation system. Those performance measures must include the national performance measures established by federal law and regulation. The RTP must monitor and report on progress toward achieving targets for the national performance measures. As the MPO, the RTC must also integrate into the metropolitan planning process, directly or by reference, the performance measures and targets in state transportation plans and planning processes.

PERFORMANCE-BASED PLANNING

Federal law requires MPOs to conduct performance-based transportation planning. The RTP must be developed through a performance-driven, outcome-based planning approach. Performance-based planning and programming is a system-level, data-driven process to identify management and operational strategies and capital investments.

It is intended to result in more efficient investment of transportation funding by focusing on national and regional transportation goals, increasing accountability and transparency, and improving decision-making.

The RTP is the centerpiece of RTC's comprehensive performance-based transportation planning program and serves as an umbrella document that informs programming decisions, including the development of RTC's Regional Transportation Improvement Program (RTIP). The RTP draws from multiple regional and state performance-based plans, programs, and processes, and connects performance measures to goals and objectives in order to identify needs, progress, and gaps in the performance of the transportation system.

The United States Department of Transportation (USDOT) identifies essential elements for performance-based long-range transportation plans, and the overall transportation planning process. The RTP has been structured to reflect current USDOT guidance on performance-based planning.



NATIONAL PERFORMANCE MEASURES AND TARGETS, AND SYSTEM PERFORMANCE REPORT

As the MPO, RTC must establish performance targets for the national performance measures. Those targets are summarized in Table 3.1. As RTC is both the MPO and the transit system provider in the region, RTC develops a Transit Asset Management Plan and a Public Transportation Agency Safety Plan. RTC updates those transit plans regularly to monitor, report, and evaluate progress in meeting those targets.

The RTP must include a system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the national performance targets. The following system performance report describes the national performance measures and targets to evaluate the condition and performance of the region's transportation system.

Table 3.1 Performance Measures and Targets

Performance Measure	Performance Target	Baseline or Target Value	Most Recently Available Performance
Safety			
(Federal) Number of fatalities	(RTC) Aspirational target is 0.	46 (2018-2022)	47 (2023)
(5-year average)	(NDOT) Reduction in the number of fatalities compared to trend value (5 year)	Washoe County	Washoe County
(Federal) Rate of fatalities per 100 million VMT (5-year average)	(NDOT) Reduction in the number of fatalities compared to trend value (5 year)	1.16 (2018-2022)	1.31 (2022)
(Federal) Number of serious injuries	(NDOT) Reduction in the number of serious injuries compared to trend value (5 year)	161.8 (2018-2022)	148 (2022)
(Federal) Rate of serious injuries per 100 million VMT (5-year average)	(NDOT) Reduction in the number of serious injuries compared to trend value (5 year)	4.17 (2018-2022)	3.8 (2022)
(Federal) Number of non-motorized fatalities and serious injuries (5-year average)	(NDOT) Reduction in the number of non-motorized fatalities and serious injuries compared to trend value (5 year)	44.2 (2018-2022)	48 (2022)

Infracturation Condition			
Infrastructure Condition			72.00/ /2.40/
(Federal) Condition of pavements on the Interstate System	(NDOT) Percent of pavement on the Interstate system in good (and poor) condition		73.9% (2.4%)
(Federal) Condition of pavements on the NHS (excluding the Interstate)	(NDOT) Percent of pavement on the Interstate system in good (and poor) condition	>90% (<50%)	44.8% (20.3%)
(Federal) Condition of bridges on the NHS	(NDOT) Percent of NHS bridges classified in good (and poor) condition	>35% (<7%)	47.1% (1.2%)
(NDOT) Condition of non-NHS bridges	(NDOT) Percent of non- NHS bridges classified in good (and poor) condition	>35% (<7%)	55.3% (3.1%)
System Reliability			
(Federal) Travel time reliability	(NDOT) Percentage of person-miles traveled that are reliable on the Interstate System (non-Interstate NHS)	≥87.1% (≥87.1%)	95.8% (72.9%) INRIX 2023
(Federal) Freight reliability	(NDOT) Truck Travel Time Reliability (TTTR) Index	≤1.25	1.5 INRIX 2023
Traffic congestion			
(Federal) Peak hour excessive delay	(NDOT) Annual hours of Peak Hour Excessive Delay (PHED) per capita	≤11.0 hours	11.2 INRIX 2023
(Federal) Non-single occupant vehicle travel	(NDOT) Percent of non- single occupant vehicle travel	≥23.1%	30.5% ACS 1 Yr (2022) 32.2% Urbanized Reno, PMR 2023
Emissions			
(Federal) Total emissions reductions from CMAQ projects	(RTC) Estimated emissions r projects as reported	reduction from CMAQ	PM ₁₀ : 0.0137 NO _x : 0.8537 VOC: 5.0299 CO: 249.4149 (2023) CMAQ Report



CHAPTER 4

Goals and Objectives

The 2023 USDOT Guide for Performance-Based Planning defines a goal as a broad statement that describes a desired end state. The Guide defines an objective as a specific, measurable statement that supports achievement of a goal. These strategic elements set the stage for the performance measures that are incorporated in the plan and help to drive investment and policy priorities that address transportation system and community outcomes. Planning is a continuous process and plan goals and objectives can and should build on those from previous plans.

STATE AND LOCAL PLANNING

This RTP draws from past state and local plans and programs, to help shape the goals, objectives, performance measures, and targets in future planning and programing processes. Federal law requires that RTC integrate certain performance-based plans into the transportation planning process. RTC must integrate, either directly or by reference, the goals, objectives, performance measures and targets described in those plans. State and local plans that were reviewed and integrated as a part of the RTP planning process include the following:

- 2024 RTC South Virginia Street Transit-Oriented Development (SVTOD) Plan
- 2024 RTC Regional Freight Plan
- 2024 RTC Active Transportation Plan –
 Walk & Roll Truckee Meadows
- 2024 Truckee Meadows Regional Plan
- 2023-2027 RTC Transportation Optimization Plan Strategies (TOPS)
- 2023 Washoe County Master Plan Envision Washoe 2040
- 2021-2025 Nevada Strategic Highway Safety Plan (SHSP)

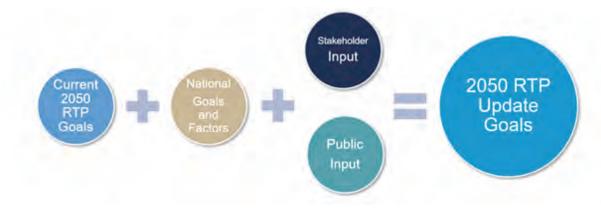
- 2022 Nevada State Freight Plan
- 2050 RTC Regional Transportation Plan (RTP) (Adopted March 2021)
- 2020 One Nevada Transportation Plan
- 2020 NDOT Coordinated Human Services Transportation Plan
- 2020 RTC Public Transportation Agency Safety Plan
- 2019 RTC ADA Transition Plan
- 2018 RTC Regional Travel Characteristics Study (Regional Household Travel Survey)
- 2017 RTC Bicycle and Pedestrian Master Plan (BPMP)
- 2017 City of Reno Master Plan Relmagine Reno
- 2016 RTC Complete Streets Master Plan
- 2016 City of Sparks Comprehensive Plan
- 2014 NNPH Air Quality Management Division (AQMD) Carbon Monoxide and PM₁₀ Maintenance Plans

RTP GOALS

The goals in this RTP describe a desired end state for the regional multimodal transportation system over the next 20 years. Federal law and regulation establish seven national goals. As explained in USDOT guidance, MPOs should incorporate the national goals into their long-range transportation plans or provide new goals that align with them. In addition, ten planning factors must be considered within the metropolitan transportation planning process. These planning factors address a wide array of issues important to communities. As shown in Figure 4.1, current RTP goals, the federally required planning factors, and the national goals were considered in the development of Plan goals.

Stakeholder and public input was utilized in the development of the draft goals which were also vetted through the Agency Working Group (AWG). A summary of the public and stakeholder engagement process conducted for this RTP is included as Appendix A.

Figure 4.1 RTP Update Goal Development Process



The goals in this RTP, collectively, are a broad statement that describes the intent behind transportation investments in the region. The goals were used to develop objectives and evaluation factors for project prioritization. Keeping the Plan's goals at the core of project prioritization will result in a project list that can best meet the identified transportation goals for the region. Figure 4.2 illustrates the process of creating evaluation measures from goals.

Figure 4.2 RTP Update Evaluation Factors Process



The following nine (unranked) goals were created for this RTP and reflect the desired state of transportation for the region over the next 20 years. Each goal is further discussed in nine goal chapters of this RTP.

1. Safety



2. Maintain Infrastructure Condition



3. Congestion Reduction



To achieve a significant reduction in congestion on the regional roadway network.

4. System Reliability and Resiliency



To improve the efficiency, resiliency, and overall reliability of the multimodal transportation system.

5. Efficient Freight Movement and Economic Vitality



To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.

6. Equity and Environmental Sustainability



To enhance the performance of the transportation system while protecting and enhancing equity and the natural environment.

7. Reduced Project Delivery Delays



To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process.

8. Accessibility and Mobility



To increase the accessibility and mobility of people on the transportation system and enhance the integration and connectivity of the transportation system.

9. Integrated Land-Use and Economic Development



To increase partnership among local jurisdictions and other stakeholders to identify how transportation investments can support regional development goals.

RTP OBJECTIVES

Objectives in this RTP support the achievement of the goals for the multimodal transportation system. Objectives are intended to reflect outcomes that are experienced by system users and the public, and integrate objectives described in state transportation plans and processes. Building on previous versions of the RTP and other planning efforts, this RTP addresses the following nine objectives under the nine goals, as shown in the chart below. Each objective is further discussed within the goal chapters.

Table 4.1 2050 RTP Update Goals and Objectives

	Goal	Objective		
1	Safety	Reduce Traffic Fatalities and Serious Injuries		
2	Maintain Infrastructure Condition	Manage Existing Infrastructure Efficiently		
3	Congestion Reduction	Manage Vehicle Travel Demand and Reduce Congestion		
4	System Reliability and Resiliency	Integrate All Travel Modes and Increase Travel Options		
5	Efficient Freight Movement and Economic Vitality	Improve the Movement of Freight and Goods		
6	Equity and Environmental Sustainability	Promote Equity and Environmental Justice		
7	Reduced Project Delivery Delays	Monitor Implementation and Performance		
8	Accessibility and Mobility	Provide a Regional Transit System and Other Transportation Services		
9	Integrated Land-Use and Economic Development	Improve Regional Connectivity		







The goal of Safety is defined in this RTP as the achievement of a significant reduction in traffic fatalities and serious injuries on roadways. The goal is achieved through its objective to: Reduce Traffic Fatalities and Serious Injuries. This chapter describes the regional efforts and strategies to address safety in a manner that will result in the reduction of fatalities and serious injuries for all road users.

The following efforts and strategies are described in this chapter:

- SECTION 1 SAFETY ANALYSES AND PLANNING
- SECTION 2 SAFETY DESIGN STANDARDS
- SECTION 3 REGIONAL SAFETY COLLABORATION
- SECTION 4 COMMUNITY SAFETY AWARENESS AND EDUCATION



SECTION 1 – SAFETY ANALYSES AND PLANNING

The RTC conducts several safety analyses and planning activities. As discussed in Chapter 3, RTC utilizes national and state performance measures to track and report on data that are related to safety. Safety data are also collected through regional efforts and through local tools like the RTC High Injury Network. Safety data are analyzed to inform RTC planning efforts such as corridor studies and area plans. The RTC is also preparing to develop a comprehensive safety action plan with funding from the Safe Streets and Roads for All grant program that will utilize robust data collection to produce a predictive safety tool to assist in creating a safer transportation network. RTC and regional activities involving safety data analysis and planning are further described below.

Data Analyses

The collection and analysis of crash data is important for continuous safety planning. RTC works closely with NDOT to analyze and publish information about safety trends over time as well as the specific safety impacts of particular projects. RTC staff serve on the Strategic Highway Safety Plan (SHSP) data team and receive weekly updates about data available from NDOT and the Nevada Office of Traffic Safety (OTS). RTC also uses these data to perform a more in-depth analysis to produce tools like the High Injury Network (HIN) to inform project selection and design. Finally, the RTC utilizes data collection and analysis agreements with UNR to better understand crash and near-miss characteristics as well as potential contributing factors based on roadway and intersection attributes.

Nevada State Highway Safety Plan

The Nevada State Highway Safety Plan is produced by NDOT in cooperation with many agencies, including the RTC. It is a comprehensive statewide safety plan that identifies the greatest causes of fatalities and serious injuries on Nevada roadways and provides a coordinated framework for reducing the crashes that cause fatalities and serious injuries. It establishes statewide goals and strategies focusing on the 6 "Es" of traffic safety: Equity, Engineering, Education, Enforcement, Emergency Medical Services/Emergency Response/Incident Management, and Everyone. The goals of this plan are incorporated into the RTP, and many of the Vision Zero Truckee Meadows pedestrian-oriented goals align with the plan.

Corridor and Area Plans

Corridor planning is used to identify safety concerns and infrastructure solutions. The RTC has conducted plans for several corridors in the region that have been incorporated into the investments shown in the RTP project listing provided in Appendix B. These plans incorporate safety analyses, needs for multimodal investments such as bicycle facilities and sidewalks, and other operational needs. For example, an area plan has been completed for Verdi which details safety and other infrastructure needs. Additionally, the Active Transportation Plan, which is covered in more detail in Chapter 12, establishes a pedestrian experience index and bicycle level of traffic stress that seek to determine potential barriers to active transportation. These indicators reflect what a non-motorized user's perception of safety might be and how comfortable they might be using the facility. The Active Transportation Plan recommended a formal Active Transportation Program be established, under which a series of Neighborhood Network Plans will be developed. These plans aim to create a safer environment for all users of the active transportation network, reducing the risk of crashes and injuries. Projects in several corridor and area plans have advanced to design and delivery, including West Fourth Street, East Sixth Street and Sun Valley Boulevard.

SECTION 2 – SAFETY DESIGN STANDARDS

Safety design standards and facility elements can greatly impact both roadway and transit safety. The RTC employs safety design standards in the installation of roadway projects and at bus stops and bus stations. The RTC's activities involving safety design standards for roadway and transit are further described below.



Safe Roadways

The primary objective of roadway design is to develop facilities that meet the long-term transportation needs of the region in a safe, efficient, and cost-effective manner complying with all applicable statutes, codes, and regulations. The range of roadway safety improvements, which are selected based on roadway context, attributes and transportation patterns, are effective in reducing roadway fatalities and serious injuries. These improvements are based on the FHWA's Proven Safety Countermeasures initiative. The FHWA Proven Safety Countermeasures include the following:

- Appropriate speed limits for all road users
- Speed safety cameras
- Variable speed limits
- Bicycle lanes
- Crosswalk visibility enhancements
- Leading pedestrian interval
- Medians and pedestrian refuge islands
- Pedestrian hybrid beacons
- Rectangular Rapid Flashing Beacons (RRFB)
- Road diets (roadway reconfiguration)
- Walkways
- Enhanced delineation for horizontal curves
- Longitudinal rumble strips and stripes
- Median barriers
- Roadside design improvements at curves
- SafetyEdge technology
- Wider edge lines

- Backplates with retroreflective borders
- Corridor access management
- Dedicated left- and right-turn lanes at intersections
- Reduced left-turn conflict intersections
- Roundabouts
- Systemic application of multiple lowcost countermeasures at stop-controlled intersections
- Yellow change intervals
- Lighting
- Local road safety plans
- Pavement friction management
- Road safety audit

The RTC's Street and Highway Program states that projects may include any of the above as "standard improvements," as determined necessary by RTC staff during project scoping or the preliminary design phase.

The RTC installs design treatments that encourage cars to travel at speeds closer to the posted speed limit, based on research that shows speed management can reduce the number and severity of crashes. In 2022, The National Highway Traffic Safety Administration found that speed contributed to 29 percent of all traffic facilities. The research also shows that the average risk of death for a pedestrian reaches 10 percent at an impact speed of 23 mph, 25 percent at 32 mph, 50 percent at 42 mph, 75 percent at 50 mph and 90 percent at 58 mph.

The RTC uses Complete Streets design principles in its projects, wherever applicable, which apply context-sensitive solutions to support all types of transportation. The primary purpose of Complete Streets projects is to provide safe access and travel for all users, including pedestrians, bicyclists, motorists, and transit users of all ages and abilities. These design treatments have been demonstrated to consistently reduce crashes on roadways in the Truckee Meadows, and many of them are part of FHWA's Proven Safety Countermeasures initiative. On state-owned facilities, NDOT also applies improvements in Intelligent Transportation Systems (ITS) to help identify and provide notification of crashes, which helps with emergency response and to reduce the risk of secondary crashes.

While all projects are designed with safety in mind, projects included in this RTP that address specific roadway safety issues, were identified in road safety audits, or are in high-crash locations are listed below.

- East 6th Street Bicycle Facility and Safety Improvements
- Keystone Avenue Improvements
- Military Road Capacity and Safety
- Mill Street Capacity and Safety
- Mt. Rose Corridor Study Recommendations Phase 1 Improvements
- Pembroke Drive Safety
- Sparks Boulevard Corridor Phase 2
- Sun Valley Boulevard Corridor Improvements

Safe Transit Operations

Ensuring safe service is one of the four goals identified in the Transportation Optimization Plan Strategies (TOPS) which serves as the RTC's short-range transit plan. The plan is the basis for changes to the RTC's public transportation services over a five-year period. The stated objective associated with the TOPS safety goal is: "maintain and operate transit vehicles and stations to ensure customer safety." Travel by transit is already safer than by car as research by the National Safety Council indicates the national passenger vehicle death rate, per 100,000,000 passenger miles, was over 50 times higher for cars than for buses. RTC strives to ensure continued safety in transit operations with high standards for maintenance, security, and coordination with law enforcement and local jurisdictions. Examples of recent RTC efforts to improve safety at bus stops include implementation of the Public Transit Agency Safety Plan, the installation of solarpowered lights where feasible, and the installation of security cameras onboard vehicles and at RTC RAPID stations, RTC 4TH STREET STATION, and RTC CENTENNIAL PLAZA.

SECTION 3 – REGIONAL COLLABORATION

Regional safety operations include the RTC's partnership in the Nevada Traffic Incident Management program as well as emergency management, Road Safety Assessments and Safety Management Plans. Additionally, participation as a member of the Vision Zero Truckee Meadows Task Force is another way the RTC improves safety through regional collaboration.

Nevada Traffic Incident Management

The goal of the Nevada Traffic Incident Management (NV TIM) program is to remove incidents (crashes) from Nevada's highways and restore normal travel operations as safely and quickly as possible. TIM is a systematic, statewide, multi-agency effort to enhance the safe and quick clearance of traffic crashes; support prompt, reliable, and interoperable communications; improve responder safety; support economic vitality by reducing delays; and reduce secondary crashes. The NV TIM Coalition is a forum of collaborative members from public and private agencies that facilitates continuous dialogue about TIM practices. These well-rounded, multidisciplinary teams bring together their diverse experience to advance and implement TIM practices within specific areas of responsibility across the state.

NV TIM partners include:

- Nevada Department of Transportation (NDOT)
- State of Nevada Department of Public Safety
- Law Enforcement (City and County)
- Fire and Rescue (City, County, and Volunteer)
- Local Ambulance Agencies
- Local Emergency Management Offices / Services
- Public Works (City, County, and Tribal)
- Environmental Agencies / Hazardous Materials Responders (private and public)
- Towing and Recovery
- Federal Highway Administration, Department of Homeland Security, and Federal Transit Administration

- Media and Agency Public Information Officers
- Traffic Management Centers / Dispatchers (public and private)

Road Safety Assessments and Safety Management Plans

Regional transportation and safety experts take part in NDOT's Road Safety Assessments (RSA) and Safety Management Plans (SMP) which are efforts to identify roadway safety issues and recommend solutions to correct them. The assessments and plans are conducted in partnership with NDOT, RTC, local government agencies, emergency responders, and bicycle and pedestrian experts. RSAs and SMPs are formal safety performance reviews of existing or future roads or intersections by multi-disciplinary teams which are performed to support corridor studies and identify short-, medium-, and long-term roadway safety improvements.

Emergency Management Plan

The RTC Emergency Management Plan (EMP) is a critical portion of the framework for emergency response and preparedness throughout Washoe County. The EMP is intended to support a comprehensive, all-hazards approach to emergency response management and works seamlessly with Washoe County's Plan along with other agency, jurisdiction, and neighboring county plans. The EMP will respond to a regionwide spectrum of emergencies as warranted by external professional emergency response organizations. The purpose of the plan is to protect life, minimize damage, and ensure continuity of operations so essential services may continue to be provided to the community. The EMP applies to all emergencies that could impact Northern Nevada. Planned training, exercises, and drills are part of the EMP. These planned events provide better coordination, response, and management of actual incidents or events. Planned events allow regional partners to test and exercise plans to improve the response and management of actual events.



Vision Zero Truckee Meadows and the Safe System Approach

In 2017, the RTC led the creation of Vision Zero Truckee Meadows (VZTM) and formed an associated task force made up of members of local, regional, state, and federal government, universities, non-profits, emergency response, health providers, and the public. The VZTM Task Force was established to take equitable, data-driven, and transparent actions to improve safety throughout the community. The Task Force maintains that the only acceptable number of traffic deaths in our community is zero and has a stated goal of reaching zero traffic fatalities and serious injuries by 2030.

Vision Zero implements a Safe System Approach, which is based on the premise that it is unacceptable to allow deaths and serious injuries to occur on the roads. To achieve zero deaths and serious injuries, crashes must be managed so that when they do happen, the kinetic energy exchange on the human body is kept below the tolerable limits for serious harm to occur.

This important principle is at the core of applying a Safe System Approach in designing and operating the road system. The Safe System Approach is guided by six principles—or fundamental tenants—and five elements, which are avenues for implementation. A Safe System cannot be achieved without all five elements working in synergy. With a Safe System Approach, weaknesses in one element may be compensated for with solutions in other areas. A true Safe System Approach involves optimizing across all the elements to create layers of protection against harm on the roads.

The VZTM Task Force created an Action Plan, originally adopted in 2019 and updated in 2022, that guides actionable steps meant to bring the region closer to its goal of zero fatalities and serious injuries. RTC continues to facilitate activities and regular meetings of the Task Force. It also maintains a website, VisionZeroTruckeeMeadows.com, where the Action Plan and other information can be found.



SECTION 4 – COMMUNITY AWARENESS AND EDUCATION

Raising public awareness about safety concerns and providing educational materials are important tools to improve safety. RTC attends various outreach events and provides the community with safety materials and information. Of particular importance is safety messaging related to pedestrians and bicyclists, who are considered the most vulnerable road users. To that end, the RTC communicates best practices in safety and participates in outreach activities using forums such as the Vision Zero Truckee Meadows Task Force and Safe Routes to School, Additionally. safety measures are often shared with the public through programs such as "The Road Ahead With RTC" segments on KOLO 8 as well as Truckee Meadows Bicycle Alliance, SMART TRIPS, Northern Nevada Public Health, social media, and dedicated and targeted webpages.

Safe Routes to School

The RTC works closely with the Washoe County School District and NDOT to implement a Safe Routes to School (SRTS) Program. The program includes a significant educational component geared toward K-12 students, parents, and school staff. The School District Police Department SRTS Coordinator conducts regular school-based events to teach K-12 grade students how to be more visible to motorists and how to follow safety precautions. The SRTS Coordinator also works with parents, school faculty, and staff to reconfigure school zone areas and to implement no-idling zones in a way that minimizes potential conflicts between motorists and pedestrians. The SRTS Coordinator is also a source of input to the RTC about capital investments that would improve safety on roadways near schools.

RTC SMART TRIPS

The RTC SMART TRIPS program assists businesses and citizens in using sustainable modes of transportation and adopting trip reduction strategies. A reduction in vehicle trips is a critical step toward maintaining and improving air quality in the Truckee Meadows and reducing traffic congestion. In addition to promoting the benefits of sustainable transportation, the SMART TRIPS program helps educate the public on how to travel safely. Safety messages for motorists, bicyclists, and pedestrians are distributed throughout the year at public events and employee benefit fairs. Safety lights that can be worn on clothing or placed on bikes are also given to members of the public at these events. SMART TRIPS safety brochures can be downloaded from rtcwashoe.com in the Safety and Security section of the About page.



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CHAPTER 6

Goal #2: Maintain Infrastructure Condition

The goal, Maintain Infrastructure Condition, is defined in this RTP as maintaining regional roadway infrastructure in a state of good repair. The goal is accomplished through its objective to: Manage Existing Infrastructure Efficiently. This chapter describes the regional efforts and strategies to manage existing multimodal infrastructure efficiently.

Collectively, the purpose of these efforts and strategies is to obtain the best and most efficient use of existing resources, stretch limited resources further, and, in some cases, reduce the need for costly capital investments. RTC strives to maximize the use of limited resources by maintaining existing systems in good repair and continuously seeking operational improvements. This is most apparent in RTC's pavement preservation and transit programs. These programs provide a framework for obtaining the best and most efficient use of existing resources, minimizing life-cycle costs, and in some cases reducing the need for costly capital investments.

The following efforts and strategies are discussed in this chapter:

- SECTION 1 PAVEMENT PRESERVATION PROGRAM
- SECTION 2 TRANSIT ASSETS AND INFRASTRUCTURE



SECTION 1 – PAVEMENT PRESERVATION PROGRAM

Whether traveling by automobile, transit, bicycle, or as a pedestrian, all roadway users benefit when streets are well maintained. The goals of pavement preservation are to keep roadways in good condition and to minimize long-term repair costs. By applying the most cost-effective treatment in the right location, at the right time, pavement life cycle costs can be minimized, and serviceable pavement life can be maximized. An effective pavement preservation program saves money and keeps roadways in good condition for the traveling public.

The pavement condition of roadways in the region is maintained through pavement preservation efforts at the state, regional, and local levels. At the state level, the Nevada Department of Transportation's (NDOT) pavement preservation program addresses the state highway system. At the regional level, RTC manages a Regional Pavement Preservation Program that addresses roadways of regional significance. At the local level, Washoe County, Reno, and Sparks have pavement preservation programs for roadways within their respective jurisdictions that are not eligible for the RTC Pavement Preservation Program. The local jurisdictions are also responsible for routine maintenance of all roadways within their respective jurisdictions, such as street sweeping, snow removal, and pothole repairs.

As shown in Table 6.1, roadway usage and ownership vary. Variables such as ownership and facility type must be considered in the efficient management of existing multimodal infrastructure.



Table 6.1 – Roadway Facilities in Washoe County

RTC does not own or operate any roadways

Local roads serve neighborhoods and carry the fewest trips on the system

Local roads and minor collectors are maintained by the local jurisdictions (Reno, Sparks and Washoe County) and carry 16% of the vehicle miles traveled (VMT) in Washoe County

Collectors serve as connections between local and arterial roads

Arterials carry the majority of trips on the roadway system and function as alternatives to highways to relieve traffic congestion

Arterials and major collectors carry 47% of VMT in Washoe County and are eligible for funding through the RTC Pavement Preservation Program

I-80 and US 395 are maintained by NDOT and carry 37% of the VMT in Washoe County

RTC Regional Pavement Preservation Program

RTC manages the Regional Pavement Preservation Program which includes eligible roadways within Washoe County. Eligibility criteria include both the functional classification of the roadway and the Average Daily Traffic (ADT). Eligible roads must be collector and above in functional classification and must carry a minimum of 5,000 ADT.

Approximately 25 percent of non-state roads (not owned or maintained by NDOT) in Washoe County are eligible for the Regional Pavement Preservation Program. The current list of eligible regional roadways for pavement preservation projects is provided as Appendix F. The pavement preservation roadway list is updated approximately every three years through a comprehensive regional assessment of roadway pavement assets and condition.



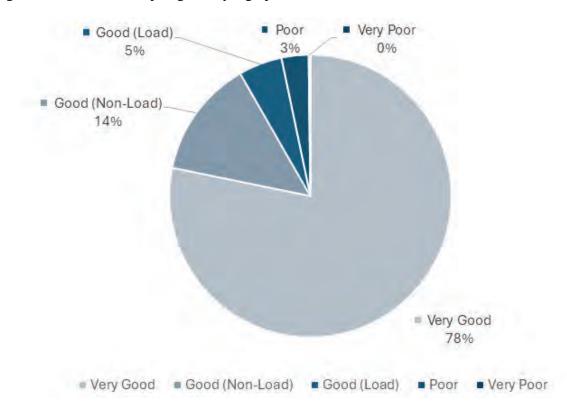
The Program is funded through a portion of the annual fuel tax revenue which is set aside for pavement preservation. The fuel tax is a function of previous voter approval, state statute, and Washoe County code. The Regional Pavement Preservation Program is an efficient use of tax-funded resources as preventative maintenance maximizes the life of the roadway and prevents costly repairs. It is six to ten times less expensive to properly maintain roadways than to allow them to fail and pay for costly reconstruction treatments.

In order to determine which roadways need maintenance and in what timeframe, RTC collects and tracks Pavement Condition Index (PCI) data for each eligible roadway and utilizes the Regional Pavement Management System (PMS). The PMS tool helps to prioritize pavement preservation projects and provide a comprehensive regional assessment of roadway pavement assets and condition. Projects are selected based on both this initial analysis and input from the Pavement Preservation Committee which consists of public works and maintenance staff from Washoe County, the City of Reno, and the City of Sparks.

The Regional Pavement Preservation Program has significantly improved roadway conditions and reduced the region's backlog of pavement reconstruction needs. Since initiation of the program, the average PCI for eligible roadways has been raised to within the optimal range for minimizing costs and maximizing performance life.

As seen in Figure 6.1, over 78 percent of roads are in Very Good condition, while slightly more than three percent are in Poor or Very Poor condition. PCI ratings of 70 and above are considered Very Good; 55-70 is considered Good (whether Non-Load or Load); 40-55 is considered Poor; and a PCI under 40 is considered Very Poor. It should be noted that although the Good (Non-Load) and Good (Load) categories share the same PCI range, load-related distresses and failures require more intensive corrections, whereas non-load-related failures are less costly to address.





Despite the overall Very Good rating of the roads in the region, challenges do exist in maintaining existing roadways. More efficient cars that use less fuel and electric cars are affecting the amount of fuel sold and taxed. The reduction in fuel tax revenue for this program could impact the region's ability to maintain the Very Good - Good rating in the future.

State and Local Government Pavement Preservation Efforts

NDOT performs pavement preservation on the state highway system in the region and throughout the state. The NDOT pavement preservation program's goals and strategies to achieve and sustain a state of good repair over the life cycle of its assets are included in the NDOT Transportation Asset Management Plan (TAMP). The goal for highway maintenance is to assure that NDOT-maintained roads are maintained to as high a level as possible consistent with work plans, policies, program objectives, budget, and available resources. NDOT defines highway maintenance as the preservation of roadway facilities in a safe and usable condition and divides this program into three areas:

Routine Maintenance – work needed on a daily basis to repair damage to the highway system and perform operational activities which keep the traveling public moving in a safe and efficient manner. Examples are crack filling, striping, sweeping, culvert cleaning, repairing concrete, replacing traffic signs, and sealing pavement.



- <u>Capital Improvement</u> work that will slow down the deterioration or extend the life of the highway system. Examples are chip seal, cold in-place recycle, microsurfacing, bridge maintenance, slope flattening, and guardrail installation.
- Emergency Activities work needed due to accidents and natural disasters to stabilize and remediate travelways and damaged structures. Examples are snow removal, traffic incident cleanup, flood damage repair and guardrail/ impact attenuator repair.

NDOT also uses a PMS to assess its roadway pavement assets and condition, and to prioritize pavement preservation projects. PMS enables NDOT to make informed decisions on how to maintain and improve the condition of the roadway network while maximizing pavement performance through the practical use of available funds. NDOT collects pavement condition data annually or biennially, which is used to assign a Present Serviceability Index value that aids in determining which facilities are in a state of good repair. It also allows NDOT to make informed and cost-effective decisions about prioritizing pavement preservation activities.

Washoe County, the City of Reno, and the City of Sparks perform pavement preservation on the roadways that are not included in NDOT's pavement preservation program or the Regional Pavement Preservation Program. Streets and highways have different needs and the performance indicators for highways are not the same as those for an urban network.

Washoe County is required to use all gasoline tax revenues for road maintenance and to maintain condition of the roads to meet a regional standard of 73 on the PCI. The County evaluates maintenance and reconstruction needs based on an analysis of PCI, timing, cost, and available funds.

The City of Reno's Pavement Management group uses a PMS to assist in evaluating the pavement condition, serviceable life, and maintenance strategies for its 755 miles of City owned roads, 22 miles of alleys, and 75 parking lots. The City conducts an annual survey of a portion of city streets to collect data used to produce a PCI rating. This PCI rating is used to determine what type of treatment is most appropriate and a PMS is used to evaluate maintenance strategies that help minimize costs while improving overall pavement conditions.

NDOT and local governments face challenges in their ability to fund and operate effective pavement preservation programs and other maintenance and operations activities. However, through the effective use of their available resources, local governments work to maintain local roads in an optimal state of repair. While these local roads account for approximately 60 percent of roadways in the region, they only carry 11 percent of VMT in Washoe County.

SECTION 2 – TRANSIT ASSETS AND INFRASTRUCTURE

In accordance with federal regulations in 49 U.S.C. 5326 and 49 CFR 625, RTC has developed a Transit Asset Management (TAM) Plan to monitor and manage public transportation capital assets to enhance safety, reduce maintenance costs, increase reliability, and improve performance. The TAM Plan was developed in 2018 with an update completed in 2022.

TAM is defined, in the RTC TAM Plan, as a "strategic and systematic process through which an organization procures, operates, maintains, rehabilitates, and replaces transit assets to manage their performance, risks, and costs over their life cycle to provide safe, cost-effective, and reliable service for the community." RTC is committed to operating a public transportation system that offers reliable, accessible and convenient service with safe vehicles, equipment and facilities.

TAM combines the components of investment (available funding and revenue), rehabilitation and replacement actions, and performance measures with the outcome of operating assets within the parameters of a state of good repair. Sufficiently maintained assets, those in a state of good repair, are instrumental to RTC's ability to provide reliable service, as well as minimize operating and maintenance costs over the life cycle of rolling stock, equipment, and facilities. A capital asset is considered to be in a state of good repair when it is able to operate at a full level of performance.

RTC considers TAM to be a critical component in managing its growing service demands with limited financial resources. The TAM Plan includes an asset inventory portfolio, an asset condition assessment, a decision support tool and management approach, and investment prioritization that are used to aid in the following:

- Assessing the current condition of capital assets
- Determining the condition the assets should be in and what level of performance they should achieve
- Identifying the unacceptable risks, including safety risks, in continuing to use an asset that is not in a state of good repair
- Deciding how to best balance and prioritize anticipated funds (revenues from all sources) to improve asset condition and achieve a sufficient level of performance within those means

The TAM Plan establishes a process for supporting investment decision-making, including project selection and prioritization. The process involves use of a tool developed to prioritize assets for investment, and another to maximize the use of available resources to meet the greatest needs. The first tool in the process uses a weighted prioritization score of each factor used in the assessment. The resulting score for each asset can be used to produce a ranked list that is further refined in the next step.

Following this asset weighting, assets with a total weighted prioritization score of 2.75 or more are fed into a data analysis model which identifies the combination of assets with the highest sum of weighted prioritization scores while utilizing a minimum of 90 percent of the identified budget for that year. The result is a final prioritized list of projects that will maximize available funds to address the most immediate needs.





CHAPTER 7

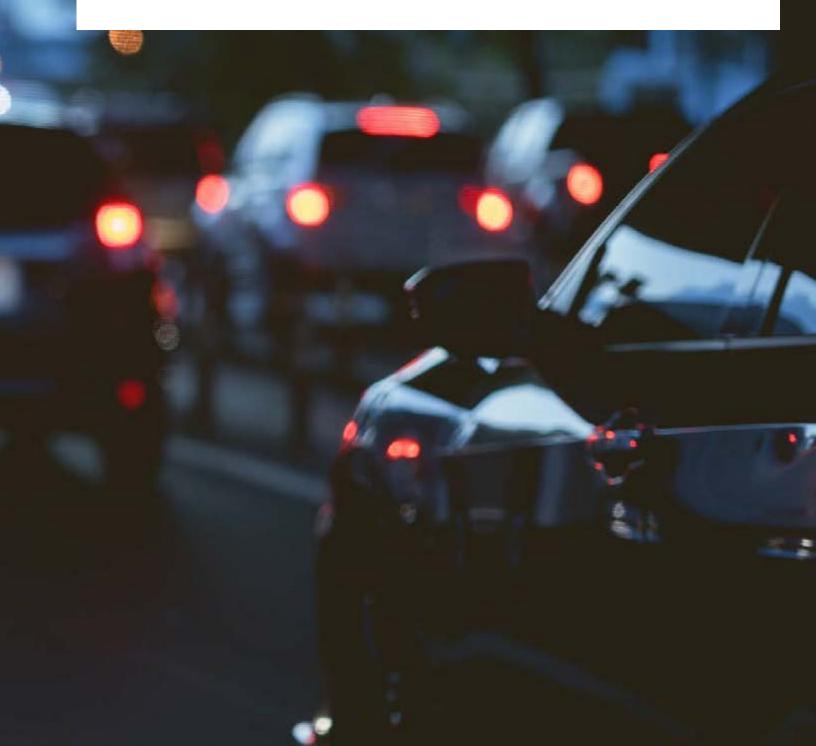
Goal #3: Congestion Reduction

The goal of Congestion Reduction is defined in this RTP as achieving a significant reduction in congestion on the roadway network. The goal is achieved through its objective to: Manage Vehicle Travel Demand and Reduce Congestion. This chapter describes the regional efforts and strategies to address congestion reduction.

The following efforts and strategies are described in this chapter:

SECTION 1 – CONGESTION MANAGEMENT PROCESS

SECTION 2 – INTELLIGENT TRANSPORTATION SYSTEMS



SECTION 1 – CONGESTION MANAGEMENT PROCESS

The Congestion Management Process (CMP) was developed as part of the RTP and is documented in Appendix D. The CMP establishes a framework for the RTC to prioritize projects aimed at reducing traffic congestion, enhancing transportation system performance, and meeting broad regional goals. The CMP's scope covers the major roads and freeways in the Truckee Meadows region, emphasizing data-driven congestion analysis, such as using INRIX data and the regional travel demand model to identify congestion hotspots and plan targeted improvements.

The CMP aligns closely with the overarching RTP goals, emphasizing safety, infrastructure condition, congestion reduction, system reliability, freight movement, equity, environmental sustainability, efficient project delivery, and accessibility. One of the CMP's primary objectives is to reduce both recurring and non-recurring congestion by implementing various strategies, including signal timing improvements, expanding fiber optic network connectivity, and strengthening traffic incident management practices. These initiatives collectively support smoother and more efficient traffic flow across the region.

Performance measures are central to the CMP and have been developed in alignment with federal legislation, specifically the Infrastructure Investment and Jobs Act and Moving Ahead for Progress in the 21st Century Act. These measures include targets for safety, infrastructure, system reliability, freight movement, environmental sustainability, and mobility, providing a clear structure for assessing progress and aligning with national transportation goals.

The CMP also includes mechanisms for monitoring and evaluating project performance. Through annual reports and performance plans, the RTC assesses project outcomes and makes adjustments as necessary based on performance data and community feedback. This adaptive approach ensures that projects remain responsive to evolving regional needs.

The CMP emphasizes a well-defined project selection framework, drawing on input from community members, studies, and partner agencies. Projects are prioritized based on criteria that reflect congestion, safety, and multimodal integration, aligning with the RTP project prioritization. This approach supports RTC's goal of Congestion Reduction to achieve a significant reduction in congestion on the roadway network.



SECTION 2 – INTELLIGENT TRANSPORTATION SYSTEMS

Intelligent Transportation Systems (ITS) improve the transportation system by optimizing traffic flow, enhancing safety, and reducing congestion. RTC has developed an ITS Strategic Master Plan and invested heavily in ITS to reduce congestion and improve safety through the following strategies:

- Real-Time Traffic Monitoring Using sensors, cameras, and GPS data, smart traffic management systems continuously monitor traffic conditions. This data is analyzed to detect congestion, crashes, and other incidents in real-time.
- Adaptive Traffic Signal Control Traffic signals are adjusted dynamically based on current traffic conditions. This helps to minimize wait times at intersections and improve overall traffic flow.
- 3. Incident Detection and Management –
 Automated systems can quickly identify
 crashes or breakdowns and alert emergency
 services. Early detection and response to
 incidents minimizes the amount of time lanes
 are blocked and reduces traffic queuing.

- 4. <u>Predictive Analytics</u> By analyzing historical and real-time data, these systems can predict traffic patterns, potential congestion points, and possible high-risk crash locations. This allows for proactive measures, such as adjusting traffic signals or providing route recommendations to drivers.
- 5. Enhanced Infrastructure and Public
 Information Systems Intelligent
 infrastructure, such as dynamic message
 signs, motorist apps, and smart intersections,
 provides real-time information to drivers
 about traffic conditions, alternate routes, and
 estimated travel times which helps distribute
 traffic more evenly across the regional
 transportation network.
- Public Transit Integration Coordinating public transportation schedules and routes with realtime traffic conditions and providing transit priority systems at traffic signals makes buses more reliable, encouraging increased usage which reduces congestion.

These technologies and strategies work together to create a more efficient and safer transportation network.





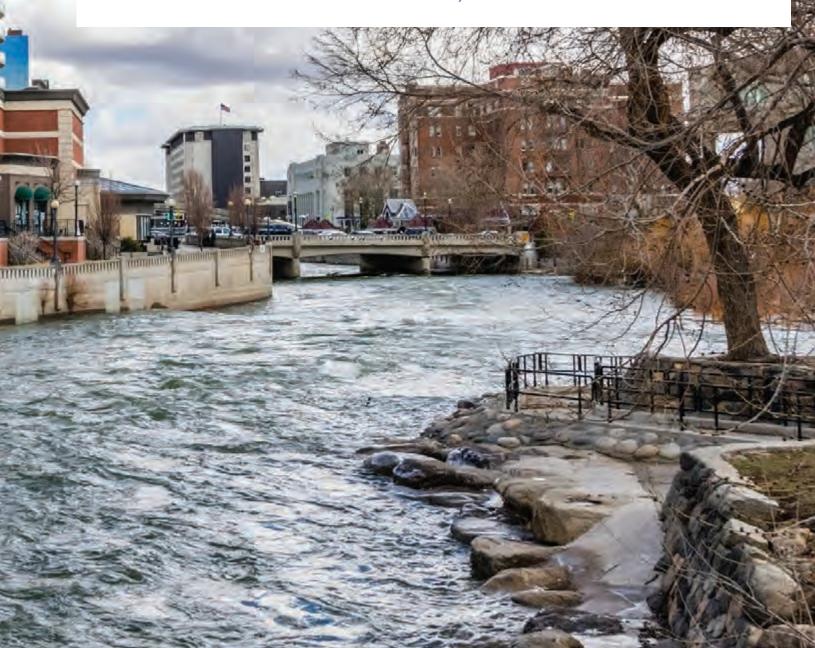


Goal #4: System Reliability and Resiliency

The RTP goal of System Reliability and Resiliency is defined in this RTP as improvement in the efficiency, resiliency, and overall reliability of the multimodal transportation system. System reliability refers to travel time predictability and resiliency refers to the ability of the transportation system to adapt as well as respond and recover quickly in emergency events. The goal of system reliability and resiliency is achieved through its objective to: Integrate All Travel Modes and Increase Travel Options. This chapter describes the regional efforts and strategies to integrate all travel modes and increase travel options. Collectively, these efforts and strategies aim to achieve the goal of system reliability and resiliency.

The following efforts and strategies are discussed in this chapter:

- SECTION 1 COMPLETE STREETS
- SECTION 2 ACTIVE TRANSPORTATION
- SECTION 3 ENVIRONMENTAL SUSTAINABILITY, FLOOD AND STORMWATER MANAGEMENT



SECTION 1 – COMPLETE STREETS

Complete Streets design principles apply contextsensitive solutions to integrate travel modes, and provide safe access and travel for all users, including pedestrians, bicyclists, motorists and transit users of all ages and abilities. These design treatments have been demonstrated to consistently reduce the number and severity of crashes on roadways. In the Reno-Sparks metropolitan region, Complete Streets designs encourage motorists to drive at posted speeds and provide a designated space for walking and biking.



Reducing the potential for crashes also improves travel time reliability as crashes are not predictable and can slow or stop traffic, adding time to a trip. The range of Complete Streets improvements, which are selected based on corridor land-use characteristics and transportation patterns, include the following:

- Roundabouts
- Narrow (less than 12-foot) travel lanes
- Reducing vehicle and pedestrian conflict points by reducing underutilized travel lanes
- Adding center turn lanes

- Adding bicycle lanes, multiuse paths, buffered bike lanes, or sharrows
- Installing or upgrading sidewalks and crosswalks
- Installing pedestrian crossing/waiting areas in median islands
- Installing or upgrading transit stops

The projects in this RTP support Complete Streets design objectives, including projects that focus on community livability as well as regional connectivity. Multimodal projects address the safety, and mobility needs of all corridor travelers, but generally do not add additional lane capacity for automobiles. Regional connectivity projects also incorporate Complete Streets design concepts. With the exception of freeway projects, all road widenings are evaluated for upgrades to the sidewalk network, as well as transit stops and bicycle lanes where it is consistent with applicable plans and policies. Additional information about specific projects and design objectives is available in the 2016 RTC Complete Streets Master Plan.

SECTION 2 – ACTIVE TRANSPORTATION

Active transportation is a way of getting around that relies on human physical power. This includes walking, cycling, rolling (skateboarding, scooters), and using a wheelchair. When active transportation is part of a transportation network, the network's travel options increase and the network is made more resilient. Adding redundancy through multiple modes provides options for mobility and network adaptability if a roadway corridor becomes unavailable due to an emergency. Additionally, as mode shift occurs and travelers choose to utilize active transportation, instead of a vehicle, roadway congestion decreases, extending the longevity of the existing roadway system.

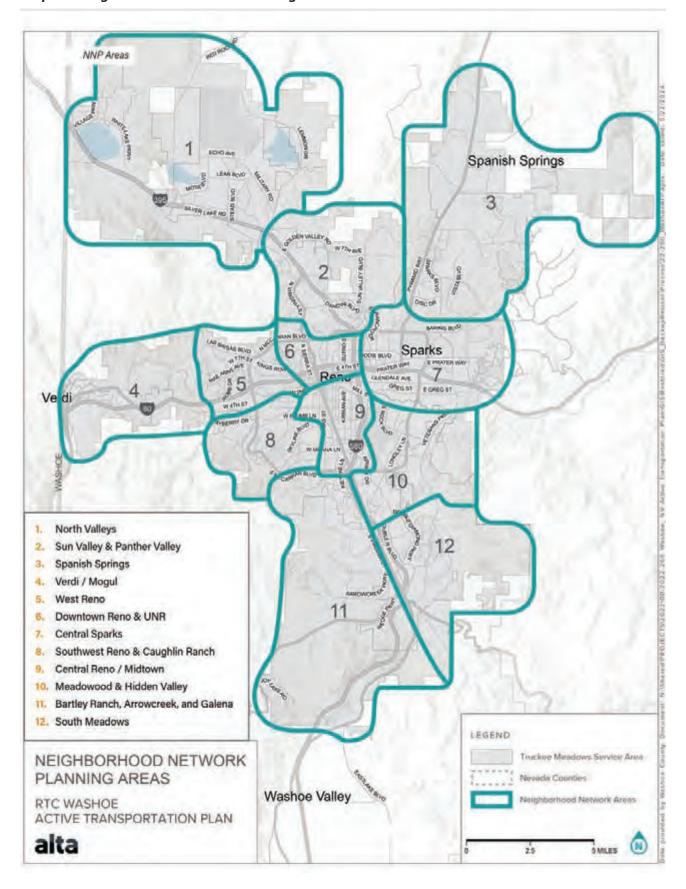
Active Transportation Plan

Adopted in September of 2024, the RTC Active Transportation Plan (ATP) establishes a clear vision and goals for the future of active transportation in the Truckee Meadows and introduces a new approach to active transportation planning through Neighborhood Network Planning (NNP). The NNP approach will engage residents and stakeholders at the local level to identify active transportation solutions that address the unique needs of each neighborhood. The goals of the ATP are to:

- Improve Safety
- Expand Mode Share
- Maintain the System Sustainably
- Enhance the Community

The ATP is RTC's guiding document for project identification, prioritization, design, and implementation as related to active transportation improvements. The community-driven Plan moves beyond the Complete Streets approach by emphasizing the importance of a well-connected neighborhood as a key driver of active trips. The Plan identifies 12 active transportation neighborhoods within the Truckee Meadows, as shown in Map 8.1. RTC will complete a neighborhood network plan (NNP) for each of the twelve neighborhoods to identify and prioritize projects that create a comfortable and safe environment for active transportation for residents, business owners, and other stakeholders in that area.





To quantify the increases in safety and comfort on the active network, the ATP presents two key metrics: bicycle level of traffic stress (BLTS) and pedestrian experience index (PEI). These two metrics use factors such as level of separation, type of facility, speed limits, and number of vehicle lanes to determine how attractive a bike facility or sidewalk is to an "interested but concerned" user. Additionally, the active trip potential metric considers land use to highlight areas with the strongest potential for increased active trips if given supportive infrastructure for people to use.

The ATP is also equipped with a typology guide containing best practices for roadway design to achieve target BLTS and PEI levels. This typology guide can be used to inform project managers and designers in places with or without an associated neighborhood plan.

The approach to implementation recommended by the ATP, is the formation of an Active Transportation Program guided by an Active Transportation Technical Working Group (ATWG) which will include representatives from the City of Reno, City of Sparks, and Washoe County. The Active Transportation Program will focus on planning, design, and construction of active transportation improvements identified through the neighborhood planning process.

Performance metrics are another key part of this Plan and are designed to measure how well policy and infrastructure changes improve sidewalk and bike path quality and utilization.

Spot Improvements

RTC programs funds each year to implement spot improvements for ADA, and other pedestrian and bicycle improvements. A summary of bicycle and pedestrian improvements completed through the Spot Improvement Program from 2020 to 2023 is provided in Table 8.1.

Table 8.1 Bicycle and Pedestrian Spot Improvements 2020-2023

Year	Bike	Sidewalk	MUP	New Crosswalks		Crosswalk	Crosswalk	Pedestri-
	Lane Miles	Miles	Miles		Replaced	Warning Devices (Pair)	Lighting	an Ramps
2020	5.96	8.11	0	5	154	6	4	270
2021	3.67	3.57	0	8	285	9	3	113
2022	1.94	1.64	0.51	9	55	16	65	163
2023	5.93	4.71	2	16	384	27	64	183
Total	17.50	18.03	2.51	38	878	58	136	729

SECTION 3 – ENVIRONMENTAL SUSTAINABILITY, FLOOD, AND STORMWATER MANAGEMENT

Weather events have can have significant effects on the transportation network, causing disruptions to infrastructure and service. Similarly, the transportation network has the potential to aid in the environmental sustainability of the region, reducing the impacts of disruptions and contributing to sustainability efforts. Efforts of particular relevance to transportation include emissions reduction, stormwater management, and flood prevention. RTC and regional activities involving environmental sustainability and stormwater management are further described below.

RTC Sustainability Efforts

RTC provides the region with sustainable multimodal transportation options, including infrastructure that supports active transportation. As a part of this commitment, RTC adopted a Sustainability Policy in September 2011. This policy affirms RTC initiatives to promote, continually improve upon, and implement sustainable practices:

RTC Sustainability Policy

The RTC shall provide a safe, effective, and efficient transportation system that addresses environmental, social, and economic sustainability issues. By providing sustainable transportation, the RTC can actively play a role in improving the health and economic competitiveness of the region as well as reduce costs by using resources more efficiently.

Sustainability Plan

In 2017, RTC completed its Sustainability Plan, which serves as a guideline for conducting operations more efficiently by implementing sustainable practices and continuing to provide sustainable and reliable transportation options. The plan created a benchmark of the current sustainability initiatives in which the RTC engages. It also includes a comprehensive organizational vision of sustainability to guide RTC's future planning and construction efforts, operations and maintenance, and internal activities.

Facilities and Vehicles

RTC incorporates sustainable practices at its facilities. Some examples of these efforts include upgrades to improve the efficiency of HVAC systems, installation of external LED lighting, reduction in water usage for landscaping, and solar lighting at several bus shelters. In addition, RTC purchases sustainable products for use in daily maintenance and operations.

RTC operates a mixed fleet of alternatively fueled fixed-route buses, including 100 percent battery electric, hydrogen fuel cell, and hybrid-electric buses. Additional information is available in Chapter 9.

Stormwater Management

The design of roadway infrastructure has an important role in minimizing the adverse impact of stormwater and protecting water quality. Protecting the safety and quality of our water resources is a key consideration during the entire process of a project from planning to construction. To minimize any potentially harmful impacts to our water resources during any stage of a project, RTC prioritizes stormwater management from the beginning. During the construction of any roadway, each contractor is required to develop a Stormwater Pollution Prevention Plan, which identifies any potentially harmful impacts to local water resources caused by the construction project and develops mitigation strategies to eliminate or mitigate those potential impacts.

In addition to managing impacts to water resources during construction, the design of all roadway projects incorporates stormwater management techniques to address runoff. Stormwater run-off from roadways often contains harmful pollutants such as oil, grease, heavy metals, solids, and nutrients. Due to the impermeable nature of roadways, stormwater run-off from roadways collects these pollutants and carries them to local rivers and other water bodies such as the Truckee River, Virginia Lake, or Pyramid Lake. Due to the impermeable nature of roadways, stormwater run-off from roadways collects these pollutants and can carry them to local rivers and other water bodies such as the Truckee River, Virginia Lake, or Pyramid Lake.



Water Quality Protection

Truckee Meadows Water Authority, Western
Regional Water Commission, Nevada Division of
Environmental Protection, and Washoe County
Health District have collaborated to create the
2020 Integrated Source Water and Watershed
Protection Plan for Public Water Systems and the
Truckee River in the Truckee Meadows Plan. This
Plan serves as a watershed management tool for
organizations, agencies and the public to help
protect water quality. TMRP has implemented this
Plan through a new policy for their 2024 Regional
Plan, NR 15 -Source Water Protection and
Watershed Management, which states that, "Local
government and affected entity master plans and
other similar plans shall include policies that:

- Reference and/or utilize the Integrated Source Water and 319(h) Watershed Protection Plan for Public Water Systems and the Truckee River in the Truckee Meadows. Available at: https://washoecountycleanwater.org/
- Promote awareness and consideration of critical source water protection areas as identified in the above referenced plan."

Washoe County Community Climate Action Plan

Washoe County is currently in the process of developing its first-ever Community Climate Action Plan (CAP). The purpose of the CAP is to identify specific actions that can help protect the local climate, improve public health, and reduce risks associated with increased greenhouse gas (GHG) emissions. The CAP aims to be a guide for residents, businesses, and public agencies to contribute to the County's target of net zero GHG emissions by 2050. As part of plan development, the County is working with local and regional jurisdictions, public agencies, and community organizations to identify and recommend sustainability best practices across multiple sectors, including transportation. The CAP strategy most pertinent to the transportation sector is emissions reduction.

To reduce emissions in the transportation sector, the Plan will focus on two goals. The first is to lower the number of vehicles on the road and total vehicle miles traveled (VMT). The second goal is a shift from traditional combustion engine vehicles to cleaner vehicles such as zero -emissions vehicles or to active transportation modes such as walking, biking, and riding scooters.

Washoe County Regional Resiliency Study

As described in the 2014 Washoe County Regional Resiliency Study, the Truckee Meadows area has endured significant flood events over the course of its history. Some of the earliest-documented floods coincided with deep snow accumulations, followed by unprecedented heavy rain and flood events occurring in California during the 1860s. Regionally destructive flood events have periodically followed with notable floods occurring in 1907, 1955, 1963, 1997, and 2016. Economic impacts and infrastructure damage were significant to area business and transportation features.

The Northern Nevada Region has evolved a proactive approach in determining flooding potential since the 1997 event by developing the regional Truckee River Flood Warning Plan and installing a flood warning system of river and precipitation gauges. Recent flood prevention projects include the Truckee River Flood Control Project that aims to protect critical areas of the region to a one percent frequency (100- year) flood event.

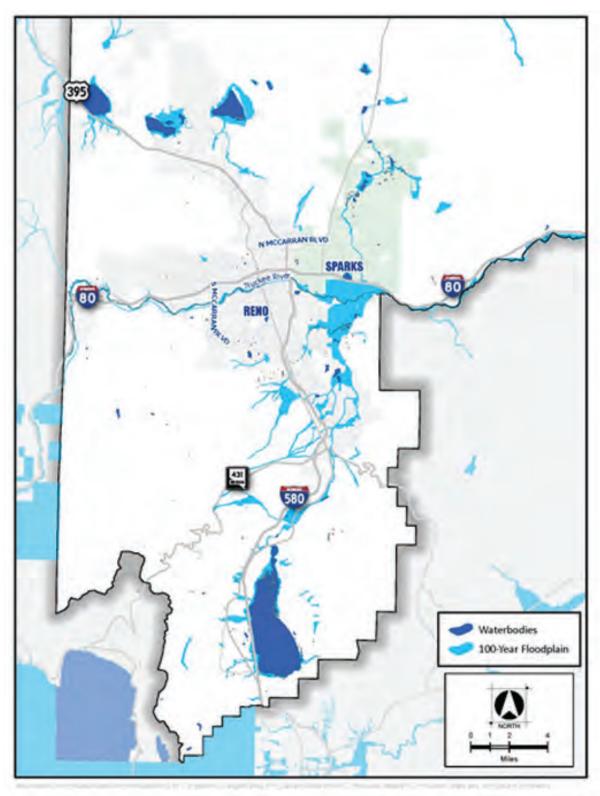
Washoe County Floodplain Management

Washoe County has been a member of the National Flood Insurance Program (NFIP) since 1984, reviewing all new development in special flood hazard areas (Flood Zones). Washoe County's membership in the NFIP provides residents an option for federally backed flood insurance for any structure, whether located within the floodplain or not. In addition, residents can receive a discounted rate on their flood insurance.

In May 2009, Washoe County qualified to be part of the Federal Emergency Management Agency (FEMA) Community Rating System (CRS), a program which rewards communities through further discounts on flood insurance, for activities that exceed the minimum NFIP requirements.

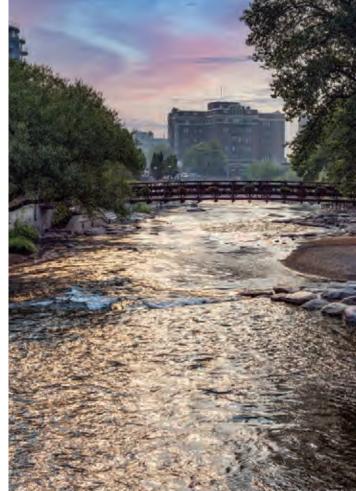
Currently, all development in flood zones is controlled by Washoe County Flood Hazard Ordinance 416, and FEMA regulations. Map 8.2 shows a map of the floodplains in Washoe County.

Map 8.2 Washoe County Floodplains



Truckee River Flood Project

The Truckee River Flood Management Project (The Flood Project) is an ongoing joint effort among the cities of Reno and Sparks, Washoe County, the US Army Corps of Engineers, and numerous other stakeholders to reduce the devastating impacts of flooding in the Truckee Meadows. There is a need for flood prevention activities in the Truckee Meadows as approximately every 10 years, the Truckee River overflows its banks, causing damage to homes, businesses, and infrastructure. Significant flooding of the Truckee River occurred in 1986, 1997 (the flood of record), and 2005. In 2017, high flows almost overtopped the riverbanks. The implementation strategies of The Flood Project are designed to provide 100-year level of flood protection for the Truckee Meadows and include projects such as the construction of levees, floodwalls, vegetative terraces and ecosystem restoration.







CHAPTER 9

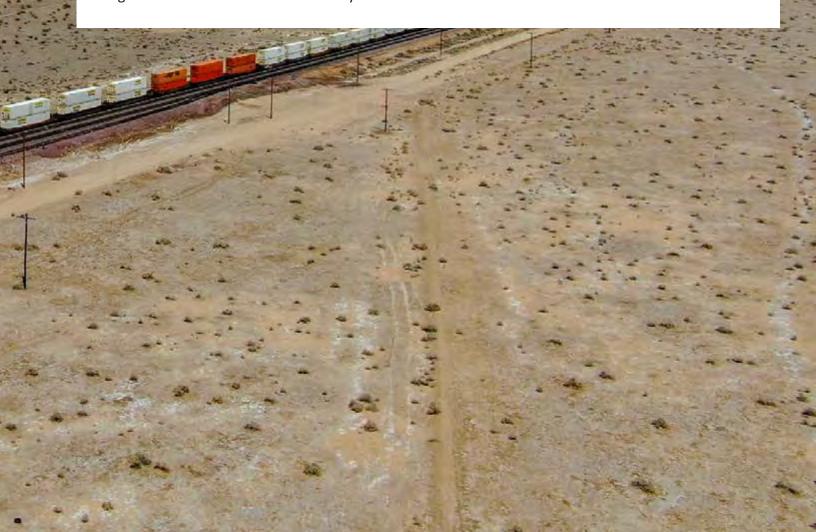
Goal #5: Efficient Freight Movement and Economic Vitality

The goal of Efficient Freight Movement and Economic Vitality is defined in this RTP as the improvement of the regional freight network, strengthening of the ability of rural communities to access national and international trade markets, and support of regional economic development. The goal is achieved through its objective to: Improve the Movement of Freight and Goods. Effective goods movement is vital to the economic competitiveness of Northern Nevada and to the overall health of the transportation system. This chapter describes efforts and strategies to address efficient freight movement and economic vitality through the improved movement of freight and goods.

The following efforts and strategies are described in this chapter:

- SECTION 1 RTC REGIONAL FREIGHT PLAN
- SECTION 2 NATIONAL, STATE, AND LOCAL POLICIES AND PLANS
- SECTION 3 OUTREACH AND COORDINATION
- SECTION 4 PROJECTS SUPPORTING FREIGHT AND GOODS MOVEMENT

The above efforts and strategies will be discussed further in Sections 1-4. Collectively, these efforts and strategies to improve the movement of freight and goods aim to achieve the goal of efficient freight movement and economic vitality.



SECTION 1 – RTC REGIONAL FREIGHT PLAN

In 2024, RTC adopted the Regional Freight Plan which identifies the transportation needs and priorities that will support a thriving regional economy through efficient freight and goods movement as well as workforce access. While the Plan focuses primarily on Washoe County, it is recognized that freight and its associated economic impacts expand across multiple county and jurisdictional boundaries in Northern Nevada and Northern California. The Plan therefore considers needs and opportunities in surrounding counties in addition to the Truckee Meadows. The five goals of this Plan are:

- Improve safety Transportation safety is a guiding principle for RTC, and providing for the safety of freight movement on Washoe County roadways is an important element of planning for goods movement.
- 2. Improve multimodal integration and rail access About a quarter of freight activity in Northern Nevada transfers between multiple modes, which could include truck, rail, and/ or aviation. Providing for efficient connections between modes is essential. Maintaining rail access to existing industrial properties helps ensure the seamless movement of goods and supports industrial operations. Because rail service is difficult to restore once lost, the Regional Freight Plan identifies preservation of rail access as a key priority.
- 3. Improve efficiency of freight movement

 Reducing travel delays and improving travel time reliability is important for freight movement, just as it is for all types of transportation in the region.

- 4. Provide for equity and sustainability in freight movement Freight may have impacts on neighborhoods and the environment that are different from other types of transportation. Potential impacts resulting from noise, air quality, and safety are of particular concern in traditionally underserved areas.
- 5. Improve truck parking The limited availability of truck parking is one of the most significant and challenging issues facing Northern Nevada. With periodic winter closures on I-80 over the Sierra Nevada, this is a concern that impacts Washoe County in addition to communities along I-80 across Nevada and beyond.

The Regional Freight Plan emphasizes the significance of regional highways that provide a critical link in both national and local goods movement. Regional roads connect manufacturers to intermodal transfer sites as well as the larger freeway network. Freight-significant regional roads are designated by NDOT as Critical Urban Freight Corridors, and include corridors such as McCarran Boulevard, Pyramid Way, and Lemmon Drive. Map 9.1 shows the 2023 National Highway Freight Network Subsystems within urban Washoe County and surrounding areas.



Map 9.1 National Highway Freight Network



Tables 9.1 and 9.2 show the top commodities by tonnage and value in 2022 and 2050 (projected). The purpose of the top commodity analysis is to understand trade patterns and enhance freight planning by identifying key goods that drive trade flows and their impact on the region's economy.

Table 9.1 Top Commodities by Tonnage and Value in 2022Source Freight Analysis Framework 5.4.1, disaggregated by Cambridge Systematics Inc. 2023

Top Commodities by Tonnage (Tons)		Top Commodities by Value (USD)		
Gravel	5M	Electronics	\$7B	
Nonmetallic Mineral Products	5M	Miscellaneous Manufactured Products	\$7B	
Natural Sands	2M	Textiles/Leathers	\$4B	
Waste/Scraps	2M	Machinery	\$3B	
Coal - not elsewhere classified (n.e.c.)	1M	Mixed Freight	\$3B	
Top 5 Total	15M	Top 5 Total	\$24B	
All Commodities Total	28M	All Commodities Total	\$24B	

Source: Freight Analysis Framework 5.4.1, disaggregated by Cambridge Systematics Inc. 2023

Table 9.2 Top Commodities by Tonnage and Value in 2050

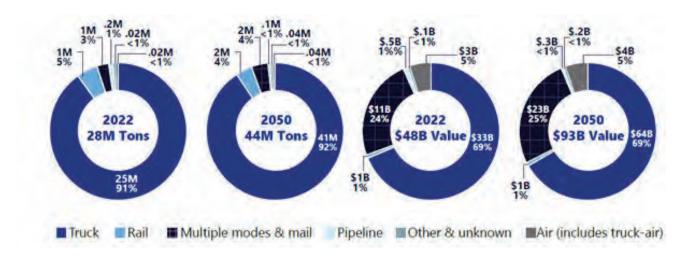
Source Freight Analysis Framework 5.4.1, disaggregated by Cambridge Systematics Inc. 2023

Top Commodities by Tonnage (Tons)		Top Commodities by Value (USD)	
Gravel	8M	Miscellaneous Manufactured Products	\$15B
Nonmetallic Mineral Products	8M	Electronics	\$13B
Natural Sands	3M	Textiles/Leathers	\$9B
Basic Chemicals	3M	Pharmaceuticals	\$6B
Waste/Scrap	2M	Machinery	\$6B
Top 5 Total	24M	Top 5 Total	\$49B
All Commodities Total	44M	All Commodities Total	\$93B

Source: Freight Analysis Framework 5.4.1, disaggregated by Cambridge Systematics Inc. 2023

Most of the goods movement activity in the region is transported by truck, as shown in Figure 9.1. The Regional Freight Study examined the impacts of this high volume of truck traffic on safety. Map 9.2 illustrates that the highest concentration of semi-truck involved vehicle crashes occur on the freeways, with a particular hotspot along I-80 in industrial Sparks. A project included in this RTP that addresses safety concerns in the corridor is the widening of I-80 to three lanes in each direction from East McCarran Boulevard in Sparks to Vista Blvd. Though a need for the region, this project currently has no identified funding.

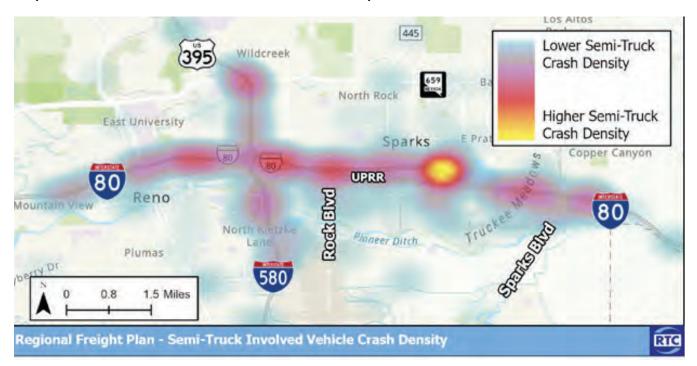
Figure 9.1 Commodity Flow Modal Split in 2022 and 2050 by Tonnage and Value



Source: Freight Analysis Framework 5.4.1, disaggregated by Cambridge Systematics Inc. 2023



Map 9.2 Truck-Involved Crashes in Central Reno and Sparks



SECTION 2 – NATIONAL, STATE, AND LOCAL POLICIES AND PLANS

An overview of key national, state, and local freight plans and policies that affect the movement of freight and goods is provided below.

National Policy

The 2012 Moving Ahead for Progress in the 21st Century Act (MAP-21) established a policy to improve the condition and performance of the national freight network. The purpose of the policy is to provide a foundation for the United States to compete in the global economy and achieve goals related to economic competitiveness and efficiency, congestion, productivity, safety, security, and resilience of freight movement. This is particularly significant in Northern Nevada, through which a significant amount of national freight movement occurs. The 2015 Fixing America's Surface Transportation Act (FAST) emphasized the importance of coordination between local governments and freight transportation providers.

The passage of the current transportation bill, the 2021 Infrastructure Investment and Jobs Act (IIJA), further reinforces the importance of freight to the national economy. Specifically, the IIJA Act established grant programs, such as INFRA, to fund critical transportation projects that benefit freight movements.

Nevada State Freight Plan

The 2050 RTP supports the vision and goals described in the Nevada State Freight Plan (NSFP), which was adopted in 2017 and updated in 2022. The following strategic goals were identified in the NSFP with supporting objectives and performance measures:

- Economic Competitiveness
- Mobility and Reliability

- Safety
- Infrastructure Preservation
- Advanced Innovative Technology
- Environmental Sustainability and Livability
- Sustainable Funding
- Collaboration, Land-Use, and Community Values

These goals provide the context for the implementation of 18 strategies listed in the NSFP that will collectively address improvements to Nevada's freight network to achieve the desired vision.

Nevada Truck Parking Implementation Plan

According to the Federal Highway Administration, truck parking shortages are a national safety concern. Washoe County has a deficit of approximately 250 truck parking spaces. The Nevada Truck Parking Implementation Plan was developed in 2019. This plan identifies opportunities to expand and improve existing facilities and integrate truck parking technology in response to rising demand, changing hours of service requirements and safety standards, and rapid advancements in technology.

When implemented, these improvements will help truck drivers by providing adequate and safe public truck parking where it is most needed and enhanced by real-time truck parking availability information. The RTC has been an active participant in developing and implementing the Nevada Truck Parking Implementation Plan.



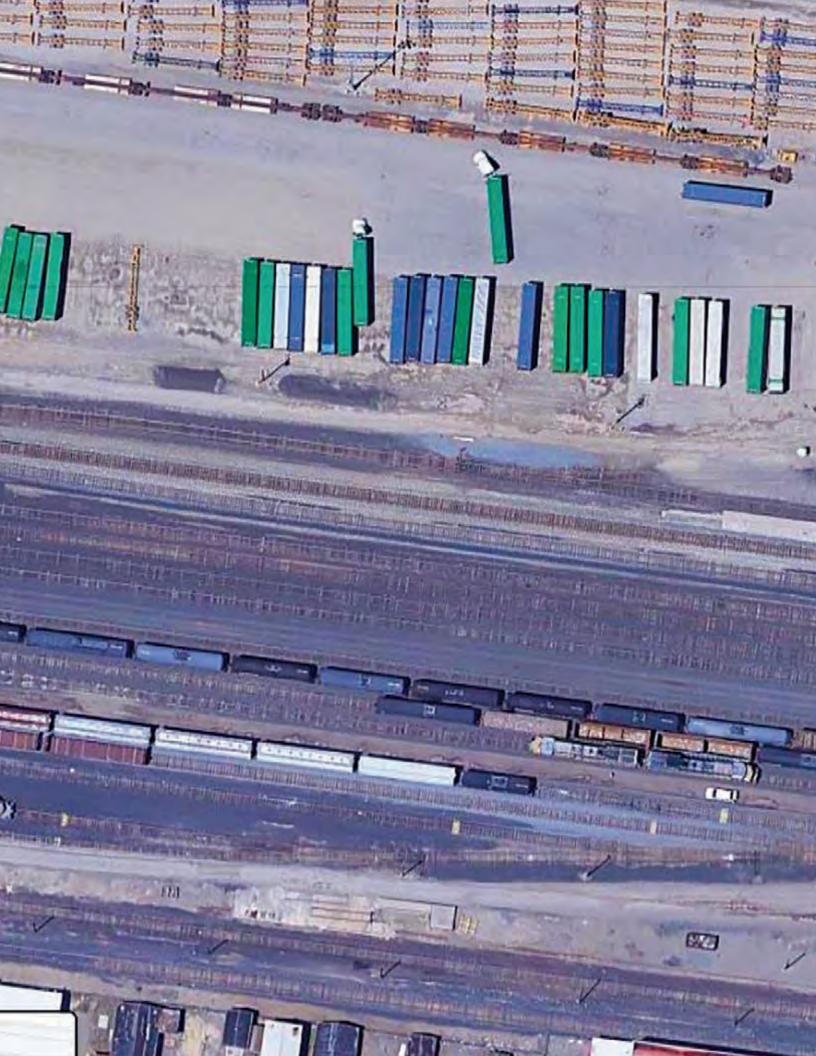
Nevada State Rail Plan

The 2021 Nevada State Rail Plan was developed by NDOT. The plan reflects Nevada's leadership with public and private transport providers at the state, regional, and local levels, to expand and enhance passenger and freight rail, and better integrate rail into the larger transportation system. The 2021 Nevada State Rail Plan:

- Provides a plan for freight and passenger rail transportation in the state.
- Prioritizes projects and describes intended strategies to enhance rail service in the state to benefit the public.
- Serves as the basis for federal and state investments in Nevada.

Nevada's geography and historic development patterns have resulted in two primary rail corridors, which generally run east-west across the state, along with a few supplemental branch and excursion lines.

Rail shipments accounted for eight percent of the shipments to other states, six percent of the total traffic to Nevada, and less than one percent of in-state traffic in 2015. The Union Pacific (UP) Railroad operates two east-west corridors: Burlington Northern Santa Fe (BNSF) Railway has rights to operate on nearly three-quarters of the UP railways in Nevada. The northern corridors serve Reno and Sparks, as well as other Northern Nevada communities, and connect with Salt Lake City and Denver to the east and with Sacramento and the San Francisco Bay Area to the west. Amtrak operates once a day passenger rail service in each direction across this northern Nevada corridor; I-80 generally parallels the rail lines in this corridor. There are a total of 144 route miles of freight railroad in Washoe County.



The first UP rail yard in Sparks was built in 1904. From that point, Sparks was an important stop for trains serving Nevada businesses and residents. Today, the UP railyard in Sparks is an integral part of the railroad's 32,000-mile operation. Playing a major role in the application of distributed power, the Sparks railyard has been a focal point for the safe and efficient operation of freight trains over Donner Summit. With nearly 1,200 miles of track and 600 employees in the state, the Sparks railyard plays a critical role in the efficient movement of goods in and around Nevada.

RNO Master Plan

Reno's proximity to major West Coast ports provide next day capability for movement of cargo back and forth for import and export as well as domestic spoke and hub services via air, truck, or rail. Reno has customs facilities and personnel to handle import and export needs, while Reno-Tahoe International Airport (RNO) is capable of handling a variety of international and domestic services and flights. In 2019, RNO handled more than 66,621 tons or nearly 147 million pounds of cargo shipments.

Approximately 402,465 pounds of cargo arrives or departs the airport each day. Companies handling air cargo at RNO include DHL, FedEx, and UPS (Reno-Tahoe Airport Authority, 2019). RNO is within a designated foreign trade zone and is located within two miles of both major highway corridors, I-80 and US 395, and less than one mile from the UP Sparks Intermodal Facility.

More details about the airports and planned expansion initiatives can be found in the RNO Master Plan, approved in January 2019.

SECTION 3 – OUTREACH AND COORDINATION

The Freight Advisory Committee (FAC) is a group formed during the development of the Nevada State Freight Plan to coordinate and collect input from a range of public and private sector stakeholders. FAC meetings are held quarterly. RTC has been participating in the meetings and working closely with NDOT and other partners to develop and prioritize freight projects.

Additionally, the Regional Freight Plan recommends the creation of a Regional Freight Advisory Committee that would include a combination of public and private sector agencies and organizations with an interest in freight and goods movement. This committee, in combination with surveys of those agencies and organizations, would be used to foster collaboration and information sharing among stakeholders to guide implementation of recommendations in the Regional Freight Plan and Regional Transportation Plan.

Truck parking challenges and potential solutions specific to Northern Nevada were discussed during a FAC workshop. This workshop provided the RTC an opportunity to engage with public and private sector partners on potential shared solutions. Topics included:

Truck parking situation throughout the US and within Northern Nevada



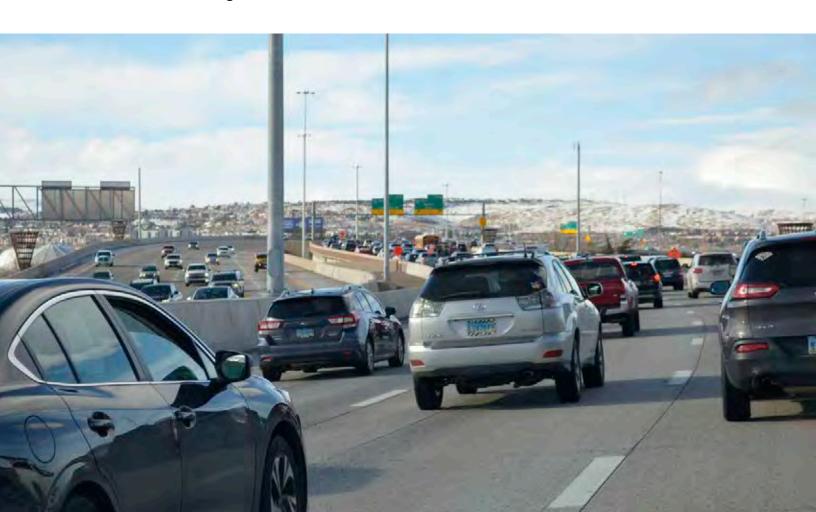
- Current truck parking assessments and needs
- Best practices and possible solutions
- Development of truck parking actions, strategies, and priorities

SECTION 4 – PROJECTS SUPPORTING FREIGHT AND GOODS MOVEMENT

Multiple projects in this RTP focus on improving freight and goods movement through Northern Nevada. Three of these projects are summarized below.

- Systemwide Intelligent Traffic System (ITS) improvements on I-80 and US 395/I-580
 - This project makes improvements to traffic signal timing. Traffic signal timing determines traffic movements for different time intervals depending on variables like average traffic flow levels. ITS improvements support freight and goods movement by reducing idle times and delays, making roadway travel more efficient for freight trucks.

- Pyramid Highway/US 395 Connector
 - This project supports freight and goods movement by improving capacity and safety and reducing travel delays. Efficient corridors, characterized by consistent travel times, are essential for ensuring timely deliveries and reducing supply chain disruptions.
- Spaghetti Bowl Project and US 395 Widening
 - Phase 1 of improvements to the Spaghetti Bowl have been completed and Phase 2 of the project includes the widening of the segment eastward to Sparks Boulevard. This project supports freight and goods movement by improving capacity and safety and reducing travel delays. I-80 through downtown Reno and Sparks contains the highest concentrations of truck-involved crashes in the region and NDOT's planned I-80 improvements as part of the Spaghetti Bowl Project, are a high priority for improving safety.







Goal #6: Equity and Environmental Sustainability

This RTP defines the goal of Equity and Environmental Sustainability as enhancing the performance of the transportation system while protecting and enhancing equity and the natural environment. The goal of equity and environmental sustainability is achieved through its objective to: Promote Equity and Environmental Justice. The RTC strives to serve the transportation needs of all residents and visitors in the region without discrimination based on age, income, race, language, ethnicity, or ability. This chapter describes the regional efforts and strategies to promote equity and environmental justice.

The following federal policies and associated actions are discussed in this chapter:

SECTION 1 – TITLE VI OF THE CIVIL RIGHTS ACT OF 1964

SECTION 2 – AMERICANS WITH DISABILITIES ACT (ADA) OF 1990

SECTION 3 - EXECUTIVE ORDER ON ENVIRONMENTAL JUSTICE

SECTION 4 - EXECUTIVE ORDER ON CLIMATE CHANGE AND SUSTAINABILITY

The RTC complies with the above federal policies and requirements and implements each toward the goal of achieving equity and environmental sustainability.



SECTION 1 – TITLE VI OF THE CIVIL RIGHTS ACT OF 1964

According to Title VI of the Civil Rights Act of 1964, "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Per Title VI, RTC is required to take steps to ensure that no discrimination occurs based on the factors above.

RTC transportation projects and services are implemented in conformance with the RTC Title VI Report. The RTC submits a Title VI Report to the Federal Transit Administration every three years, with the most recent report approved by RTC's Board in February 2023. Additionally, the RTC submits a Title VI Certification and Assurance to the FTA on an annual basis.

An inclusive participation strategy is one of the primary measures used to comply with Title VI requirements. RTC ensures that persons who are a member of a minority group, have low-income, and/or have Limited English Proficiency (LEP) are able to provide meaningful input into the planning process. One example of inclusive participation practices is public meetings which are held in locations near transit routes and where translators and materials are provided in Spanish and English. RTC works with senior centers, assisted living facilities and senior organizations within the RTC transit service area to introduce seniors and people with disabilities to the RTC Travel Training Program. The Travel Training Program curriculum includes a presentation about RTC transit services and a field trip allowing the participants to experience riding the bus. The goal of the program is to make the participants feel more comfortable using public transportation as well as to solicit input from them about RTC services.

In addition to outreach efforts designed to engage people with disabilities, RTC also ensures persons with LEP understand the transit operations of RTC RIDE and RTC ACCESS by making the following information available in both English and Spanish:

- RTC RIDE bus route information.
- RTC ACCESS Rider's Guide
- Signs on buses (fare signs, information for RTC RIDE programs, etc.)
- Signage at the bus stops stating detour information or temporary route changes
- Bus announcements explaining how to exit the bus
- RTC ACCESS voice recordings that reminds passengers of upcoming reservations
- RTC Passenger Services has Spanish speaking passenger service representatives available to assist passengers
- RTC website content is translatable to multiple languages, including Spanish.

Another strategy in place to ensure compliance with Title VI requirements is the RTC complaint process. RTC has established complaint procedures to receive, investigate, and track Title VI complaints. These procedures include a Title VI policy statement, specific directions detailing how to file a complaint, an explanation of how the complaint will be investigated, and a complaint form specific to the RTC. The RTC complaint process and forms are translated into Spanish and are available in other languages upon request.

Equal Opportunity in Procurement

Many of RTC's transportation projects are implemented using federal sources of funding. RTC is an Equal Opportunity Employer and encourages Minority, Women, and Disadvantaged Business Enterprises (DBE) to participate in the competitive procurement process. All planning and project development work is procured and administered through RTC's Board-adopted DBE Program. RTC supports inclusive economic development by incorporating nondiscriminatory elements in its DBE program to facilitate competition by small businesses and ensure DBEs have an equal opportunity to receive and participate in contracts. RTC sets project-specific DBE goals, provides DBE training, and conducts outreach to local and regional DBEs to advise them of opportunities. RTC has established an overall goal of 1.3 percent for DBE participation in FTA and other federally-funded contract opportunities for federal fiscal years 2023 – 2025. This goal is updated triennially, and changes based on the relative availability of DBE firms in the region and the type of projects proposed for implementation during the triennial period.

The State of Nevada has a robust workforce development and apprenticeship program. Similarly, RTC's contracting regulations promote the hiring of underrepresented workers and residents. For example, RTC works with the Small Business Development Center at the University of Nevada, Reno to develop a listing of local and regional small businesses. RTC utilizes this listing and a directory of Emerging Small Businesses, developed by the Nevada Governor's Office of Economic Development, to conduct procurement outreach.

In addition, Nevada's Apprenticeship Utilization Act requires that "a contractor or subcontractor engaged in horizontal construction who employs workers on one or more public works during a calendar year pursuant to NRS 338.040 use one or more apprentices for at least three percent, or any increased percentage established pursuant to subsection 3, of the total hours of labor worked for each apprenticed craft or type of work to be performed on those public works." Finally, Nevada's prevailing wage requirements ensure that jobs created by RTC projects will pay a fair wage. Construction contracting companies, hired by RTC, also must comply with Nevada's prevailing wage requirements and federal DBE programs.

Objectives of the RTC DBE Program are to ensure nondiscrimination, remove barriers to DBE participation, create full and fair opportunities for equal participation by small businesses in federally funded contracting and procurement opportunities, and assist in the development of DBE firms that can compete successfully in the marketplace. RTC's procurement policies comply with all applicable civil rights and equal opportunity laws, to ensure that all individuals – regardless of race, gender, age, disability, and national origin – benefit from federal funding programs.

SECTION 2 – AMERICANS WITH DISABILITIES ACT (ADA) OF 1990

The Americans with Disabilities Act (ADA) of 1990 requires that disabled persons have equal access to transportation facilities and services. This includes wheelchair accessible accommodations in the transit system. RTC complies with ADA requirements in all aspects of its administration and operations. Specific examples are provided below.

ADA Transition Plan

RTC adopted an updated ADA Transition Plan in 2020, which identifies and prioritizes ADA needs at RTC facilities. The updated Plan complemented the 2011 ADA Transition Plan by incorporating its previous action items and expanding the scope of the plan. The ADA Transition Plan addresses physical obstacles in areas that are open to the public in the six RTC buildings and at 360 RTC transit stops. The ADA Transition Plan update also included the provision of a schedule for implementing the access modifications, and identification of a position and official who is responsible for implementing the ADA Transition Plan. As RTC continues to address ADA-related issues identified in the Plan, the Plan will be updated at regular intervals or as needed.

Bus Stop and Sidewalk Connectivity Program

RTC initiated a program that funds ADA improvements and sidewalk connectivity at high-priority bus stops in 2019. These improvements were completed in 2023. However, additional phases of the program are expected to be identified and completed in future years. The RTC will continue to upgrade bus stops in accordance with the needs identified through the ADA Transition Plan and its subsequent updates. RTC also works with local governments to bring existing bus stops up to ADA standards as part of the development review process.

Accessibility of the Transit Fleet

The RTC fleet used for RIDE (fixed-route), ACCESS (paratransit), and FlexRIDE (microtransit) services contain accessibility features such as wheelchair ramps and lifts, interior and exterior audio announcements, accessible stop requests with audible chimes, and others to aid users in navigating the system. The ACCESS service provides service specifically for those with disabilities that prevent them from riding the RIDE service independently some or all of the time. It provides door-to-door, prescheduled transportation for people who meet the eligibility criteria of the ADA.

Additionally, the RTC Reasonable Modification Policy allows individuals to make requests beyond those noted above or required by law. RTC may allow the reasonable modification of its policies to accommodate the needs of persons with disabilities in order to allow them to fully utilize available services.

Improving Accessibility of the Regional Road Network

RTC Active Transportation Plan includes a tool to help identify areas in the region most in need of pedestrian and bicycle facility improvements. The ADA requires that newly constructed or altered facilities be readily accessible to and usable by persons with disabilities. When reconstruction of roadways occurs, upgrades must be provided to bring the roadway into compliance with ADA standards. As RTC delivers major roadway improvements, project area sidewalks and crosswalks are brought to current ADA standards.

Examples include the recently completed Oddie/ Wells Corridor Multimodal Improvements, Sky Vista Parkway Capacity, and Sparks Boulevard Corridor Phase 1 projects, which were all designed to provide wider and/or safer sidewalks with accessibility improvements.

SECTION 3 – EXECUTIVE ORDER ON ENVIRONMENTAL JUSTICE

Executive Order 12898 – the Executive Order on Environmental Justice – requires the identification and assessment of disproportionately high and adverse impacts on minority and low-income populations. The 1994 Presidential Executive Order directed every federal agency to identify and address the effects of all programs, policies, and activities on minority populations and low-income populations. Nearly three decades later, the federal government built upon and strengthened its commitment to deliver environmental justice to all communities across America through Executive Order 14096 (2023).

The Executive Order includes implementation and enforcement of environmental and civil rights laws, preventing pollution, addressing climate change and its effects, and working to clean up legacy pollution that is harming human health and the environment.

Effective transportation decision-making depends upon understanding and properly addressing the unique needs of different socioeconomic groups. RTC considers the potential adverse impacts of projects on environmental justice populations. This includes impacts to neighborhood cohesiveness, regional accessibility, neighborhood quality of life, and health impacts. RTC also implements outreach strategies targeted toward minority residents and households with Limited English Proficiency (LEP). These strategies include outreach in Spanish-language media, bilingual meeting and transit notices, and the availability of bilingual staff at public meetings. These strategies are impactful as the population of Washoe County consists of 37 percent minority and four percent of households with LEP. Map 10.1 shows the relation of census tracts with higher than county average LEP population to projects included in this RTP.

It should be noted that the demographic data used in this chapter was produced using the Climate and Economic Justice Screening Tool (CEJST), which was created under the 2021 Executive Order 14008to identify communities that are experiencing burdens in any of eight categories. The tool uses census tracts boundaries from 2010 as well as data from the 2019 American Community Survey five-year estimates. More information on Executive Order 14008 and CEJST is provided in Section 4 of this chapter.

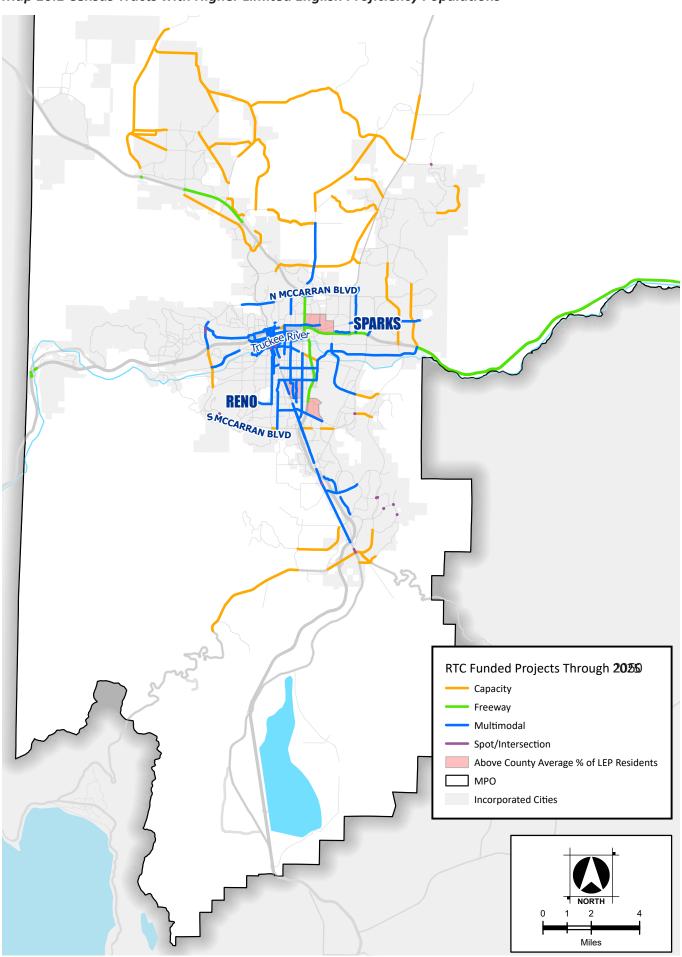
When RTC alters transit service, staff ensures that no disproportionately high or adverse impacts on minority and low-income populations occur. When a major service change is being considered, staff receives input from passengers, including many people who are part of minority and low-income populations. RTC policy identifies a major service change as:

- A reduction or increase of 10 percent or more of system-wide service hours
- The elimination or expansion of any existing service that affects:
 - 25 percent or more of the service hours of a route
 - 25 percent or more of the route's ridership (defined as activity at impacted bus stops)

Additionally, RTC holds a formal public hearing and analyzes how these changes will impact all passengers within the RTC service area. RTC transit activities are continually reviewed, and the results are summarized once every three years in a Title VI Report, which is described in Section 1 of this chapter.



Map 10.1 Census Tracts with Higher Limited English Proficiency Populations



The projects, programs, and services in this plan provide enhanced mobility to all residents regardless of age, race, language, or income. Several of the projects that focus on pedestrian safety, bicycle accessibility, and quality of life are located in lower income communities, including the multimodal improvements on East Sixth Street, Sun Valley Boulevard, and Vassar Street.

Many projects on regional roads in areas with low-income communities involve bringing them up to current ADA-accessibility standards and improving pavement condition. While construction may generate temporary negative impacts, the long-term mobility benefits of these projects will be significant.

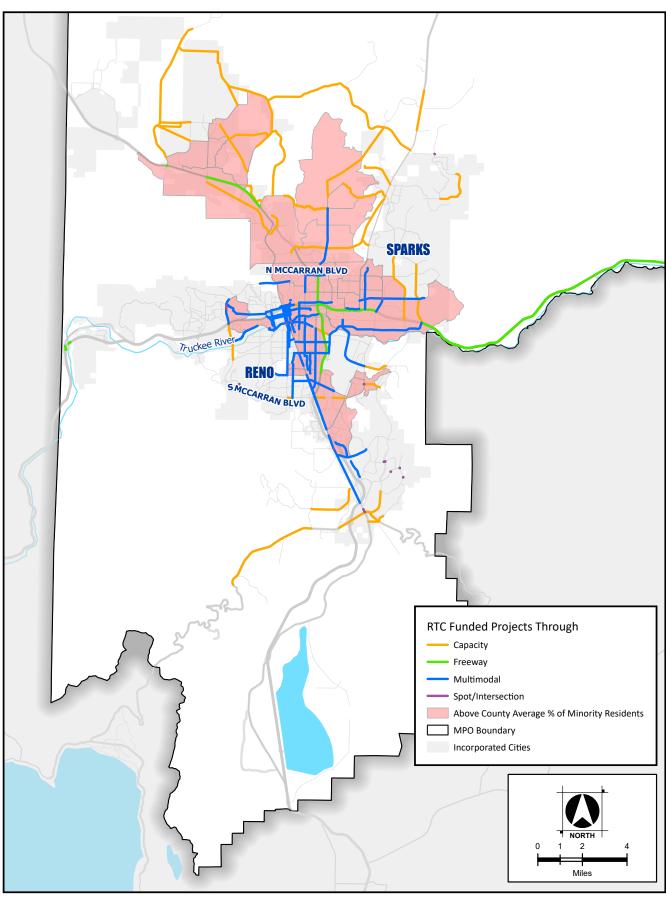
Table 10.1 Demographic and Socioeconomic Summary, 2019 ACS Five-Year Estimates

	Washoe County Population and Demographics	Population Within ¼ Mile of Roadway Projects	Population Within ¼ Mile of Transit Routes
Persons 65 Years	72,890	70,033	53,448
and Over	(16.0%)	(15.8%)	(15.0%)
Minority population	168,722	164,453	145,939
	(36.9%)	(37.1%)	(41.0%)
Persons Below	50,827	49,890	44,652
Poverty Level	(11.1%)	(11.3%)	(12.5%)
Limited English	7,030	6,868	6,593
Proficiency	(3.9%)	(3.9%)	(4.6%)
Households			
Total Households	182,180	176,550	142,961
	(100%)	(100%)	(100%)
Total Population	456,936	443,415	356,267
	(100%)	(100%)	(100%)

As shown in the table of demographic information above, approximately 37.1 percent of the residents living within ¼ mile of the projects included in the RTP and 41 percent of the residents living within ¼ mile of transit routes are members of a minority group. Just under 37 percent of Washoe County residents are members of a minority group. These data indicate that transportation investments and benefits are shared equitably throughout the community. Map 10.2 shows the relation of census tracts with higher than county average minority population to projects included in this RTP.



Map 10.2 Census Tracts with Higher Minority Populations



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Approximately 11.1 percent of Washoe County residents have incomes that are below the poverty level. About 11.3 percent of residents near roadway projects and 12.5 percent of residents near transit routes have incomes below the poverty level. The proportion of seniors served by the projects and services in the RTP is slightly lower than the county average; this is because of the high senior populations in lower density outlying areas such as Cold Springs and southwest Reno, which are not served by transit. Maps 10.3 and 10.4 show the distribution of RTP projects relative to the location of populations experiencing higher than average poverty levels or that are age 65 or older.

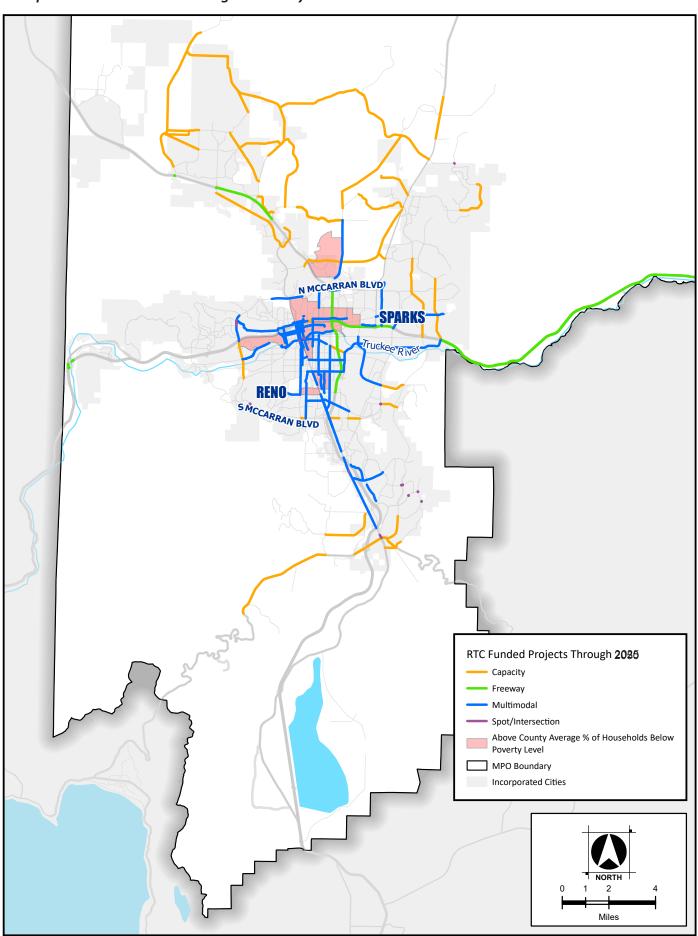
RTC's outreach includes numerous efforts to support transportation for economically disadvantaged populations. RTC also provides bus passes to charitable organizations at discounted rates, or for free. For example, bus passes are provided to the Reno Works program, which transitions homeless individuals in Washoe County into jobs and housing.

RTC participates in, and organizes, numerous events for seniors, disabled individuals, and students of all ages. These events help residents connect with transportation services that are often a lifeline for many individuals, allowing them to access social activities, medical appointments, educational opportunities, and employment. Notably, the RTC organizes the Stuff-A-Bus for Seniors drive, which collects needed donations of clothing and other essentials.

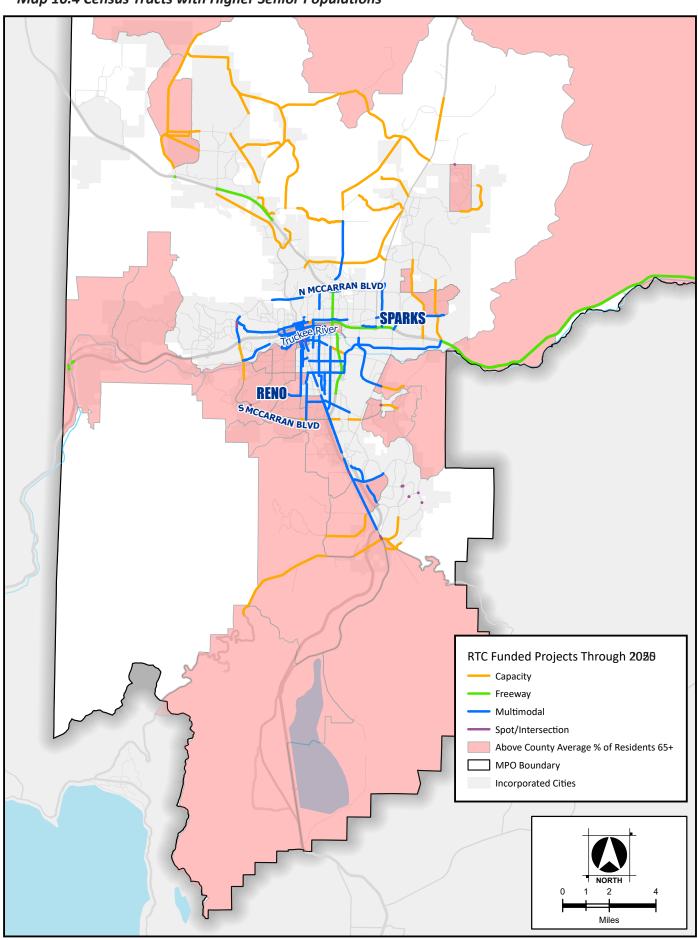
Thousands of seniors also interact with RTC at the annual Senior Fest event. In addition to incorporating seniors and persons with disabilities on standing committees, these populations are also offered free mobility travel training. This training instills confidence and builds skills in using transit and navigating the community.



Map 10.3 Census Tracts with Higher Poverty



Map 10.4 Census Tracts with Higher Senior Populations



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SECTION 4 – EXECUTIVE ORDER ON CLIMATE CHANGE AND SUSTAINABILITY

Executive Order 14008 on Tackling the Climate Crisis at Home and Abroad addresses issues related to climate change and sustainability. One of the initiatives under this order is Justice 40. Justice 40 establishes a goal that 40 percent of overall benefits from certain federal climate, clean energy, and affordable and sustainable housing investments flow to disadvantaged communities that are marginalized by underinvestment and overburdened by pollution.

In response to Justice 40, hundreds of federal programs have been updated to ensure that disadvantaged communities receive the benefits of new and existing federal investments. Investments made will help confront decades of underinvestment in disadvantaged communities and bring critical resources to communities that have been overburdened by legacy pollution and environmental hazards.

In response, RTC has reaffirmed existing policies to ensure meaningful engagement and equitable investment in the planning, design, and implementation of projects.

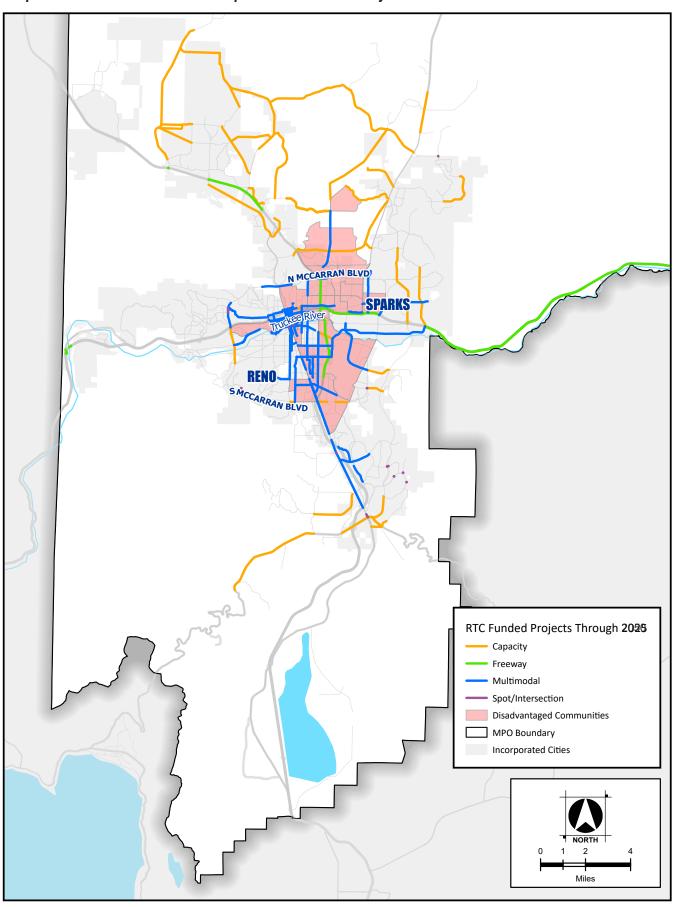
For example, RTC utilizes the Climate and Economic Justice Screening Tool (CEJST) to identify disadvantaged census tracts directly impacted by proposed projects. The tool uses various datasets as indicators of burdens, which are organized into eight categories: 1) climate change, 2) energy, 3) health, 4) housing, 5) legacy pollution, 6) transportation, 7) water and wastewater, and 8) workforce development.

RTC may also reference other tools, such as the Environmental Protection Agency's (EPA) Environmental Justice Screening and Mapping Tool (EJScreen) or the Department of Transportation's (DOT) Screening Tool for Equity Analysis of Projects (STEAP) to identify disadvantaged or Justice 40 populations. Maps 10.5 and 10.6 were produced using the EJScreen tool to show the relation of disadvantaged populations to RTP projects and RTC RIDE routes, respectively. Once identified, these communities will typically be targeted for outreach events as determined by the applicable project's community engagement plan. Engagement strategies ensure meaningful participation of these communities consistent with Federal Highway Administration (FHWA) guidance in Promising Practices for Meaningful Public Involvement in Transportation Decision-Making.

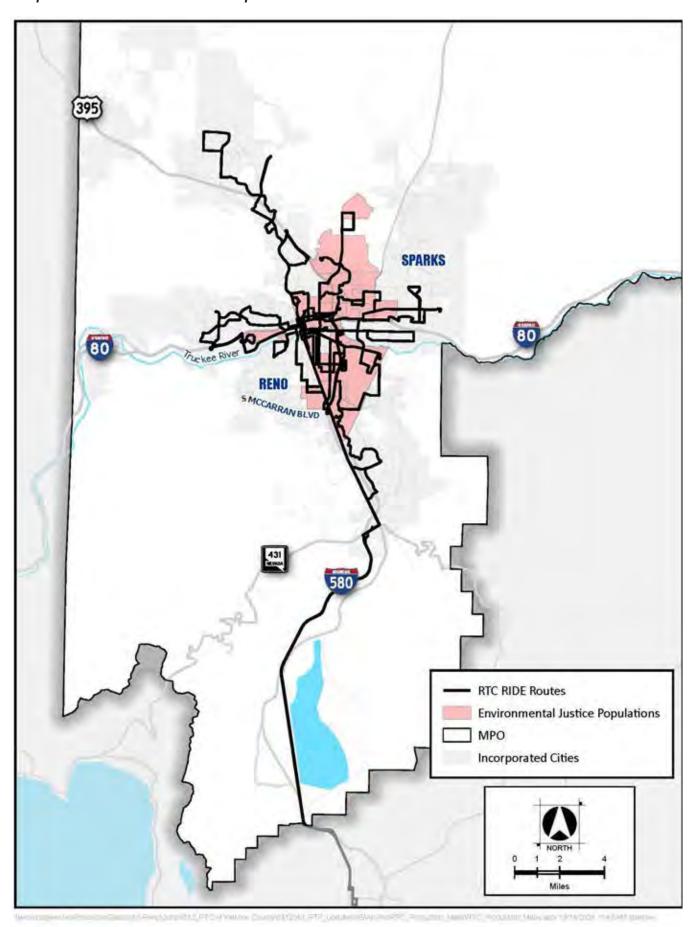




Map 10.5 Environmental Justice Populations and RTP Projects



Map 10.6 Environmental Justice Populations and RTC RIDE Routes







Goal #7: Reduced Project Delivery Delays

The goal of Reduced Project Delivery Delays is defined in this RTP as a reduction in project costs, promotion of jobs and the economy, and the expeditious movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process. This includes reducing regulatory burdens and improving agencies' work practices. The goal is achieved through its objective of Monitoring Implementation and Performance.

Effective implementation and performance monitoring fosters a culture of accountability and continuous improvement. By aligning system performance with broader regulatory and funding priorities, RTC can streamline compliance and make projects more competitive for federal grants and support. This proactive oversight ensures that the delivery process remains aligned with national priorities, supports economic growth, and enhances the movement of people and goods while reducing regulatory burdens and optimizing project delivery practices.

This chapter describes the regional performance measures used to support the goal of reduced project delivery delays. The following performance measures and practices are discussed in this chapter:

- SECTION 1 RTC PERFORMANCE PLANS
- SECTION 2 SAFETY
- SECTION 3 ROADWAY INFRASTRUCTURE CONDITION
- SECTION 4 CONGESTION REDUCTION
- SECTION 5 SYSTEM RELIABILITY
- SECTION 6 ENVIRONMENTAL SUSTAINABILITY
- SECTION 7 TRANSIT STATE OF GOOD REPAIR AND OTHER TRANSIT MEASURES
- SECTION 8 RTC KEY PERFORMANCE INDICATORS (KPIS)



SECTION 1 – RTC PERFORMANCE PLANS

The Fixing America's Surface Transportation Act and the Moving Ahead for Progress in the 21st Century Act provide a framework for linking goals and performance targets with project selection and implementation. Performance management leads to more efficient investment of transportation funds by focusing on national transportation goals, increasing accountability and transparency, and improving decision making.

Performance plans chart progress toward achieving performance targets and are used to facilitate a community conversation about the track record of the RTC's transportation program. The performance measures included in performance plans build upon existing and planned data collection efforts. RTC develops the following performance plans:

- Regional Transportation Plan, to be updated every four years, which includes a discussion of:
 - Anticipated effects of the improvement program toward achieving the performance targets
 - How investment priorities are linked to performance targets
- Annual Metropolitan System and Transit Performance Report, which includes:
 - Evaluation of the condition and performance of the transportation system
 - Progress achieved in meeting performance targets
 - Evaluation of how transportation investments have improved conditions
- Transit Asset Management (TAM) Plan
- Transportation Optimization Plan Strategies (TOPS)

Public Transportation Agency Safety Plan

The U.S. Secretary of Transportation, in consultation with states, MPOs and other stakeholders, establishes national performance measures for several areas: pavement conditions and performance for the Interstate System and National Highway System, bridge conditions, injuries and fatalities, traffic congestion, on-road mobile source emissions, and freight movement on the Interstate System. States, in coordination with MPOs, set performance targets in support of those measures, and state and metropolitan plans describe how program and project selection will help achieve the targets. RTC has collaborated with the Federal Highway Administration (FHWA) Nevada Division Office, Nevada Department of Transportation (NDOT), and other stakeholder jurisdictions and agencies to develop performance measures. These performance measures and targets are updated upon release of national and state performance measures.

SECTION 2 – SAFETY PERFORMANCE MEASURES

The RTC's aspirational vision is that zero fatalities on our region's roadways is the only acceptable goal and RTC recognizes that reaching that goal requires time and significant effort by all stakeholders.



The safety performance targets identified in the RTP represent important steps in working toward the ultimate goal of eliminating traffic-related deaths and serious injuries. The safety performance targets are considered interimperformance levels that make progress toward the long-term goal of zero fatalities. This approach is consistent with guidance from the U.S. Department of Transportation, NDOT, as well as states and MPOs across the nation. RTC tracks progress toward safety goals using the following safety performance measures:

- Number of Fatalities and Rate of Fatalities per 100 Million Vehicle Miles Travelled (VMT) – These performance measures address vehicles on all roadways within the metropolitan planning area and utilize data provided by the Fatality Analysis Reporting System (FARS). The aspirational goal of zero fatalities is consistent with the Nevada's Strategic Highway Safety Plan.
- Number of Serious Injuries and Rate of Serious Injuries Per 100 Million VMT – Serious injuries resulting from automobile crashes are also tracked by FARS.
- Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries – This data is provided by NDOT.
- Preventable Transit Crashes Per 100,000 Miles of Service – RTC tracks the number of preventable crashes (that is, the number of crashes in which the driver is at fault) that RTC RIDE and RTC ACCESS vehicles experience. While traveling on a bus is much safer than riding in other types of vehicles, RTC continuously strives to increase safety of transit travel.

SECTION 3 – ROADWAY INFRASTRUCTURE CONDITION

The six FHWA national performance measures for assessing roadway pavement infrastructure condition reflect elements in the Highway Performance Monitoring System, including the International Roughness Index, rutting for asphalt surfaced pavements, faulting for jointed concrete surface pavements, and cracking percent. The measures include the percentage of pavements in good and poor condition on both the Interstate System and Non-Interstate National Highway System, as well as the percentage of bridges in good and poor condition.



The measures for assessing bridge infrastructure condition are based upon elements in the National Bridge Inventory (NBI), which reports the condition of the bridge deck, superstructure, substructure, and culverts. The data to determine bridge condition using the FHWA measures are provided by NDOT, through their periodic assessment of pavement and bridge infrastructure.

SECTION 4 – CONGESTION REDUCTION

RTC tracks the following measures for Congestion Reduction:

- Level of Travel Time Reliability (LOTTR) Defined as the ratio of the longer travel times (80th percentile) of a reporting segment to a "normal" travel time (50th percentile), using data from FHWA's National Performance Management Research Data Set (NPMRDS). The measures are the percent of person-miles traveled on the relevant Interstate System and Non-Interstate National Highway System that are reliable. Person-miles take into account the users of the National Highway System. Data to reflect the users can include bus, auto, and truck occupancy levels.
- Truck Travel Time Reliability (TTTR) Ratio -Determined by dividing the 95th percentile time by the normal time (50th percentile) for each segment. Then, the TTTR Index is generated by multiplying each segment's largest ratio from defined time periods by its length, then dividing the sum of all lengthweighted segments by the total length of the Interstate. In addition to the national measures, NDOT has identified performance measures through their State Freight Plan. Some of these measures address truck speeds on I-80, I-580, and US 395; fatal crashes involving trucks; and the registration of trucks in Nevada with an engine model year of 2010 or newer (for air quality purposes).
- Transit Passengers per Service Hour —
 Transit operating efficiency is a priority for
 RTC. A system-wide average of 21 passengers
 per service hour is the 2025 performance
 target for RTC RIDE. This goal is updated every
 five years through the Transit Optimization
 Plan Strategies (TOPS) planning process. RTC
 currently tracks this data and provides regular
 reports to the RTC Board. This measure is also
 tracked for ACCESS and FlexRIDE.

SECTION 5 – SYSTEM RELIABILITY

RTC tracks the following measures for System Reliability:

- Peak Hour Excessive Delay This measure applies to mainline highway segments on the National Highway System that cross any part of an urbanized area with a population of more than 200,000, and that is part of a nonattainment or maintenance area for any one of the criteria pollutants listed under the NAAQS. Excessive delay is based on travel time lower than 20 miles per hour or 60 percent of the posted speed limit travel time, whichever is greater. RTC was required to begin reporting on this measure in 2022.
- Percent Non-SOV Travel Non-single occupancy vehicle (SOV) travel is defined as any travel mode other than driving alone in a motorized vehicle, including travel avoided by telecommuting. The FHWA has provided three different options for calculating this measure, and RTC has opted to use the American Community Survey (ACS) method (Method A). This method utilizes the most recent ACS 5-year estimates for "Percent; Commuting to Work Workers 16 years and over." As with the Peak Hour Excessive Delay measure, RTC was required to begin reporting on this measure in 2022.
- <u>Transit System On-Time Performance</u> The goal of the RTC RIDE system is to have 85 percent of all transit departures occur on schedule. This data is currently collected and reported to the RTC Board. This measure is also reported for ACCESS and FlexRIDE.

SECTION 6 – ENVIRONMENTAL SUSTAINABILITY

RTC tracks the following measures for Environmental Sustainability:

- CMAQ Program Performance Measures –
 These measures track reductions for each applicable criteria pollutant and precursor in areas designated as nonattainment or maintenance for NAAQS as it relates to the CMAQ Improvement Program. RTC reports these measures annually directly to FHWA.
- Transit Fleet Mix Monitoring fleet mix not only helps RTC assess transit assets and vehicle budgets, but also helps confirm that efficient and climate-friendly vehicle technologies are being integrated into the RTC fleet and are benefiting the Truckee Meadows community. RTC has set a vehicle replacement goal of a 100 percent electric or CNG fuel fleet by 2040. In support of this effort, RTC has already met its goal of 100 percent battery electric, hydrogen fuel cell, and battery hybrid vehicles for the RIDE fixed-route fleet.
- Auto Emissions RTC, in partnership with the Northern Nevada Public Health Air Quality Management Division, monitors the emissions generated by on-road mobile sources. The performance target is that auto emissions remain under the emissions budget established in the State Implementation Program.

One of the community benefits of public transportation is a reduction of greenhouse gas emissions. Most fixed-route and vanpool trips replace trips that would otherwise be taken by a SOV. RTC focuses on reducing SOV trips through initiatives such as growing ridership in the fixed-route and vanpool programs.

SECTION 7 – TRANSIT STATE OF GOOD REPAIR PERFORMANCE MEASURES AND OTHER TRANSIT MEASURES

RTC tracks the following measures for Transit State of Good Repair:

- Preventive Maintenance of Transit Rolling
 Stock and Facilities The RTC TOPS
 identifies an inspection and maintenance
 schedule for transit capital resources. This
 performance measure tracks the timeliness of
 implementation of inspections and corrective
 actions. As of the most recent annual report,
 100 percent of preventive maintenance is
 being performed on time.
- Maintain Industry Standard Vehicle Life Cycle RTC will maintain vehicles in good repair to the expected life cycle for transit rolling stock. RTC follows FTA useful life standards, which vary by type of vehicle. This measure, as well as related measures such as percent of vehicles past retirement age, are further developed through the TAM Plan.



National transit goals and performance measures are developed by the Federal Transit Administration. These include state of good repair standards for measuring the condition of the following transit capital assets:

- <u>Equipment</u> Non-revenue support-service and maintenance vehicles
- Rolling Stock Revenue vehicles by mode
- <u>Infrastructure</u> Only rail fixed-guideway, track signals and systems. RTC does not own or operate any assets in this category, therefore, this is not applicable to RTC
- <u>Facilities</u> Maintenance and administrative facilities; and passenger stations (buildings) and parking facilities

RTC reports on a variety of other performance measures related to transit operations with metrics such as ridership, farebox recovery rate, passengers per revenue vehicle hour and revenue vehicle miles. RTC reports on performance measures monthly and provides annual reports for a year-to-year comparison. These reports help RTC monitor the efficiency of transportation services offered and the performance of individual routes to make informed decisions about future projects and demand for services.

SECTION 8 – RTC KEY PERFORMANCE INDICATORS

RTC not only tracks federally required performance measures but also employs Key Performance Indicators (KPIs) to ensure that nearterm goals are achieved efficiently. While federal performance measures provide a framework for long-term compliance and progress, RTC uses KPIs to assess and monitor additional metrics that are crucial for the success of programs and projects. These KPIs include operational efficiency, service reliability, customer satisfaction, and safety. By balancing both federally mandated and internal performance measures, RTC ensures that short-term implementations consistently support long-term transportation goals.

Each year, RTC develops and tracks KPIs to assess progress and success in achieving annual strategic goals. The use of KPIs and milestone tracking is central to the approach. Strategic goals are broken into actionable items with specific targets, allowing for real-time tracking of progress. Each project or initiative is categorized as either "on target," "achieved," or "off target," providing a transparent view of the current status.

The KPI and milestone tracking process addresses the goals and milestones across different RTC departments (Engineering, Public Transportation, Planning, etc.), each with its own deliverables, timelines, and performance outcomes. It promotes department collaborations and streamlines project implementation by clarifying expectations and providing transparency. KPIs are developed to monitor departmental progress, in areas such as:

- Engineering Department Status of road design, construction, and traffic management projects
- Public Transportation Department

 Improvements to transit services,
 infrastructure upgrades, and efforts to expand rider access
- <u>Planning Department</u> Long-term transportation planning, safety improvements, and public engagement efforts

The KPI process also significantly emphasizes financial stewardship, ensuring that projects stay within budget and outlines long-term financial strategies to sustain operations. KPIs provide a clear framework for assessing RTC's performance, allowing the organization to track its success in delivering safe, efficient, and sustainable transportation solutions across the region.





CHAPTER 12

Goal #8: Accessibility and Mobility

The goal of Accessibility and Mobility is defined in this RTP as an increase in the accessibility and mobility of people on the multimodal transportation system and enhancement of the integration and connectivity of the multimodal transportation system. The goal is achieved through its objective: to Provide a Regional Transit System and Other Transportation Services. This chapter describes the regional efforts and strategies to provide a regional transit system and other transportation services.

Regional travel options beyond single-occupancy vehicles (SOVs) include walking, rolling, and the use of public transit. These modes are a major component of the regional transportation network used for commutes, utilitarian trips, and active recreation. Continued investment in active transportation and public transit is an investment in the social and economic success of the community, especially for vulnerable populations.

RTC seeks to have an interconnected multimodal transportation system that gives residents more travel choices. An integrated regional transportation system must provide mobility options that are appropriate to the land-use context and address the needs of neighborhoods, commercial districts, and the movement of goods.

The following efforts and strategies are discussed in this chapter:

- SECTION 1 LOCAL MULTIMODAL CONNECTIVITY INITIATIVES
- SECTION 2 ADVANCED MOBILITY AND INNOVATION EFFORTS
- SECTION 3 TRANSIT SERVICES



SECTION 1 – LOCAL MULTIMODAL CONNECTIVITY INITIATIVES

Active Transportation Plan and ADA Transition Plan

The RTC Active Transportation Plan was adopted in 2024, and the ADA Transition Plan was adopted in 2020. The two plans establish strategies for the development of a well-connected regional walking and bicycling network that provides residents and visitors a more livable and healthy community.

These planning efforts also created an opportunity to identify safe access to transit stops throughout the region. The ADA Transition Plan included an evaluation of RTC transit stops and accessible connectivity to transit. The Active Transportation Plan's neighborhood approach to improving pedestrian and bicycle infrastructure increases connectivity and provides the community with multimodal transportation options. More information on the Active Transportation Plan can be found in Chapter Eight.

Bicycle Friendly America

The Bicycle Friendly America program, administered by the League of American Bicyclists, provides guidance and recognition for communities working toward the creation of a bicycling culture and environment. A Bicycle Friendly Community, Business, or University welcomes bicyclists by providing safe accommodations for bicycling and encouraging people to bike for transportation and recreation. A bicycle-friendly place makes bicycling safe, comfortable, and convenient for people of all ages and abilities. In 2015, the Reno, Sparks, and Washoe County region was re-designated a bronze level Bicycle Friendly Community by the League of American Bicyclists. The community received this designation based on local efforts to improve and expand the bicycle network. Also in 2015, the University of Nevada, Reno was the first University in the state of Nevada to be recognized as a Bicycle Friendly University.



In December 2016, RTC was awarded a silver level Bicycle Friendly Business designation by the League of American Bicyclists. The Bicycle Friendly Business award recognizes local businesses and corporations for creating a bicycle friendly environment for customers and bicycle commuting employees. RTC was recognized for encouraging employees and customers to bicycle through participation in Bike Month, working with advocacy groups, the installation of a public bike repair area at the RTC 4th Street Station, and offering bike parking in well-lit areas with security cameras. Re-designation occurs every four years, and efforts are currently underway for RTC to update its Bicycle Friendly Business designation.

Truckee Meadows Regional Trails Plan

The mission of the Truckee Meadows Regional Trails Plan, as stated on the Plan webpage, is "to work with community and agency partners to create a regional, sustainable, system trail network that enhances the quality of life for Truckee Meadows residents." The Plan includes goals and objectives that aim to guide future bicycle and pedestrian facilities and facility connectivity throughout the region.

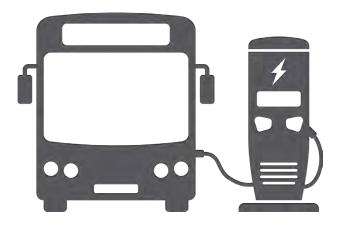
RTC was a planning partner on this effort and Plan implementation is supported by RTC through the Active Transportation Program and by the Truckee Meadows Regional Planning Agency (TMRPA) through a new policy (NR 11) in the 2024 Regional Plan which states that: "Local government and affected entity master plans and other similar plans shall include policies that:

- Reference and/or utilize the Truckee Meadows Regional Trails Plan (TMRTP). Available at: https://www.tmparksfoundation.org/truckee-meadows-trails-initiative
- Promote the construction of trails and trailheads and the connectivity of trails with existing, planned, and proposed trails as identified in the TMRTP."

SECTION 2 – ADVANCED MOBILITY AND INNOVATION EFFORTS

Advancements in mobility and transportation technologies such as alternative fuels, automated vehicles, and shared mobility stand to significantly change the future of transportation networks. RTC and regional activities involving advanced mobility and innovation efforts are further described below.

Zero-Emission Vehicles and Charging Infrastructure



Increasing the proportion of zero-emission vehicles in use throughout the region, including both electric and hydrogen fuel cell vehicles, will have benefits to air quality and reduce greenhouse gas emissions.

The growth of zero-emission vehicles will require the development of fueling/charging infrastructure as well. To prepare for continued growth in the alternative fuel and advanced mobility sectors, in 2022 RTC completed the Electric Vehicle and Alternative Fuel Infrastructure and Advanced Mobility Plan. The Plan investigates advanced mobility solutions that can be implemented in Washoe County to create a more convenient, connected, equitable and sustainable transportation network. In addition to an evaluation of existing electric vehicle charging resources and identification of strategies for long-term development of alternative charging technologies, the Plan also investigates other innovative and emerging mobility trends such as connected vehicles, autonomous vehicles, and micromobility.

Connected and Autonomous Vehicles

The concept of fully autonomous (also called self-driving, driverless, or robotic) vehicles has gone from being a distant possibility to a near-term reality. Vehicles of all types are becoming more autonomous as this technology continues to improve at a rapid rate.

Nevada has been leading the way for autonomous cars and trucks by becoming one of the first states in the nation to pass regulations regarding the safety requirements and licensing for autonomous vehicles. Nevada was also the first state in the nation to provide a license to an autonomous commercial truck.

RTC has also collaborated with the University of Nevada, Reno (UNR) on research into intelligent mobility. UNR's Center for Applied Research integrates expertise in advanced autonomous systems, computer sciences, synchronized transportation, and robotics to help address community needs. The Center has created a Living Lab to allow the testing of mobility technologies in urban environments. The Center and RTC have partnered to research autonomous bus technologies and applications using zero-emission electric vehicles.

In addition to individual vehicles becoming autonomous, some concepts have proposed a fully connected transportation system in which vehicles would communicate with each other and with the surrounding infrastructure could improve both safety and operational efficiency.

Autonomous aircraft are also beginning to emerge as a transportation option of the future. Drones are small aircraft that are piloted remotely and do not require a human to be seated within the aircraft itself. Nevada has been on the forefront of regulating and providing resources to this new technology. In 2015, UNR opened the Nevada Advanced Autonomous Systems Innovation Center as a catalyst for innovation in the field of autonomous systems.

Bike and Scooter Share

Early in 2016, RTC completed the Truckee Meadows Bike Share Feasibility Study. The study researched the possibility of launching a bike share program in the Truckee Meadows region. The study revealed that a successful bike share would likely require a public-private partnership. The study recommended a hybrid system utilizing both smart bike systems and station-based systems. Smart bikes can be rented from any location and all the necessary equipment to facilitate the rental is physically located on the bike. A station-based system utilizes a fixed number of racks at a given location and the user must return the rented bike at one of these locations.

In April 2018, the City of Reno executed the Exclusive Agreement for a pilot dockless (smart bike) bike share program between the City of Reno and City of Sparks, Washoe County, UNR, and The Reno-Sparks Indian Colony. This pilot project was the first in the country that included a tribal government. RTC had a supporting role in the dockless bike share pilot, which involved no public capital infrastructure investment. The pilot project ended, and the local jurisdictions determined not to continue with dockless bike share.

While there may still be interest in bike share for the region, the local jurisdictions and other partner entities would need to revisit the type and structure of any future system.

In 2022, the City of Reno launched an e-scooter share option with Bird in Downtown and Midtown Reno. Scooter operating rules include a "no sidewalk riding" requirement in Downtown and Midtown, as well as designated parking areas. Since the launch of the e-scooter share, 484,276 total trips have been made.

SECTION 3 – TRANSIT

RTC is the main transit provider for Washoe County. Transit is an essential part of the local economy that helps thousands of Washoe County residents get to work each day. Transit supports vibrant development patterns and local zoning and land-use policies. In addition, transit provides a critical public service to residents and visitors. The main benefits of transit service are summarized below:

- <u>Supports the Economy</u> Getting people to work, including essential jobs and services
- <u>Shapes Development</u> Economic revitalization
- <u>Provides a Public Service</u> Mobility for people that do not drive
- <u>Aids Environmental Efforts</u> Reducing traffic congestion also reduces air pollution
- Provides Access to Essential Services –
 Providing service to healthcare, pharmacies, groceries, and other public services

RTC transit services, programs, and initiatives are further described below.



RTC RIDE and RAPID



RTC operates the RIDE and RAPID fixed-route bus system. There are 18 RIDE local bus routes, and two RAPID bus rapid transit routes. All routes connect to three major passenger transit centers which are 4TH STREET STATION in Downtown Reno, CENTENNIAL PLAZA in Sparks, and the Meadowood Mall Transfer Center in the southern portion of the service area. Schedules are coordinated at these transit centers to allow riders to quickly transfer between routes. Routes generally operate on compatible clock-based headways of 10, 30, and 60 minutes. The ticket cost is \$2, one-way, and in fiscal year 2024 (July 1, 2023, to June 30, 2024), approximately 5.4 million trips were provided on RIDE and RAPID.

RTC Regional Connector



RTC currently provides the REGIONAL CONNECTOR transit route between Reno and Carson City. This premium service carried over 20,000 passengers in fiscal year 2024.

RTC ACCESS



RTC ACCESS is a paratransit service, required as a civil right under the Americans with Disabilities Act (ADA), which provides mobility for people whose disability prevents them from using fixed-route transit service. Rides are reserved through a call center one to three days in advance of travel.

RTC ACCESS passenger trips are made using a combination of full-size accessible cut-away buses, mini-vans, and taxis. The service operates 24 hours a day, seven days a week. In fiscal year 2024, about 140,000 rides were provided. Approximately 3,700 individuals are certified as ADA paratransit eligible in Washoe County and are eligible for the ACCESS service. The ADA requires paratransit service to be provided within ¾ of a mile of fixed-route transit service. The ticket cost is \$3, one-way.

RTC FlexRIDE



RTC FlexRIDE is a curbside-to-curbside transit service available by requesting a ride through an app or by phone. Rides can be scheduled at the desired travel time and can be expected to arrive to the curbside closest to the pick-up location in as little as 20 minutes. The convenience of this service has made it very popular with customers and resulted in strong ridership increases over previously offered fixed-route services.

RTC initiated the first FlexRIDE pilot program in Sparks in 2019 and added additional FlexRIDE zones in the North Valleys, Spanish Springs, and Somersett/Verdi in 2020 and in the South Meadows area in 2024. Approximately 110,000 FlexRIDE trips were taken in fiscal year 2024. The ticket cost is the same as the standard RTC RIDE fare.

Taxi and Ride-Hailing



The RTC partners with both taxi and ride-hailing services to broaden mobility options for eligible passengers. Washoe Senior Ride (WSR) Taxi Bucks program is a subsidized taxi program of the RTC and is funded by the ¼ percent of Washoe County sales tax allocated for public transportation. This program extends a mobility option to people who do not live within the RTC RIDE and ACCESS service area. WSR provides alternative, reliable, and affordable transportation to Washoe County residents 60 years and older, RTC ACCESS clients (any age), and Washoe County Veterans (any age). Participants are issued an RTC WSR CardONE re-loadable card, which can be used to pay any part of a taxi fare.

Ride-hailing first became available in the Truckee Meadows through Lyft and Uber in the fall of 2015. On-demand ride-hailing services like Lyft or Uber require a credit card and smartphone app to book and pay for trips. Currently, the RTC offers the RTC Washoe Lyft or Uber Rides which is a subsidized voucher program. The RTC Washoe Lyft or Uber Rides program provides alternative, reliable, and affordable transportation to Washoe County residents 60 years and older, RTC ACCESS clients (any age), and Washoe County Veterans (any age). Each month registered participants receive a \$60 voucher subsidy, which can be used to pay any part of a Lyft or Uber ride.

RTC VANPOOL Program



The RTC VANPOOL Program is the fastest growing component of the RTC SMART TRIPS trip reduction program and now represents RTC's largest transit vehicle fleet. This program provides an opportunity to reduce auto trips and serve longdistance commutes effectively. As of 2024, the program has approximately 330 vehicles with vans traveling to locations such as Carson City, the Tahoe-Reno Industrial Center, Spanish Springs, Stead, Herlong, Susanville, and the Lake Tahoe basin. Participants share the costs of the vehicle lease and gas, with RTC providing a subsidy to encourage participation based on the distance traveled. In fiscal year 2024, by reducing auto trips for commuting, the VANPOOL program prevented the emission of over 9,600 metric tons of carbon dioxide (CO₂).



RTC SMART TRIPS

RTC's trip reduction program, RTC SMART TRIPS, encourages the use of sustainable travel modes and trip reduction strategies such as telecommuting, compressed work weeks, and trip chaining. Major components of the program include a bus pass subsidy program in which RTC matches an employer's contribution to their employees' 31day transit passes up to 20 percent, a subsidized vanpool program, RTC VANPOOL, and an online trip matching program that makes it quick, easy, and convenient to look for carpool partners and also bus, bike, and walking buddies for either recurring or one-time trips.

One of the most common deterrents to ridesharing is the fear of being stranded. Consequently, people who either carpool or vanpool to work can sign up for the guaranteed ride home program and be reimbursed for a taxi ride home up to four times a year if unexpected events prevent normal ridesharing arrangements.

Pedestrian and bicycle travel is promoted by the RTC SMART TRIPS program throughout the year through participation in the Truckee Meadows Bicycle Alliance's Bike to Work Week campaign each spring, and maintenance of the Street Smart website that educates the public about the benefits of walking and how to do it safely.

Privately Operated Intercity Bus Service

RTC supports private intercity bus transportation where feasible and appropriate. RTC leases bus bay access at RTC CENTENNIAL PLAZA to My Ride to Work, which is a service that provides privately operated transit access to employees at the Tahoe-Reno Industrial Center. An estimated 2,000 employees use this service every day. Greyhound, which provides intercity transit access with nationwide connectivity, also leases bus bay access and waiting room space at RTC CENTENNIAL PLAZA.

Additional intercity services include the North Lake Tahoe Express offering service from the Reno airport to Truckee and North Lake Tahoe area, and the South Tahoe Airporter which provides service

Transit Optimization Plan Strategies (TOPS)

The Transit Optimization Plan Strategies (TOPS) Plan outlines a strategy for transit service and improvements over a five-year period. TOPS provides an overview of the current status of mass transit in southern Washoe County and contains proposed programs and budgets. The main focus of TOPS is RTC RIDE, but detailed operating, capital, and planning information for RTC ACCESS and Tahoe Area Regional Transit (TART) is also included. The TOPS Plan will be updated beginning in 2025 and will include the plan years of 2026-2030. Some elements included in the Plan are the:

- Evaluation of RTC's RIDE service as a component of the overall RTC public transportation service, including recommendations for addition or subtraction of service;
- Comprehensive review of the Washoe Senior Ride Program and areas where RTC can improve the program;
- Comprehensive review of RTC ACCESS service and areas where RTC can improve the program; and
- Evaluation of the grant program for not-forprofit transportation services, as identified in the Coordinated Public Transit-Human Services Transportation Plan.

Coordinated Public Transit-Human Services Transportation Plan

The Coordinated Public Transit-Human Services Transportation Plan (CTP) is required by the Federal Transit Administration (FTA) as a part of the Section 5310 grant funding program. To be funded, projects must be contained in the CTP and improve transportation options for senior citizens and persons with disabilities above and beyond the requirements of the ADA. The current CTP was updated in 2024, and is included in this RTP as Appendix D.

Not-for-Profit Partnerships

RTC's 5310 equivalent sales tax program offers competitive grant funding to organizations, such as nonprofits, that provide enhanced mobility. Mobility services currently funded by this program include the following:

- Non-Emergency Medical Related Transportation through Access to Healthcare Network (AHN)
- Neighbor Network of Northern Nevada (N4) and the purchase of non-ADA Paratransit rides
- Senior Outreach Services volunteer program at the Sanford Center for Aging at UNR to provide transportation for frail, homebound, and below-poverty seniors
- Volunteers of America transportation specifically for senior/disabled clients at its Nevada CARES Campus and Shelter

Maintenance Facility Infrastructure

RTC currently operates the following two transit maintenance facilities:

- Jerry L. Hall Regional Transit Operations and Maintenance Center – Located at Villanova Drive under the I-580 viaduct, this facility is used to store and maintain the fixed-route transit fleet. This 6.8-acre property has capacity to store 78 buses and contains a bus wash, body repair bay, chassis inspection, vehicle inspection area, and RIDE dispatch office.
- Located at Sutro Street and 6th Street near downtown Reno, this facility is used to store and maintain the ACCESS paratransit and FlexRIDE fleets. It contains the ACCESS dispatch office and infrastructure to fuel the Compressed Natural Gas (CNG) fleet. The Sutro facility has also been identified as a back-up office location for RTC administrative staff for operations in the event of an emergency that renders the Terminal Way building inaccessible.

Recent improvements to the property include the construction of a hydrogen fueling station to support the implementation of hydrogen fuel cell buses as a part of RTC's fixed-route service.

Maintenance Facility Needs

RTC has a long-standing commitment to sustainability and utilizing alternative fuels for public transit services including, most recently, the purchase of eight hydrogen fuel cell buses. However, the location of the Jerry L. Hall Regional Transit Operations and Maintenance Center under I-580 precludes the use of this facility for hydrogen fuel cell maintenance. Expansion of the Sutro Maintenance Facility would provide a suitable location to initiate a hydrogen fuel cell program. With an appropriate facility, RTC could also pursue opportunities to transition the ACCESS and FlexRIDE fleet to hydrogen fuel cell technology when it becomes available for the paratransit vehicle type.

In addition, the Nevada Department of Transportation (NDOT) has adopted the Spaghetti Bowl Project, which is a plan for safety, operational, and capacity improvements on I-80 and I-580. Phase 4 of the Spaghetti Bowl Project would involve reconstruction of the Villanova/Plumb Lane interchanges at I-580 and would require relocation of RTC's fixed-route transit facility. RTC is coordinating with NDOT for timing of the relocation.

To accommodate planned growth in the transit system as well charging and maintenance needs for diesel, electric, and hydrogen fuel cell vehicles, a new/replacement facility would need to include:

- Approximately 10 acres
- 30,000 square feet for maintenance bays
- 45,000 square feet for covered outdoor storage
- 40 bus parking spaces with capacity for 80 buses

- 100 employee and 12 service vehicle parking spaces
- 20 electric bus chargers with 4,000-amp service
- Bus wash, body repair bay, chassis inspection and vehicle inspection pit

The expansion of the Sutro Maintenance Facility could accommodate these infrastructure requirements and still provide a central location that meets transit operational needs.

Passenger Facility Needs

RTC is currently undertaking the following passenger facility improvements:

- Expand RTC 4TH STREET STATION to construct four additional bus bays, electric bus chargers, parking spaces, and operating space in support of RTC's relationship with the City of Reno Business Improvement District Ambassador program
- Bus stop accessibility improvements throughout the region, in support of the ADA Transition Plan
- Improvements of existing BRT stations and construction of potential BRT expansion to correspond with development opportunities





CHAPTER 13

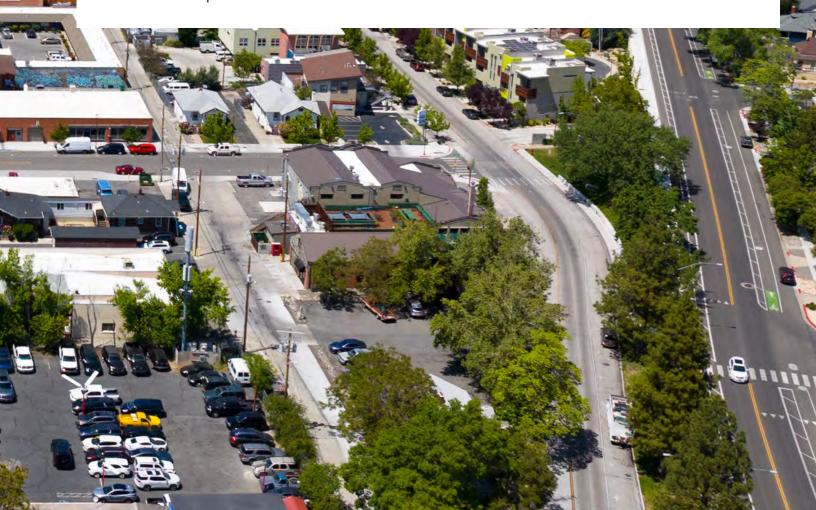
Goal #9: Integrated Land-Use and Economic Development

The goal of Integrated Land-Use and Economic Development is defined as an increase of partnerships among local jurisdictions and other stakeholders to identify how transportation investments can support regional development, housing, and tourism. The goal is achieved through its objective to: Improve Regional Connectivity. The improvement of regional connectivity, or connections to points both inside and outside the region, begins with thoughtful and strategic transportation planning to align with the travel needs of both residents and visitors. Such planning informs facility selection and mobility options that create economic development opportunities and ensure that infrastructure is appropriately located with regard to land use. This chapter describes the regional efforts and strategies to address the integration of land-use and support economic development through the improvement of regional connectivity.

The following efforts and strategies are described in this chapter:

- SECTION 1 LAND-USE PLANNING PARTNERSHIPS
- SECTION 2 ECONOMIC DEVELOPMENT PARTNERSHIPS
- SECTION 3 SUSTAINABLE AND EFFICIENT GROWTH

The above efforts and strategies will be discussed further in Sections 1-3. Collectively, these efforts and strategies to improve regional connectivity aim to achieve the goal of integrated land-use and economic development.



SECTION 1 – LAND-USE PLANNING PARTNERSHIPS

The Integrated Land Use and Economic Development goal is predicated on increasing RTC partnerships among local jurisdictions and other stakeholders to identify how transportation investments can support regional development goals. The purpose of land-use partnerships is the coordination of land use and transportation planning that accommodates pedestrian and bike safety, mobility options, enhances public transportation service, improves road network connectivity, and includes a multimodal approach to transportation. The RTC develops and maintains partnerships with numerous regional and local entities to understand and support the landuse development patterns that should inform transportation planning.

Regional Planning

The RTC collaborates with many regional agencies that influence land-use. Some of the organizations the RTC works with regularly include the Truckee Meadows Regional Planning Agency, Northern Nevada Public Health, Washoe County School District, Washoe County Senior Services, Reno-Tahoe Airport Authority, and the Reno Housing Authority. The RTC also works closely with agencies at the state and federal levels.

An overview of regional planning agencies and their policies that influence transportation investment is provided below.

Truckee Meadows Regional Planning Agency (TMRPA)

RTC and Truckee Meadows Regional Planning Agency (TMRPA) collaborate closely on a wide range of data management and analytical issues. Through a Shared Work Program, the two agencies access data on a common server and undertake joint technical analyses. Additionally, this RTP serves as the long-range transportation plan for purposes of compliance with state law through its utilization by the Truckee Meadows Regional Plan.

The Truckee Meadows Regional Planning Agency (TMRPA) was created by Nevada legislature in 1989 to facilitate regional land-use planning for the region within the City of Reno, City of Sparks and Washoe County. TMRPA is responsible for the preparation and implementation of the Truckee Meadows Regional Plan (referred to as the Regional Plan). The TMRPA is comprised of the Regional Planning Governing Board (RPGB), the Regional Planning Commission (RPC), and TMRPA staff.

The current Regional Plan was updated in 2024 and provides the framework for growth in the Truckee Meadows over the next 20 years. The Plan focuses on the coordination of master land-use planning in the region as it relates to population, land use patterns, public facilities, service provision, natural resources, and intergovernmental coordination. The Regional Plan is a cooperative effort of the local and regional units of government, affected entities, the major service providers, and the citizens of the Truckee Meadows. The Plan is intended to present a regional consensus reached through a process of public conversation and decisionmaking, to provide a unifying framework for local and regional policies and services.



The Regional Plan also establishes the Truckee Meadows Service Area (TMSA), the area within which services and infrastructure are anticipated to be provided over the next 20 years. The TMSA concept is further refined into five Regional Land Designations to establish a priority hierarchy for managing regional growth. TMRPA requires that local government and affected entities' master plans, facilities plans, and other similar plans promote and not conflict with the growth and investment priorities defined by the Regional Land Designations.

The 2024 Regional Plan defines and ranks in priority for development the five (5) Regional Land Designations as follows: The highest priority is the Mixed Use Core, "an area that promotes the highest density and intensity of development, prioritizes infrastructure provision, and promotes a pedestrian-friendly atmosphere served by transit." The second priority is Tier 1, "an area within the TMSA where a varying range of development is expected and with a secondary priority for development and investment." The third priority is Tier 2, "an area where there is generally less dense development occurring at suburban levels, with a few higher density nodes." The fourth priority is Tier 3, which "comprises the remaining areas within the TMSA. These areas contain lands that are developed at low densities, are undeveloped, or have significant constraints." Finally, the 5th and last priority is the Rural Area which is an area "stretching from the boundaries of the TMSA across the remainder of Washoe County (areas outside TMRPA's jurisdiction such as Tribal Lands and the Lake Tahoe Basin are not included). This area is restricted to very low residential densities and generally consists of dispersed development on large parcels."

The Facilities and Services standards table in the 2024 Regional Plan outlines expectations for various forms of infrastructure both within and outside of the TMSA. In order to align regional efforts, the 2050 RTP Update recognizes this priority hierarchy and the RTC has utilized the hierarchy to inform the projects list and their time frames.

The RTC also consistently coordinates with TMRPA and the local jurisdictions to ensure the priorities in the Regional Plan as well as the master plans are reflected in the RTP.

Further, TMRPA works closely with the local jurisdictions to develop population and employment projections by Traffic Analysis Zone (TAZ), which are assigned in the RTC travel demand forecast model. In accordance with RPGB policy, the Washoe County population and employment projections, called the Consensus Forecast, uses a number of leading forecasts, which has several advantages over using a single source for forecasting population.

Northen Nevada Public Health

RTC formally partners with Northern Nevada Public Health (NNPH), formerly the Washoe County Health District, through NNPH's participation on the RTC Technical Advisory Committee (TAC) which is convened monthly and advises RTC staff and the Board. NNPH Air Quality Management Division (AQMD) and Chronic Disease and Injury Prevention Program actively support transportation investments that improve community health. Additionally, NNPH sponsors several healthy community initiatives based on the concept that health is more than the absence of disease and is defined broadly to include the full range of quality of life issues, including transportation.

Air Quality Management Division (AQMD)

Another RTC partner is the Air Quality
Management Division (AQMD) which implements
clean air solutions that protect the quality of
life for residents of Washoe County through
community partnerships and programs such as
air monitoring, permitting and enforcement,
planning, and education. The Division monitors
ambient air quality for the determination of
compliance with National Ambient Air Quality
Standards (NAAQS). Additional information about
air quality is provided in Appendix B.

Because motor vehicles are the largest source of ozone pollution in Washoe County, the Air Quality Management Division (AQMD) has partnered with the RTC and other government and nongovernment bicycle advocacy groups in the Truckee Meadows to promote cycling in place of vehicle trips. AQMD works with the Truckee Meadows Bicycle Alliance on outreach and events such as Bike Month. Another AQMD's program that promotes community health and sustainable transportation and demonstrates its commitment to collaboration with regional partners is the Rack 'Em Up Program. The program supports bicycle advocacy through outreach and special events.

Chronic Disease and Injury Prevention Program

The Chronic Disease and Injury Prevention Program (CDIP) focuses on modifiable risk factors that impact the top five leading causes of death in Washoe County. One of these factors is lack of physical activity. As part of an effort through the CDIP, as well as to fulfill part of the requirements of Assembly Bill 343, NNPH staff conducted a physical activity survey and subsequent walk audit in an area determined to be in need of a higher degree of focus. A walk audit can briefly be described an assessment used to determine the viability of walking in a given environment. The results of the walk audit were presented to the Vision Zero Truckee Meadows Task Force and, going forward, the RTC will seek to collaborate with NNPH in future walk audit efforts. These efforts will not only help meet the requirement to complete at least one walk audit per year but will assist the RTC in the development of the series of Neighborhood Network Plans discussed in Chapter 12.

Including physical activity as a part of daily activities helps to reduce obesity and the resulting chronic conditions such as heart disease and diabetes. However, this will occur only if safe and accessible sidewalks and bicycle facilities are readily available. Creation of comfortable and convenient active transportation facilities that encourage physical activity is part of RTC's vision for active transportation in the region.

Community Health Improvement Plan

The 2022-2025 Community Health Improvement Plan, developed by NNPH, is based on findings from the 2022-2025 Community Health Assessment and reflects a long-term, comprehensive commitment to addressing public health problems. The plan outlines top priorities and a collective action plan for how health will be improved through a series of goals housed under four focus areas.

One of the primary concerns of participants of community-based meetings under the "Access to Health Care" focus area was lack of transportation to care. This is also one of the primary concerns according to outreach conducted as part of the RTC's Coordinated Public Transit-Human Services Transportation Plan (CTP), which is included in this document as Appendix D. The issues related to the lack of transportation to care are addressed, in part, through the implementation of projects identified in the CTP and RTP.

Washoe County School District

RTC works closely with the Washoe County School District (WCSD) and the Nevada Department of Transportation on the Safe Routes to School (SRTS) Program. The program is funded, in part, by RTC through Surface Transportation Block Group grant funding and was recently expanded under IIJA to explicitly include high schools. The School District Police Department now implements this program for grades K-12, which includes a combination of capital investments, organization of parent volunteers at school zones, development of operational plans, and student education.

The School District's SRTS Coordinator participates in RTC plans and studies to identify important student safety and accessibility issues.

RTC also works closely with WCSD regarding school siting and associated transportation infrastructure needs as part of its Facility Modernization Plan. As the regional school population continues to grow, it will be increasingly important to properly site and orient schools to enhance accessibility and encourage more youth to walk, bike, and roll to school.

Finally, WCSD and SRTS participate as members of the Vision Zero Truckee Meadows Task Force and are often recipients of funding through the RTC's Transportation Alternatives Set-Aside Program. Collaboration resulting from these efforts is typically focused on school zone safety and the enhancement of active transportation facilities.

Washoe County Senior Services

Washoe County's Senior Services Division is committed to building a higher quality of life for all residents, regardless of age. Its mission is to provide a variety of direct and indirect support and services to meet the needs of older adults and those who care for them. Washoe County Senior Services offers a nutrition program, legal services, social services, adult day care, and recreational activities. The Washoe County Master Plan for Aging Services is the roadmap that guides the enhancement and development of Washoe County's senior programs and services.





The Plan's Guiding Principles detail a series of goals, with associated objectives and strategies, and were developed by Washoe County Senior Services' partners, stakeholders, Advisory Board, and employees. The goal for transportation is to expand public and private options that allow seniors to live independently. The RTC involved Washoe County Senior Services in the development of its CTP and also partner in providing transportation information and other resources to local senior citizens.

Reno Housing Authority

The Reno Housing Authority (RHA) was founded in 1943 and was appointed the Public Housing Authority for Reno, Sparks, and Washoe County. The RHA's mission is to provide fair, sustainable, quality housing in diverse neighborhoods throughout Reno, Sparks and Washoe County that offers a stable foundation for low-income families to pursue economic opportunities, become self-sufficient and improve their quality of life. Through its various subsidies, rental assistance, and other programs, the RHA helps ensure 15,000 Nevadans have a safe, secure place to call home.



Local Planning

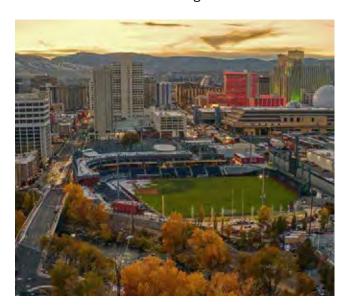
The City of Reno, City of Sparks, and Washoe County are responsible for local land-use planning in the region. The RTC works extensively with these local jurisdictions to develop and implement projects in accordance with local and regional master planning documents. For example, the RTC participates in the development review processes with each local government to provide input on access management, transit, pedestrian and bicycle facility improvements, and to ensure consistency with long-range and regional transportation plans. Additional coordination occurs at a local and regional level between all agencies, when needed, for specific projects or activities.

A summary of key land-use policies as they relate to transportation for each entity is provided below.

City of Reno

The Reno City Council adopted their Master Plan, titled Relmagine Reno, on December 13, 2017, with additional updates effective as of November 2021.

This Master Plan is the result of the widest public engagement effort in Reno's history. The Plan reflects the ideas, values, and desires of the community, aligning these with a range of plans, policies, and initiatives in place or underway in both Reno and the wider region.



The guiding principles are the first level of policy guidance included in the Master Plan. Each reflects one aspect of the community's visions and values and articulates the type of place desired for Reno. Together, they address a range of topics, providing the framework for Master Plan goals and policies that will help to guide decision-making across the City. Guiding Principle 5, a Well-Connected City and Region, is supported by the following goals:

- Continue to develop a safe, balanced, and well-connected transportation system that enhances mobility for all modes.
- Actively manage transportation systems and infrastructure to improve reliability, efficiency, and safety.
- Facilitate the movement of goods and services throughout the region via truck, air, and rail.
- Encourage the use of transit, car or van pools, bicycling, walking, and other forms of alternative transportation.
- Anticipate and plan for the implications and opportunities associated with connected vehicles, autonomous vehicles (AVs), and the expected transition from personal car ownership to mobility-as-a-service.

City of Sparks

The City of Sparks adopted its comprehensive plan, Ignite Sparks, in August 2016. In 2021, the plan was updated and was found to be in conformance with the 2019 TMRPA Regional Plan. Ignite Sparks establishes goals and policies centered around managing growth through landuse, economic vitality, and connectivity.

Included within its Vision Statement is a desire for "integrated connectivity with a maintained road network which includes bike and pedestrian pathways."



This vision is supported by the following goals:

- 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.
- Provide a transportation network that supports business formation and attraction and economic vitality.
- Facilitate non-motorized travel throughout the community.

Washoe County

The Washoe County Master Plan, Envision Washoe 2040, was adopted in 2023 and was found to be in conformance with TMRPA's Regional Plan in 2024. This update removed regulatory information and more detailed standards, integrating them into the Washoe County Development Code. The vision, goals, policies, and actions from the 2010 Master Plan were updated and remain a part of Envision Washoe 2040. The Plan was developed to adapt to today's challenges and opportunities while also aligning with the structure of the TMRPA Regional Plan in order to improve consistency throughout the region and to make interjurisdictional coordination easier.

The document identifies seven planning elements with principles and policies that are informed by an existing conditions analysis and used to address key opportunities and constraints related to each element. These elements were adapted from other plans to further enhance regional cohesion. The land use element was built around the TMRPA Regional Plan and master plans from the cities of Reno and Sparks, as well as the Pyramid Lake Paiute Tribe and Reno-Sparks Indian Colony. The Transportation element considers several RTC documents including the Complete Streets Master Plan, Bicycle and Pedestrian Master Plan, Advanced Mobility Plan, and the (previous) 2050 RTP.

The overarching goal of the land use element is to demonstrate a commitment to the regional form and pattern described by the TMRPA Regional Plan, while the policies express a commitment to direct new development inside the Truckee Meadows Service Area to promote infill development.

The transportation element focuses on the challenges of creating and maintaining a quality transportation system and increasing accessibility across multiple jurisdictions. Envision Washoe 2040 demonstrates a commitment to ensuring that transportation infrastructure meets the needs of existing and future development and responds to the community's desire to pursue innovative transit and multimodal opportunities through the following principles:

- Create an interconnected transportation network.
- Provide an efficient transportation network through coordinated operations, system management, technology, and targeted investments.
- Prioritize multimodal transportation to support healthy communities.
- Coordinate transportation decisions with regional and local partners.

 Reduce transportation-related emissions and pollutants.

Pyramid Lake Paiute Tribe (PLPT)

The Pyramid Lake Indian Reservation is comprised of more than 475,000 acres in Northern Nevada and contains portions of Interstate 80 and several State highways including SR 445, SR 446, SR 447, and SR 427.

The approximate 3,000 members of the Tribe (of whom about 1,300 live on the reservation) are direct descendants of the Northern Paiute people who have occupied the vast areas of the Great Basin for thousands of years. Pyramid Lake is located 35 miles northeast of Reno and is the property of and managed by the PLPT and is visited annually by over 150,000 people from around the world. The PLPT operates its own transit system which serves communities within the Reservation and connects to services in nearby Reno and Sparks.



The Long-Range Transportation Plan (LRTP) for the Pyramid Lake Paiute Reservation (updated in May 2021) provides the inventory and analysis of infrastructure to support improvements to existing transportation facilities and develop new transportation opportunities within the PLPT Reservation and evaluate present and future transportation needs in and around Reservation Lands.

The LRTP establishes a prioritized listing of road improvement/construction projects to meet current and projected transportation needs. The LRTP incorporates these needs by way of the included Tribal Transportation Improvement Program and priority list that is forwarded to the Bureau of Indian Affairs for inclusion in a regional Tribal Transportation Plan and the Statewide Transportation Improvement Program (STIP). Projects from the STIP that are within the RTC's planning area are subsequently adopted into the Region Transportation Improvement Program (RTIP).

Reno-Sparks Indian Colony (RSIC)

The Reno-Sparks Indian Colony (RSIC) is a federally recognized Native American Tribe located within the Truckee Meadows. The RSIC was established in 1917 and was formally recognized in 1936 under the Indian Reorganization Act. Currently, the tribal membership consists of over 1,300 members from three Great Basin Tribes – the Paiute (Numu), the Shoshone (Newe), and the Washoe (Wa She Shu).

The reservation lands primarily consist of the original 28-acre residential Colony and another 15,539 acres in Hungry Valley, which is 19 miles north of the Colony nestled in scenic Eagle Canyon.

Over the past three decades the Colony has assembled various development sites in Reno, Sparks, and Washoe County, representing 83 acres of commercial property. The redevelopment of Reno's East Second Street neighborhood, where half the Colony's residents live, consists of the development of the Three Nations Plaza (Wal-Mart), relocation of the Northern Nevada Transitional Center and the RSIC Health Center.

The development of the 65,000 square-foot outpatient Health Care facility was constructed from the proceeds of the Colony's economic development projects for the benefit of its community members and more than 9,000 Native Americans residing in the region.

The RSIC also operates a fixed-route transit system between the Reno and Hungry Valley communities. The transit system runs Monday through Saturday and includes nine stops to connect Tribal Members with Tribal Government services, the RSIC Health Center, residential neighborhoods, and Tribal Enterprises.

The RSIC's Long Range Transportation Plan (LRTP) identifies and evaluates current and future transportation needs of the Colony. Existing conditions and RSIC's current goals were used to determine present needs, while future needs were evaluated based on the RSIC's social, economic, and development goals and objectives, including specific development proposals, as well as the land use and transportation plans of the surrounding area. The RSIC's LRTP follows the same process noted in the PLPT section above for including projects in the STIP and RTIP.

SECTION 2 – ECONOMIC DEVELOPMENT PARTNERSHIPS

Economic development is supported though regional partnerships and is important to the improvement of regional connectivity. Economic development activities can influence transportation patterns and travel demand which often leads to investment in transportation infrastructure and can also influence land use. For example, a growing tech hub might increase the need for better transportation links, leading to the construction of a new transit line, which is likely to induce increased development around its stations. In this example, the availability and efficiency of transportation options attract businesses and influence economic decisions. Simliarly, efficient transportation connections to the area can induce visitor demand. Areas with well-planned transportation infrastructure are often more attractive for businesses and visitors and can experience faster economic growth. Partnerships are key to keeping in the loop on ongoing economic development activities and aligning transportation planning with those initiatives.

A summary of key economic development initiatives and policies as they relate to transportation for statewide, regional, and local entities is provided below.

Nevada Governor's Office of Economic Development

The Nevada Governor's Office of Economic Development has a vision for a vibrant, innovative, and sustainable economy with high-paying jobs for Nevadans. The 2023 statewide Comprehensive Economic Development Strategy, Realizing Nevada's Electric, Innovative, and Connected Future lays out a roadmap for Nevada to fully develop industries critical to world markets. The document uses a SWOT analysis and an analysis of Nevada's competitive position relative to national and global market trends to develop a strategic plan to align and coordinate action by state policymakers in the areas of clean energy, innovation, and infrastructure. It also identified five target industries—one of which is Transportation and Logistics—and actions to advance them over the next five years.

The University of Nevada, Reno

The University of Nevada, Reno (UNR) was established in Reno in 1891 and serves more than 21,000 students. The University is one of the largest activity centers in the region. RTC often partners with UNR staff and students to conduct research related to engineering and planning projects.

UNR works closely with RTC to promote safe multimodal transportation for its students especially in the downtown and campus areas. The RAPID Virginia Line extension to UNR and the EdPass Program that allows students, faculty, and staff to ride transit free with their university identification card, will reduce the need for cars on campus and greatly expand the traveling convenience for the student population. The partnership with UNR also extended to development of the University Area Multimodal Transportation Study, which identifies planned safety and mobility improvements in the campus area.

The Economic Development Authority of Western Nevada

The Economic Development Authority of Western Nevada (EDAWN) is a private/public partnership committed to adding quality jobs to the region by recruiting new companies, supporting the success of existing companies, and assisting newly forming companies, to diversify the economy and have a positive impact on the quality of life in the Truckee Meadows.

Included in EDAWN's Strategic Plan is the objective to attract new businesses to downtown districts to support job growth in target industries including:

- Advance Manufacturing
- Aerospace and Defense
- Biotechnology
- Blockchain
- Business-to-Business Software
- Fintech
- Internet of Things
- Logistics and E-Commerce

EDAWN is a supporter of RTC's initiatives to promote transportation investments such as bicycle, pedestrian, and transit amenities that can attract people to the region and are quality of life assets for the Truckee Meadows. In addition, strategic transportation investments in roadways facilitate goods movement in support of logistics, distribution, and advanced manufacturing. EDAWN is an advocate for expanding economic opportunities and implementing infrastructure upgrades needed to accommodate expected growth, while doing so without putting a strain on infrastructure.

Reno-Tahoe Airport Authority

The Reno-Tahoe Airport Authority (RTAA), which owns and operates the Reno-Tahoe International Airport (RTIA) and Reno-Stead Airport, is an important asset to the region, generating a total annual economic impact of \$3.6 billion and directly supporting over 6,300 jobs. The RTIA is located in the core of the Truckee Meadows and is essential to the economic growth of the region. It serves over four million passengers per year and is estimated to have served 4.6 million in 2023. In 2022, approximately 139 million pounds of cargo arrived/departed RTIA.

The Reno-Stead Airport is a 5,000-acre general aviation facility that is quickly becoming a major economic hub in northern Nevada and is an Federal Aviation Administration (FAA) designated Unmanned Autonomous Systems (UAS) test site. The Reno-Stead Airport campus also includes a business park, which has been identified as a future regional jobs center by TMRPA and represents 60 percent of vacant industrial land in the City of Reno and 37 percent of vacant industrial land in Washoe County. The Reno-Stead Airport business park is designed to cater to industries such as aerospace, advanced manufacturing, and logistics.



The RTIA and Reno-Stead airports are crucial to the success of tourism and cargo-related industries in Northern Nevada, as outlined in the RTIA Master Plan. The plan identifies air cargo growth and the need to expand capacity and modernize air cargo facilities.

These developments not only underscore the RTAA's potential to drive economic growth but also highlights its pivotal role in meeting the region's future employment and industrial needs.

Reno-Sparks Convention and Visitors Authority

The Reno-Sparks Convention and Visitors Authority (RSCVA) was established in 1959 and acts as a marketing organization for the county to promote convention and tourism business. Unlike many convention and visitors bureaus across the country, the RSCVA owns and operates several facilities designed to draw out-of-town visitors. In addition, the RSCVA is mandated by the Nevada State Legislature (NRS 244A), and is not a partnership-based organization. The RSCVA, as a public body, also functions as a collection agency, ensuring that room taxes are distributed to the appropriate governmental organizations benefitting visitors and residents of Reno Tahoe. The RSCVA's vision is to be the preferred outdoor, gaming and event destination and its mission is to attract overnight visitors to Reno Tahoe while supporting the sustainable growth of local communities.



The travel and tourism industry is central to the Northern Nevada economy. With more than 20,000 hotel rooms in the Reno-Sparks metro area, resorts and gaming have long been major economic drivers for the region. Reno is a gateway to the outdoor mountain destinations surrounding the Lake Tahoe area, including world-class ski resorts, and world-renowned hiking trails.

The growing arts community, including Reno's annual Artown festival and the many events associated with the Burning Man festival, are expanding the tourism base. Public art, including sculptures and murals, further integrate this vibrant creativity into the fabric of the community. This emerging arts tourism is further supported by the growing craft brewery and restaurant scenes in downtown Reno and Sparks.

The Truckee Meadows is uniquely suited to hosting large events due to the strength of the existing hospitality industry. Other strengths include the centrally located Reno-Tahoe International Airport and the successful RTC RAPID transit system. The region's major resort hotels are connected to downtown Reno and Sparks as well as the Reno-Sparks Convention Center by the Virginia Line and Lincoln Line RAPID transit services.

Sporting events at various levels, ranging from Reno Aces Minor League Baseball games to high school and senior tournaments, support the local tourism industry and wider economy. More than 15,000 athletes and coaches come to the area annually for basketball and volleyball tournaments, and internationally sanctioned sporting events in bowling, fencing, boxing, handball, and weightlifting. Public transit and the efficiency of traffic operations on the regional road network play a key role in facilitating the movement of the thousands of visitors attending and participating in these events.

The RTC partners with the RSCVA to support the travel and tourism industry and enhance this industry's impact on the local economy. In many cases, the RTC provides special event transportation, as it does during the Best in the West Nugget Rib Cook Off or The Great Reno Balloon Race. The RTC's regular bus service facilitates travel to and from many event venues as well, such as Greater Nevada Field for Reno Aces baseball games, Lawlor Events Center and Mackay Stadium for Nevada Wolf Pack basketball and football games, the Livestock Events Center for the Reno Rodeo and other events throughout the year, the National Bowling Stadium, and many others.

SECTION 3 – SUSTAINABLE AND EFFICIENT GROWTH

Sustainable and efficient transportation network development creates regional connectivity that is integrated with land use and is delivered at the appropriate time and location. Whether for transit service, roadways, or bicycle and pedestrian infrastructure, the RTC seeks to provide the appropriate level of connectivity, at the appropriate time, that will serve the community today and for years to come. Transportation needs for the movement of people and goods evolve, as land development generates travel, travel generates new transportation facilities, new transportation facilities increase accessibility, and increased transportation accessibility attracts further land development. Sustainable growth includes identifying the appropriate investment needed at the appropriate time to keep pace with growth. Efficient growth is achieved through sound transportation planning, based on data, to identify the transportation needs of the region. Sustainably and efficiency or righttiming and right-sizing of the transportation network are essential in order to ensure that the transportation network can serve the needs of the region, now and in the years to come.



An overview of efforts to improve regional connectivity through sustainable and efficient growth is provided below.

South Virginia Street Transit-Oriented Development Plan

The RTC, in partnership with the City of Reno, studied the South Virginia Street corridor to determine the feasibility of extending the Virginia Line Bus Rapid Transit (BRT) service from its current terminus at Meadowood Mall to south Reno. With hundreds of acres of vacant and underutilized land in the corridor, there is opportunity to help shape land-use to improve accessibility and enhance economic development opportunities. The Plan recommended land-use planning tools most appropriate for encouraging a walkable, transit-supportive development pattern that meets the growth and development needs of the region.

High-density housing and employment near transit stops is necessary to support a BRT level of service. Providing safe, convenient, and accessible pedestrian connections to bus stops is essential to promoting not only transit trips, but active transportation trips as well. This type of transit-oriented development (TOD) has advantages beyond increased ridership. Effective transit not only boosts property values and business attractiveness but also stimulates broader economic development by better connecting industry to the workforce on which it relies.

Despite the City of Reno's 2017 adoption of the ReImagine Reno Master Plan, which included the removal of its TOD zoning along South Virginia Street, the region has had success with higher-intensity development. Land-use policies established by Reno, Sparks, and the Truckee Meadows Regional Planning Agency have incentivized this type of development in the Virginia Street, 4th Street/Prater Way, and other key transit corridors. For example, Midtown has emerged as a major shopping and dining destination with a growing residential and office component. Victorian Square in downtown Sparks has also experienced a resurgence, as evidenced by the housing development near RTC Centennial Plaza. Affordable housing and essential services are best suited to locations near transit lines to promote accessibility.



Multimodal infrastructure provides more options to get to work, school, recreational activities and provides access to necessary goods and services. High-capacity transit combined with Complete Streets design elements that provide pedestrian and bicycle access support a vibrant urban environment. The evolution of South Virginia Street, and other areas in the region prioritized for growth, is largely dependent on outside influences and will continue to respond to growth and the market. Planning for and continuing to encourage sustainable growth is essential to ensuring these areas are catalysts for vibrant changes to the community. Infrastructure investments, intergovernmental collaboration, public/private partnerships, and the continued phasing of transit enhancements will all work to support the landuse, transportation, and economic development goals for the region.

Active Transportation Plan: Walk & Roll Truckee Meadows

The RTC's Active Transportation Plan: Walk & Roll Truckee Meadows establishes a clear vision and goals for the future of active transportation in the Truckee Meadows and introduces a new approach to active transportation planning and implementation in the region called Neighborhood Network Planning. This approach has been established to engage residents and stakeholders at the local level to tailor active transportation solutions that address the unique needs of each neighborhood. This innovative and interactive planning process will inform the creation of a comprehensive and connected active transportation network across the Truckee Meadows for all users.

The Active Transportation Plan aligns with the Regional Plan, utilizing its Land Use Tiers to identify Land Use Contexts (Urban, Suburban, and Rural) with similar characteristics that will help guide implementation of active transportation facilities in a context sensitive manner.

Promoting active transportation in Washoe County offers a multitude of benefits which align with and support the goals of the City of Reno, City of Sparks, and Washoe County. Among them is economic development, which is achieved through the creation of a more walkable and bikeable environment. This attracts businesses and residents while supporting local shops and restaurants.

Over the next four to five years, the RTC will complete the series of Neighborhood Network Plans for the twelve Neighborhood Network Planning areas identified in the Active Transportation Plan. The resulting plans will adapt the regional vision and goals to the local context while aligning with overall objectives for the region, as applied through the unique lens of each neighborhood.

Incorporating Land-Use and Economic Development into Project Selection

Effective planning must consider how transportation infrastructure will influence land use and economic development and vice versa, aiming for a harmonious balance that supports sustainable and efficient growth. There is a necessary balance required between economic development and sustainable land use to avoid issues like congestion, environmental degradation, and uneven development. This means incorporating transit-oriented development, mixed-use areas, and maintaining green spaces among the more conventional commercial, residential, and industrial uses.



Integration of land-use and transportation was carried forward as a goal from the previous RTP and was incorporated into the evaluation factors used in selecting projects for inclusion in this RTP. Several projects were developed with a specialized focus toward supporting land-use and economic development policies, as listed below.



- Biggest Little Bike Network (projects on Vine Street, Virginia Street, 5th Street, 6th Street, and Evans Avenue/Lake Street/Sinclair Street
- Buck Drive Circulation
- Sun Valley Boulevard Corridor Improvements
- West Fourth Street Downtown

West 4th Street Multimodal Improvement

Examples of projects implemented in support of land-use and economic development under the previous RTP's prioritization are listed below.

- Oddie Boulevard/Wells Avenue Multimodal Improvements
- Holcomb Avenue Rehabilitation
- Peppermill BRT

USDOT guidance related to national goals and planning factors does not explicitly require incorporation or consideration of the relationship between land-use and transportation. However, land-use and transportation are closely connected and are, in turn, linked to economic factors such as housing opportunities, employment locations, commute patterns, and the costs of transportation to households. Effective transportation planning requires integrating land use and economic development policies to ensure that transportation infrastructure supports and is supported by economic activities and land use patterns. The RTC and its partners, recognizing the importance of this dynamic, work to create consistency between local land-use, regional transportation, and economic strategic plans in pursuit of a functional and thriving community.





CHAPTER 14

Prioritizing Projects and Investing Strategically

Federal transportation legislation (The Bipartisan Infrastructure Law (BIL)), enacted as the Infrastructure Investment and Jobs Act (IIJA) requires that the RTP be based on a financial plan that demonstrates how the program of projects can be paid for and implemented. The program of projects incorporates all transportation improvements, including transit (both operations and maintenance), roadway capacity, new roadways, Intelligent Transportation Systems (ITS)/ operations, pavement preservation, and bicycle and pedestrian facilities.

The financial plan must:

- Demonstrate how the adopted transportation plan can be implemented/funded.
- Identify resources from public and private sources that are reasonably expected to be made available to carry out the plan.
- Recommend any additional financing strategies for needed projects and programs.

The financial plan is shown in Year-of-Expenditure (YOE) dollars. Converting all costs and revenues to YOE dollars assumes a more accurate depiction of all costs, revenues and deficits with long-range transportation plans.

This chapter outlines the project development and prioritization methodology, revenue projections, and funding sources including federal, state, and local and regional sources.

SECTION 1 – REVENUE PROJECTIONS

SECTION 2 – FUNDING SOURCES

SECTION 3 – PROJECT DEVELOPMENT AND PRIORITIZATION

SECTION 4 – PLAN INVESTMENT NEEDS

SECTION 5 - FINANCIAL SUMMARY



SECTION 1 – REVENUE PROJECTIONS

Revenue forecast assumptions identified through this process are outlined below:

- State revenues for vehicle registration fees, motor carrier fees, driver's license fees, and petroleum cleanup funds will increase by 0.92 percent annually matching population growth.
- Regional revenues will increase by 0.92 percent annually matching population growth, with an additional 3.28 percent growth factor for indexed fuel tax.
- Fuel tax at both the State and Regional level are reduced by two percent annually to match CAFE standards of fuel efficiency.
- Federal revenues will increase by two percent annually.
- Each metropolitan region developed forecasts for local tax revenues, based on regional conditions.

While funding programs are subject to change over time, RTC is tasked with using the best available data at the time the long-range plan is developed. In developing the projections, historical growth trends of current revenue sources attributable to the region were considered, as well as current conditions, effects of inflation, and changes in population.

Using these indicators as a base, assumptions were made that there will be increases in all revenue sources over the life of the plan and that the projects included will not exceed the reasonably foreseeable future revenues, which will meet the fiscally constrained plan requirement. Many projects are included in the plan as unfunded needs due to the lack of resources. An example of an unfunded need is the Pyramid/395 Connector. Though funding for Phase 2 of the project has been identified, Phases 3, 4, and 5 currently remain unfunded due to their high cost. Combined, the cost of Phases 3, 4, and 5 is estimated at \$756,648,000 with Phase 3 estimated to cost \$427,479,000.

The RTP is revisited at least every four years, which allows for timely adjustments to be addressed as needed.

SECTION 2 – FUNDING SOURCES

Current revenue sources include the federal government, state government, and RTC. Table 14.1 shows the types of funding sources available and the allowable use under that source, either for roads or transit. The allowable use for the various funding sources is limited by statute, regulation, or state constitutional provisions. As an example, the Nevada Constitution allows local fuel taxes to be spent only on roadway construction. State law precludes the use of fuel tax by RTC for routine roadway operation and maintenance. In addition, some federal funds are restricted to capital improvements and may not be used for operations or maintenance.

Table 14.1 Funding Sources and Allowable Uses

Types of Funds	Uses
National Highway Performance Program (NHPP)	Roads (Primarily)
Surface Transportation Block Grant (STGB)	Roads & Transit
Congestion Mitigation Air Quality (CMAQ)	Roads & Transit
Transportation Alternatives (TA) Set-Aside Program	Roads & Transit
Highway Safety Improvement Program (HSIP)	Roads (Primarily)
FTA Section 5307	Transit
FTA Section 5310	Transit
FTA Section 5337	Transit
Bus and Bus Facilities Program (FTA Section 5339)	Transit
Gas and Special Fuel Tax	Roads
Driver's License, Vehicle Registration, and Motor Carrier Fees	Roads
Regional Road Impact Fee (RRIF)	Roads (Capacity)
Sales and Use Tax	Roads (Capacity)

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Revenues in fiscal year (FY) 2024, July 1, 2023, to June 30, 2024, were approximately \$180.4 million. Figure 14.1 shows the funding sources for that revenue. In FY 2024, 28 percent of revenues were used for transit and 58 percent were used for roadways, 14 percent for debt service, and 1 percent for MPO Operations.

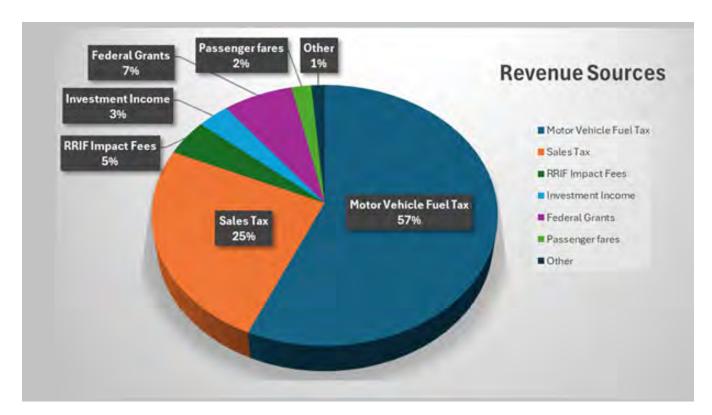


Figure 14.1 FY 2024 Revenues by Funding Source

Federal Funding

Federal funds for transportation are collected nationally and allocated back to the states through a series of formulas and grants. The FAST Act was the first federal law in over a decade to provide long-term funding certainty for surface transportation infrastructure planning and investment. The Fixing America's Surface Transportation (FAST) Act authorized \$305 billion over fiscal years 2016 through 2020 for highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs. The IIJA (Public Law 117-58, also known as the "Bipartisan Infrastructure Law," continues the FAST Act Metropolitan Planning Program, which establishes a cooperative, continuous, and comprehensive framework for making transportation investment decisions in metropolitan areas. The IIJA provides approximately \$350 billion for Federal highway programs over a five-year period (fiscal years 2022 through 2026). Most of this funding is apportioned to States based on formulas specified in Federal law. However, the Bipartisan Infrastructure Law also provides funding through a wide range of competitive grant programs.

The primary funding source provided by the federal government is the Highway Trust Fund (HTF) through the programs in the IIJA. The HTF is comprised of the Highway Account (funds highway and intermodal programs) and the Mass Transit Account. Federal motor fuel taxes are the major source of income into the HTF.

Starting in 2021, HIF programs received increases of 24 percent for Highway Account programs and 32 percent for the Mass Transit Accounts, with increases thereafter in the range of 2 to 3 percent per year. Additional formula funding generally available to the RTC include:

- National Highway Performance Program
 (NHPP) Funds are to support the condition
 and performance of the National Highway
 System (NHS), for the construction of new
 facilities on the NHS and to ensure that
 investments of federal-aid funds in highway
 construction are directed to support progress
 toward the achievement of performance
 targets to be established in the states asset
 management plan.
- <u>Surface Transportation Block Grant Program</u>
 (<u>STBG</u>) Flexible funding that may be used for projects to preserve or improve conditions and performance on any federal-aid highway, bridge projects on any public road, facilities for nonmotorized transportation, transit capital projects and public bus terminals and facilities.
- CMAQ Flexible funding for transportation projects and programs to help meet the requirements of the Clean Air Act: to reduce congestion and improve air quality for the region.
- <u>Transportation Alternatives (TA) Set-Aside</u>
 <u>Program</u> Funds are for a variety of alternative transportation projects such as transportation safety, bicycle or pedestrian improvements, and Safe Routes to Schools programs.
- Highway Safety Improvement Program (HSIP)

 Funds are to improve highway safety on all public roads through a strategic approach that focuses on performance.
- <u>Urbanized Area Formula Grant (FTA Section</u>
 <u>5307)</u> Funds are to support public
 transportation.

- Enhanced Mobility of Seniors and Individuals with Disabilities (FTA Section 5310) – Funds are to provide improved mobility for seniors and people with disabilities.
- State of Good Repair (FTA Section 5337) –
 Funds are to provide capital assistance for
 maintenance, replacement, and rehabilitation
 projects of high-intensity fixed guideway and
 motorbus systems to help transit agencies
 maintain assets in a state of good repair in
 urbanized areas.
- Bus and Bus Facilities Program (FTA Section 5339) – Funds are to replace, rehabilitate, and purchase buses and related equipment, and to construct bus-related facilities.
- <u>Discretionary Grant Programs</u> Funds are awarded on the basis of a competitive process for eligible transportation projects.

Generally, federal funding programs require a state or local contribution of funds toward the cost of a project, which is referred to as matching funds. The typical match for street and highway programs is 5 percent and for transit programs it is 20 percent.

State Funding

State funding sources include gas tax, special fuel (diesel) tax, vehicle registration fees, motor carrier fees, and driver's license fees. Fuel tax revenue projections take into account the increasing fuel efficiency of cars as new electric, hybrid, and alternative fuel technologies emerge. The majority of state funding is applicable to street and highway projects. Currently no state funding is available to be used for transit projects.

The Nevada State Legislature and RTC are exploring potential alternative transportation funding methods, including a road usage charge for electric and hybrid vehicles and a tax on vehicle miles of travel. The Nevada Department of Transportation is undertaking a more detailed analysis of various funding options to supplement the fuel tax. Only existing revenue sources are included in the financial projections for this plan. RTC is also completing a study specific to local fuel tax replacement options.

Regional Funding

Regional funding sources include fuel tax, sales and use tax, passenger fares and other revenue such as the Regional Road Impact Fee (RRIF) paid by private developers, bus advertising, and lease income.

In 2008, Washoe County voters approved the indexing of fuel taxes to keep pace with inflation. This allows RTC to implement major-capacity projects and the pavement preservation program. In 2002, voters approved a ½ cent sales tax that is eligible for both transit and roadway uses, and a 1982 ballot initiative approved the use of ½ cent sales tax to fund the transit program.

A summary of fuel tax rates is shown below in the table below.

Table 14.2 Summary of Fuel Tax Rates (2025)

Source	Rate Per Gallon
County Optional Plus Inflation Index	51.93¢
County Mandatory	12.22¢
Federal	18.40¢
State	18.45¢

Total Funding

Table 14.3 outlines the revenue projections by timeframe and it identifies whether the funding is eligible for roadway projects or public transportation. This table indicates anticipated revenues in YOE dollars. No new funding sources were considered for the timeframe covered by this document.

Table 14.3 Revenue Projections

Revenue Projections (Year of Expenditure)					
Fund Source	2025-2034	2035-2050	Total		
Complete Street F	Complete Street Funding				
Federal	\$2,005,598,682	\$1,708,499,803	\$3,714,098,485		
State	\$843,270,616	\$1,325,962,993	\$2,169,233,609		
Regional	\$1,340,924,181	\$2,857,455,510	\$4,198,379,691		
Total	\$4,189,793,478	\$5,891,918,307	\$10,081,711,785		
Public Transportation Funding					
Federal	\$127,069,486	\$263,675,144	\$390,744,630		
State	\$0	\$0	\$0		
Regional	\$528,366,112	\$1,402,733,115	\$1,931,099,227		
Total	\$655,435,598	\$1,666,408,259	\$2,321,843,857		

SECTION 3 – PROJECT DEVELOPMENT AND PRIORITIZATION

The RTP contains the community's vision for the transportation system. The projects, programs, and activities identified in the RTP are necessary to make the long-range vision a reality. The funding needs assessment includes all jurisdictions (local, regional and state) and all activities, projects and programs on regional roads. A discussion of unfunded needs is also included.

Project Development

Projects in this RTP were developed in coordination with local jurisdictions (City of Reno, City of Sparks, and Washoe County), the Nevada Department of Transportation (NDOT) and regional stakeholders. About half of draft projects were informed by past transportation plans and studies for the region, and the other half were added through a call for projects conducted for the local jurisdictions. The draft project list was provided for review to the RTP Agency Working Group, local jurisdictions, and NDOT. Once the review period concluded, project scopes were developed or confirmed. After project scoping, estimated costs were forecasted for each project. As most of the projects included little or no engineering work, beyond a basic project scope, most cost estimates included in this RTP are intended to be used as a planning-level tool with the expectation that costs will change as projects progress toward implementation.

Project Prioritization

Plan goals and objectives were used to develop a scoring tool for project prioritization. Keeping the Plan's goals at the core of project prioritization produces a project list that can best meet the transportation goals for the region. Metrics selected for the scoring tool included the integration of the new BIL requirement to "provide for consideration of projects and strategies that will promote consistency between transportation improvements and State and local housing patterns (in addition to planned growth and economic development patterns)." This requirement is addressed through several metrics but especially through the metric assessing in which of the five Truckee Meadows Regional Planning Agency (TMRPA) tiers the project is located. The TMRPA tiers identify current and expected housing density for the region. The TMRPA tiers are further discussed in Chapter Thirteen, Land-Use and Economic Development.

The first eight goals were utilized to rank projects, per project type, and the ninth goal was used to determine project timing within the planning horizons. Goals utilized to rank projects were weighted equally, with a total possible score of 100 per goal. The project scoring tool is included as Table 14.4.



Table 14.4 2050 RTP Update Project Scoring Tool

	Goal	Objectiv	е	Metric	Score
	Safety				50
					50
	Maintain Infrastructure Condition	Manage Existing Infrastructure Efficiently	Pavement Condition Index (PCI) for project location (Poor=90, Fair=50, Good=0)	90	
				Bridge Rating (Poor=10, Fair=5, Good=0, No bridge=0)	10
					50
					50
	and Resiliency an	Integrate All Travel Modes and Increase Travel Options	Is the project a new road segment? (Yes=60, No=0)	60	
			Does the project fill technology or facility gaps in the existing network? (Yes=20, No=0)	20	
				Is the project a bike/ped project? (Yes=20, No=0)	20
					50
		Promote Equity and Environmental Justice	Does the project provide benefit to an EJ area? (Yes=40, No=0)	40	
			Does project improve Pedestrian Experience Index (PEI) rating and/or Bicycle Level of Traffic Stress (BLTS) rating (as defined in the Active Transportation Plan (ATP)? (Yes=60, No=0)	60	
	Provide a Regional Transit System and			40	
	Transportation Services		ervices	Distance from fixed route transit service (<0.25 mi=30, 0.25-0.5mi=20, >0.5mi=0) And/or distance from BRT service (= 0.5 mi=30, 0.5 mi=0)	30
					30
8	Integrate Improve Inter-Region Connectivity	gional	Project is within which of the five TMRPA tiers? (1=70, 2=60, 3=40, 4=20, 5=10)	70	
	Economic Development			Does project improve connectivity for tourism? (Yes=30, No=0)	30
9	Reduced Project Delivery Delays (Used in Timing, not Prioritization)	Monitoring Implementation and		What is the project status? (Planning=20, Environmental=50, Design=60, Construction=70)	70
		Performance	Private/Other agency funding (Yes=20, No=0)	20	
				Project feasibility (High=10, Medium=5, Low=0)	10

SECTION 4 – PLAN INVESTMENT NEEDS

The transportation funding needs for this RTP have been divided into two major categories – public transportation and complete streets. The projects/programs are identified in Appendix B. Needs are shown in YOE dollars and were placed into the following planning horizons:

- 2025-2034
- 2035-2050

Public Transportation

Existing transit-eligible revenues are being utilized for current transit operations. Should additional revenues become available, effective uses for these funds would include increased frequency and span of service on productive routes, as identified in the Transit Optimization Plan Strategies (TOPS), and potential expansions of FlexRIDE service areas. The RAPID transit service provided on the Lincoln Line and Virginia Line is the core of the regional transit system. The unfunded vision for transit includes expansions of these routes, the creation of an inter-regional transit route between Truckee and the Tahoe Reno Industrial Center, development of a new bus transfer facility, a new or expanded bus maintenance facility, and parking/mobility hubs. Due to the significant costs of these projects, they are listed as unfunded needs in the transit vision.

RTC faces rising costs to provide paratransit service if fixed-route service is expanded in the future. RTC is federally required to provide paratransit service to eligible customers within ¾ of a mile of fixed routes. The average RTC ACCESS trip costs about \$25 to provide, compared with about \$2.50 for the average RTC RIDE trip.

For the purposes of this fiscally constrained plan, the transit system is assumed to remain at existing service. The public transportation needs are summarized in Table 14.6 with costs shown in year of expenditure (YOE) dollars. Other unfunded transit facility needs include a new transfer facility, maintenance facility, and mobility hubs. The transfer facility would accommodate expansion of an electric or hydrogen fuel cell RTC RAPID and RTC RIDE fleet.

Table 14.6 Public Transportation Needs by Activity

Public Transportation Needs by Activity					
	2025-2034	2035-2050	Total		
Operations	\$510,232,713	\$1,602,207,255	\$2,112,530,969		
Vehicles	\$73,556,341	\$110,334,512	\$183,890,853		
Facilities	\$19,535,133	\$29,302,700	\$48,837,833		
Total	\$603,324,187	\$1,741,844,467	\$2,345,168,654		

Complete Streets

Complete Streets include pavement preservation, system efficiency, multimodal, and congestion relief projects for regional roads.

Pavement preservation includes the treatments used strategically to keep roads in good condition, extend the useful life of pavement, and minimize the life-cycle costs of eligible roads. Preservation includes preventive maintenance, rehabilitation, and reconstruction of pavements and bridges, as described in Chapter Six, Infrastructure Condition. This RTP includes annual funding for preventive maintenance on eligible roads.

System efficiency projects include traffic signal coordination, communications technology, and other Intelligent Transportation Systems (ITS) technologies that improve traffic flow without adding new travel lanes. These are projects that contribute to the efficient operation of the transportation system as a whole. This RTP includes annual funding for traffic operations improvements.

The RTP includes annual funding for Active Transportation improvements throughout the region. Active transportation projects can impact multiple modes of travel. For example, sidewalk projects that improve ADA accessibility to RTC RIDE bus stops have the potential to allow some RTC ACCESS customers to use fixed-route service instead of paratransit.

Multimodal projects include ADA-accessibility improvements, pedestrian/bicycle facility improvements, and roadway reconstruction projects that focus on safety, economic development, and quality of life rather than auto capacity.

Congestion relief projects typically include the addition of new lanes for general purpose traffic, specific improvements to facilitate goods movement, and other improvements to increase the efficiency of existing road segments and intersections. Capacity improvement needs are identified through the regional travel demand model. Capacity projects also address safety and multimodal transportation needs.

Complete Streets needs are summarized in Table 14.7 with costs shown in year of expenditure dollars.

Table 14.7 Complete Streets Needs

	2025-2034	2035-2050	Total
Pavement Preservation	\$225,000,000	\$360,000,000	\$585,000,000
Traffic Signals/ITS/ Operations	\$100,000,000	\$160,000,000	\$260,000,000
Active Transportation	\$50,000,000	\$80,000,000	\$130,000,000
Major Roadway Projects	\$3,759,203,288	\$4,653,426,353	\$8,412,629,641
Total*	\$4,134,203,288	\$5,253,426,353	\$9,387,629,641

The program of projects in this RTP does not bring all regional roads up to level of service standards. The capacity projects included in the plan reflect the prioritization of the most severely congested corridors and the bottleneck locations that have wide-ranging impacts on the regional network.

The unfunded needs listing includes projects for which no funding is available. These are projects that would be included in the RTP if additional funding resources were available.

Including the unfunded project listing provides an opportunity to identify additional projects for future consideration in the event additional funding becomes available. The total unfunded needs are estimated at approximately \$3,926,186,395 for roadway projects.

SECTION 4 – FINANCIAL SUMMARY

As revenues from the majority of funding sources are not keeping up with growing need transportation projects within the region, RTC faces a difficult challenge in setting priorities for future spending. Looking at the revenues and needs for the RTP as a simple budget, once the funds for operating and maintaining the existing system are subtracted from the revenues, the remainder can be applied to new projects or expanded services. These could be new transit services, new roads, widened roads, or bicycle facilities – all modes considered in this RTP.







CHAPTER 15

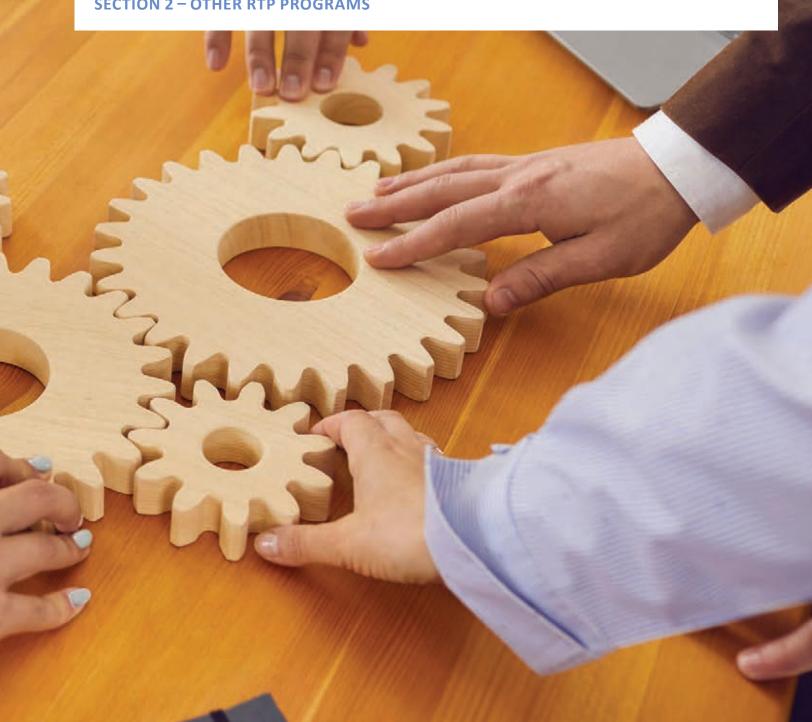
Connection to Programming

This chapter will discuss the relationship between the goals of the RTP and the implementation and operation of RTC programs. RTC facilitates programs related to multiple facets of transportation including roadway construction and maintenance, transit operation, congestion management, and active transportation. Coordinating funding and programming for each of these programs is essential to achieve the goals of the RTP.

The following efforts and strategies are described in this chapter:

SECTION 1 - REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM

SECTION 2 – OTHER RTP PROGRAMS



SECTION 1 – REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM

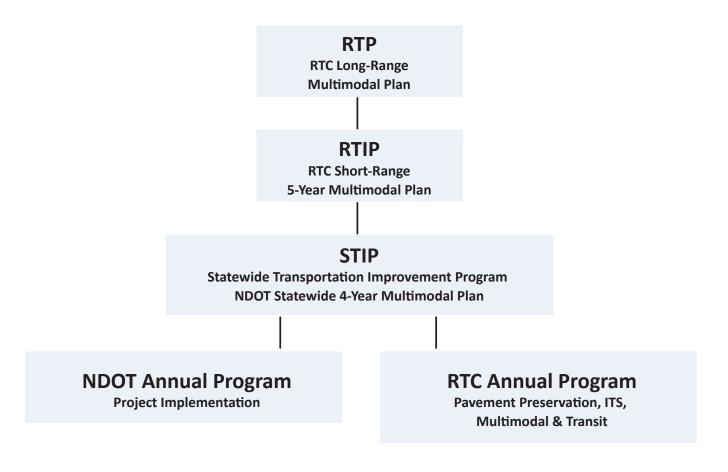
The Regional Transportation Improvement Program (RTIP) is a federally required five-year plan that identifies and prioritizes transportation projects for a region. The RTIP includes a subset of projects from a region's RTP. Projects must be included in the RTP to be eligible for inclusion in the RTIP. RTC, as the Metropolitan Planning Organization for the region is responsible for developing the RTIP.

The RTIP provides a summary of projects and programs by federal fiscal year and shows the agency responsible for implementing the project, funding source and other related information. The RTIP represents a prioritized program directed at addressing the region's transportation needs while improving the region's safety, air quality, transportation efficiency, and mobility.

The RTIP assists in implementing the RTP by advancing projects selected from the first ten years of the plan. Additional projects are advanced during biennial adoptions of the RTIP and if more funding becomes available. Figure 15.1 shows how the RTP directly impacts project and program implementation through the RTIP.

Appendix B of this RTP includes a fiscally constrained list of projects and programs that represents the needed transportation improvements for the region over the next 25 years. Upon approval of this RTP by the RTC Board, the enclosed list of projects and programs will be eligible for future addition to the RTIP.

Figure 15.1 RTC Planning Process



SECTION 2 – RTP PROGRAMS

RTC facilitates several regional transportation programs. Typically, smaller scale projects such as pavement preservation and active transportation quick-builds are funded through these programs. The following programs have designated budgets and unique criteria that are used to guide project selection and fund eligible projects.

Pavement Preservation Program

The purpose of the Pavement Preservation Program is to maintain roads in good condition and minimize long term costs. The goal is to apply the most cost-effective treatment to the right pavements, at the right time to minimize pavement life cycle costs while maximizing serviceable pavement life. An effective Pavement Preservation Program saves money that can be used for other important transportation initiatives. As part of the pavement preservation system RTC maintains data on index rating for each regional road. Through a process of collaboration and coordination with the local governments, RTC completes roadway preservation projects on eligible roadways within Washoe County. The local governments provide preservation services for roadways not eligible for the Regional Pavement Preservation Program. As part of the pavement preservation system RTC maintains data on index rating for each regional road.

More information about the Pavement Preservation Program can be found in Chapter 6, Infrastructure Condition.

Traffic Signalization Program

RTC has initiated a regional traffic signal optimization and improvement program to enhance the capacity of the existing system and reduce traffic congestion. This is an ongoing program that will allow nearly 400 intersections in the Truckee Meadows to be coordinated.

Projects completed through this program seek to achieve two primary objectives: 1) improved traffic flow resulting in improved level of service and 2) mobile source emission reductions through decreased delay, fewer accelerations/decelerations and a decreased number of stops. Modeled benefits of this program include up to an 11 percent reduction of pollutants along improved corridors. This program is funded annually to allow for approximately one-third of the region's signals to be re-timed and optimized each year.



Traffic Intersection Improvements and Intelligent Transportation Systems Program

RTC enhances existing intersections through the Traffic Intersection Improvements Program, focusing on measures that boost service levels and safety. These improvements include intersection widening, reconfiguration, signal installation, and alternative designs such as roundabouts, upgraded traffic signal detection, and equipment enhancements. Eligible projects through the Traffic Intersection Improvements and Intelligent Transportation Systems Program are generally lower cost traffic operation and safety improvements at locations that fall outside of capacity and multimodal projects identified in the RTP. Projects are prioritized through this program based on feedback from the partner agencies and compatibility with the RTP's nine goals including an emphasis on projects that have a lower risk of delivery delays.

RTC administers the Intelligent Transportation Systems (ITS) Program that will leverage technology to reduce congestion along the region's busiest corridors. More information about ITS can be found in Chapter 7, Congestion Reduction.

Regional Road Impact Fee Program

Impact fees under the Regional Road Impact
Fee Program (RRIF) have been levied on all new
development projects within urbanized Washoe
County since 1996. The funds collected are used
to finance the costs of capacity enhancement
projects necessitated by and attributable to new
development. The Program is a way to charge new
development for its proportionate fair share of
those costs.

Eligible projects must be on the RRIF network, which is comprised of existing or planned arterial or collector streets and roads that meet the criteria specified in the current RRIF Capital Improvements Plan (CIP). As of 2024, those criteria include:

- Arterials categorized as High, Moderate, or Low Access control as defined by RTC Engineering;
- Collectors that have a forecast volume of at least 14,000 annualized average daily trips at "build-out," which is defined as full development based on the approved land use assumptions in each jurisdiction;
- Freeway and highway ramps that connect to arterial or collector streets and roads that are included in the RRIF Network are considered arterial or collector streets and roads.

The RRIF Network only includes arterial or collector streets and roads that meet the criteria above that are either existing or planned in the first 10 years of the RTP. The RRIF CIP is developed using projects identified in the current RTP that are on the RRIF Network, and then further refined using sound engineering and planning judgement to make reasonable adjustments detailed in the CIP document.

The resulting list of projects is the planned capital improvements and facility expansions necessitated by and attributable to new development.

Active Transportation Program

RTC is committed to improving safety and comfort for non-vehicular travelers including pedestrians and bicyclists. Annual funding will be programmed for the implementation of low-cost, high-impact projects identified in the Active Transportation Plan and the subsequent Neighborhood Network Plans. Quick-build projects implemented using program funds will provide valuable insights into how to best increase active transportation infrastructure utilization and can inform where RTC ultimately implements more permanent infrastructure projects. More details about the Active Transportation Program can be found in Chapter 8, System Reliability and Resiliency.



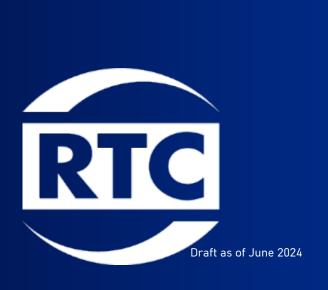




APPENDIX A

Public and Stakeholder Engagement





Appendix A Public and Stakeholder Engagement

Executive Summary

Purpose

To inform the 2050 Regional Transportation Plan update, the Regional Transportation Commission of Washoe County (RTC) embarked on a process to solicit feedback from the public, regional stakeholders, and elected officials regarding the state of the transportation system and preferences concerning identified focus areas. The information received is intended to help understand public and community concerns and preferences and inform potential agency preferences and weighting that should be considered into the RTP development process.

Key Findings

Across the methods of input from diverse input groups, the top transportation challenges were:

- 1. Traffic Congestion and Delays
- 2. Unsafe Driving Conditions and Behaviors
- 3. Lack Of Safe Connections for Bicyclists And Pedestrians
- 4. Lack Of Frequent and Reliable Transit Options

The most significant themes that emerged across all input included (additional information below):

- 1. Regional Planning and Coordination
- 2. Pedestrian and Cyclist Safety and Infrastructure
- 3. Public Transit Options
- 4. Environmental Sustainability

Regional Planning and Coordination

The RTC Board, Regional Government Partners, and Agency Working Group emphasized the need for regional planning and coordination to address the impact of growth and development on the transportation system. Input from the public (Social Sentiment, Community Survey) expresses concern about the strain of new developments on existing infrastructure and public services. There is an opportunity to make explicit within the RTP existing regional coordination efforts underway as well as outline future guidelines for managing regional stakeholder participation.

Pedestrian and Cyclist Safety and Infrastructure

Pedestrian and cyclist safety and infrastructure were other themes mentioned across the RTC Board, Regional Government Partners, Agency Working Group, and Geo-Mapped Community Needs as priority areas for improvement. Specific geographic areas were called out as priority areas to solve for pedestrian and cyclist safety by the RTC Board and Geo-mapped Community Needs, such as Sun Valley and the River Corridor. The Social Sentiment and Community Survey input also indicated high demand for protected bike lanes, sidewalks, and crosswalks, especially in areas with high traffic and along the River Corridor.

Public Transit Options

A reoccurring theme between the RTC Board, Regional Government Partners, Agency Working Group, and Community Survey groups emerged as strong interest in **expanding and enhancing public transit options**, such as bus, light rail, and micro-modal options. The idea of a light rail was primarily mentioned in community input methods. There was also a desire for enhanced public transportation options to the airport. The Social Sentiment and Geo-Mapped Community Needs groups also suggested the greater need for ride-sharing options, carpool lanes, and park-and-ride facilities as options to reduce vehicle dependency and congestion.

Environment Sustainability

Environmental sustainability and resiliency were mentioned by the RTC Board, Regional Government Partners, and Agency Working Group as a key priority when planning for the future transportation system. In these groups, sustainability may encompass reducing vehicle miles traveled, enhancing resident health, and enhancing the resiliency of the transportation system during severe weather. The Community also showed some awareness and support for environmental and sustainability issues, such as implementing idle-free zones, exploring alternative materials for road maintenance, and assessing the impact of electric vehicles and new modes. Sustainability should continue to be a key focus for the updates to the 2050 Regional Transportation Plan.

Methodology

Ensuring a broad participation base helps develop a cohesive effort in regional planning. It also allows RTC's priorities to align with those of other groups and agencies working to enrich the quality of life and create a more livable community. Strong community support for the planning process will also greatly enhance the implementation of specific projects and programs. Public participation in plan development included feedback from four advisory groups, the RTC Board, a public survey and interactive map as well as social sentiment analysis. This input was utilized to inform the goals and objectives for the RTP which provide the direction for transportation investments over the next 20 years and were utilized in project prioritization. Additionally, members of the Agency Working Group (AWG) provided ongoing guidance on many RTP elements such as the goals, objectives and the project scoring tool.

Advisory Groups

The 2050 RTP process was formed with the participation of advisory groups that guided the planning process:

RTP Agency Working Group

The Agency Working Group (AWG) helped to guide, inform, and provide technical expertise in all areas of the plan. The AWG collaborated with the RTC to ensure consistency with other planning strategies, initiatives, and policies in the region. This group has a more expansive membership than the RTC Technical Advisory Committee. A complete list of Agency Working Group members can be found on page 32 of this Appendix.

This group contributed significantly to:

- Coordinating Regional Planning Efforts
- Identifying The Impacts of Transportation on Other Agencies
- Providing A Forum to Present Innovative Ideas at A Regional Level

RTC Citizens Multimodal Advisory Committee

The Citizens Multimodal Advisory Committee (CMAC) is a standing committee that provides feedback to staff and the RTC Board of Commissioners.

The group meets monthly and is made up of residents from throughout the region who are interested in the transportation system. This diverse group represents community needs and concerns related to all modes of transportation. CMAC provided input regarding priorities for projects and services in the 2050 RTP.

RTC Technical Advisory Committee

The Technical Advisory Committee (TAC) is a standing committee that provides feedback to staff and the RTC Board of Commissioners. The group meets monthly and comprises staff members from partner agencies. This group represents perspectives and concerns for local jurisdictions and agencies. TAC provided input regarding priorities for projects and services in the 2050 RTP.

Inter-County Working Group

It is essential that the RTP is comprehensive and illustrates the vision for transportation planning efforts and challenges in Northern Nevada and the Lake Tahoe Region. Inter-regional collaboration with other nearby cities, counties, and MPOs ensures that RTC can build on transportation linkages and economic ties and reduce the duplication of efforts attempting to accomplish the same goal. Collaboration among regions allows for developing greater ideas and partnerships to impact mobility options positively. The Inter-County Working Group included representatives from surrounding jurisdictions, including Carson City, Storey County, Tahoe Regional Planning Agency, Tahoe Transportation District, US 395 Coalition, City of Fernley, Nevada Association of Counties, and NDOT. A complete list of Inter-County Working Group members can be found on page 34 of this Appendix.

Other Inputs

Presentations were provided to the RTC Board. The outreach process also highlights the involvement of other elected officials, boards, and commissions. The RTC provided regular reports to the RTC Board of Commissioners throughout the development process. The Board provided direction at strategic points, including adopting the guiding principles and goals.

The RTP was developed with integration with the Coordinated Human Services Transportation Plan (CTP) outreach process. The CTP was developed in coordination with the RTP. The CTP process included a series of public meetings and stakeholder outreach. Interviews with representatives of human services agencies and non-profits were the initial steps. This included human service transportation providers, medical providers, veteran's services, and transportation network companies. A community transportation survey was conducted to identify issues to consider in the plan.

Digital and traditional media were used to reach a broad audience, including the RTC website, news releases, interviews, videos, the RTC YouTube channel, Facebook and Twitter, The Road Ahead with RTC, and meeting announcements in English and Spanish-language publications. Public comments were received using online surveys, phone calls, and emails.

The following table summarizes methods used to obtain feedback from various groups:

Group	Method(s)	Timeframe	
Public	Social Sentiment Scraping	February-March 2024	
	Survey	April 8-May 31, 2024	
	Geographic Needs Mapping	April 8-May 31,2024	
RTC Board	Board Retreat	March 22, 2024	
	Board Meetings	Bi-Monthly Updates or Milestones	
Agency Working Group	AWG Meetings	Kick-off January 26, 2024	

		Bi-Monthly Updates or Milestones	
Regional Government Partners	City/County Presentations (3)	April 22-24, 2024	
Inter-County Working Group	Inter-County Working Group Meeting	March 1, 2024	
CMAC	Committee Meeting	Bi-Monthly Updates or Milestones	
TAC	Committee Meeting	Bi-Monthly Updates or Milestones	
CTP Team	Senior Events	Survey Through Senior Events in May 2024	

Public & Community

Community Survey

Purpose

To understand public concerns and preferences and inform potential agency preferences and/or weighting should that be incorporated into the performance analysis process.

Method

The online survey was available on the RTP public information webpage from April 9 to May 31, 2024. Public outreach efforts are listed below:

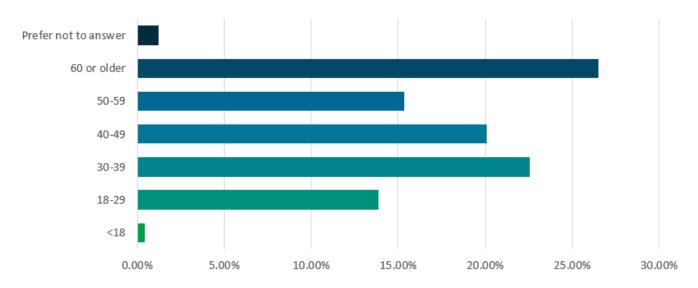
- Socials (Facebook, X, Instagram): 1 post/week
- Press Releases: 2
- ▶ The Road Ahead Segment: 4/16/24: Regional Transportation Plan Survey
- News Station Stories: 6
 - O 4/10/24 (KOLO 8): RTC launches survey for 2050 transportation plan
 - 4/10/24 (KTVN 2): Regional Transportation Commission Invites the Community to Participate in a 2050 Update Survey
 - 5/29/24 (KOLO 8 in-studio): RTC shares Regional Transportation Plan Update Survey to better transportation needs
- Promotion at Aces Greater Nevada Field: May 7 31, 2024
- Promotion at Citizen Advisory Boards (CAB): 9
- Senior Events: 1
- E-Blasts:
 - O 4/30/24 RTC April eNews (1,271 recipients)
 - o 5/29/24 RTP 2024 Survey Household Travel Survey (HHTS) Audience (1,196 recipients)
 - o 5/30/24 Oddie Wells Phase 3 Update (267 recipients)
 - 5/29/24 Channel 8 Website Takeover (101 clicks)

Summary of Findings

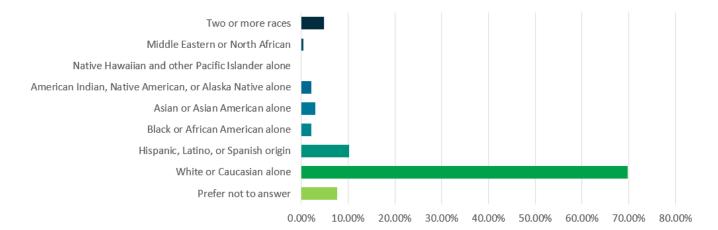
Representation of Respondent Sample

The Washoe County population older than 19 is 371,595, based on US Census Bureau profile data from 2022 American Community Survey 1–Year Estimates. 473 Responses were received. The demographics of the respondents are summarized as follows:

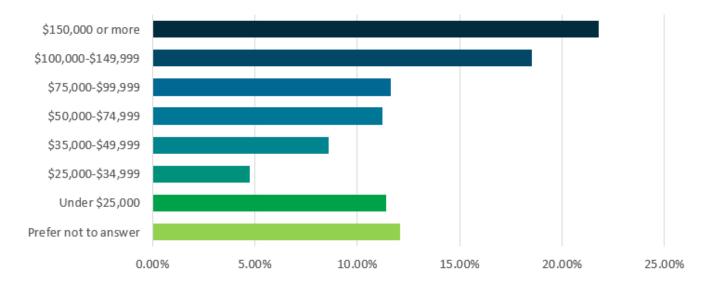
Age



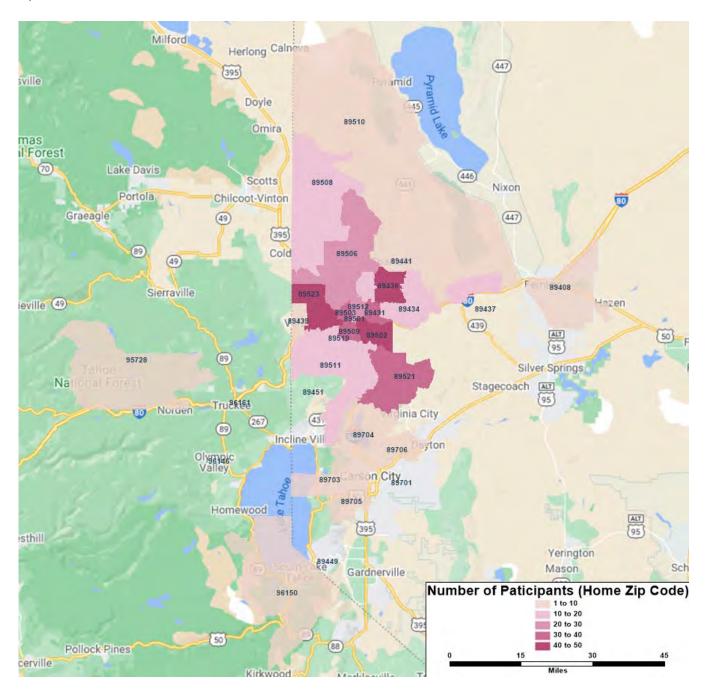
Race/Ethnicity



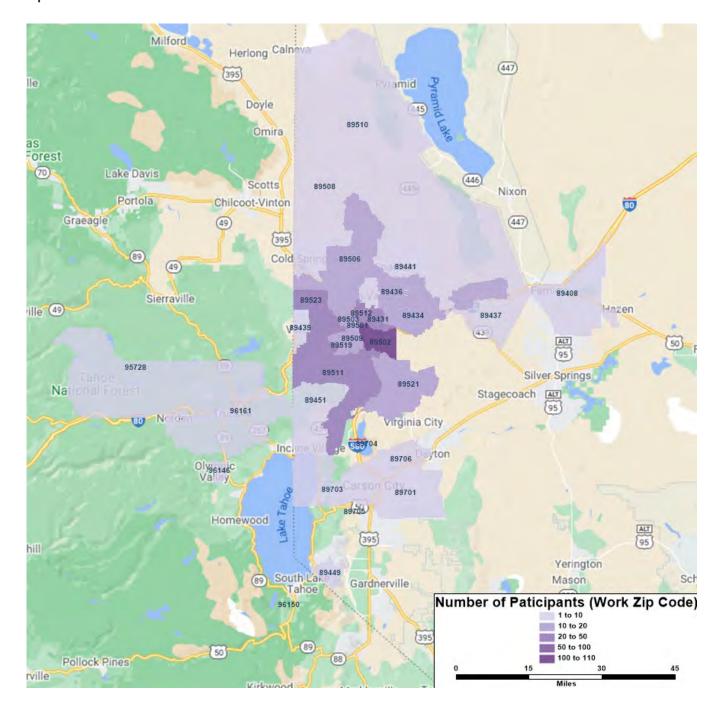
Household Income



Zip Code - Personal (Home)



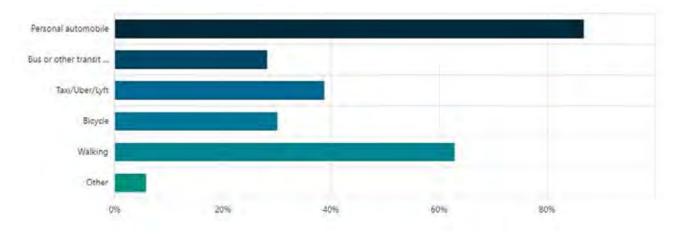
Zip Code - Work

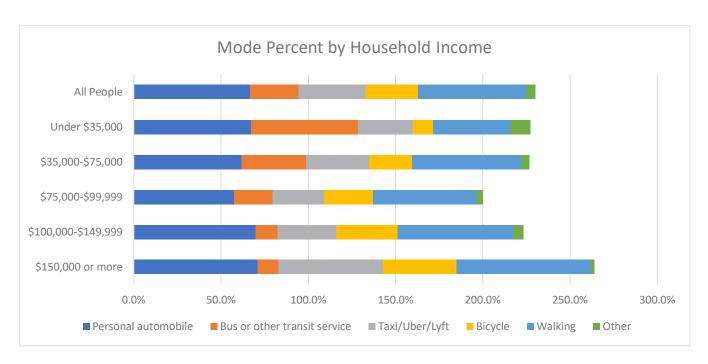


Detailed Analysis

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N = 473

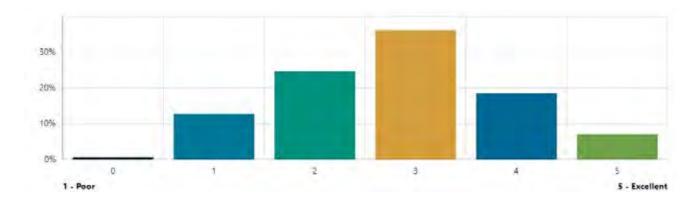




On a scale of 1-5, with 1 being poor and 5 being excellent, how well is the transportation system in Truckee Meadows doing its job of freely moving people and goods?

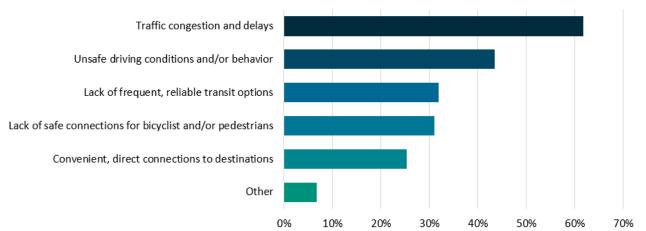
N = 473

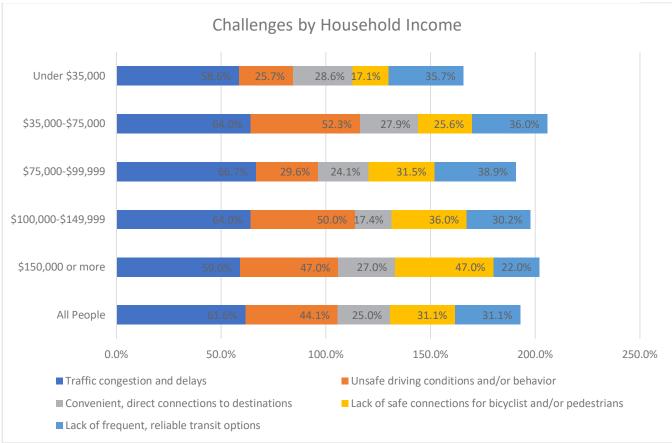
Average: 2.80



What are the two (2) biggest transportation challenges facing the Truckee Meadows? N = 473

Answer Choice	Percentage	Count
Traffic congestion and delays	61.81%	293
Unsafe driving conditions and/or behavior	44.30%	210
Convenient, direct connections to destinations	25.11%	119
Lack of safe connections for bicyclist and/or pedestrians	31.22%	148
Lack of frequent, reliable transit options	31.22%	148
Other	6.96%	33





Are there any other challenges or general transportation issues that you would like the study team to know about?

N = 344

Inadequate Public Transportation (66)

Lack of frequent and reliable bus services.

- Limited bus routes, especially in North Valley, Spanish Springs, and Wingfield Springs.
- Poor connection to the airport and regional locations like Fernley and Truckee.
- Demand for light rail systems to connect various parts of the city and neighboring areas.
- Lack of shaded or protected bus stops.
- Insufficient seating and facilities at bus stops.

Safety Concerns (32)

- Unsafe bike lanes and lack of protected lanes.
- Dangerous pedestrian areas and inadequate crosswalks.
- Frequent speeding and reckless driving.

Congestion and Traffic Management (24)

- Poorly timed traffic signals and lack of coordination leading to unnecessary congestion.
- Need for more lanes on major highways like I-580 and Pyramid Highway.
- Overcrowded roads due to new developments without corresponding infrastructure improvements.

Road and Infrastructure Maintenance (21)

- Poor road conditions, potholes, and cracks.
- Inconsistent and substandard bike paths.
- Issues with snow removal affecting bike lanes and sidewalks.

Development and Planning Issues (20)

- Reactive rather than proactive planning for infrastructure.
- Poor planning for new developments leading to congestion and inadequate road capacity.
- Lack of coordination between various development projects.

Cyclist and Pedestrian Infrastructure (19)

- Lack of continuous and safe bike lanes.
- Inadequate sidewalks and pedestrian paths, especially in residential and high-traffic areas.
- Demand for protected bike lanes and better pedestrian amenities.

Need for Alternative Transportation Solutions (14)

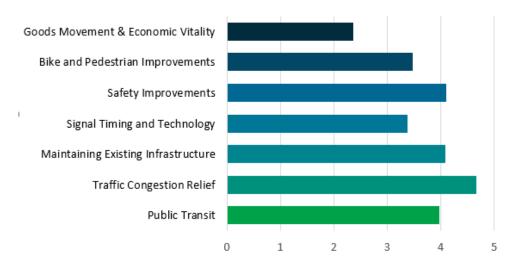
- Demand for ride-sharing programs and carpool lanes.
- Emphasis on developing light rail systems and improving public transit to reduce car dependency.

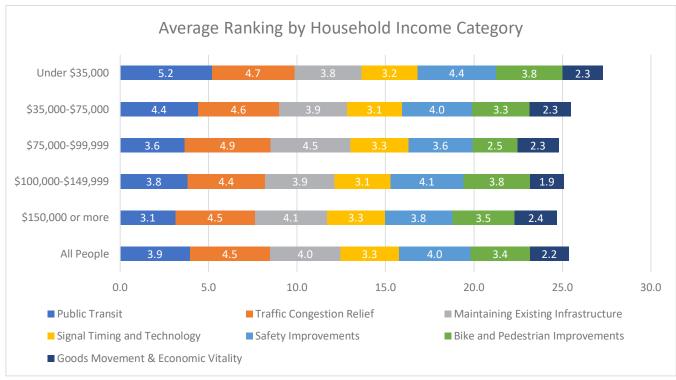
Environmental and Sustainability Concerns (6)

- Demand for idle-free zones to reduce pollution.
- Push for alternative materials for road maintenance to prevent potholes.

If you oversaw transportation funding, how would you rank the following project types on which would receive the most to least funding?

N = 414





N = 414

When you think about transportation in the Truckee Meadows, in 5 words or less, what comes to mind?

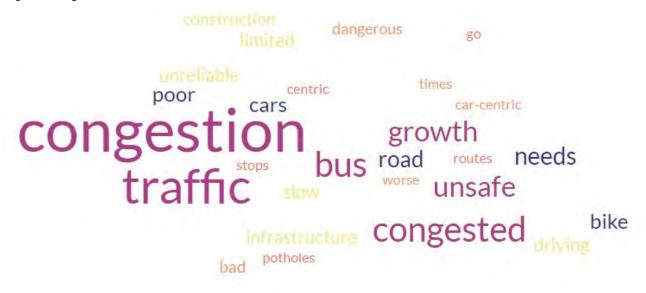
N = 444

There is approximately a 15%/85% split between respondents answering positively and negatively about the current transportation system. Most respondents voiced concerns about congestion, slow construction processes/infrastructure, and the unreliability of public transportation options.

Summary Statements

15

- Unsafe and unreliable public transit
- · Growing congestion and traffic delays
- Car-dependent with limited alternatives
- Poorly planned and poorly maintained
- Inadequate public transportation infrastructure
- Frequent road construction causing delays
- Limited bus routes and schedules
- Insufficient bike lanes and paths
- Heavy reliance on personal vehicles
- Slow buses and outdated infrastructure
- Unsafe conditions for pedestrians and cyclists
- · Congested roads and poor traffic management
- Inadequate response to population growth
- Inefficient and inconvenient public transport
- High car usage, low alternatives



When you think about transportation in the Truckee Meadows in the next 10-20 years, in 5 words or less, what comes to mind?

There is approximately a 30%/70% split between respondents answering positively and negatively about the future of the transportation system. Most respondents are concerned about the region's fast-paced growth and transportation's ability to keep up with growing demand.

Summary Statements

- More reliable bus routes.
- Overcrowded, inadequate public transportation system.
- Expanding population, outdated infrastructure concerns.

- Improved public transit, less congestion.
- High hopes for future improvements.
- Desperately need light rail system.
- Safety for pedestrians and cyclists.
- More lanes for growing population.
- Prioritized sustainable transportation options.
- Inadequate infrastructure, growing traffic issues.
- Need better long-term planning vision.
- Increased congestion, unreliable transit options.
- Improved connectivity, reduced traffic congestion.
- Prioritize efficient public transportation systems.



Geo-Mapping Community Needs

Purpose

To understand public concerns and preferences, as well as inform potential agency preferences and/or weighting should that be incorporated into the performance analysis process. As the nature of this input is specific to geographic locations (coordinates/addresses) the application of the findings exceeds the RTP process. Findings will be used in future planning and corridor studies.

Method

The interactive geo-map was available on the RTP public information webpage from April 9 to May 31, 2024.

Summary of Findings

The heat map below visually identifies areas of concern in specific locations within RTC's jurisdiction. The sections below synthesize input within the Board's prioritized regions: North Valley's, Sun Valley, River Corridor, and Verdi.

North Valleys

Transportation Infrastructure:

- Issues with on/off ramps, slip lanes, and merge lanes
- Suggestions for improvements in road design and traffic flow
- Specific locations mentioned for necessary changes (e.g., I-580, Virginia Rapid Transit, Red Rock Road Interchange)

Public Transit:

- Requests for extending bus routes and improving bus service reliability
- Suggestions for adding shelters at bus stops
- Issues with current FlexRIDE services being unreliable for working individuals

Pedestrian and Cyclist Safety:

- Conflicts between vehicle traffic and pedestrian/bike paths
- Need for infrastructural improvements for safer walking and biking routes
- Specific areas highlighted for lacking sidewalks or having narrow roads unsafe for multiple uses

Community Growth and Development:

- Recognition of growing communities and the need for infrastructure to keep up
- Mention of areas like Cold Spring and Lemmon Valley experiencing rapid growth

Public Amenities:

- Request for the reinstatement of amenities like water fountains in parks
- Suggestions for new amenities such as landscape buffers and pedestrian connections

Traffic Management:

- · Need for better traffic management solutions, including traffic lights, roundabouts, and dedicated lanes
- Problems with current traffic congestion and suggestions for improvements

Sun Valley

Pedestrian Safety

Concerns with pedestrian and bike traffic on mixed-use protected path at I-580 on/off ramp slip lanes

Truckee River Corridor

Pedestrian and Cyclist Infrastructure:

- Calls for pedestrian and cyclist-only bridges, particularly across the river
- Need for protected bike lanes on busy roads and corridors
- Requests for biking/walking paths in areas with high traffic to provide safe routes

Traffic Calming and Road Design:

- Suggestions for narrowing lanes and implementing traffic calming measures, especially in school zones and highspeed areas
- · Recommendations for adding bulb-out curb extensions at intersections to improve pedestrian safety and accessibility

Safety and Accessibility Improvements:

- Importance of integrating road design changes to signal drivers to slow down
- Need for cutaways and curb extensions to accommodate people in wheelchairs and with strollers
- Enhancing existing paths and bridges for better pedestrian and cyclist safety

Community and Neighborhood Enhancement:

- Desire to create a pleasant, safe, and accessible neighborhood corridor along the river for pedestrians and cyclists
- Maintenance and improvement of existing paths to better serve the community, such as the Truckee River path

Public Demand and Usage:

- High demand for bike infrastructure due to the presence of various trip generators like schools, shopping centers, and residential areas
- Potential to reduce traffic congestion by providing alternative transportation modes

Bridge and River Crossings:

- Specific mention of bridges (e.g., Sutro St, Wells Ave) needing better accommodation for pedestrians and cyclists
- Suggestions for utilizing existing wide bridges for dedicated biking/walking paths

Verdi

Lack of Sidewalks and Bike Lanes:

- Repeated mentions of the absence of sidewalks and bike lanes in Verdi
- Specific need for pedestrian and bike safety improvements

Infrastructure Improvements:

- Suggestions for adding protected bike lanes that connect to existing paths like the Truckee bike path
- Need for a westbound on-ramp to improve connectivity for Verdi, Mogul, Somersett, and Boomtown

Public Transportation:

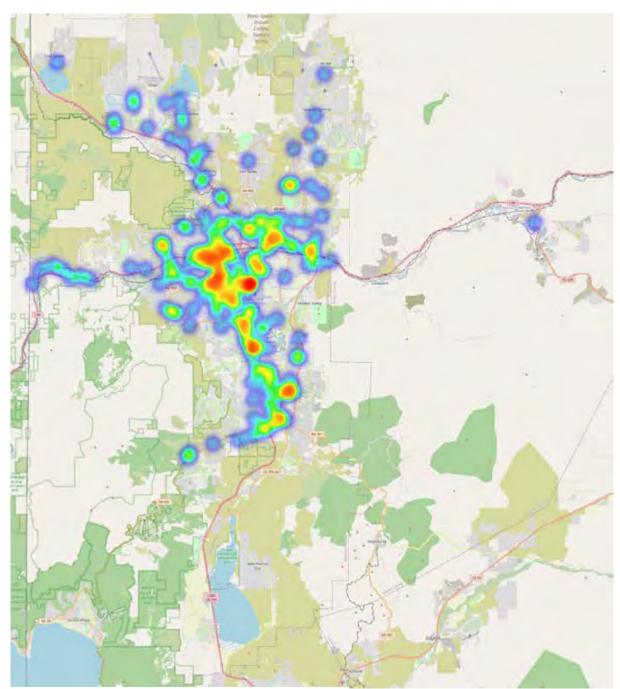
· Request for bus services in the area.

Support for Local Businesses:

• Indication that infrastructure improvements (sidewalks, bike lanes) would benefit local businesses

Park and Ride Facilities:

• Proposal for potential park and ride parking lots



Heat Map of Areas of Concern in Specific Locations from Geo-Mapping Results

Social Sentiment Analysis

Purpose

To gather "observable data" regarding transportation and the transportation network in our community. To summarize broad themes specific to community needs as input into the RTC 2050 Update.

Method

To learn more about local sentiment regarding topics RTC would be interested in, OnStrategy "scraped" the r/Reno subreddit for comments containing specific themes and keywords using custom-built API tools:

- 64,000 members Reno Subreddit
- 1,782 comments over period 2/11/22 2/21/24
- 31 keywords analyzed

When <u>comments</u> on a topic were available, they were analyzed by ChatGPT to apply a "Sentiment Score" running from 1= Very Negative, 3 = Neutral and 5 = Very Positive. The aggregate of the comments makes up the final "Sentiment" score.

The individual <u>"Sentiment"</u> scores were then averaged to determine a topic's overall score. "Sentiments" in the highest third of scores were deemed "Positive," the middle third was deemed "Neutral," and the lowest third was deemed "Negative."

Summary of Findings

"Rides" - Sentiment & Response Themes

Sentiment: 3.28 Reponses: 100 Themes

Rides Response Themes

Tesla's Use of Taxpayer Dollars (Negative)

- Critique on Tesla's Funding Source
- Impact on Public Services

Driving Behavior on Reno Highways (Neutral)

- Traffic Behavior
- Driving Habits
- Lane Usage

Parking & Bus Usage (Neutral)

- Commuting
- Winter Parking Options
- Public Transportation
- Workplace Transportation

Non-Car Travel Options in Tahoe (Inquisitive)

- Seeking Transportation Suggestions
- Train, Bus, and TART Exploration
- Ride Share Options in the Region

"Drivers" - Sentiment & Response Themes

Sentiment: 3.04 Responses: 99

Themes

Drivers Response Themes

Safety and Crime Concerns (Negative)

- Traffic Safety
- Altercations on the Road

Transportation and Road Updates (Inquisitive)

- · Road Conditions & Traffic Updates
- Seeking Information on Construction Timetables

Public Transportation Issues (Frustrated)

- · Complaints about Bus Routes
- Ineffectiveness of Public Transportation
- · Driver Criticism

General Traffic Inquiries (Mixed)

- Encouraging Community Interaction
- General Traffic Concerns
- · Desires for Improvement

"Crash" - Sentiment & Response Themes

Sentiment: 3.06 Responses: 97

Themes

Crash Response Themes

Concerns about Road Maintenance (Frustration)

- Comparisons with California Roads
- Expectations for Public Service
- Impact of Snow/Ice on Roads

Accidents Involving Trucks and Dangerous Driving (Concerned)

- · Semi-Truck Accidents
- Unsafe Driving Practices
- Plea to Restrict Trucks in Inclement Weather

Witnessing and Reporting Accidents (Concerned)

- Access to Witnesses and Reporting Car Crashes
- Information Sharing on Accidents

"Road" – Sentiment & Response Themes

Sentiment: 3.18 Responses: 97 Themes

Road Response Themes

Weather and Road Conditions (Mixed: Concern, Frustration, Appreciation)

Snowstorms, Icy Roads, Closures, and Impact on Daily Life

City Development and Projects (Curious & Observation)

- Inquiries about Oddie District Project
- Improvements in Roads
- · Development in the City

City Infrastructure and Snow Removal (Concerned)

- Comparisons with Other Regions
- Effectiveness of Plowing
- Expressing Disappointment with Road Conditions

Observations About Driving (Annoyance)

- Complaints About Reckless Driving
- Concerns About Pets Crossing the Roads
- · Reflections on Driving Experiences

"Highway" - Sentiment & Response Themes

Sentiment: 3.25 Responses: 97 Themes

Highway Response Themes

Development Impact on Traffic (Negative)

- Frustration with increased traffic on Pyramid Highway (McCarran intersection)
- · Disappointment in the worsening traffic situation and questions the sudden influx of people

Infrastructure and Traffic Management (Neg/Neutral)

- · Criticism of Road Planning and Infrastructure
- Frustration With the Inadequacy of Road Designs, Particularly on Pyramid Highway

Impact of Industrial Development (Negative)

- Criticism of the Industrial Development, Particularly the Tesla Gigafactory, For Straining Public Resources Without Adequate Tax Revenue
- Expresses Concerns About the Consequences of Rapid Growth on Infrastructure, Education, and Public Services

Concerns About Truck Impact on Roads and Safety (Negative)

- Expressing Concerns about Litter
- Unsafe Driving Practices and the Strain on Roads and Safety, (Esp. Impact of Trucks on I-80)
- Calls for Safer and More Efficient Trucking Practices

"Traffic" - Sentiment & Response Themes

Sentiment: 3.10 Responses: 96 Themes

Traffic Response Themes

Public Transportation and Commuting (Neutral/Negative)

- Discussions on Public Transportation
- · Concerns about Traffic Affecting Commuting and Daily Life

City Infrastructure and Traffic Management (Negative)

- Criticism of Traffic Light Synchronizations
- Calls for Better Traffic Management
- Complaints About Effectiveness of Current Systems

Community Engagement and Meetings (Neutral/Positive)

- · Encouraging Community Members to Attend Meetings Regarding Road Improvement
- Seeking Feedback and Support for Proposed Changes
- Sharing Information About Community Events

Traffic Woes & Road Updates (Negative)

- Complaints About Traffic
- Road Closures and Construction Causing Inconvenience
- Frustration with Delays

"Speeding" - Sentiment & Response Themes

Sentiment: 3.07 Responses: 83

Themes

Speeding Response Themes

Cyclists and Traffic (Neutral/Positive)

· Observations About Cyclists Biking Against Traffic

Driving Habits in Reno (Negative)

- Complaints About Reckless Driving
- Tailgating, Speeding, Aggressive Maneuvers

Electric Scooter Dilemma (Neutral)

- Legality of Riding and Electric Scooter
- Safety Practices

Pedestrian Accidents and Street Safety (Concerned)

- Highlighting Recent Pedestrian Accidents
- Discussing Safety Issues Related to Poorly Lit Streets
- · Advocating for More Street Lights

"Street" - Sentiment & Response Themes

Sentiment: 3.19 Responses: 83

Themes

Street Response Themes

Bus Stop and RTC Bus Parking (Curiosity/Concern)

Concerns about Parked RTC Buses

Traffic Light Functionality (Informative)

- · Functionality of Traffic Lights
- · Advice for Optimizing Traffic Flow

Construction Impact on Driving (Frustration)

- Challenges to Drivers Based on Construction
- Impact to Delivery Services and General Traffic Flow

"Freeway" - Sentiment & Response Themes

Sentiment: 3.07 Responses: 83

Themes

Freeway Response Themes

Traffic Conditions & Closures (Neutral)

- Concerns about Road Closures
- Inquiries About Specific Traffic Situations
- Frustration Over Worsening Traffic Conditions

Road Hazards & Incidents (Informative)

 Observation of Road Hazards, Including Tires on Freeways, Cars Pinned Between Barriers, and Reckless Drivers

Enforcement & Emergency Response (Frustration)

- Comments on Law Enforcement Observations
- · Reporting Incidents
- Seeking Information for Where to Find Freeway/Road Closure Info

"Biking" - Sentiment & Response Themes

Sentiment: 3.29 Responses: 83

Themes

Biking Response Themes

Bike Safety & Behavior (Concerned)

- Observations about Cyclists Behavior on Roads and Intersections
- Emphasizing Need for Improved Bike Safety

Bike Lane Infrastructure (Concerned)

- Discussions about Conditions of Bike Lanes
- Questions on Bike Lane Planning
- Community Interest in Enhanced Bike Infrastructure

RTC Board

Purpose

To understand the RTC Board's geographic focus areas for the 2050 Regional Transportation Plan update.

Method

Board members were asked to identify their five top "areas of community need." An open discussion followed.

Summary of Findings

Geographic Priorities

Top Areas of Focus:

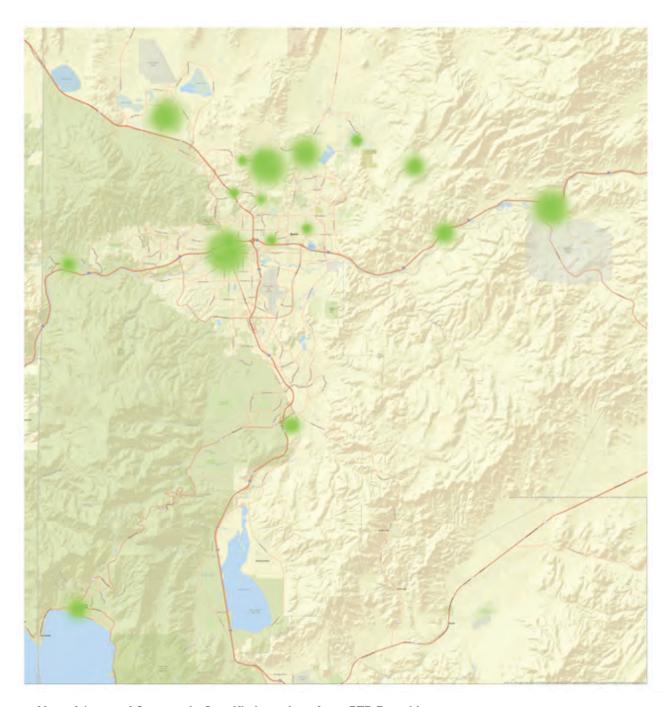
- North Valleys (Resiliency)
- Sun Valley
- River Corridor as Transportation (More Than Downtown)
- Lake Tahoe (Micro, Park & Ride)
- Verdi
- La Posada to USA Parkway

Others:

- 4th Street > Downtown Connect
- Mccarren Sync
- I-80 Spaghetti Bowl
- Downtown

Additional Priorities

- Toll Road To USA Parkway
- Connection To Downtown From 4th Street
- Signals On Mccarren
- Pedestrian Safety in Sun Valley
- Micromodal Facilities in The River Corridor
- North Valleys Congestion Mitigation



Map of Areas of Concern in Specific Locations from RTP Board Input

Regional Government Partners

Purpose

- Present elected officials with 2050 Regional Transportation Plan Update Process.
- Inform Board and Council members of the purpose of the Agency Working Group.
- · Accept process and transportation system recommendations and priorities from Board and Council members.

Method

The Washoe County Board of Commissioners, City of Reno City Council, and City of Sparks City Council received an overview of the Regional Transportation Planning process in a regularly scheduled Board meeting.

Summary of Feedback

2050 RTP Update Process

- 1. Providing Paper Copies of The Survey for Seniors to Complete At An Upcoming Workshop
- 2. Providing The Public Survey and Webpage for City and County Promotion on Social Media
- 3. Including Tahoe Transportation District in The Agency Working Group
- 4. Allowing For Public Input on Specific Roads for Rehab, Maintenance, Etc.

Transportation System

- 1. Continued Focus on Safety
- 2. Enhanced Project Communication, Particularly Defining the Difference Between RTC And NDOT Projects
- 3. Greater Focus on Congestion Reduction in Roadways
- 4. Detailed Communication of The RTC's Project Funding Prioritization Process
- 5. Specific Attention To RTC/Tahoe Transportation District's Connection Points
- 6. Request For Additional Green Bike Lanes to Improve Bicycle Safety

Agency Working Group

Purpose

The Agency Working Group is a cross-organization task force soliciting input from respective organizations on RTP-specific topics for discussion at AWG meetings. Members are responsible for representing their organization's input, perspective, and opinions in RTP planning and acting as a feedback loop to their organizations. A complete list of Agency Working Group members can be found below.

Method

The Agency Working Group meets bimonthly via Zoom. Topics vary but are typically inclusive of:

- 1. RTTP Project Updates
- 2. Discussion of Insights Since the Previous AWG
- 3. Presentation of Technical Work Complete To-Date for Open Discussion

Summary of Findings

Ranking Priority Areas for Research and Analysis

THEME: Efficient Operations Across All Modes (47)

- Efficiency & System Reliability (11)
- Congestion Reduction (11)
- Connectivity of Transportation System (10)
- Regional Integrated & Inclusive Transportation (8)
- Active Transportation (8)
- Transit Infrastructure (7)
- Transit Choices (to include eliminating fares) (2)

THEME: Economic Development and Equity (45)

- Regional Planning & Development (14)
- Goods Movement & Economic Vitality (9)
- Funding Considerations (8)
- Equitable Development (5)
- Strategic Investment & Equitable Project Delivery (3)
- Public Engagement (3)
- Workforce & Student Transportation (2)
- Enhance Travel & Tourism (1)

THEME: Safe and Reliable Transportation System (26)

- Infrastructure Condition (10)
- Safety (to include pedestrian safety) (9)
- Maintainability (5)
- Security of the Transportation System (2)

THEME: Sustainability and Resiliency (21)

- Environmental Sustainability (8)
- Resiliency (natural disasters & stormwater, fuel & energy)
 (5)
- Reducing Vehicle Miles Traveled (4)
- Resident Health (3)
- Impact of EV & New Modes (1)

Agency Working Group

Members

Jennifer Thomason, Army Corps

Angela Fuss, City of Reno Grace Mackedon City of Reno

John Flansberg, City of Reno

Kerrie Koski, City of Reno

Kurt Dietrich, City of Reno

Amber Sosa, City of Sparks

Jon Ericson, City of Sparks

Jim Rundle, City of Sparks

Karina O'Connor, EPA

Michael Dorantes, EPA

Abdalla Abdelmoez, FHWA

Bryan Weber, FHWA

Alex Smith, FTA

Taquan Jackson, Keolis

Kevin Verre, NDOT

Sondra Rosenberg, NDOT

Craig Petersen, NNPH

Francisco Vega, NNPH

John English, NNPH

Brendan Schnieder, NNPH

Johnnie Garcia, PLPT

Hillary Lopez, Reno Housing Authority

Elaine Wiseman, RSIC

Candace Stowell, RSIC

Gary Probert, RTTA

Lissa Butterfield, RTTA

Jeremy Smith, TMRPA

Erin Dixon, Washoe County

Julee Olander, Washoe County

Kelli Seals, Washoe County

Mitch Fink, Washoe County

Adam Searcy, WCSD

Kyle Chisholm, WCSD

Rick Martin, WCSD

Jennifer Iveson, WCSP

Nancy McCormick, EDAWN

Brian Buttazoni, BLM

Paul Enos, Nevada Trucking Association

Alexis Motarex, AGC

Carl Hasty. Tahoe Transportation District

Sienna Reid, City of Sparks

Scott Carey, City of Sparks

AWG Top Areas of Focus for the RTP Update

At the AWG kick-off meeting, 30 out of 41 participants selected their top 5 "most important areas for the RTP Update." The summary is below.

Areas of Focus, Ranked

- 1. Regional Planning & Development (14)
- 2. Efficiency & System Reliability (11)
- 3. Congestion Reduction (11)
- 4. Infrastructure Condition (10)

- 5. Connectivity of Transportation System (10)
- 6. Goods Movement & Economic Vitality (9)
- 7. Safety (to include pedestrian safety) (9)
- 8. Environmental Sustainability (8)
- 9. Funding Considerations (8)
- 10. Regional Integrated & Inclusive Transportation (8)
- 11. Active Transportation (8)
- 12. Transit Infrastructure (7)
- 13. Equitable Development (5)
- 14. Maintainability (5)
- 15. Resiliency (natural disasters & stormwater, fuel & energy) (5)
- 16. Reducing Vehicle Miles Traveled (4)
- 17. Public Engagement (3)
- 18. Resident Health (3)
- 19. Strategic Investment & Equitable Project Delivery (3)
- 20. Security of the Transportation System (2)
- 21. Transit Choices (to include eliminating fares) (2)
- 22. Workforce & Student Transportation (2)
- 23. Impact of EV & New Modes (1)
- 24. Enhance Travel & Tourism (1)

Inter-County Working Group

Purpose

The Inter-County Working Group is a group focused on providing feedback through inter-regional collaboration with nearby cities, counties, and MPOs to ensure that RTC can build on transportation linkages and economic ties and reduce the duplication of efforts attempting to accomplish the same goal.

Method

The Agency Working Group met on 3/1/2024 via Zoom. Topics discussed included:

1. Inter-county transportation issues that cross the boundaries of regions

The Agency Working Group was engaged again in January 2025 to review the draft RTP.

Members

Carl Hasty - District Manager, Tahoe Transportation District

Derek Starkey - City Engineer, City of Fernley

Jeremy Smith, Director, TMRPA

John Clerici - US 395 Coalition

Kathy Canfield - Planning Manager, Storey County

Kelly Norman -Senior Transportation Planner, Carson Area Metropolitan Planning Organization

Michelle Glickert, Principal Transportation Planner, Tahoe Regional Planning Agency

Kevin Verre - Multi-Modal and Program Development Chief, NDOT

Mark Wooster - Performance Analysis Division Chief, NDOT

APPENDIX B Fiscally Constrained Project List



2025-2034 PROJECTS

Freeway Projects

Project	Limits/Description	YOE Cost Estimate
I-80 East Widening	Vista Blvd. to USA Pkwy.	\$659,654,115
I-80 West Reno Bridges Replacement Part 1	Replace Garson Rd., Mogul Rd., W. 4th St., Mae Anne Ave. Bridges	\$155,918,245
I-80 West Reno Bridges Replacement Part 2	Replace Truckee River/RR, I-80 Business Loop, Truckee River, S Verdi Rd/RR Bridges	\$177,506,926
Reno Spaghetti Bowl Phase 2	I-80 Improvements from Spaghetti Bowl to E. McCarran Blvd.	\$809,575,505
US 395 North Valleys Phase 2	US 395 Widening from Golden Valley Rd. to Stead Blvd.	\$275,855,357

Capacity Projects

Project	Limits/Description	YOE Cost Estimate
Arrowcreek Pkwy. Capacity	Wedge Pkwy. to Zolezzi Ln.	\$18,470,315
Buck Dr. Capacity	Lemmon Dr. to N. Hills Blvd.	\$4,797,484
Geiger Grade Road Realignment	New 4 Lane Road from Alt US 395 to Toll Rd.	\$101,346,859
Highland Ranch Pkwy. Capacity	Sun Valley Blvd.to Pyramid Hwy.	\$61,767,613
Lear Blvd. Connection	Military Rd. to Lemmon Dr.	\$43,777,046
Lemmon Dr. Segment 2	Fleetwood Dr. to Ramsey Way.	\$81,557,236
McCarran Blvd. Lakeside Dr. to Plumas St. Capacity	Add Lanes, Intersection Improvements, and Shared Use Paths	\$7,316,164
McCarran Blvd., Longley Ln. to Airway Dr. Capacity	Add lanes and Eastbound shared use path	\$17,990,567
McCarran Blvd., Neil Rd. to South Virginia St. Capacity	Remove Lanes and Provide Protected Shared Use Path.	\$8,395,598
McCarran Blvd., Plumb Ln. to I-80 Capacity	Add Lanes, Intersection Improvements, and Shared Use Paths	\$55,650,820
Military Rd. Capacity	Lemmon Dr. to Lear Blvd.	\$46,175,788
Mill St. Safety and Capacity	Kietzke Ln. to Terminal Way	\$38,379,876
Mira Loma Dr. Capacity	McCarran Blvd. to Veterans Pkwy.	\$16,431,384
Moya Blvd. Capacity	Red Rock Rd. to Echo Ave.	\$28,664,970
Mt. Rose Hwy. Corridor Improvements (Group 1 Projects)	Douglas Fir Dr. to Bordeaux Dr.	\$20,509,246
N. Hills Blvd. Capacity	Golden Valley Rd. to Buck Dr.	\$43,777,046
North Virginia St. Capacity	Panther Dr. to Stead Blvd.	\$101,946,545

Panther Dr. Extension	N. Virginia St. to Panther Dr. to N. Hills Blvd.	\$18,590,252
Pembroke Dr. Capacity	McCarran Blvd. to Veterans Pkwy.	\$19,189,938
Pyramid Hwy. Operations Improvements	Add Southbound Lane, Egyptian Dr. to Ingenuity Ave.	\$17,990,567
Pyramid Hwy./ US 395 Connector Phase 2	Widen Disc Dr. from Pyramid Hwy. to Vista Blvd.	\$30,284,121
Sparks Blvd. Capacity	I-80 WB Ramps to Baring Blvd.	\$83,776,073
Sparks Blvd. Capacity	Baring Blvd. to Disc Dr.	\$54,811,260
Veterans Pkwy. Widening	S. Virginia St to Damonte Ranch Pkwy. Extension	\$7,304,170
Vista Blvd. Widening South	I-80 to Prater Way	\$23,507,674
O'Brien's Pass Capacity	Spearhead Way to Sun Valley Blvd.	\$75,440,443

Multimodal Projects

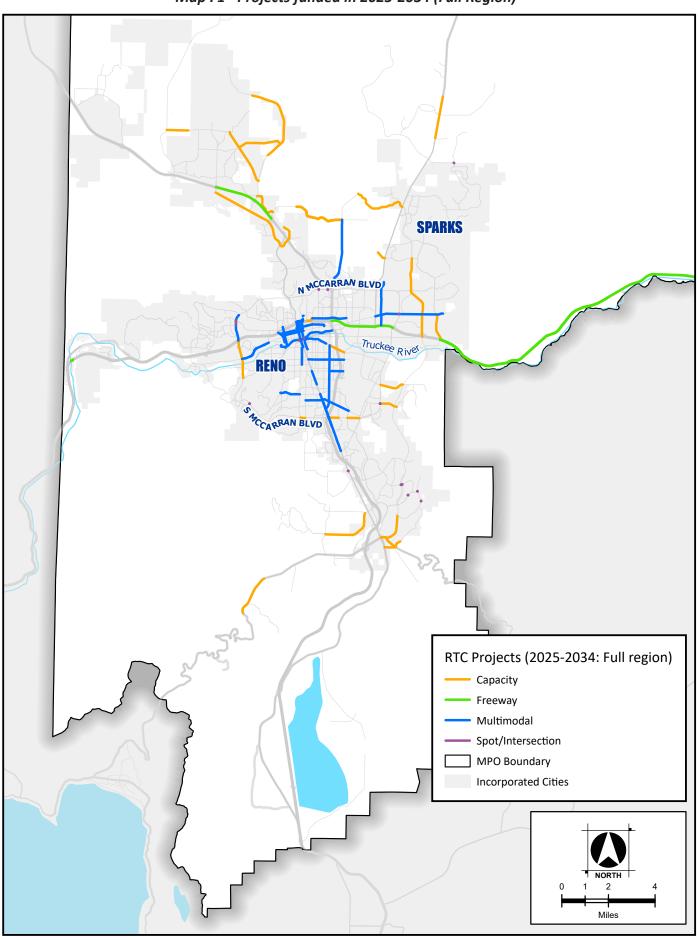
Project	Limits/Description	YOE Cost Estimate
4th St. Bike lanes (Sparks)	Victorian Ave. to Queen Way	\$9,834,843
9th St./G St. Multimidal	Enhanced Sidewalks and Bike Lanes, Wells Ave. to El Rancho Dr.	\$13,552,894
Biggest Little Bike Network	Multiple Locations	\$23,987,422
E. 6th St. Bicycle Facility & Safety	Virginia St. to 4th St.	\$29,984,278
Forest St. Safety & Multimodal	Mount Rose St. to California Ave.	\$1,319,308
Keystone Ave. Multimodal	1st St. to I-80	\$13,552,894
Keystone Ave. Bridge Replacement	Truckee River Bridge Replacement	\$89,712,960
Kietzke Ln. ADA Improvements	Virginia St. to Mill St.	\$4,797,484
McCarran Blvd. I-80 to Las Brisas Blvd. Multimodal	Provide Protected Shared Use Paths	\$4,077,862
Mill St. Downtown Multimodal	Lake St. to Gould St.	\$12,113,648
Moana Ln. Multimodal and ADA	Skyline Blvd. to Plumas St.	\$13,672,831
Peckham Ln. Multimodal	Lakeside Dr. to Airway Dr.	\$18,110,504
Plumb Ln. Multimodal	Bike Lanes and Sidewalks, Kietzke Ln. to Terminal Way	\$10,914,277
Prater Way Bike Lanes	Pyramid Way to Probasco Way and Sparks Blvd. to Petes Way	\$18,950,064
S. Virginia St. Multimodal and ADA North	Meadowood Mall Cr. to Moana Ln.	\$19,429,812
S. Virginia St. Multimodal and ADA South	Longley Ln. to Meadowood Mall Cr.	\$14,272,516

Spanish Springs Rd. Safety and Multimodal	N. Truckee Ln. to Sparks Blvd.	\$12,593,397
Sun Valley Blvd. Multimodal	Scottsdale Rd. to 7th Ave.	\$95,949,689
Truckee River Cantilever	Cantilever Path Behind Auto Museum and AT&T	\$6,296,698
Truckee River Vision Plan	Reconfigure Riverside Dr. and Various Intersection Improvements	\$5,996,856
Truckee River Vision Plan West	Western Truckee River Improvements.	\$14,392,453
University Area Roadway Improvements Phase 1	Multiple Locations	\$4,197,799
Vassar St. Bike Facility	Kietzke Ln. to Terminal Way	\$6,836,415
Vassar St. Bike Facility	Holcomb Ave. to Kietzke Ln.	\$6,716,478
Victorian Ave. Multimodal	Bike Facilities from 16th St. to Pyramid Way	\$6,356,667
W. 4th St. Pedestrian & Safety	McCarran Ave. to Keystone Ave.	\$32,904,747
W. 4th St. Pedestrian	Vine St. to Sierra St.	\$10,194,655
O'Brien's Pass Safety Project	Safety and Shared Use Path from Spearhead Way to Sun Valley Blvd.	\$28,425,096

Spot and Intersection Improvements

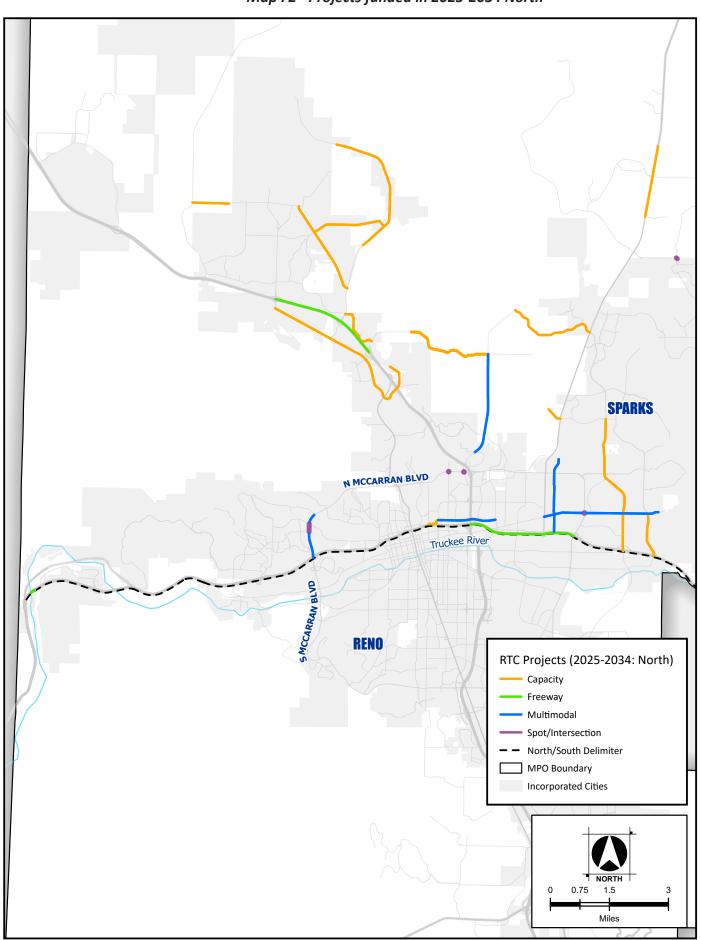
Project	Limits/Description	YOE Cost Estimate
La Posada Dr. and Cordoba Blvd.	Construct Roundabout	\$5,996,856
Lake St. Bridge Replacement	Over Truckee River	\$40,178,932
McCarran Blvd./Cashill Blvd.	Add Thru and Left Turn Lanes	\$6,116,793
McCarran Blvd./Clear Acre Ln.	Add Intersection Capacity	\$2,398,742
McCarran Blvd./Mae Anne Ave./W 7th St.	Add Intersection Capacity	\$3,718,050
McCarran Blvd./Mira Loma Dr.	Add Westbound and Northbound Improvements	\$4,077,862
McCarran Blvd./Prater Way	Add Southbound Left and Modify Right Turns	\$5,277,233
McCarran Blvd./Sutro St.	Add Northbound Thru and Modify Rights	\$3,238,302
Rio Wrangler Pkwy. Roundabouts	Steamboat Pkwy. and McCauley Ranch Blvd.	\$8,395,598
S. Virginia St./Holcomb Ranch Ln.	Safety and Access Management Improvements	\$1,095,626
Sierra St. Bridge Replacement	Over Truckee River	\$40,598,712
Steamboat Pkwy./Hampton Park Dr.	Signalization Improvements	\$1,095,626
Veterans Pkwy./Carat Ave. Enhancements	Add Eastbound and Westbound Right Turn Lanes	\$1,511,208

Map F1 - Projects funded in 2025-2034 (Full Region)

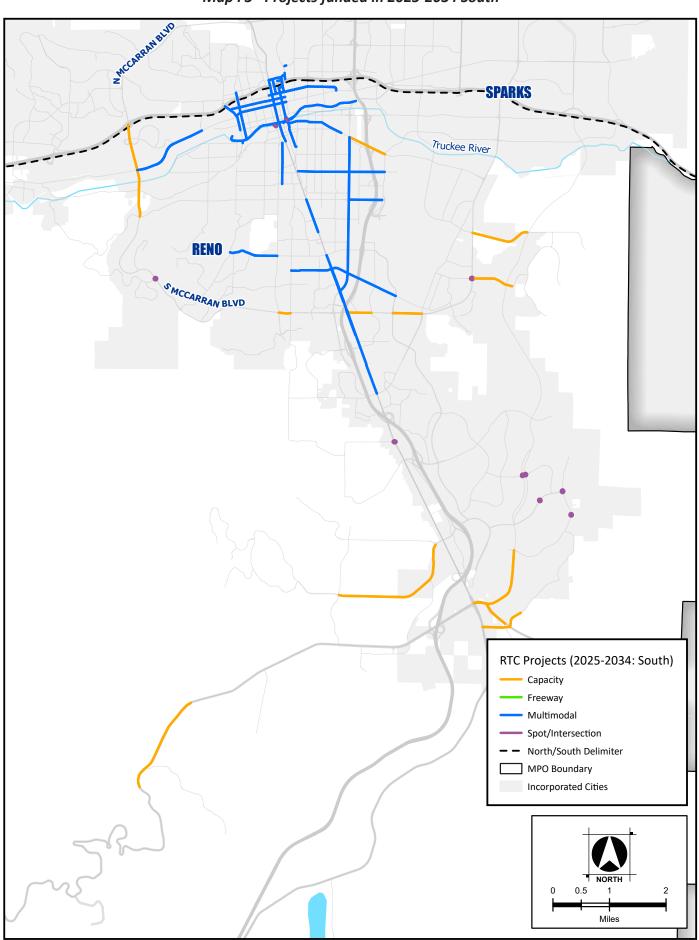


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Map F2 - Projects funded in 2025-2034 North



Map F3 - Projects funded in 2025-2034 South



2035-2050 PROJECTS

Freeway Projects

Project	Limits/Description	YOE Cost Estimate
I-80 / Gold Ranch Rd. Interchange	Reconfigure Interchange and Reconstruct I-80 Eastbound Bridge	\$55,108,308
Reno Spaghetti Bowl Phase 3	US 395 improvements from Spaghetti Bowl to N. McCarran Blvd./Clear Acre Ln. Interchange	\$734,777,440
Reno Spaghetti Bowl Phase 4	I-580 improvements from Moana Ln. to Spaghetti Bowl	\$918,471,800
US 395/Red Rock Rd. Interchange	Interchange Improvements	\$12,858,605
US 395/Stead Blvd. Interchange	Interchange Improvements	\$12,858,605

Capacity Projects

Project	Limits/Description	YOE Cost Estimate
9th St. Extension	Valley Rd. to N. Wells Ave.	\$9,184,718
Arrowcreek Pkwy. Capacity	Thomas Creek Rd. to Wedge Pkwy.	\$80,274,435
Bravo Ave. Extension	Road Extension to Lemmon Dr.	\$42,800,786
Eagle Canyon Dr. Capacity	Pyramid Hwy. to W. Calle de la Plata	\$55,108,308
Echo Ave. Extension	Red Rock Rd. to Moya Blvd.	\$66,313,664
Estates Dr. Extension	Lemmon Dr. to Golden Valley Rd.	\$170,652,060
Lear Blvd. Extension	Moya Blvd. to Red Rock Rd.	\$97,541,705
Lemmon Dr. Extension	Ramsey Way to Red Rock Rd.	\$328,629,210
Lemmon Valley to Spanish Springs Connector	New 4 Lane Road from Lemmon Valley to Spanish Springs	\$271,500,264
Mt. Rose Hwy. Corridor Improvements (Group 2 Projects)	Bordeaux Dr. to Thomas Creek Rd.	\$46,107,284
Mt. Rose Hwy. Corridor Improvements (Group 4 Projects)	Wedge Pkwy. to Veterans Pkwy.	\$29,574,792
Parr Blvd. Widening	Ferrari McLeod Blvd. to Raggio Pkwy.	\$20,206,380
Pyramid Hwy./US 395 Connector Phase 3	Construct Connector, US 395 to Pyramid Hwy.	\$785,254,813
Red Rock Rd. Widening	US 395 to Placerville Dr.	\$123,993,693
Sun Valley Blvd. Extension	Road Extension to Eagle Canyon Dr.	\$75,130,993
Vista Blvd. Capacity	Wingfield Pkwy. to Hubble Dr.	\$76,233,159
Vista Blvd. Widening North	Prater Way to S. Los Altos Pkwy.	\$85,234,183
Wingfield Hills Extension	Road Extension to North End of Sun Valley	\$67,048,441

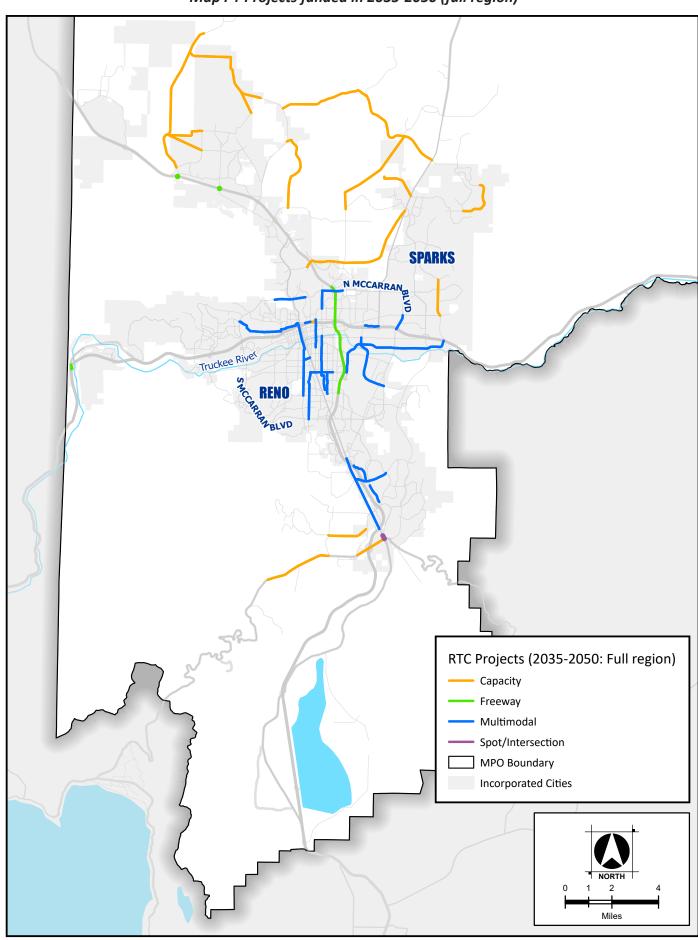
Multimodal Projects

Project	Limits/Description	YOE Cost Estimate
7th St./University Terr. Buffered Bike Lanes	McCarran Blvd. to Sierra St.	\$38,759,510
9th St. Buffered Bike Lanes	Evans Ave. to Valley Rd.	\$2,388,027
Casazza Dr./Kirman Ave./ Wrondel Way Buffered Bike Lanes	Gentry Way to Kuenzlie St.	\$8,817,329
Double R Blvd. Pedestrian Facility	Double Diamond Pkwy. to Lauren Ct.	\$3,857,582
Gateway Dr. Pedestrian Facility	S. Meadows Pkwy. to Offenhauser Dr.	\$2,314,549
Greg St. Sidewalks and Bike Lanes	Mill St. to Vista Blvd.	\$65,027,803
Lakeside Dr. Bike Lanes	McCarran Blvd. to Plumb Ln.	\$32,881,290
McCarran Blvd. Prater Way to I-80 Multimodal	Provide Protected Shared Use Paths	\$33,432,374
McCarran Blvd. Rancho San Rafael to Evans Ave. Multimodal	Provide Eastbound Shared Use Path	\$1,836,944
McCarran Blvd. Sutro St. to Northtowne Ln. Multimodal	Provide Protected Shared Use Paths	\$5,327,136
Plumas St./Mary St. Multimodal	Moana Ln. to California Ave. and Plumas St. to Virginia St.	\$35,820,400
Plumb Ln. Sidewalks and Bike Lanes	Lakeside Dr. to Kietzke Ln.	\$24,063,961
Rock Blvd. Sidewalks and Bike Lanes	Greg St. to McCarran Blvd.	\$24,798,739
S. Meadows Pkwy. Bicycle Facility	Bike Facility Improvements from S. Virginia St. to Double Diamond Pkwy.	\$15,044,568
S. Virginia St. Multimodal and Transit	Sidewalks, Bike Lanes, and Bus/Bike Lane, Arrowcreek Pkwy. to E. Patriot Blvd.	\$75,498,382
S. Virginia St. Safety	I-580 Interchange S. to Arrowcreek Pkwy.	\$11,186,987
Sierra St. Sidewalks	Improve Sidewalks, California Ave. to W. 9th St.	\$11,389,050
Sutro St. Multimodal	N. McCarran Blvd. to Oddie Blvd.	\$20,022,685
Terminal Way Multimodal	Plumb Ln. to Mill St.	\$17,450,964
Wells Ave. Bike Lanes and Truckee River Crossing	Moran St. to E. 9th St.	\$23,880,267
Yori Ave. Sidewalks and Bike Lanes	Moana Ln. to Plumb Ln.	\$14,511,854

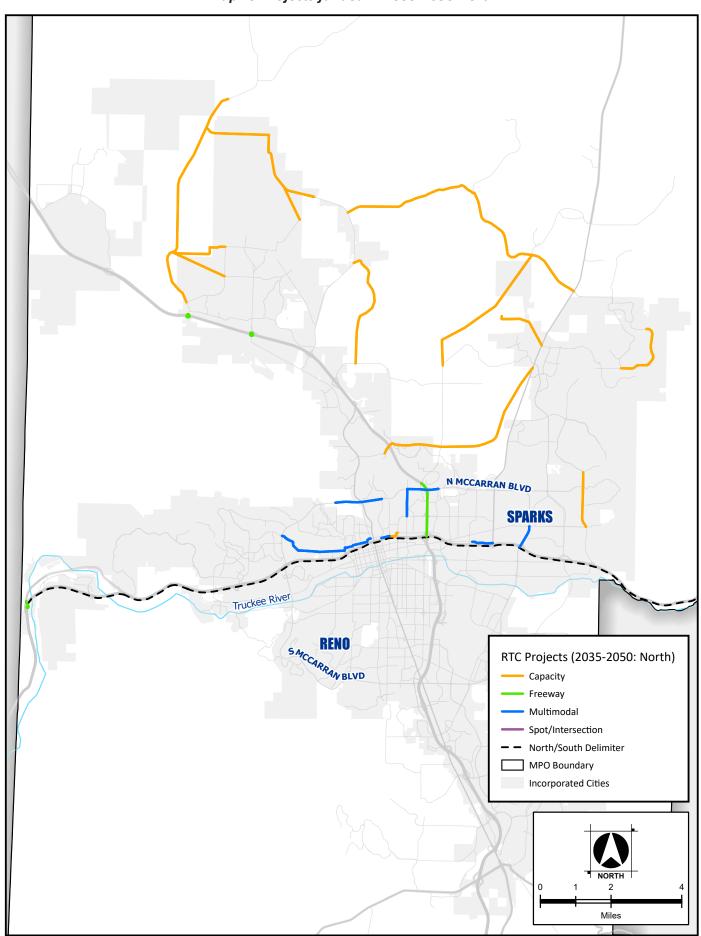
Spot and Intersection Improvements

Project	Limits/Description	YOE Cost Estimate
S. Virginia St./Veterans Pkwy.	Triple Southbound Left Turns	\$20,252,303

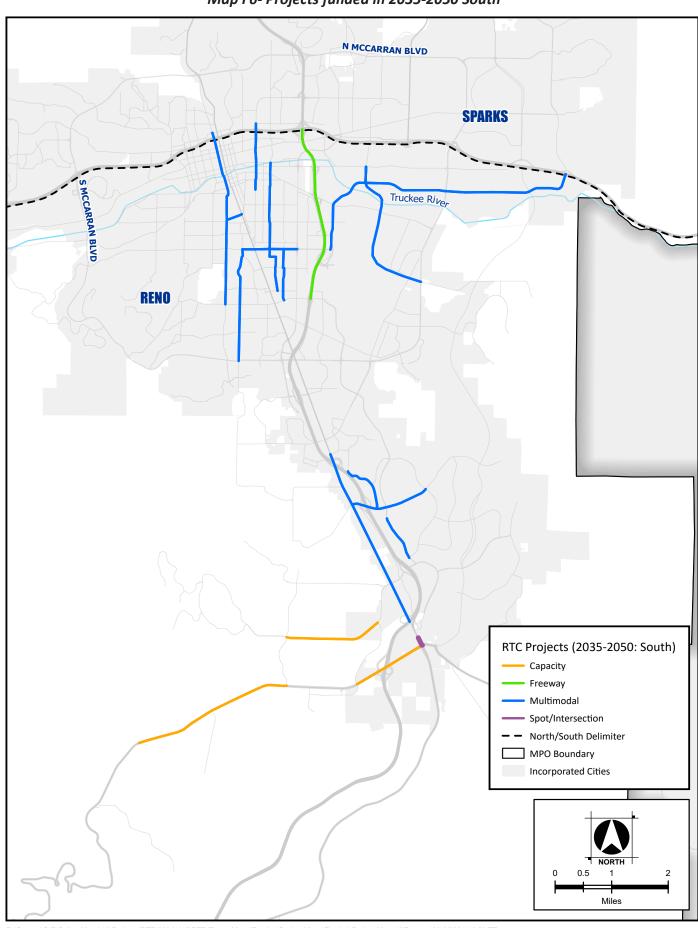
Map F4-Projects funded in 2035-2050 (full region)



Map F5-Projects funded in 2035-2050 North



Map F6- Projects funded in 2035-2050 South



UNFUNDED PROJECTS

Freeway Projects

Project	Limits/Description	YOE Cost Estimate
I-580 Widening	Neil Rd. to S. Virginia St./Kietzke Ln.	\$60,587,210
I-80 / East McCarran Blvd Interchange	Interchange Improvements	\$35,000,000
I-80 / Sparks Blvd Interchange	Interchange Improvements	\$50,000,000
I-80 Widening - Sparks	E. McCarran Blvd. to Vista Blvd.	\$40,000,000
I-80 Widening - Verdi	Gold Ranch Rd. to W. 4th St.	\$70,000,000
I-80 Median Cable or Barrier Rail - Verdi	Gold Ranch Rd. to W. 4th St.	\$12,000,000
Reno Spaghetti Bowl Phase 5	Southbound US 395 improvements from Spaghetti Bowl to N. McCarran/Clear Acre Avenue interchange	\$525,000,000
US 395 Widening - North	Stead Blvd. to Red Rock Rd.	\$124,065,525
US 395 Widening for Pryamid Highway Connector Traffic	Clear Acre Ln. to Parr Blvd.	\$280,558,660

Capacity Projects

Project	Limits/Description	YOE Cost Estimate
Cold Springs to Red Rock Connector	Mud Spring Dr. to Red Rock Rd.	\$165,800,000
McCarran Blvd. Northtown Ln. to Pyramid Way Capacity	Add Lanes, Intersection Improvements, and Shared Use Paths	\$43,800,000
N. Virginia St. Extension	Red Rock Rd. to White Lake Pkwy.	\$152,500,000
Pyramid Hwy./US 395 Connector Phase 4	System Ramps at US 395	\$96,954,000
Pyramid Hwy./US 395 Phase 6	W. Sun Valley Interchange and Local Improvements	\$68,026,000
Pyramid Way Phase 5 Widening	4 Lanes, Sparks Blvd. to Calle de la Plata	\$232,215,000
Rio Wrangler Pkwy. Widening	4 Lanes from Summer Glen Dr. to Steamboat Pkwy.	\$24,300,000
TRI Center Northern Connection	La Posada Dr. to USA Pkwy.	\$548,200,000
TRI Center Southern Connection	Eastern Talus Valley Boundary to USA Pkwy.	\$913,700,000
South Verdi Rd. Improvements	Bridge St. to Cabela Dr.	\$10,000,000
W. Sun Valley Arterial Roadway	New 4 Lane Road, Dandini Blvd. to Eagle Canyon Dr.	\$136,500,000

Multimodal Projects

Project	Limits/Description	YOE Cost Estimate
3rd St. Bridge over Canal	Provide Shared Use Path Bridge over Canal on 3rd St. in Verdi	\$2,000,000
3rd St. Bridge over Truckee River (East)	Provide Shared Use Path Bridge over Truckee River on 3rd St. East in Verdi	\$3,000,000
3rd St. Bridge over Truckee River (West)	Provide Shared Use Path Bridge over Truckee River on 3rd St. West in Verdi	\$3,000,000
3rd St. Shared Use Path	Provide Shared Use Path on 3rd St.	\$2,000,000
Arrowcreek Pkwy. Pedestrian Facility	Zolezzi Ln. to Thomas Creek Rd.	\$1,785,000
Baring Blvd. Bike Lanes	McCarran Blvd. to Vista Blvd.	\$16,200,000
Bridge St. Shared Use Path	Verdi Rd. to 3rd St.	\$2,000,000
Damonte Ranch Park & Ride	Park & Ride	\$2,415,000
Double Diamond Pkwy. Bicycle Facility	Double R Blvd. to S. Meadows Pkwy.	\$1,575,000
Eastlake Blvd. Bike Facilities	I-580 Interchange to Old US 395	\$21,000,000
El Rancho Dr./Dandini Blvd. Sidewalks	Raggio Pkwy. to Sullivan Ln.	\$25,200,000
Geiger Grade Pedestrian Facility	S. Virginia St. to Rim Rock Dr.	\$1,260,000
Golden Valley Rd. Bike Lanes	N. Virginia St. to North Hills Blvd.	\$5,600,000
Holcomb Ave. Buffered Bike Lanes	Vassar St. to Center St.	\$1,800,000
Keystone Ave. Sidewalks and Bike Lanes	Coleman Dr. to Peavine Rd.	\$1,250,000
Lake St. Pedestrian Bridge	7th St. to 9th St.	\$5,800,000
McCarran Blvd. 4th St. to Baring Blvd. Multimodal	Add Westbound Protected Shared Use Path	\$14,200,000
McCarran Blvd. Baring Blvd. to Prater Way Multimodal	Provide Protected Shared Use Paths	\$25,000,000
McCarran Blvd. Evans Ave. to Sutro St. Multimodal	Provide Westbound Shared Use Path	\$1,400,000
McCarran Blvd. I-80 to Truckee River Multimodal	Protected Bike Lane and Shared Use Path	\$29,500,000
McCarran Blvd. Las Brisas Blvd. to Rancho San Rafael Multimodal	Provide Westbound Shared Use Path	\$3,900,000
McCarran Blvd. Plumas St. to Mayberry Dr. Multimodal	Protected Bike Lanes in Both Directions	\$16,000,000
McCarran Blvd. Rio Encantado Ln. to Longley Ln. Multimodal	Add Southbound Sidewalk	\$3,400,000
McCarran Blvd. Rock Blvd. to Perro Ln. Multimodal	Add Southbound Sidewalk	\$600,000

Mt. Rose Hwy. Corridor Improvements (Group 3 Projects)	Thomas Creek Rd. to Wedge Pkwy.	\$4,100,000
Neil Rd. Bike Lanes	Kietzke Ln. to S. Virginia St.	\$5,400,000
S. Meadows Pkwy. Bicycle Facility Upgrades	Double Diamond Pkwy. to Veterans Pkwy.	\$2,100,000
S. Meadows Pkwy./Double R Blvd. Park & Ride	Park & Ride Lot	\$2,415,000
S. Virginia Street Multimodal and ADA South	Meadowood Mall Cr. To Moana Ln.	\$16,200,000
Sierra St. Pedestrian	W. 9th St. to N. Virginia St.	\$24,800,000
Skyline Blvd. Bike Lanes	Cashill Blvd. to Arlington Ave.	\$14,700,000
Truckee River Idlewild Dickerson Bridge	Bridge Over the Truckee River, Connecting Dickerson Rd. to Idlewild Park	\$2,250,000
Truckee River Vision Plan East	Eastern Improvements	\$4,000,000
Truckee River Vision Rural West	Rural Western Improvements	\$5,000,000
Veterans Pkwy./Geiger Grade Park & Ride	Park & Ride	\$2,415,000
Veterans Pkwy./S. Meadows Pkwy.	Park & Ride	\$2,415,000
Vista Blvd. Sidewalks and Bike Lanes	Greg St. to S. Los Altos Pkwy.	\$25,600,000
W. 4th Street Multimodal	I-80 to S. McCarran Blvd.	\$21,200,000
Zolezzi Ln. Sidewalks	Thomas Creek Rd. to S. Virginia St.	\$14,500,000

Private Projects

Project	Limits/Description
Parr Blvd. Interchange	Intersection Signalization
White Lake Pkwy. Capacity (North)	US 395 to Village Pkwy.
Vista Knoll Pkwy. Extension	Walmart Driveway To Lemmon Dr.
Rio Wrangler Pkwy. Extension South	Veterans Pkwy. to Damonte Ranch Pkwy.
Lazy 5 Pkwy. Extension	W. Sun Valley Arterial to Pyramid Hwy.
Meridian & Santerra Regional Road Network (Verdi)	Multiple Locations
Rio Wrangler Pkwy. Extension North	Bucephalus Pkwy. to South Meadows Pkwy.
S Virginia St./South Hills Dr.	Signalization Improvements
Ridgeview Dr. North Extension	Ridgeview Dr. to McCarran Blvd.
Robb Dr. Extension	W. 4th St. to I-80
White Lake Pkwy. Extension South	US 395 to Stonegate Entrance
Chase Canyon Segments 1 and 2	New 4 Lane Road from US 395 to 2nd Roundabout
US 395/Red Rock Rd. Interchange	Interim Phase Improvements
White Lake Pkwy. Interchange Upgrades	Interchange Improvement at US 395
Damonte Ranch Pkwy. Extension	Rio Wrangler Pkwy. to Veterans Pkwy
Talus Valley Regional Road Network (South Meadows)	Multiple Locations
Silver Knolls Blvd.	New Road from Red Rock Rd. to Silver Knolls Blvd.
Dolores Dr. Extension	West to Lazy 5 Park
South Meadows Pkwy. Extension	Mojave Sky Dr. to Rio Wrangler Pkwy.
Moya Blvd. Extension	Lemmon Dr. to Echo Ave.
Five Ridges Pkwy.	New Road from Highland Ranch Pkwy. to 2nd Roundabout

APPENDIX C

<u>Air Quality Analysis and Conformity Determination</u>



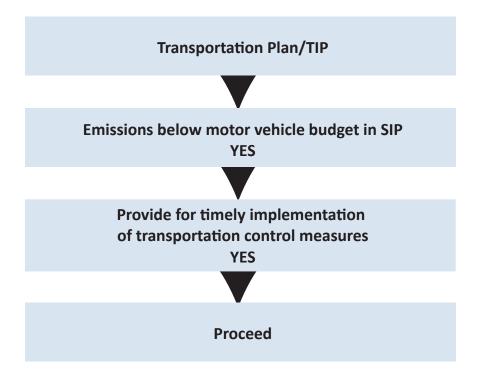
The Clean Air Act Amendments (CAAA) of 1990 require that each state environmental agency develop a State Implementation Plan (SIP). The SIP shows how the state will implement measures designed to improve air quality to meet National Ambient Air Quality Standards (NAAQS) for each criteria air pollutant, according to the schedules included in the CAAA.

Since emissions from motor vehicles make a significant contribution to air pollution, the CAAA also requires that transportation officials make a commitment to programs and projects that will help achieve air quality goals including:

- Providing for greater integration of the transportation and air quality process
- Ensuring that transportation plans, programs and projects conform with the SIP
- Reduction in the growth in vehicle miles traveled (VMT) and congestion in areas that have not attained the U.S. Environmental Protection Agency's (EPA) air quality standards.

Conformity for the Regional Transportation Plan (RTP) and the Transportation Improvement Program (TIP) are demonstrated when projected regional emissions generated by the plan and TIP do not exceed the region's motor vehicle emissions budgets as established by the SIP. While the MPO is ultimately responsible for making sure a conformity determination is made, the conformity process depends on federal, state and local transportation and air quality agencies working together to meet the transportation conformity requirements. The roles and responsibilities of the partner agencies involved in the air quality conformity analysis are defined in the Washoe County Transportation Conformity Plan. The plan was adopted by RTC and the Washoe County District Board of Health in January 2013.

TRANSPORTATION CONFORMITY



STATUS OF AIR QUALITY POLLUTANTS

Criteria pollutants are considered on a county-wide basis if actual pollutant levels are exceeded outside of the air quality planning area of the Truckee Meadows. The air quality planning area of the Truckee Meadows is determined by EPA to be Hydrographic Area 87 (HA 87) which is shown in Figure C-1. The current design values and designation statuses of the criteria pollutants and their NAAQS in Washoe County are listed in Table C-1. Design values are the statistics that the EPA uses to compare ambient air monitoring data to the NAAQS to determine designations. All designations are codified in 40 CFR 81.329

Table C-1
Design Values and Designations (as of December 31, 2023)

NAAQS			Design	ations
Pollutant (Averaging Time)	Level	Design Value ¹	Unclassifiable/ Attainment, or Maintenance	Nonattainment
O³ (8-hour)	0.070 ppm	0.069 ppm	All HAs	
PM _{2.5} (24-hour)	35 μg/m³	59 μg/m³	All HAs	
PM ₁₀ (24-hour)	150 μg/m³	4.3 Expected Exceedances	All HAs²	
CO (1-hour)	35 ppm	2.6 ppm	All HAs	
CO (8-hour)	9 ppm	1.8 ppm	All Has ³	
NO₂ (1-hour)	100 ppb	48 ppb	All HAs	
NO₂ (Annual Mean)	53 ppb	11 ppb	All HAs	
SO₂ (1-hour)	75 ppb	3 ppb	All HAs	
Pb (Rolling 3-month average)	0.15 μg/m³	n/a	All HAs	

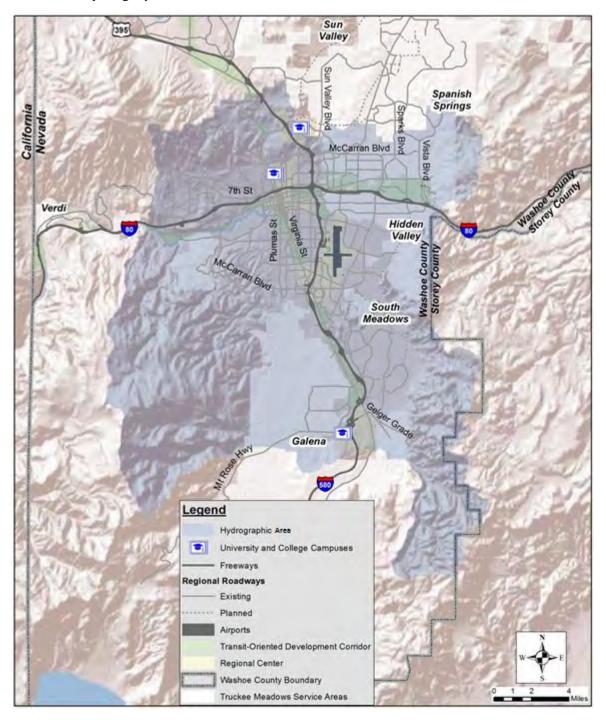
¹ NAAQS that has a multi-year average design value (O₃, both PM_{2.5}, PM₁₀, both CO, 1-hr NO₂, and SO₂) has a design value that is affected by wildfire smoke, high winds, prescribed burns, etc.

 $^{^{2}}$ Maintenance Area for PM $_{10}$ - $\underline{80}$ FR $\underline{76232}$

³ Maintenance Area for CO - <u>73 FR 38124</u>, <u>81 FR 59490</u>

Regional emissions analyses were performed for CO and PM_{10} to demonstrate document conformity with Motor Vehicle Emissions Budgets in the CO and PM_{10} State Implementation Plans. The RTC, in collaboration with the local agencies, has also been implementing programs that reduce motor vehicle emissions in the region.

Figure C-1 Truckee Meadows Hydrographic Area 87



TRAVEL FORECASTING MODEL AND MOVES EMISSION MODEL

The RTC's travel demand model was developed in 2024 on the TransCAD platform. The model was calibrated with data collected through the 2023-2024 Regional Household Travel Characteristics Study¹. The model uses the 2024 Consensus Forecast population and employment provided by the Truckee Meadows Regional Planning Agency (TMRPA). EPA's MOtor Vehicle Emission Simulator (MOVES) is a state-of-the-science emission modeling system that estimates emissions for mobile sources at the national, county, and project level for criteria air pollutants, greenhouse gases, and air toxics. MOVES5 is now the latest official version of MOVES. The analysis for the RTP uses MOVES5 to calculate emission data.

AIR QUALITY ANALYSIS PLAN REQUIREMENTS

Federal regulations are specific in defining the level of air quality analysis necessary for incorporation into the RTP. Section 93, Title 40 of Code of Federal Regulations (CFR) dated August 15, 1997 (effective September 15, 1997), pertains to the criteria and procedures necessary to analyze the air quality impacts of the RTP. For the purposes of an air quality determination, the analysis years are 2020, 2025, 2030, 2040, and 2050. No air quality analysis is required for the street and highway projects identified as unfunded needs. A summary of requirements is listed below:

- A. The RTP must contribute to emission reductions in CO nonattainment/maintenance areas.
- B. Air quality analysis years must be no more than 10 years apart.
- C. In CO and PM₁₀ nonattainment/maintenance areas, analysis must be performed for both pollutants.

- D. The last year of the RTP (2050) shall also be an analysis year.
- E. An analysis must be performed for each year contained in the motor vehicle emission budget (MVEB) for HA 87 for both CO and PM₁₀, as budgets have been established for these pollutants.
- F. For both CO and PM₁₀, the analysis of emissions for the required years cannot exceed the MVEB.

AIR QUALITY ANALYSIS CREDITING PROVISIONS

Federal regulations also allow for crediting procedures over the life of the RTP for the implementation of Transportation Control Measures (TCMs) in which emissions reductions can be quantified. These TCMs are critical to areas such as Washoe County that have and are expected to have continued growth in population and VMT. Several specific TCM measures are in progress or planned in Washoe County that will have quantifiable emissions reductions. These include:

- A. Traffic signal optimization program;
- B. Conversion of the public transit fleet cleaner fuels;
- C. Implementation of trip reduction programs.

These TCMs have been the focus of studies to quantify the air quality benefit of each. The TCMs are described below. The RTC is not taking any credit for reduced emissions associated with these TCMs but may choose to take credit in the future, if conditions warrant.

¹ https://rtcwashoe.com/planning/2023-2024-rtc-regional-travel-characteristics-study/

TRAFFIC SIGNAL OPTIMIZATION/TIMING UPGRADE PROGRAM

Traffic signal coordination and improvements seek to achieve two primary objectives: 1) improved traffic flow resulting in improved level of service and 2) mobile source emission reductions through decreased delay, fewer accelerations/decelerations and a decreased number of stops.

The RTC has reviewed several studies and federally accepted models to quantify the reduction of mobile emissions from signal coordination programs. These include signal coordination studies conducted by several cities in southern California and the California Department of Transportation (CALTRANS). A comparison of before and after field studies was conducted and the improvements in all three peak periods were noted. Examples included a statewide average reduction of 14 seconds in stop delay and a 12 percent reduction in the number of stops per mile in the afternoon peak period. Several methodologies were used to take the results of studies to quantify the emission reductions from signal coordination programs.

The pollution reduction results (tons/per day or percentage reduction) from each model vary as some models focus on corridor specific reductions while the others are more of an area-wide reduction projection. Pollutant reductions ranged from 11 percent along specific corridors to 3 percent to 4 percent on a regional level.

The RTC has initiated a region-wide traffic signal optimization and improvements program to enhance the capacity of the existing system, improve safety, and reduce traffic congestion in the region. This is an ongoing program that will allow over 400 intersections in the Truckee Meadows to be optimized. Currently, the average is 80 signals/intersections annually.

CONVERSION OF RTC ACCESS AND RTC RIDE FLEETS TO ALTERNATIVE OR CLEANER BURNING FUELS

Almost 6 million annual passengers with 19.6 million passenger miles are provided service by the RTC RIDE public transit and RTC ACCESS paratransit. While this is a small percentage of total daily travel, it is important in terms of air quality. All RTC RIDE buses are comprised of electric, hybrid diesel-electric and bio-diesel vehicles. RTC ACCESS cut-away vehicles are fueled by Compressed Natural Gas (CNG). These vehicles can reduce mobile emission totals.

Estimates by the California Air Resources Board between standard urban diesel and biodiesel or CNG determined that NOX emissions from vehicles with CNG or cleaner burning diesels were reduced approximately 60 percent.

RTC currently has 19 zero emission battery electric buses and 2 hydrogen fuel cell vehicles in its fixed route fleet with 6 additional fuel cell vehicles scheduled for delivery and placement into service in spring 2025.

TRIP REDUCTION PROGRAMS

The RTC's trip reduction program, RTC SMART TRIPS, encourages the use of sustainable travel modes and trip reductions strategies such as telecommuting, compressed work weeks, and trip chaining. Major components of the program include a bus pass subsidy program in which the RTC matches an employer's contribution to their employees' 31-day transit passes up to 20 percent; a subsidized vanpool program, RTC VANPOOL; and an on-line trip matching program, RTC TRIP MATCH, that makes it quick, easy, and convenient to look for carpool partners as well as bus, bike, and walking buddies for either recurring or one time trips. One of the most common deterrents to ridesharing is the fear of being "stranded."

Consequently, people who either carpool or vanpool to work can sign up for the Guaranteed Ride Home program and be reimbursed for a taxi ride home up to four times a year if an unexpected event prevents normal ridesharing arrangements from working. Making trips safely on foot and by bicycle are also promoted by the RTC SMART TRIPS program throughout the year.

The goals of these programs are to promote trip reduction on a region-wide level, improve air quality, and reduce vehicle miles of travel and traffic congestion. During the period from October 1st, 2023, through September 30th 2024 the air quality benefits of the program were substantial, as shown in Table C-1. The data included the number of people in each vanpool and the average daily trip mileage. The air pollution calculation was obtained by multiplying the number of passenger trips for each vanpool per month by the average daily trip mileage for each vanpool per month and totaling those results to estimate the total VMT eliminated through the program due to the vanpool passengers not driving alone to work. The reduction in VMT was then multiplied by the pollutant factors per mile with those results outlined in the chart below. The emissions factors per mile for each pollutant were provided by Northern Nevada Public Health Air Quality Management Division (AQMD).

Table C-2
RTC VANPOOL Air Pollution Reductions (October 1st, 2023-September 30th, 2024)

Volatile organic compounds (VOC)	64,045.1 lbs
Nitrogen Oxide (NOx)	35,980.4 lbs
Carbon Monoxide (CO)	476,738.7 lbs
Particulate Matter (PM ₁₀)	256.3 lbs
Particulate Matter (PM _{2.5})	238.4 lbs
Carbon Dioxide (CO ₂)	19,204,552 lbs

RTC SMART TRIPS program continues to grow and add more participants. RTC TRIP MATCH is a web-based carpool, bike, bus and walking buddy matching service that eliminates single occupant travel miles.

RTC TRAVEL DEMAND MODEL

The base year for housing, employment, and population data from the TMRPA is 2022. The model uses the 2024 Washoe County Consensus Forecast (CF)² population and employment forecasts provided by TMRPA. The CF is produced biannually (every even year) using four independent growth predictions for Washoe County and forecasts both population and job growth over the next 20 years.

As part of an approved shared work program, TMRPA provides the socioeconomic variables of each traffic analysis zone input into the RTC's travel demand model. The overall population and job growth increments from the CF are spatially disaggregated to individual parcels using a geographic information systems model. TMRPA's land use model is the result of years-long, collaborative work with local jurisdictions, affected entities, and partner organizations. The model selects parcels for future development using a robust accounting of existing land use entitlements and growth-related characteristics that influence a parcel's suitability for development. Results of the land use model are aggregated into traffic analysis zones for each travel demand model year.

² https://tmrpa.org/washoe-county-consensus-forecast/

Caliper is under contract with the RTC Washoe to develop the travel demand model. In Q4 of 2024, Caliper completed the latest travel demand model for RTC. This hybrid model incorporates innovative methodologies, including machine learning for trip generation, nested destination choice models, and linkage of non-home-based trips to home-based trips by location and mode.

The model was estimated, calibrated, and validated to represent an average weekday in October 2022. The Nevada Department of Transportation (NDOT) has several automatic traffic monitoring stations throughout the county. These continuous count stations provide average daily traffic counts for each month. For validation, Caliper utilized NDOT AADT traffic counts adjusted to October 2022 using seasonal factors developed from continuous count locations, and October transit ridership data for transit assignment. Socio-economic data, as well as roadway and transit networks for the model's 2022 base year, were provided by TMRPA and RTC. The 2022 base-year model demonstrated strong validation results against the traffic and transit counts collected during the same period.

2025, 2030, 2040 and 2050 networks were established for this RTP air quality analysis. The 2025 network consists of the current roadway network and the current transit network. Each of the remaining networks is comprised of the previous model year network with the capacity-related projects and transit service changes included in the RTP.

AIR QUALITY ANALYSIS

An emission test on both CO and PM10 must be successfully completed to make a finding of conformity. The area of analysis for these pollutants is HA 87. As stated previously, the CO and PM10 emissions for the required analysis years cannot exceed the established motor vehicle emissions budget. Analysis is performed for 2025, 2030, 2040 and 2050 for both pollutants.

To initiate the air quality conformity determination, the emission levels for the pollutants in each analysis year are generated. For the MOVES emission model, the 2025 model year source types 42, 43, and 51 are derived from 2023 local data provided by the Washoe County School District, RTC, and Waste Management. All other source types use MOVES default values. The numbers for source types 42, 43, and 51 are scaled proportionally to the default total vehicle population for future projections. MOVES defaults for age distribution and source types not listed above were determined to be more representative than local vehicle registration due to the local registration source type categories not aligning with MOVES HPMS categories, a change in data reporting methodology, and data quality concerns. The fuel input data is from MOVES default.

Based on MOVES5 Technical Guidance, PM10 and CO seasonal temperature and humidity data (November, December, and January) from the 2011 baseline inventory year that was used in the 2014 redesignation request and maintenance plans are the meteorological inputs used for the MOVES5 model run in this conformity analysis. This data was from the NWS station at the Reno-Tahoe International Airport.

The VMT for each facility type is derived from the RTC's travel demand model. Many local roads are approximated as centroid connectors in the model network. Since centroid connectors are not actual roads, the VMT's for local roads are estimated as 12.34% (urban) and 6.15% (rural) of the total VMT's based on NDOT's 2023 Annual Vehicle Miles of Travel Report (August 2024). Average weekday speed by facility type from RTC's travel demand model is provided as input to the MOVES model. Since the RTC travel demand model was calibrated to an average weekday, it does not provide accurate weekend speed data.

Therefore, weekend speed input data is from MOVES default. Total emissions for each facility type are then added to get a daily emission total for the roadway system in the analysis area. Emission totals are shown in pounds per day (lbs./day).

CO ANALYSIS

The MVEB for carbon monoxide (CO), effective October 31, 2016, is shown in Table C-3, which also includes the CO emissions for all analysis years of the RTP. CO under all RTP analysis years are within the MVEB. The tables supporting this analysis are contained at the end of this chapter.

Table C-3
CO Emissions Analysis (lbs. /day)

Analysis Year	MVEB	RTP Analysis
2025	171,509	54,601
2030	169,959	39,693
2040	169,959	22,476
2050	169,959	17,233

PM₁₀ ANALYSIS

The MVEB for PM10, effective January 6, 2016, is shown in Table C-4, which also includes the PM10 emissions for all analysis years of the RTP. On-road vehicle exhaust emissions are estimated using MOVES5. PM10 under all RTP analysis years are within the MVEB. The tables supporting this analysis are contained at the end of this chapter.

Table C-4
PM₁₀ Total Emissions (lbs. /day)

Analysis Year	MVEB	RTP Analysis
2025	6,473	3,156
2030	6,927	3,137
2040	6,927	2,988
2050	6,927	2,928

For the PM10 MVEB categories of paved and unpaved road fugitives and road construction, the methodologies and assumptions are detailed below:

Paved Roads

Paved road fugitive emissions are calculated using emission factors, silt loading, mean vehicle weight, and mean vehicle speed found in AP-42, Section 13.2.1 and VMT data within HA 87 to project to 2050. Silting loading factors for PM10 vary between 0.02 g/m2 to 0.44 g/m2 depending on Annual Daily Traffic (ADT) categories and are within the ranges listed in AP-42 Section 13.2.1. ADT<500 (0.44 g/m2) and ADT=500-5,000 (0.16 g/m2) silt loading factors were derived from locally sourced data. ADT=5,000-10,000 (0.06 g/m2) and ADT>10,000 (0.02 g/m2) uses AP-42, Table 13.2.1-2 silt loading factors. A mean vehicle weight of 2 tons was used. The assumptions used in this methodology were last revised in 2021 and have been used for the National Emission Inventory, RTPs, and maintenance plans.

210 | 2050 RTP

Unpaved Roads

Seasonal/Spatial Allocation - As per the 2017 National Emissions Inventory (NEI), an estimated 1703 tons of PM10 is emitted in Washoe County per year due to fugitive dust on unpaved roads. As recommended by EPA, these emissions are adjusted to HA 87 using GIS data from Open Street Map for unpaved roads in Washoe County. Using ArcMap 10.8.2, AQMD found that 8.81% of the unpaved roads in Washoe County are located in HA 87. Additionally, AQMD calculated a seasonal adjustment factor for the PM10 season using Automated Traffic Recorders (ATRs) located in the maintenance area. The seasonal adjustment factor was found to be 0.928.

Emission Projections - Unpaved road fugitive dust is expected to change in the future based on Local Vehicle Miles Traveled (LVMT). Since local roads are the closest road type to unpaved roads, the change in travel on local roads is used as a proxy for the changes in travel expected on unpaved roads. Additionally, unpaved road emissions are projected to decrease over time as more roads are paved and the maintenance area continues to develop. It is expected that paved road miles will increase annually at 2.6% in the maintenance area based on historical changes to paved road miles. This factor was also used to project forward in AQMD's 1st 10-Year Maintenance Plan for PM10. This is a methodology that was updated in May 2024 in order to accurately project emissions for the 2nd 10-Year PM10 Maintenance Plan and for the National Emission Inventory.

Road Construction

Any construction activity, which will disturb one acre or more of land, must submit a Dust Control Plan to the AQMD. The approval, or permit, is valid for 18 months from the date of issuance. To estimate emissions from construction activity, the AQMD researched the database containing the Dust Plan Permits. The Dust Plans were divided into three categories: residential, non-residential, and road construction. Acres disturbed were categorized by hydrographic areas. Emission factors for construction, wind erosion, trackout, and miscellaneous construction activity are found in Western Regional Air Partnership (WRAP) Fugitive Dust Handbook, AP-42, and EPA guidance ^{3, 4, 5}. This has been the methodology used for National Emission Inventory, RTPs, and maintenance plans since 2012. The 1st 10-Year Maintenance Plan used Population Growth Rates from the Nevada State Demographer to project growth in this category.

SUMMARY

A strong commitment to fund and implement feasible TCM measures must be made if acceptable air quality standards are to be sustained. The local jurisdictions and NDOT, through the RTP process, have made the commitment to fund TCMs such as ridesharing, traffic flow improvements, signal coordination, and conversion of public transit fleet to cleaner burning fuels. The 2050 RTP update includes significant investments in bicycle and pedestrian infrastructure. Based on existing and planned commitments, the air quality analysis conducted in this chapter demonstrates that the required air quality conformity determination can be made and the RTP has shown to be in conformance with federal air quality regulations.

³ WRAP Fugitive Dust Handbook, p. 3-3, Table 3-2, Factors from the 1996 MRI BACM Study, September 7, 2006

⁴ EPA; "Control of Open Fugitive Dust Sources"; EPA-450/3-88-008; OAQPS; September 1988

⁵ Compilation of Air Pollutant Emission Factors (AP-42) Volume I, U.S. Environmental Protection Agency, Fifth Edition, 1995. Midwest Research Institute. Improvement of Specific Emission Factors (BACM Project No. 1). March 29, 1996

AIR QUALITY ANALYSIS SUPPORT DOCUMENTATION

Table C-5
Daily VMT by Facility Type by Analysis Year (Hydrographic Area 87)

Facility Type	2025	2030	2040	2050
Interstate	2,142,359	2,194,063	2,407,286	2,666,463
Other FWYs	441,834	455,748	494,398	589,156
Major Arterial	1,738,263	1,848,184	1,986,923	2,131,913
Minor Arterial	773,681	792,358	868,062	954,543
Collector	174,739	183,241	195,918	210,799
Local	676,197	702,203	763,653	840,663
Total	5,947,074	6,175,799	6,716,240	7,393,536

Table C-6
Emissions (lbs./day)

Analysis Year	СО	On-Road Vehicles PM ₁₀	Diesel Idling PM ₁₀	Paved Road Fugitive PM ₁₀	Unpaved Road Fugitives PM ₁₀	Road Construction PM ₁₀	Total PM ₁₀ Emissions
2025	54,339	394	0.071	1,767	742	253	3,156
2030	39,476	345	0.027	1,870	653	269	3,137
2040	22,326	258	0.004	2,015	430	285	2,988
2050	17,097	224	0.002	2,236	166	302	2,928

The full list of future transportation projects is included in the RTP, while projects modeled for the conformity analysis are detailed below in Table C-7. Projects not modeled are those that do not impact network capacity in the travel demand model. These include:

- Bike/pedestrian projects without lane changes (projects with lane changes, including those that reduce lanes, are included in the modeled list).
- Operational improvements that do not change capacity.
- Spot and intersection improvements that do not alter network capacity in the model.

Table C-7
Capacity Projects on Model Network and Model Years

Project	Description	Model Year
Biggest Little Bike Network	Multiple Locations (lane reduction)	2030
Buck Dr	Lemmon Dr to N Hills Blvd	2030
Butch Cassidy	Extension	2030
E 6th Street Bicycle Facility & Safety Improvements	Virginia St to 4th St (lane reduction)	2030
Lemmon Dr Segment 2	Fleetwood Dr to Ramsey Way(widen from FW to Palace)	2030
Military Rd	Lemmon Dr to Lear Blvd	2030
Mill St Safety and Capacity	Kietzke to Terminal	2030
Pembroke Dr	McCarran Blvd to Veterans Pkwy	2030
Pyramid Hwy - Add Southbound Lane	Egyptian Dr to Ingenuity Ave	2030
Vassar Street Bike Facility	Kietzke Ln to Terminal Way (lane reduction)	2030
Vista Blvd	I-80 to Prater Way	2030
9th St Extension	Valley Rd To N Wells Ave	2040
Arrowcreek Pkwy	Wedge Pkwy to Zolezzi Ln	2040
Chase Canyon Segments 1 and 2 (Private)	New 4 lane road - US 395 to 2nd roundabout	2040
Damonte Ranch Pkwy Extension	Veterans Pkwy to Rio Wrangler Pkwy	2040
Daybreak Road Network(Private)	Multiple locations	2040
Dolores Dr Extension (Private)	West to Lazy 5 Pkwy	2040
Geiger Grade New 4 Lane Rd	Virginia St to Toll Rd	2040
Herz Blvd extension/connection (Private)	Mt Rose Highway to Old US 395	2040
Highland Ranch Parkway	5 Ridges entrance to Sun Valley Blvd	2040
Highland Ranch Pkwy (Private)	Pyramid Hwy to 5 Ridges entrance	2040
Lazy 5 Pkwy (Private)	W Sun Valley Arterial to Pyramid Hwy	2040
Lear Blvd	Connection between Military Rd to Lemmon Dr	2040
McCarran Blvd	Neil Rd. to South Virginia St (lane reduction)	2040
McCarran Blvd	Longley Ln. to Airway Dr.	2040
McCarran Blvd	Lakeside Ln. to Plumas St.	2040
McCarran Blvd	Plumb Ln. to I-80	2040
Meridian & Santerra Road Network (Private)	Multiple locations	2040
Military Rd	Lear Blvd to Echo	2040
Mira Loma Dr	McCarran to Veterans	2040
Moya Blvd	Red Rock Rd to Echo Ave	2040
Moya Blvd Extension (Private)	Lemmon Dr to Echo Ave	2040
N. Hills Blvd	Golden Valley Rd to Buck Dr	2040
NDOT I-80 Operations & Capacity	Vista Blvd to USA Parkway	2040
NDOT Spaghetti Bowl Phase 2	I-80 from spaghetti bowl to eastern McCarran Blvd in Sparks	2040

Project	Description	Model Year
North Virginia St	Panther to Stead Blvd	2040
Panther Dr Extension	N. Virginia to Panther to N. Hills Blvd	2040
Pyramid Hwy/395 Connector Phase 2	Widen Disc Dr from Pyramid to Vista Blvd	2040
Ridgeview Dr North Extension (Private)	End of Ridgeview to McCarran Blvd	2040
Rio Wrangler Pkwy Extension -South (Private)	Damonte Ranch Pkwy to Veterans Pkwy	2040
Rio Wrangler Pkwy Extension-North (Private)	Bucephalus Pkwy to South Meadows Pkwy	2040
Robb Dr Ext (Private)	4th St to I-80	2040
Silver Knolls Blvd - New Road (Private)	Red Rock Rd to Silver Knolls Blvd	2040
South Meadows Extension (Private)	Mojave Sky Dr to Rio Wrangler Pkwy	2040
Sparks Blvd	Baring Blvd to Disc Dr	2040
Sparks Blvd	180 Off Ramps to Baring	2040
US 395 North Valleys, Phase 2	Golden Valley to Stead Blvd	2040
Veterans Pkwy Widening	S. Virginia St to Damonte Ranch Extension	2040
Vista Knoll Pkwy Ext (Private)	Walmart Driveway To Lemmon Dr	2040
West 7th/Golden Valley Rd	Spearhead Way to Sun Valley Blvd	2040
White Lake Pkwy Extension-South (Private)	US 395 to Stonegate Entrance	2040
White Lake Pkwy - North (Private)	US 395 to Village Pkwy	2040
Arrowcreek Pkwy	Thomas Creek Rd to Wdge Pkwy	2050
Bravo Ave Extension	Extension to Lemmon Dr	2050
Eagle Canyon	Pyramid Hwy to W Calle de la Plata	2050
Echo Ave - Extension	Red Rock Rd to Moya Blvd	2050
Estates Dr Extension	Lemmon Dr to Golden Valley Rd	2050
Lear Blvd Extension	Moya Blvd to Red Rock Rd	2050
Lemmon Dr Extension	Ramsey Wy To Red Rock Rd	2050
Lemmon Valley to Spanish Springs Connector	New 4 lane road from Lemmon Valley to Spanish Springs	2050
NDOT Spaghetti Bowl Phase 3	US 395 from Spaghetti Bowl to N. McCarran/Clear Acre Interchange	2050
NDOT Spaghetti Bowl Phase 4	I-580 from spaghetti bowl to Moana Ln interchange	2050
Parr Blvd	Ferrari McLeod to Raggio Pkwy	2050
Pyramid/395 Connector Phase 3 Connector	US 395 to Pyramid Hwy south of Sparks Blvd	2050
Red Rock Rd	US 395 to Placerville Dr	2050
Sun Valley Blvd Extension	Extension to Eagle Canyon	2050
Vista Blvd	Wingfield Pkwy to Hubble Dr	2050
Vista Blvd	Prater to South Los Altos Pkwy	2050
Wingfield Hills	Road extension to north end of Sun Valley	2050

NOTES:

This table includes only projects that impact model network capacity for the air quality analysis.

APPENDIX D

RTC Congestion Management Plan (CMP)



CONGESTION MANAGEMENT PROCESS

The purpose of the Congestion Management Process (CMP) is to identify how RTC selects and prioritizes projects to reduce traffic congestion. This CMP was developed in coordination with the 2050 RTP performance-based planning process and is consistent with the RTP goals and project evaluation criteria. The CMP is a systematic approach that is collaboratively developed for the region and provides safe and effective management of new and existing transportation facilities.

Congestion management, as defined by the Federal Highway Administration (FHWA), is the application of strategies to improve transportation system performance and reliability by reducing the adverse impacts of congestion on the movement of people and goods. A CMP is a regionally accepted approach that provides information on performance and assesses strategies for congestion management.

The performance management metrics identified in Chapter three, as well as the transportation conformity requirements regarding air quality, have an important role in the CMP. The CMP is an ongoing process, adjusting over time as goals and objectives change, new congestion issues arise, new resources become available, and new strategies are identified and evaluated. The RTP identifies a well-balanced project selection process across all modes of transportation and outlines the implementation schedule and anticipated funding sources for a truly multimodal program.

1 – Congestion Management Objectives

Traffic congestion impedes economic activity, degrades air quality, and has an adverse impact on quality of life in the Truckee Meadows. Traffic congestion on freeway facilities, particularly I-80, has an adverse impact on national freight movement in addition to local traffic operations. Significant proportions of traffic congestion are non-recurring and are caused by crashes, work zones, weather, and special events. The objectives of this CMP are to reduce both recurring and non-recurring traffic congestion.

An important component to this process is the implementation of operations and management strategies that improve signal timing coordination and communications between traffic operations engineers at RTC, NDOT, City of Reno, City of Sparks, and Washoe County. Examples of intelligent transportation systems (ITS) initiatives include the RTC Traffic Signalization Program and ITS Traffic Management Program, which is expanding fiber optic network connectivity. The Nevada Traffic Incident Management (NV TIM) is another important program that addresses incident response.

This CMP supports the advancement of the RTP goals, which are:

- Safety
- Maintain Infrastructure Condition
- Congestion Reduction
- System Reliability and Resiliency
- Freight Movement and Economic Vitality
- Equity and Environmental Sustainability
- Reduce Project Delivery Delays
- Accessibility and Mobility
- Integrate Land-Use and Economic Development

The CMP also provides an opportunity to address freight issues. RTC completed a Regional Freight Plan in coordination with the development of this RTP and regularly participates in Freight Advisory Committee meetings facilitated by NDOT that involved regional partners in freight and logistics, economic development, and infrastructure development. RTC will continue to coordinate with regional stakeholders as freight needs evolve.

2 – Identify Area of Application

The CMP applies to the Reno-Sparks urbanized area in Washoe County, Nevada. This is the planning area addressed in the 2050 RTP Update. It addresses project prioritization for roadway capacity, safety, and operations.

3 – Define System or Network of Interest

The CMP addresses congestion issues on regionally important roads and freeways in the Reno-Sparks metropolitan area, including existing or proposed roadways that handle high volumes of vehicle trips, facilitate connectivity across different jurisdictions, overcome significant travel barriers, or otherwise comply with the federal definition for regional significance. In terms of roadway functional classifications, RTC generally considers the following to be regionally important:

- Arterials that are direct connections between freeways and other arterials, provide continuity throughout the region, and generally accommodate longer trips within the region, especially in the peak periods on high traffic volume corridors.
- Collectors that cross a significant travel barrier or provide access to major existing or future regional facilities.

Level of service (LOS) is a term commonly used to measure the operational conditions for traffic flow, generally in terms of speed and travel time, freedom to maneuver, traffic interruptions and comfort and convenience. LOS is represented by the letters A to F; with A generally representing free flowing traffic and F, representing bumper to bumper traffic. The qualitative description of the conditions that correspond to each level of service is shown in Table D-1.

Table D-1
Level of Service Definitions

LOS	
Α	Free flow; individual users are virtually unaffected by the presence of others in the traffic stream
В	Reasonably free flow; the presence of other users in the traffic stream begins to be noticeable
С	Stable flow; each user is significantly affected by the presence of others
D	Approaching unstable flow; users experience poor level of comfort and convenience
E	Unstable flow; users experience decreasing speed and increasing traffic
F	Forced or breakdown flow; users experience frequent slowing and vehicles move in lockstep with the vehicle in front of it

The level of service standards used for assessing the need for street and highway improvements at a planning level are shown in Table D-2. These are the same standards that were first adopted in 2008. Design of the specific facilities will be based on more detailed operational analysis.

Table D-2 Regional Level of Service Standards

LOS	
D	All regional roadway facilities projected to carry less than 27,000 ADT at the latest RTP horizon
E	All regional roadway facilities projected to carry 27,000 or more ADT at the latest RTP horizon

F 4th St/Prater Way – Evans Avenue to 15th St
Plumas St – Plumb Ln to California Ave
Rock Blvd – Glendale Ave to Victorian Ave
Virginia St – Kietzke Ln to S McCarran Blvd
Virginia St – Plumb Ln to Liberty St &
8th St to 17th St
Sun Valley Blvd – 2nd Ave to 5th Ave
Intersection of N Virginia St and
Interstate 80 ramps

Except as noted above, all intersections shall be designed to provide a level of service consistent with maintaining the policy level of service of the intersecting corridors.

TransCAD allows the RTC to perform more a refined analysis of the level of service on the region's roadways. The current method of establishing the level of service on a roadway is based on the ratio of the volume of traffic to the capacity of the road (V/C). This methodology is widely accepted in the industry as a more accurate method of calculating level of service. Table D-3 shows LOS based on V/C.

Table D-3
Level of Service by Volume to Capacity

LOS	V/C
Α	0.00 to 0.60
В	0.61 to 0.70
C	0.71 to 0.80
D	0.81 to 0.90
E	0.91 to 1.00
F	Greater than 1.00

RTC identified existing traffic congestion hotspots using INRIX data. INRIX is a web-based data product that allows agencies to support operations, planning, analysis, research, and performance measures generation using probe data mixed with other agency transportation data. The suite consists of a collection of data visualization and retrieval tools. These web-based tools allow users to download reports, visualize data on maps or in other interactive graphics, and even download raw data for off-line analysis.

Each tool has its own unique purposes. Among many other uses, INRIX can provide insight on:

- Real-Time Speed Data
- Travel Time Index
- Travel Time Reliability Metrics
- Queue Measurements
- Bottleneck Ranking
- Other metrics that agencies can use to communicate effectively with the public or decision-makers

The INRIX roadway network includes freeways and major roads in the region. The congestion analysis focuses on AM and PM peak hours when congestion is the most severe. Congestion is measured as observed speed as a percentage of the free flow speed. The INRIX data used for existing congestion analysis is from weekdays during 2023 (Figures 1 and 2). Projected 2050 traffic levels under the build and no-build scenarios are provided in Figures 3 and 4. RTC and NDOT have planned improvements on corridors experiencing the highest levels of traffic congestion, including US 395, Pyramid Highway, Sparks Boulevard, and Vista Boulevard.

Figure 1
Existing AM Traffic Congestion (2023)

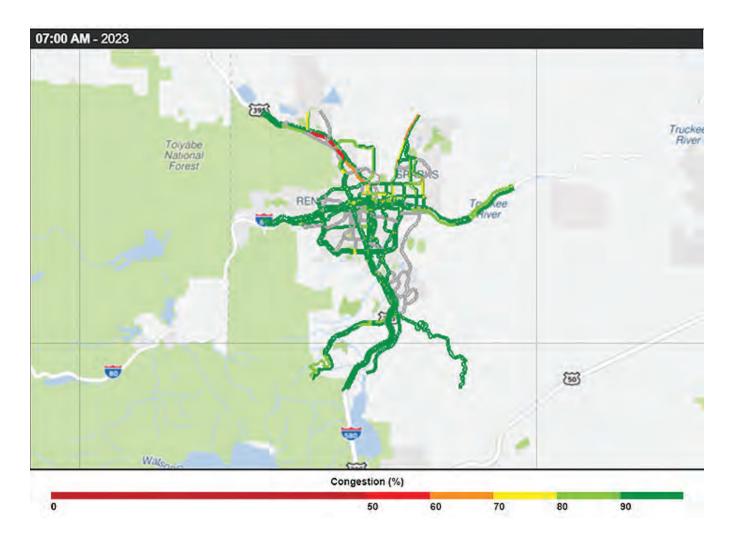


Figure 2
Existing PM Traffic Congestion (2023)

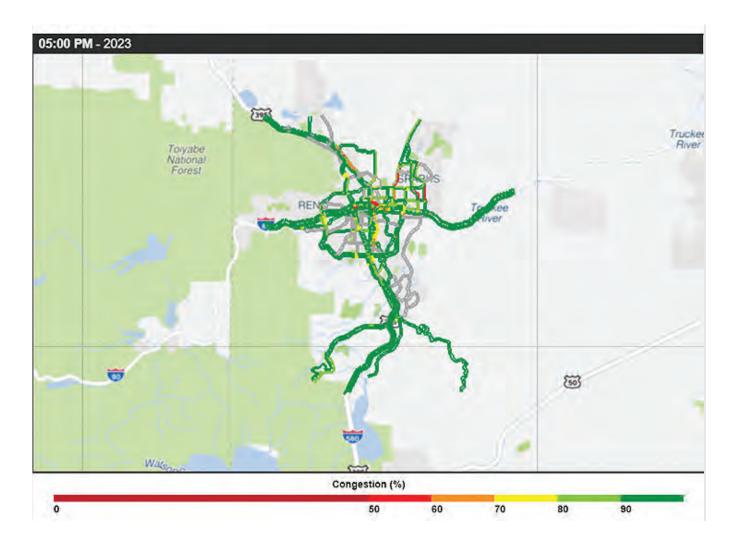


Figure 3
Projected 2050 No-Build Peak Period Level of Service

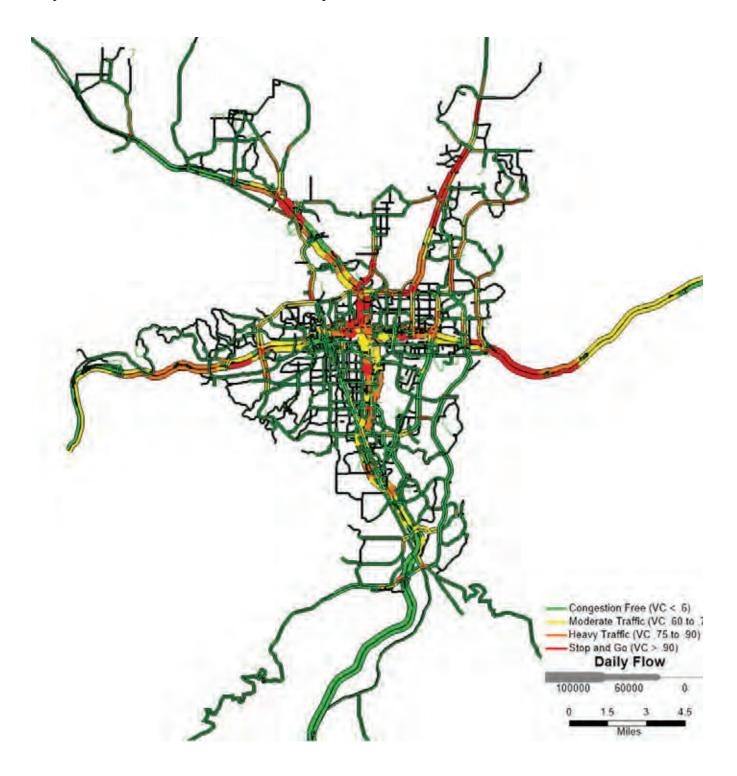
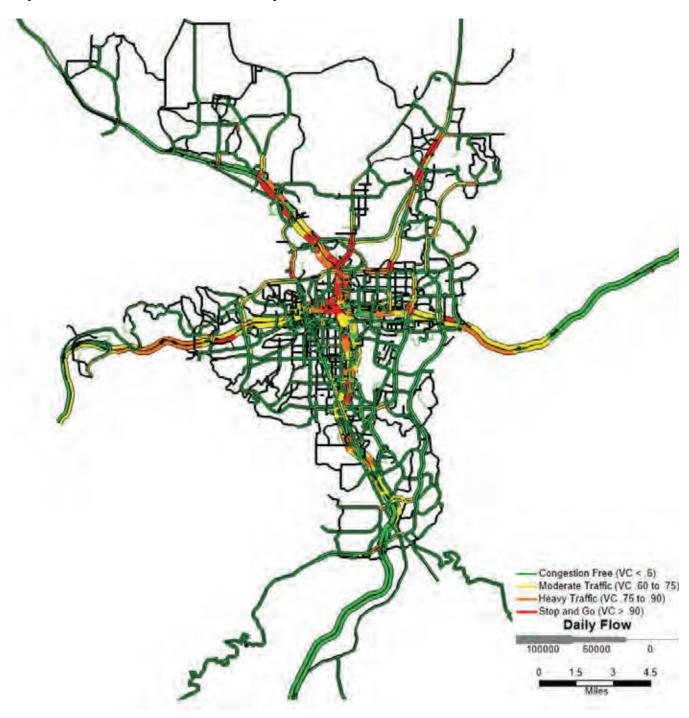


Figure 4
Projected 2050 Build Peak Period Level of Service



4 – Develop Performance Measures

The IIJA continues the legislation authorized under MAP-21, which created a data-driven, performance-based multimodal program to address the many challenges facing the U.S. transportation system. Performance management will lead to more efficient investment of transportation funds by focusing on national transportation goals, increasing accountability and transparency, and improving decision making. This section describes the performance measures and targets to be used in assessing system performance. RTC will continue to develop annual reports to track progress toward achieving these targets and will continue to gather additional community input into the transportation planning process.

The U.S. Secretary of Transportation, in consultation with states, MPOs, and other stakeholders, established national performance measures for several areas: pavement conditions and performance for the Interstate and National Highway System (NHS), bridge conditions, injuries and fatalities, traffic congestion, on-road mobile source emissions, and freight movement on the Interstate System. States, in coordination with MPOs, set performance targets in support of those measures, and state and metropolitan plans describe how program and project selection will help achieve the targets. The RTC has collaborated with the FHWA Nevada Division Office, NDOT, and other stakeholder jurisdictions and agencies to develop performance measures.

The required national performance goals for federal highway programs include the following:

- <u>Safety</u> To achieve a significant reduction in traffic fatalities and serious injuries on roadways.
- Maintain Infrastructure Condition –
 To maintain regional roadway infrastructure in a state of good repair.
- <u>Congestion Reduction</u> To achieve a significant reduction in congestion on the roadway network.

- System Reliability and Resiliency To improve the efficiency, resiliency, and overall reliability of the multimodal transportation system.
- Freight Movement and Economic Vitality To improve the freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- Equity and Environmental Sustainability

 To enhance the performance of the transportation system while protecting and enhancing the natural environment.
- Reduced Project Delivery Delays To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process.
- Accessibility and Mobility To increase
 the accessibility and mobility of people on
 the multimodal transportation system and
 enhance the integration and connectivity of
 the multimodal transportation system.
- Integrated Land-Use and Economic
 <u>Development</u> To increase partnership among local jurisdictions and other stakeholders to identify how transportation investments can support regional development, housing, and tourism goals.

The national transportation goals that have been identified are contained in Chapter four. Also identified is how these national goals link to the RTP goals and applicable performance measures. The zero fatalities goal and crash reduction goals are consistent with the Nevada Strategic Highway Safety Plan.

5 – Institute System Performance Monitoring Plan

MAP-21 also provided a framework for linking goals and performance targets with project selection and implementation. Performance plans will track the progress toward achieving these targets and will be used to facilitate a community conversation about the track record of the RTC's transportation program. RTC develops the following performance plans:

- Metropolitan (Regional) Transportation Plan, to be updated every four years, which will include a discussion of:
 - Anticipated effects of the improvement program toward achieving the performance targets.
 - How investment priorities are linked to performance targets.
- Annual Metropolitan System and Transit Performance Report, which will include:
 - Evaluation of the condition and performance of the transportation system.
 - Progress achieved in meeting performance targets.
 - Evaluation of how transportation investments have improved conditions.
 - Transit Asset Management Plan.
 - Public Transportation Safety Plan

These performance plans will inform the congestion management process, which will be ongoing throughout the life of the RTP.

As projects in the five-year Regional Transportation Improvement Plan (RTIP) are completed, the CMP framework and evaluation criteria will be used to select projects from the RTP for inclusion in future years of the RTIP and future updates of the RTP.

The CMP evaluation criteria for safety, congestion, and multimodal integration are part of the RTP performance measures that will be reported in the Annual Metropolitan System Performance Report.

6 – Identify and Evaluate Strategies

RTC gathered information about priorities for operational strategies and capacity improvements from stakeholders, the general public, and partner agencies. This included the 2050 RTP Agency Working Group, Inter-County Working Group, RTC Technical Advisory Committee, and RTC Citizens Multimodal Advisory Committee. Input was gathered at meetings of the committees listed above, as well as at RTC Board meetings and from the general public. The evaluation criteria were developed based on the RTP goals, which were informed by the public and agency participation process.

RTC also considered national performance measures and the availability of data in development of the evaluation criteria.

The RTP project prioritization framework is a crucial element in the CMP. The projects identified in the 2050 RTP were compiled from a variety of sources, including:

- The previous RTP (developed in 2021).
- Corridor plans and studies such as the McCarran Boulevard Corridor Study, Mt. Rose Highway Corridor Study, South Virginia TOD Study, Lemmon Valley Spanish Springs Connector, Regional Freight Plan, Active Transportation Plan, Verdi Regional Transportation Study, and other corridor plans.
- Road Safety Assessments and Safety Management Plans.
- Community workshops and other public comments.
- A series of online surveys.
- Input from local governing bodies.
- Input from the 2050 RTP Agency Working Group, RTC Citizens Multimodal Advisory Committee, RTC Technical Advisory Committee, Inter-County Working Group, and RTC Regional Road Impact Fee Advisory Committee.

After all project suggestions were reviewed for feasibility and any inconsistencies, each project was evaluated based on a series of criteria developed in support of the RTP goals and CMP.

7 – Implement Selected Strategies and Manage Transportation System

The RTP evaluated and prioritized strategies and proposed projects using a data-driven approach that is directly linked to the RTP goals. Expected funding for the region over the next 25 years as well as timing was then applied to the prioritized project list, resulting in a fiscally constrained project list and a framework for project implementation.

8 – Monitor Strategy Effectiveness

As described in the RTP, RTC monitors the impacts of capacity projects on an ongoing basis. In addition to the annual reports, RTC also develops before and after studies of specific projects that currently address the impacts of safety and operations. The regional travel demand model, combined with updates from our traffic count program, will further be used to monitor impacts on regional traffic congestion. An additional tool is the creation of annual progress reports to document the implementation of the RTP.

The performance measures in the RTP, which will be tracked on an annual basis, are consistent with the CMP evaluation criteria. Monitoring crash and injury data, construction of multimodal elements such as sidewalks and bicycle facilities, and changes in travel delay will assist RTC in continuously evaluating the suitability of projects in the RTP and RTIP for effectiveness.

APPENDIX E

RTC Coordinated Human Services Transportation Plan (CTP)



An exerpt of the CTP Introduction is provided as Appendix E. To access the full document, please visit the following webpage. https://rtcwashoe.com/public-transportation/resources-and-reports/



CHAPTER 1: INTRODUCTION, BACKGROUND, AND PURPOSE

As part of the Regional Transportation Plan (RTP) update process, the Regional Transportation Commission of Washoe County (RTC) has coordinated efforts and development timelines to include an update to its Coordinated Public Transit-Human Services Transportation Plan (CTP). Fundamental to the Federal Transit Administration's (FTA) Section 5310 program is the requirement for projects that utilize this funding source to be "derived from a locally developed, coordinated public transit-human service transportation plan," (also known as a "coordinated plan"). Beyond the requirements of the funding program, the CTP is an opportunity to collaborate with regional partners not normally involved in the transportation planning process, understand the needs of vulnerable populations, and to identify projects that will improve the overall transportation system for the Truckee Meadows region.

The CTP addresses compliance with the requirements of 49 C.F.R. 5310 and the dynamic between the FTA's Section 5310 program, RTC's Section 5310 program, and the RTC's 5310 equivalent sales tax program. It also discusses the stakeholder, provider, and public outreach process, identifying existing conditions, and combining them with a demographic analysis before laying out an implementation plan based on unmet needs. It concludes with a comparison of needs to available resources as well as a summary of findings and recommendations.



Federal Requirements of the Section 5310 Program

Title 49 U.S.C. 5310 authorizes the formula assistance program for the Enhanced Mobility of Seniors and Individuals with Disabilities Program. The FTA refers to this formula program as "the Section 5310 program." The FTA apportions the funds annually to States and/or Designated Recipients based on an administrative formula that considers the ratio of the number of seniors and individuals with disabilities in rural areas (under 50,000), small urbanized areas (50,000 – 200,000), and large urbanized areas (over 2000,000.) These funds are subject to annual appropriations. The RTC is designated by the Governor as the Metropolitan Planning Organization (MPO) for the Reno metropolitan area. In that capacity, the RTC is responsible for establishing policy direction for transportation planning.

This responsibility includes development and adoption of the Regional Transportation Plan (RTP), the Regional Transportation Improvement Program (RTIP), the Unified Planning Work Program (UPWP), and the Public Participation Plan (PPP), as well as the establishment and approval of federal funding priorities in certain program areas. The RTC, under authority of the State, is the Designated Recipient to Section 5310 funding. The RTC Board has the final authority over expenditure of Section 5310 funding. The RTC's Program Management Plan (PMP) describes how the RTC administers Section 5310 funding but was recently updated to reflect a change in the way this funding is distributed. FTA Circular 9070.1G is an issuance of guidance on the administration of the transit assistance program for seniors and individuals with disabilities under 49 U.S.C. 5310. The CTP further details eligibility requirements, the planning process for and contents of a coordinated plan, and the contents and cycle of the plan before detailing the Plan's development process.



APPENDIX F

RTC Regional Pavement Preservation Roadway List



Road Name	From	То	Functional Class	Policy
15th St	Victorian Ave	C St	Transit	Route
1st St	Lake St	Keystone	Arterial	LAC
2nd St	Kuenzli St	Keystone Ave	Arterial	LAC
2nd St	Kietzkie Ln	Kuenzli St	Arterial	MAC
4th St	McCarran Blvd	Galletti Way	Arterial	MAC
4th St	York Way	Greenbrae Dr	Transit	Route
5th St	N Sierra St	Keystone Ave	Arterial	MAC
5th St	Evans Ave	N Sierra St	Arterial	ULAC
6th St	E 4th St	Evans Ave	Arterial	MAC
6th St	Evans Ave	Ralston St	Arterial	ULAC
7th Ave	Sun Valley Blvd	Chocolate Dr	Arterial	LAC
7th St	Washington St	Robb Dr	Arterial	MAC
9th St	Evans Ave	Sierra St	Arterial	LAC
9th St	El Rancho Dr	N Wells Ave	Collector	LAC
Airway Dr	Longley Ln	Neil Rd	Arterial	MAC
Apple St	Kietzke Ln	Kirman Ave	Transit	Route
Arlington Ave	Skyline Blvd	W 6th St	Arterial	MAC
Armstrong Ln	Susileen Dr	Yuma Ln	Collector	LAC
Arrowcreek Pkwy	S Virginia St	Thomas Creek Rd	Arterial	MAC
Avenida de Landa	Sharlands Ave	Las Brisas Blvd	Collector	LAC
Baring Blvd	Vista Blvd	N McCarran Blvd	Arterial	MAC
Battle Born Way	Galletti Way	Victorian Ave	Arterial	MAC
Beaumont Pkwy	Clubhouse Dr	Glen Eagles Dr	Collector	LAC
Beaumont Pkwy	Avenida de Landa	Clubhouse Dr	Collector	LAC
Belmar Dr	Earthstone Dr	Los Altos Pkwy	Collector	LAC
Bluestone Dr	Huffaker Ln	End of Pavement	Collector	LAC
Bluestone Dr	Portman Ave	E Huffaker Ln	Collector	MAC
Boomtown Garson Rd	Vespucci Dr	I-80	Arterial	MAC
Booth St	California Ave	Idlewild Dr	Transit	Route
Bridge St	S Verdi Rd	3rd St	Collector	LAC
Brinkby Ave	S Virginia St	Plumas St	Collector	LAC
Buck Dr	Lemmon Dr	North Hills Blvd	Arterial	MAC
Cabela Dr	I-80	South Verdi Rd	Arterial	MAC
California Ave	S Virginia St	Hunter Lake Dr	Arterial	LAC
Calle de La Plata Dr	Pyramid Hwy	Eagle Canyon Dr	Collector	LAC
Calle de Oro Pkwy	Wingfield Springs Rd	Cordoba Blvd	Collector	LAC
Campus Way	Sierra Center Pkwy	Neil Rd	Arterial	MAC
Capital Blvd	S McCarran Blvd	Rock Blvd	Transit	Route
Casazza Dr	Wells Ave	Kietzke Ln	Transit	Route
Cashill Blvd	Skyline Blvd	S McCarran Blvd	Collector	LAC
Caughlin Pkwy	S McCarran	S McCarran Blvd	Collector	LAC

Road Name	From	То	Functional Class	Policy
Center St	S Virginia St	Truckee River Bridge	Arterial	MAC
Clear Acre Ln	Wedekind Rd	Dandini Blvd	Arterial	MAC
Colbert Dr	Longley Ln	Maestro Dr	Collector	LAC
Commerce St	N Rock Blvd	Merchant St	Transit	Route
Cordoba Blvd	Calle de Oro Pkwy	La Posada Dr	Collector	LAC
Corporate Blvd	Mill St	Capital Blvd	Transit	Route
Country Club Dr	North Side Lakeshore Blvd	South Side S.R 431	Collector	LAC
Court St	S Virginia St	S Arlington Ave	Arterial	LAC
Damonte Ranch Pkwy (Planned)	Geiger Grade Rd	Steamboat Pkwy	Arterial	MAC
Damonte Ranch	Eastern Terminus	S Virginia St	Arterial	MAC
Dandini Blvd	Sun Valley Blvd	US395	Arterial	MAC
David Allen Pkwy (Planned)	Northern Terminus	Kiley Pkwy	Collector	LAC
Debussy Dr	Sun Valley Blvd	Sun Valley Blvd	Transit	Route
Del Webb Pkwy E	Somersett Ridge Pkwy	Somersett Pkwy	Arterial	MAC
Del Webb Pkwy W	Somersett Ridge Pkwy	Somersett Pkwy	Arterial	MAC
Delores Dr (Planned)	Stonebrook Pkwy	Western Terminus	Arterial	MAC
Disc Dr	Vista Blvd	Pyramid Hwy	Arterial	MAC
Donatello Dr	Highland Ranch Pkwy	Sun Valley Blvd	Transit	Route
Double Diamond Pkwy	Double R Blvd	Double R Blvd	Arterial	MAC
Double R Blvd	Damonte Ranch Pkwy	Longley Ln	Arterial	MAC
E 5th Ave	Lupin Dr	Sun Valley Blvd	Transit	Route
E 8th Avenue	Lupin Dr	Sun Valley Blvd	Transit	Route
E Lincoln Way	Lillard Dr	Sparks Blvd	Transit	Route
Eagle Canyon Dr	Pyramid Hwy	W Calle de La Plata	Arterial	MAC
Eastlake Blvd	Old US 395	Old US 395	Arterial	MAC
Echo Ave	Moya Blvd	Mt Limbo St	Arterial	MAC
Edison Way	S Rock Rd	Mill St	Arterial	MAC
El Rancho Dr	Victorian Ave	Clear Acre Ln	Arterial	MAC
Energy Way	S Edison Way	S Rock Blvd	Transit	Route
Enterprise Rd	Valley Rd	Evans Ave	Arterial	MAC
Equity Ave	Financial Blvd	Corporate Blvd	Transit	Route
Evans Ave	E 2nd St	N McCarran Blvd	Arterial	LAC
Farr Ln	Pyramid Hwy	Wedekind Rd	Collector	LAC
Financial Blvd	Equity Ave	Mill St	Transit	Route
Foothill Rd	S Virginia St	Broken Hill Rd	Collector	LAC
Franklin Way	E Greg St	Kleppe Ln	Transit	Route
Galleria Pkwy Dr	Disc Dr	Los Altos Pkwy	Arterial	LAC
Galletti Way	Glendale Ave	Prater Way	Arterial	MAC
Gateway Dr	S Meadows Pkwy	Offenhauser Dr	Arterial	MAC

Road Name	From	То	Functional Class	Policy
Gentry Way	Neil Rd	Terminal Way	Arterial	MAC
Gentry Way	Kietzke Ln	Virginia St	Arterial	MAC
George Ferris Dr	E Lincoln Way	Legends Bay Dr	Transit	Route
Giroux St	E 2nd St	End of Pavement	Transit	Route
Glendale Ave	Meredith Way	Kietzke Ln	Arterial	MAC
Golden Valley Rd	Dream Catcher Rd	N Virginia St	Arterial	MAC
Greenbrae Dr	Howard Dr	N Rock Blvd	Collector	LAC
Greenbrae Dr	El Rancho Dr	Orovada St	Transit	Route
Greenbrae Dr	4th St	Pyramid Hwy	Transit	Route
Greenbrae Ln	N Rock Blvd	El Rancho Dr	Transit	Route
Greg St	I-80	Mill St	Arterial	MAC
Grove St	Harvard Way	Lymbery St	Collector	LAC
Harvard Way	Linden St	Vassar St	Collector	LAC
Highland Ave	Valley Rd	Evans Ave	Collector	LAC
Highland Ranch Pkwy	Pyramid Hwy	Sun Valley Blvd	Arterial	MAC
Holcomb Ave	S Virginia St	Mill St	Arterial	LAC
Howard Dr	E Prater Way	Sparks Blvd	Collector	LAC
Howard Dr	Nichols Blvd	E Lincoln Way	Transit	Route
Huffaker Ln (East)	Longley Ln	Celeste Dr	Arterial	MAC
Huffaker Ln (West)	Del Monte Ln	S Virginia St	Collector	LAC
Hunter Lake Dr	Rodney Dr	Yuma Ln	Transit	Route
Hunter Lake Dr	Yuma Ln	California Ave	Collector	LAC
Hunter Lake Dr	California Ave	Idlewild Dr	Transit	Route
Idlewild Dr	Booth St	Hunter Lake Dr	Transit	Route
Incline Way	North Side Country Club	Southwood Blvd	Collector	LAC
Industrial Way	Greg St	Glendale Ave	Transit	Route
Keystone Ave	Coleman Dr	N McCarran Blvd	Arterial	LAC
Keystone Ave	Coleman Dr	California Ave	Arterial	MAC
Kietzke Ln	S Virginia St	Neil Rd	Arterial	MAC
Kietzke Ln	Southern Terminus	Neil Rd	Transit	Route
Kiley Pkwy (Planned)	Henry Orr Pkwy	Pyramid Hwy	Collector	LAC
Kiley Pkwy	Northern Terminus	Henry Orr Pkwy	Collector	LAC
Kings Row	Keystone Ave	N McCarran Blvd	Collector	LAC
Kirman Ave	Mill St	Kuenzli St	Arterial	MAC
Kirman Ave	E Plumb Ln	Mill St	Collector	LAC
Kirman Ave	Apple St	E Plumb Ln	Transit	Route
Kuenzli St	Kietzke Ln	E 2nd St	Arterial	MAC
Kumle Ln	Firecreek Crossing	US-395	Arterial	MAC
La Posada Dr	Cordoba Blvd	Pyramid Hwy	Arterial	MAC
Lake St	Mill St	E 6th St	Collector	LAC
Lakeshore Blvd	S.R 28 (West Int.)	S.R 28 (East Int.)	Collector	LAC

Road Name	From	То	Functional Class	Policy
Lakeside Dr	Ridgeview Dr	W Huffaker Ln	Collector	LAC
Lakeside Dr	W Huffaker Ln	W Moana Ln	Arterial	MAC
Lakeside Dr	W Moana Ln	W Plumb Ln	Collector	LAC
Las Brisas Blvd	Silverado Creek Dr	N McCarran Blvd	Collector	LAC
Lazy 5 Pkwy	David Allen Pkwy	Pyramid Hwy	Arterial	MAC
Lear Blvd	Military Rd	Moya Blvd	Arterial	MAC
Legends Bay Dr	George Ferris Dr	E Lincoln Way	Transit	Route
Lemmon Dr	Ramsey Way	N Virginia St	Arterial	MAC
Liberty St	Ryland St	S Arlington Ave	Arterial	LAC
Lillard Dr	E Lincoln Way	E Prater Way	Transit	Route
Lincoln Way	Sparks Blvd	N McCarran Blvd	Arterial	LAC
Linden St	Wrondel Way	Harvard Way	Transit	Route
Locust St	Casazza Dr	Ryland St	Arterial	LAC
Longley Ln	S Virginia St	S Rock Blvd	Arterial	MAC
Loop Rd	Salomon Cir	Vista Blvd	Arterial	MAC
Los Altos Pkwy	Vista Blvd	Pyramid Hwy	Arterial	MAC
Lund Ln	Wedekind Rd	Northtowne Ln	Transit	Route
Lupin Dr	E 5th Ave	E 8th Ave	Transit	Route
Lymbery St	W Moana Ln	Lakeside Dr	Collector	MAC
Mae Anne Ave	N McCarran Blvd	Mesa Park Rd	Arterial	MAC
Maestro Dr	Double R Blvd	Colbert Dr	Arterial	MAC
Marthiam Ave	Cashill Blvd	Susileen Dr	Collector	LAC
Matley Ln	E Plumb Ln	Vilanova Dr	Arterial	MAC
Mayberry Dr	California Ave	W 4th St	Arterial	MAC
Mays Blvd	Southwood Blvd.	Lakeshore Blvd	Collector	LAC
Mccourry Blvd	Northwood Blvd.	S.R 431	Collector	LAC
Meadowood Mall Cir	Virginia St	Meadowood Mall Cir	Arterial	LAC
Meadowood Mall Link	McCarran Blvd	Meadowood Mall Cir	Arterial	LAC
Meadowood Mall Way	Virginia St	Meadowood Mall Cir	Arterial	LAC
Meadowood Mall Way	S Virginia St	Kietzke Ln	Arterial	LAC
Merchant St	Commerce St	Sullivan Ln	Transit	Route
Meredith Way	Kleppe Ln	E Glendale Ave	Transit	Route
Mesa Park	W 4th St	Mae Anne Ave	Collector	LAC
Military Rd	Lemmon Dr	Echo Ave	Arterial	MAC
Mill St	Kirman Ave	S Lake St	Arterial	LAC
Mill St	S McCarran Blvd	Kirman Ave	Arterial	MAC
Mira Loma Dr	Veterans Pkwy	To About 440 Feet East of Veterans Pkwy	Collector	LAC
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Mira Loma Dr	Veterans Pkwy	Longley Ln	Collector	LAC

Road Name	From	То	Functional Class	Policy
Moana Ln	Neil Rd	Plumas St	Arterial	MAC
Mount Rose St	S Virginia St	S Arlington Ave	Arterial	LAC
Moya Blvd	Echo Ave	Red Rock Rd	Arterial	LAC
N Virginia St	Panther Dr	Stead Blvd	Arterial	MAC
N Virginia St	Truckee River Bridge	McCarran Blvd	Arterial	MAC
Neighborhood Way	Eagle Canyon Dr	Treasure City Dr	Arterial	MAC
Neil Ln	Neil Rd	Meadowood Mall Cir	Arterial	MAC
Neil Rd	Kietzke Ln	Gentry Way	Arterial	LAC
Neil Way	Neil Rd	Meadowood Mall Cir	Arterial	MAC
Nichols Blvd	Howard Dr	N McCarran Blvd	Arterial	MAC
Nichols Blvd	N McCarran Blvd	E Victorian Ave	Transit	Route
North Hills Blvd	Golden Valley Rd	Buck Dr	Arterial	MAC
Northtowne Ln	Lund Ln	N McCarran Blvd	Transit	Route
Northwood Blvd	S.R 28 (West Int.)	S.R 28 (East Int.)	Collector	LAC
Nugget Ave	S McCarran Blvd	S Rock Blvd	Arterial	MAC
Oddie Blvd	Pyramid Hwy	Sadleir Way	Arterial	MAC
Offenhauser Dr	Portman Ave	Huffaker Ln	Collector	LAC
Offenhauser Dr	Gateway Dr	Portman Ave	Arterial	MAC
Old US-395	Eastlake Blvd	Mt Rose Hwy	Arterial	MAC
Orovada St	Greenbrae Dr	Silverada Blvd	Transit	Route
Parr Blvd	US395	N Virginia St	Arterial	LAC
Patriot Blvd	Longley Ln	Portman Ave	Collector	LAC
Patriot Blvd	Portman Ave	S Virginia St	Arterial	MAC
Peckham Ln	Longley Ln	Lakeside Dr	Arterial	MAC
Pembroke Dr	Veterans Pkwy	Boynton Slough	Arterial	MAC
Pembroke Dr	Veterans Pkwy	S McCarran Blvd	Collector	LAC
Plumas St	Ridgeview Dr	California Ave	Arterial	MAC
Plumb Ln	Terminal Way	S McCarran Blvd	Arterial	MAC
Portman Ave	Offenhauser Dr	E Patriot Blvd	Arterial	MAC
Prater Way	N McCarran Blvd	Galletti Way	Arterial	LAC
Prater Way	Petes Way	N McCarran Blvd	Arterial	MAC
Prototype Dr	Double R Blvd	Gateway Dr	Arterial	LAC
Putnam Dr	N Sierra St	Washington St	Arterial	LAC
Ralston St	W 2nd St	11th St	Collector	LAC
Red Rock Rd	Northern Terminus	US-395N	Arterial	MAC
Redfield Pkwy	Kietzke Ln	Firecreek Crossing	Arterial	MAC
Regency Way	S Virginia St	S Wells Ave	Transit	Route
Richard Springs Blvd	Lazy 5 Pkwy	Eagle Canyon Dr	Arterial	MAC
Ridgeview Dr	Lakeside Dr	Plumas St	Arterial	MAC
Rio Poco Rd	Reggie Rd	S McCarran Blvd	Collector	LAC
Rio Wrangler Pkwy	Bucephalus Pkwy	Veterans Pkwy	Arterial	MAC

Road Name	From	То	Functional Class	Policy
Rio Wrangler Pwy	S Meadows Pkwy	Bucephalus Pkwy	Arterial	MAC
Robb Dr	I-80	Las Brisas	Arterial	MAC
Rock Blvd	Prater Way	N McCarran Blvd	Arterial	LAC
Rock Blvd	S McCarran Blvd	Prater Way	Arterial	MAC
Ryland St	Mill St	Holcomb Ave	Arterial	LAC
S Virginia St	E Plumb Ln	Truckee River	Arterial	LAC
S Virginia St	Mt Rose Hwy	Plumb Ln	Arterial	MAC
Sadleir Way	N Wells Ave	Valley Rd	Arterial	MAC
Salomon Cir	Vista Blvd	Loop Rd	Arterial	MAC
Selmi Dr	Clear Acre Ln	Sutro St	Transit	Route
Sharlands Ave	Robb Dr	Mae Anne Ave	Arterial	MAC
Sierra Center Pkwy	Maestro Dr	S Virginia St	Arterial	MAC
Sierra Highlands Dr	N McCarran Blvd	Greystone Dr	Collector	LAC
Sierra Rose Dr	Kietzke Ln	Talbot Ln	Arterial	MAC
Sierra St	California Ave	N Virginia St	Arterial	LAC
Silver Lake Rd	Sky Vista Pkwy	Red Rock Rd	Collector	LAC
Silverada Blvd	E 9th St	Wedekind Rd	Collector	LAC
Sinclair St	Holcomb Ave	Mill St	Collector	LAC
Sky Mountain Dr	Mistyridge Ln	S McCarran Blvd	Transit	Route
Sky Valley Dr	Summit Ridge Dr	Mistyridge Ln	Transit	Route
Sky Vista Pkwy	Lemmon Dr	Silver Lake Rd	Arterial	MAC
Sky Vista Pkwy	Silver Lake Rd	Lear Blvd	Collector	LAC
Skyline Blvd	S McCarran Blvd	S Arlington Ave	Collector	LAC
Smithridge Dr	McCarran Blvd	E Peckham Ln	Arterial	MAC
Somersett Pkwy	Del Webb Pkwy	Mae Anne Ave	Arterial	MAC
Somersett Ridge Pkwy	Us Hwy 40 (Verdi)	S/S Del Webb Pkwy	Collector	LAC
South Meadows Pkwy	Eastern Terminus	S Virginia St	Arterial	MAC
South Meadows Pkwy	Desert Way	South Meadows Pkwy	Arterial	MAC
South Verdi Rd	I-80 WB Off Ramp	25' E Of Garson Rd.	Collector	LAC
Southwood Blvd	S.R 28 (West Int.)	S.R 28 (East Int.)	Collector	LAC
Sparks Blvd	E Greg St	Pyramid Hwy	Arterial	MAC
State St	Holcomb Ave	S Virginia St	Arterial	MAC
Stead Blvd	N Virginia St	Echo Ave	Arterial	MAC
Steamboat Pkwy	Rio Wrangler Pkwy	Damonte Ranch Pkwy	Arterial	MAC
Stoker Ave	W 4th St	W 7th St	Collector	LAC
Stonebrook Pkwy	Delores Dr	La Posada Dr	Arterial	MAC
Sullivan Ln	Oddie Blvd	El Rancho Dr	Collector	LAC
Sullivan Ln	Prater Way	Oddie Blvd	Collector	LAC
Summit Ridge Dr	W 4th St	Summit Ridge Ct	Collector	LAC
Summit Ridge Exit/On Ramp	S McCarran Blvd	Summit Ridge Dr	Transit	Route
Sun Valley Blvd	Highland Ranch Pkwy	Dandini Blvd	Arterial	MAC

Road Name	From	То	Functional Class	Policy
Susileen Dr	Marthiam Ave	Armstrong Ln	Collector	LAC
Sutro St	Kuenzli St	Selmi Dr	Arterial	MAC
Talbot Ln	South End	Redfield Pkwy	Arterial	MAC
Tanager St	Village Blvd	Southwood Blvd	Collector	LAC
Tanberg Dr	Seventh Ave	Mineral Ave	Transit	Route
Terminal Way	Gentry Way	Mill St	Arterial	MAC
Thomas Creek Rd	Mt Rose Hwy	W Zolezzi Ln	Collector	LAC
Toll Rd	Sylvester Rd	Geiger Grade Rd	Collector	LAC
University Terrace	N Sierra St	Vine St	Collector	LAC
University Way	Truckee River Bridge	Ninth St	Collector	MAC
US Hwy 40 (Verdi)	I-80	Bridge St	Arterial	MAC
Valley Rd	W 4th St	Enterprise Rd	Arterial	MAC
Vassar St	Kietzke Ln	S Virginia St	Arterial	LAC
Vassar St	Terminal Way	Kietzke Ln	Arterial	MAC
Veterans Pkwy	S Meadows Pkwy	E Greg St	Arterial	HAC
Veterans Pkwy	Geiger Grade Rd	S Meadows Pkwy	Arterial	HAC
Victorian Ave	N McCarran Blvd	Prater Way	Arterial	LAC
Village Blvd	Lakeshore Blvd	Eagle Dr	Collector	LAC
Village Pkwy	Village Center Dr	US-395	Arterial	MAC
Villanova Dr	Terminal Way	Matley Ln	Arterial	LAC
Villanova Dr	Matley Ln	Harvard Way	Collector	LAC
Vine St	1st St	University Ter	Collector	LAC
Vista Blvd	I-80	Wingfield Hill Rd	Arterial	MAC
Vista Blvd	Hubble Dr	Wingfield Hills Rd	Collector	LAC
Vista Knoll Pkwy	Lemmon Dr	Sky Vista Pkwy	Collector	LAC
Washington St	W 2nd St	Putnam Dr	Collector	LAC
Wedekind Rd	Farr Ln	To 330 Feet West of Sutro	Collector	LAC
Wedge Pkwy	De Spain Ln	Arrowcreek Pkwy	Arterial	MAC
Wells Ave	S Virginia St	Ryland St	Arterial	LAC
Wells Ave	Ryland St	Sadleir Way	Arterial	MAC
West St	W 4th St	W 6th St	Arterial	MAC
White Lake Pkwy	US395	Village Pkwy	Arterial	MAC
Windmill Farms Blvd	Kiley Pkwy	Western Terminus	Arterial	MAC
Wingfield Hills Rd	Pyramid Hwy	Rolling Meadows Dr	Arterial	MAC
Wingfield Hills Rd	Vista Blvd	Rolling Meadows Dr	Arterial	MAC
Wingfield Springs Rd	N Wingfield Pkwy Trail	Calle de Oro Pkwy	Collector	LAC
Wrondel Way	Linden St	Apple St	Transit	Route
York Way	N McCarran Blvd	N Rock Blvd	Collector	LAC
Yuma Ln	Hunter Lake Dr	Armstrong Ln	Collector	LAC
Zolezzi Ln	Arrowcreek Pkwy	Thomas Creek Rd	Collector	LAC
15th St				

Road Name	From	То	Functional Class
18th St	Glendale Ave	Crane Way	INDUSTRIAL
18th St	Glendale Ave	Hymer Ave	INDUSTRIAL
19th St	Pittman Ave	Pacific Ave	INDUSTRIAL
21th St	Greg St	Pacific Ave	INDUSTRIAL
5th St	Eastern Terminus	Ferrar St	INDUSTRIAL
5th St	Morrill Ave	Wells Ave	INDUSTRIAL
Aircenter Cir	Longley Ln	Longley Ln	INDUSTRIAL
Airmotive Way	Terminal Way	Villanova Dr	INDUSTRIAL
Alexander Lake Rd	Veterans Pkwy	Spring Dr	INDUSTRIAL
Ampere Dr	Rock Blvd	Edison Way	INDUSTRIAL
Asti Ln	Bennie Ln	Ferrari McLeod Blvd	INDUSTRIAL
Automotive Way	Market St	Kietzke Ln	INDUSTRIAL
Barron Way	Reno Corporate Dr	Louie Ln	INDUSTRIAL
Bennie Ln	Gardell Ave	Parr Blvd	INDUSTRIAL
Bergin Way	Kresge Ln	Northern Terminus	INDUSTRIAL
Bible Way	Mill St	Vassar St	INDUSTRIAL
Boxington Way	Lincoln Way	Lillard Dr	INDUSTRIAL
Bravo Ave	Mt Lola St	Ramsey Way	INDUSTRIAL
Bravo Ave	Mt Bismark St	Mt McClellan St	INDUSTRIAL
Brierley Way	Vista Blvd	Lillard Dr	INDUSTRIAL
Brookside Ct	Eastern Terminus	Rock Blvd	INDUSTRIAL
Capital Ct	Eastern Terminus	Capital Blvd	INDUSTRIAL
Catron Dr	Parr Cir	Parr Blvd	INDUSTRIAL
Gentry Way	Kietzke Ln	End of Cul de Sac	INDUSTRIAL
Circuit Ct	Southern Terminus	Isidor Ct	INDUSTRIAL
Clean Water Way	Eastern Terminus	McCarran Blvd	INDUSTRIAL
Cola Ct	Western Terminus	Vista Blvd	INDUSTRIAL
Coliseum Way	Peckham Ln	Moana Ln	INDUSTRIAL
Commercial Row	Lake St	West St	INDUSTRIAL
Condor Way	Western Terminus	Airmotive Way	INDUSTRIAL
Coney Island Dr	Standford Way	Marietta Way	INDUSTRIAL
Corsair St	Aircenter Cir	Longley Ln	INDUSTRIAL
Crane Way	Eastern Terminus	18th St	INDUSTRIAL
Crummer Ln	Virginia St	US395	INDUSTRIAL
Delucchi Ln	Home Gardens Dr	S Virginia St	INDUSTRIAL
Deming Way	Northern Terminus	Spice Islands Dr	INDUSTRIAL
Deming Way	Southern Terminus	Glendale Ave	INDUSTRIAL
Depaoli St	5th St	Tacchino St	INDUSTRIAL
Dermody Way	Northern Terminus	Glendale Ave	INDUSTRIAL
Dickerson Rd	Western Terminus	Chisim St	INDUSTRIAL
Digital Ct	Southern Terminus	Ingenuity Ave	INDUSTRIAL

Road Name	From	То	Functional Class
Distribution Dr	Calle de la Plata Dr	Isidor Ct	INDUSTRIAL
Double Eagle Ct	Western Terminus	Gateway Dr	INDUSTRIAL
Dunn Cir	Northern Terminus	Glendale Ave	INDUSTRIAL
Dunn Cir	Watson Way	Dunn Cir	INDUSTRIAL
E Commercial Row	Western Terminus	Sutro St	INDUSTRIAL
E Nugget Ave	Southern Terminus	Nugget Ave	INDUSTRIAL
Echo Ave	Moya Blvd	End of Pavement	INDUSTRIAL
Echo Ct	Northern Terminus	Echo Ave	INDUSTRIAL
Edison Way	Mill St	End of Pavement	INDUSTRIAL
Equity Ave	McCarran Blvd	Financial Blvd	INDUSTRIAL
Ferrar McLeod Blvd	Gardella Ave	Parr Blvd	INDUSTRIAL
Ferrari St	4th St	5th St	INDUSTRIAL
Financial Blvd	Equity Ave	Capital Blvd	INDUSTRIAL
Franklin Way	Spice Islands Dr	Greg St	INDUSTRIAL
Frazer Ave	Rock Blvd	21st St	INDUSTRIAL
Freeport Blvd	Steneri Way	Rock Blvd	INDUSTRIAL
Freeport Blvd	Rock Blvd	21st St	INDUSTRIAL
Gaslight Ln	Socrates Dr	Socrates Dr	INDUSTRIAL
Gentry Way	Kietzke Ln	End of Pavement	INDUSTRIAL
Gentry Way	Neil Rd	Chris Ln	INDUSTRIAL
Gentry Way	Virginia St	Brinkby Ave	INDUSTRIAL
Glen Carron Cir	Entire Loop	Entire Loop	INDUSTRIAL
Gould St	Mills St	2nd St	INDUSTRIAL
Green Acres Dr	Western Terminus	Virginia St	INDUSTRIAL
Greg Pkwy	Industrial Way	Greg St	INDUSTRIAL
Greg Pkwy	Industrial Way	Greg St	INDUSTRIAL
Hammill Ln	Eastern Terminus	Kietzke Ln	INDUSTRIAL
Harvard Way	Automotive Way	Market St	INDUSTRIAL
Hawco Ct	Eastern Terminus	Ingenuity Ave	INDUSTRIAL
Huffaker Pl	Western Terminus	Virginia St	INDUSTRIAL
Hulda Ct	Hulda Way	Eastern Terminus	INDUSTRIAL
Hulda Way	Northern Terminus	Greg St	INDUSTRIAL
Hymer Ave	Eastern Terminus	21st St	INDUSTRIAL
Icehouse Ave	Western Terminus	Eastern Terminus	INDUSTRIAL
Industrial Way	Greg Pkwy	Gret St	INDUSTRIAL
Industry Cir	Echo Ave	Echo Ave	INDUSTRIAL
Ingenuity Ave	Western Terminus	Pyramid Hwy	INDUSTRIAL
Innovation Dr	Longley Ln	Double R Blvd	INDUSTRIAL
Internation Pl	Glendale Ave	Icehouse Ave	INDUSTRIAL
Inventors PI	Western Terminus	Isidor Ct	INDUSTRIAL
Isidor Ct	Academy Way	Calle de la Plata Dr.	INDUSTRIAL

Road Name	From	То	Functional Class
Joule St	Edison Way	Rock Blvd	INDUSTRIAL
Kleppi Ln	Greg St	Greg St	INDUSTRIAL
Kresge Ln	Watson Way	McCarran Blvd	INDUSTRIAL
Kuenzli St	Sunshine Ln	Kietzke Ln	INDUSTRIAL
Larkin Cir	Eastern Terminus	Greg St	INDUSTRIAL
Lear Blvd	Eastern Terminus	Military Rd	INDUSTRIAL
Lewis St	Kietzke Ln	Maine St	INDUSTRIAL
Lewis St	Golden Ln	Kietzke Ln	INDUSTRIAL
Lillard Dr	Southern Terminus	Lincoln Dr	INDUSTRIAL
Linda Way	Coney Island Dr	Glendale Ave	INDUSTRIAL
Linden St	Harvard Way	Kietzke Ln	INDUSTRIAL
Locust St	Ryland St	Mill St	INDUSTRIAL
Longley Ln	Rock Blvd	End	INDUSTRIAL
Louie Ln	Longley Ln	Airway Dr	INDUSTRIAL
Louise St	Mill St	Market St	INDUSTRIAL
Madison Ave	Larkin Cir	Larkin Cir	INDUSTRIAL
Manuel St	2nd St	Kuenzli St	INDUSTRIAL
Marietta Way	Southern Terminus	Greg St	INDUSTRIAL
Market St	Villanova Dr	Kietzke Ln	INDUSTRIAL
Matley Ln	Mill St	Vassar St	INDUSTRIAL
Mira Loma Dr	Aircenter Circle	Longley Ln	INDUSTRIAL
Montello St	Southern Terminus	6th St	INDUSTRIAL
Mt Charleston St	Stead Blvd	Echo Ave	INDUSTRIAL
Newport Ln	Newport Ln	Ranger Rd	INDUSTRIAL
Ohm Pl	Ampere Dr	Mill St	INDUSTRIAL
Ormand Ct	Eastern Terminus	Giroux St	INDUSTRIAL
Overmyer Rd	Bergin Way	Watson Way	INDUSTRIAL
Pacifica Ave	19th St	21st St	INDUSTRIAL
Packer Way	Southern Terminus	Glendale Ave	INDUSTRIAL
Panther Dr	Panther Dr	End	INDUSTRIAL
Panther Dr	Business 395	Western Rd	INDUSTRIAL
Parr Cir	Parr Blvd	Parr Blvd	INDUSTRIAL
Pittman Ave	15th St	18th St	INDUSTRIAL
Plaza St	Lake St	Virginia St	INDUSTRIAL
Plumas St	Southern Terminus	Ridgeview Dr	INDUSTRIAL
Production Ct	Lear Blvd	N/End Cds	INDUSTRIAL
Production Dr	Northern Terminus	Resource Dr	INDUSTRIAL
Prosperity St	Golden Ln	Kietzke Ln	INDUSTRIAL
Prototype Ct	Eastern Terminus	Gateway Dr	INDUSTRIAL
Purina Way	Greg St	Spice Islands Dr	INDUSTRIAL
Quail Manor	Southern Terminus	Airway Dr	INDUSTRIAL

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Woodland Ave Sugar Pine Ct 4th St INDUSTRIAL Yale Way Market St Harvard Way INDUSTRIAL	Wild Island Ct	Southern Terminus	Lincoln Way	INDUSTRIAL
Yale Way Market St Harvard Way INDUSTRIAL	Wolverine Way	Stanford Way	Glendale Ave	INDUSTRIAL
·	Woodland Ave	Sugar Pine Ct	4th St	INDUSTRIAL
Yori Ave Moana Ln Gentry Way INDUSTRIAL	Yale Way	Market St	Harvard Way	INDUSTRIAL
	Yori Ave	Moana Ln	Gentry Way	INDUSTRIAL

RESOLUTION

CERTIFICATE



Building a Better Community Through Quality Transportation rtcwashoe.com



RESOLUTION 25-04

RESOLUTION AUTHORIZING THE APPROVAL OF THE 2025 UPDATE TO THE 2050 REGIONAL TRANSPORTATION PLAN (RTP) FOR THE RENO-SPARKS URBANIZED AREA

WHEREAS, Title 23 Code of Federal Regulations, Part 450, and Title 49 Code of Federal Regulations, Part 613, require the preparation of a Regional Transportation Plan (RTP) by the Metropolitan Planning Organization (MPO); and

WHEREAS, the Regional Transportation Commission of Washoe County (RTC) has been designated as the Metropolitan Planning Organization (MPO) for the Reno-Sparks Urbanized Area of Washoe County; and

WHEREAS, RTC, through the conduct of a continuing, comprehensive and coordinated transportation planning process and in conformance with all applicable federal requirements, has prepared the 2025 Update to the 2050 Regional Transportation Plan (RTP); and

WHEREAS, RTC finds that pursuant to Title 40 of the Code of Federal Regulations, Part 93, this Regional Transportation Plan conforms with the intent of the State Air Quality Implementation Plan; and

WHEREAS, RTC finds that the RTP has been prepared through a process of community and agency coordination and participation in accordance with the RTC's adopted Public Participation Plan.

NOW, THEREFORE, BE IT RESOLVED BY THE REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY that the Regional Transportation Commission does hereby approve and endorse the 2025 Update to the 2050 Regional Transportation Plan.

CERTIFICATE

The undersigned, duly qualified Chairperson of the Regional Transportation Commission, certifies that the foregoing is a true and correct copy of a resolution adopted at a legally convened meeting held on February 21, 2025.

Alexis Hill, Chair Regional Transportation Commission Meeting Date: 2/21/2025 Agenda Item: 5.2.

To: Regional Transportation Commission

From: Graham Dollarhide, Planning Manager

SUBJECT: FFY2023-2027 RTIP Amendment No. 5

RECOMMENDED ACTION

Conduct a public hearing regarding approval of Amendment No. 5 to the FFY 2023-2027 Regional Transportation Improvement Program (RTIP); adopt a resolution approving Amendment No. 5 to the RTIP.

BACKGROUND AND DISCUSSION

Amendment No. 5 is required to add, change, and consolidate projects in the RTIP. The amendment includes updates to projects led by both the RTC and Nevada Department of Transportation (NDOT).

A separate air quality analysis for the proposed amendment was not required as the added and amended projects are either exempt from transportation conformity requirements or have already complied with this requirement and the associated amendment does not involve a change to the project scope.

A complete list of the projects meeting the amendment threshold and thus requiring formal action, as well as a brief description of the changes to each project, are as follows:

- G-751 Bridge Replacement project scope incorporated into another existing project, allowing this one to be removed from the RTIP
- Sun Valley Boulevard Corridor Improvements Phase 2 amendment to project that increases total project cost based on anticipated federal discretionary award
- I-80 East, WA Pre-construction amendment to project to add federal funding to design phase of project
- SR 445, Pyramid Way 3R and ADA amendment to project that increases total project cost
- US 395 North Valleys Preservation amendment to project that increases total project cost
- Multilayer Overlay on Various Structures Throughout Washoe County new project to conduct pavement preservation activities on various road segments in Reno and Sparks

A public comment period preceded this public hearing (January 29, 2025 – February 18, 2025). The draft documents were posted on the agency website, and a notice was published in the Reno Gazette-Journal, Sparks Tribune, and El Sol de Nevada per the RTC Public Participation Plan. No comments have been received as of the drafting of this staff report.

FISCAL IMPACT

Funding for the project cost estimates in the proposed amendment have been budgeted based on anticipated federal, state and local revenue sources.

PREVIOUS BOARD ACTION

09/20/2024	Approved Amendment No. 4 to the FFY 2023-2027 RTIP
06/21/2024	Approved Amendment No. 3 to the FFY 2023-2027 RTIP
01/19/2024	Approved Amendment No. 2 to the FFY 2023-2027 RTIP
11/17/2023	Approved Amendment No. 1 to the FFY 2023-2027 RTIP
08/18/2023	Approved the FFY 2023-2027 RTIP

RESOLUTION 25-05

RESOLUTION AUTHORIZING THE ADOPTION OF AMENDMENT NO. 5 TO THE FEDERAL FISCAL YEARS (FFY) 2023-2027 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP) FOR THE RENO-SPARKS URBANIZED AREA.

WHEREAS, Title 23 Code of Federal Regulations, Part 450, and Title 49 Code of Federal Regulations, Part 613, require the preparation of a Regional Transportation Improvement Program (RTIP) by the Metropolitan Planning Organization (MPO) at least every four years; and

WHEREAS, the Regional Transportation Commission of Washoe County (RTC) has been designated by the Governor of the State of Nevada as the Metropolitan Planning Organization (MPO) for Washoe County; and

WHEREAS, the RTC, through the conduct of a continuing, comprehensive and coordinated transportation planning process carried out in conjunction with the RTC member entities and the Nevada Department of Transportation and in conformance with all applicable federal requirements, prepared the FFY 2023-2027 RTIP which includes all federal and non-federal regionally significant transportation projects; and

WHEREAS, the RTC finds Amendment No. 5 to the FFY 2023-2027 RTIP in conformance with the 2050 Regional Transportation Plan (RTP); and

WHEREAS, the RTC finds that pursuant to Title 40 of the Code of Federal Regulations, Part 93, this RTIP amendment conforms with the intent of the State Air Quality Implementation Plan; and,

WHEREAS, the RTC finds that current fiscal resources are adequate to develop, operate and maintain the transportation system, and finds that the FFY 2023-2027 RTIP is limited to projects for which funds are available or committed; and

WHEREAS, the FFY 2023-2027 RTIP has been prepared through a process of community and agency coordination and participation in accordance with the RTC's adopted Public Participation Plan and all applicable federal requirements;

NOW, THEREFORE, BE IT RESOLVED that the Regional Transportation Commission does hereby adopt and endorse Amendment No. 5 to the FFY 2023-2027 Regional Transportation Improvement Program.

CERTIFICATE

The undersigned, duly qualified Chairperson of the Regional Transportation Commission, certifies that the foregoing is a true and correct copy of a resolution adopted at a legally convened meeting held on February 21, 2025.

Alexis Hill, Chair Regional Transportation Commission

ALL Transportation Improvement Program, 25-01-RTC Washoe Amendment 2025-2029

6 Projects Listed

Total Cost \$0

ConstructionN/A

State TIP ID WA20180100 MPO/TIP RTC Washoe 25-01

Lead Agency Nevada DOT DAVID CHASE 775-888-7550 NDOT District 2 WASHOE Contact County TCM

Project Type @Bridge/Structures Air Quality Exempt

Project Name G-751 Bridge Replacement

Project Limits

At Bridge# G-751

Scope Replace structure and rebuild roadway approaches

Phase **Fund Source** Prior FY2025 FY2026 FY2027 FY2028 FY2029 Future Total



Version History

Local ID

No

TIP Docum	ent	MPO Approval	State Approval	FHWA Approval	FTA Approval
21-00	Adoption 2021-2025	08/28/2020	08/31/2020	09/21/2020	09/24/2020
21-14	Amendment 2021-2025	09/14/2021	09/16/2021	09/20/2021	09/29/2021
23-00	Adoption 2023-2027	10/24/2022	10/25/2022	12/15/2022	12/19/2022
25-00	Adoption 2025-2029	09/20/2024	12/23/2024	Pending	Pending
25-01	Amendment 2025-2029	Pending	Pending	Pending	N/A

Current Change Reason

Delete project

Funding Change(s):

Total project cost decreased from \$5,707,000 to

State TIP ID WA20190042	MPO/TIP RTC Washoe 25-01	Local ID	Total Cost \$88,150,000
Lead Agency RTC Washoe	Contact Jessica Dover 775-335-1831	NDOT District 2	County WASHOE
Project Type @Active Transportation (Bike/Ped)	Air Quality Exempt	TCM No	Construction2027 start
Project Name Sun Valley Blvd. Corridor Improvements			

Project At From Scottsdale Road To 7th Avenue of Distance (mile) 2.6 Begin: 1 End: 3.6 Limits Scope Multimodal and drainage improvements along the Sun Valley Boulevard corridor.

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
PE	Local Fuel Tax - RTCWA	\$2,000,000	\$4,000,000	-	-	-	-	-	\$6,000,000
	Total Preliminary Engineering	\$2,000,000	\$4,000,000	-	-	-	-	-	\$6,000,000
ROW	Local Fuel Tax - RTCWA	-	-	\$1,000,000	-	-	-	-	\$1,000,000
	Total Right of Way	-	-	\$1,000,000	-	-	-	-	\$1,000,000
CON	Anticipated Discretionary Grant	-	-	-	\$62,000,000	-	-	-	\$62,000,000
CON	Congressionally Directed Spending	-	-	-	\$2,500,000	-	-	-	\$2,500,000
CON	Local Fuel Tax - RTCWA	-	-	-	\$16,650,000	-	-	-	\$16,650,000
	Total Construction	-	-	-	\$81,150,000	-	-	-	\$81,150,000
	Total Programmed	\$2,000,000	\$4,000,000	\$1,000,000	\$81,150,000	-	-	-	\$88,150,000



Version History

TIP Docum	ent	MPO Approval	State Approval	FHWA Approval	FTA Approval
20-00	Adoption 2020-2024	09/20/2019	09/30/2019	10/21/2019	10/07/2019
21-00	Adoption 2021-2025	10/23/2020	10/26/2020	10/27/2020	10/29/2020
21-03	Amendment 2021-2025	03/19/2021	04/14/2021	04/26/2021	05/05/2021
21-92	Amendment 2021-2025	01/20/2023	02/28/2023	N/A	N/A
23-00	Adoption 2023-2027	08/18/2023	08/22/2023	08/30/2023	08/29/2023
23-02	Amendment 2023-2027	01/19/2024	02/08/2024	02/08/2024	02/27/2024
25-00	Adoption 2025-2029	09/20/2024	12/23/2024	Pending	Pending
25-01	Amendment 2025-2029	Pending	Pending	Pending	N/A

Current Change Reason

SCHEDULE / FUNDING / SCOPE - Other

Funding Change(s):

Total project cost increased from \$27,000,000 to \$88,150,000

State TIP ID WA20190047	MPO/TIP	RTC Washoe 25-01	Local ID		Total Cost	\$107,000,000
Lead Agency Nevada DOT	Contact	CHRISTOPHER KUHN 775-888-7728	NDOT	District 2	County	WASHOE
Project Type @Capacity	Air Quality	Non-Exempt	TCM	Yes	Construction	n2027 start

Project Name I80 East, WA - Pre-construction

Project Limits At From Vista Blvd To USA Parkway of Distance (mile) 13.08 Begin: 19.67 End: 32.75

Scope WIDEN TO THREE LANES EACH DIRECTION

Phase	Fund Source		Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
PE	INFRA Grant		-	\$6,500,000	-	-	-	-	-	\$6,500,000
PE	State Match - Nv		-	\$500,000	-	-	-	-	-	\$500,000
		Total Preliminary Engineering	-	\$7,000,000	-	-	-	-	-	\$7,000,000
CON	NHPP		-	-	-	\$71,250,000	-	-	-	\$71,250,000
CON	STBG State-Wide		-	-	-	\$23,750,000	-	-	-	\$23,750,000
CON	State Match - Nv		-	-	-	\$5,000,000	-	-	-	\$5,000,000
		Total Construction	-	-	-	\$100,000,000	-	-	-	\$100,000,000
		Total Programmed	-	\$7,000,000	-	\$100,000,000	-	-	-	\$107,000,000



Version History

TIP Docun	ient	MPO Approval	State Approval	FHWA Approval	FTA Approval
20-23	Amendment 2020-2024	03/31/2020	03/31/2020	04/06/2020	N/A
21-00	Adoption 2021-2025	08/28/2020	08/31/2020	09/21/2020	09/24/2020
23-04	Amendment 2023-2027	06/21/2024	07/02/2024	07/03/2024	N/A
25-00	Adoption 2025-2029	09/20/2024	12/23/2024	Pending	Pending
25-01	Amendment 2025-2029	Pending	Pending	Pending	N/A

Current Change Reason

SCHEDULE / FUNDING / SCOPE - Other

Funding Change(s):

Total project cost decreased from \$108,000,000 to \$107,000,000

State TIP ID WA20200073	MPO/TIP RTC Washoe 25-01	Local ID	Total Cost \$13,545,000
Lead Agency Nevada DOT	Contact CHRISTOPHER KUHN 775-888-7728	NDOT District 2	County WASHOE
Project Type @Preservation	Air Quality Exempt	TCM No	Construction2025 start

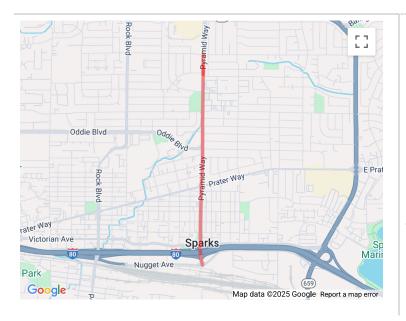
Project Name SR 445, PYRAMID WAY - 3R AND ADA

Project
Limits

At From Nugget Avenue To York Way of Distance (mile) 1.38 Begin: 0 End: 1.38

Scope 2-3/4 INCH COLDMILL, 2 INCH PBS WITH 3/4 INCH OG AND 10% PATCHING. UPGRADE EXISTING RAMPS, DRIVEWAYS AND SELECT SIDEWALK LOCATIONS TO MEET ADA

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
PE	State Gas Tax	\$330,000	-	-	-	-	-	-	\$330,000
	Total Preliminary Engineering	\$330,000	-	-	-	-	-	-	\$330,000
ROW	State Gas Tax	\$115,000	-	-	-	-	-	-	\$115,000
	Total Right of Way	\$115,000	-	-	-	-	-	-	\$115,000
CON	Congressionally Directed Spending	-	\$1,000,000	-	-	-	-	-	\$1,000,000
CON	HSIP	-	\$1,000,000	-	-	-	-	-	\$1,000,000
CON	NHPP	-	\$10,495,000	-	-	-	-	-	\$10,495,000
CON	State Gas Tax	-	\$605,000	-	-	-	-	-	\$605,000
	Total Construction	-	\$13,100,000	-	-	-	-	-	\$13,100,000
	Total Programmed	\$445,000	\$13,100,000	-	-	-	-	-	\$13,545,000



Version History

TIP Docume	ent	MPO Approval	State Approval	FHWA Approval	FTA Approval
21-03	Amendment 2021-2025	03/19/2021	04/14/2021	04/26/2021	05/05/2021
21-05	Amendment 2021-2025	08/20/2021	08/25/2021	08/30/2021	08/25/2021
21-06	Amendment 2021-2025	11/19/2021	11/23/2021	N/A	N/A
21-93	Amendment 2021-2025	12/16/2022	12/19/2022	12/22/2022	N/A
23-00	Adoption 2023-2027	08/18/2023	08/22/2023	08/30/2023	08/29/2023
23-03	Amendment 2023-2027	02/28/2024	03/05/2024	N/A	N/A
25-00	Adoption 2025-2029	09/20/2024	12/23/2024	Pending	Pending
25-01	Amendment 2025-2029	Pending	Pending	Pending	N/A

Current Change Reason

SCHEDULE / FUNDING / SCOPE - Project is moved forward.

Funding Change(s):

Total project cost increased from \$10,130,000 to \$13,545,000

State TIP ID WA20220017	MPO/TIP	RTC Washoe 25-01	Local ID		Total Cost	\$27,725,000
Lead Agency Nevada DOT	Contact	Victor Peters (775)887-7680	NDOT	District 2	County	WASHOE
Project Type @Preservation	Air Quality	Exempt	TCM	No	Constructio	n2025 start

Project Name US 395 North Valleys- Preservation

Project
Limits

At From WA MP 34.1 To WA MP 38.3 of Distance (mile) 4.13 Begin: 34.13 End: 38.26

Scope Mill and overlay with hydraulic, ITS, and ramp improvements

Phase	Fund Source		Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
PE	State Gas Tax		\$225,000	-	-	-	-	-	-	\$225,000
		Total Preliminary Engineering	\$225,000	-	-	-	-	-	-	\$225,000
CON	NHPP		-	\$21,683,750	-	-	-	-	-	\$21,683,750
CON	STBG State-Wide		-	\$4,441,250	-	-	-	-	-	\$4,441,250
CON	State Match - Nv		-	\$1,375,000	-	-	-	-	-	\$1,375,000
		Total Construction	-	\$27,500,000	-	-	-	-	-	\$27,500,000
		Total Programmed	\$225,000	\$27,500,000	-	-	-	-	-	\$27,725,000



Version History

TIP Docun	nent	MPO Approval	State Approval	FHWA Approval	FTA Approval
21-91	Amendment 2021-2025	09/16/2022	11/10/2022	11/30/2022	11/10/2022
23-00	Adoption 2023-2027	08/18/2023	08/22/2023	08/30/2023	08/29/2023
23-03	Amendment 2023-2027	02/28/2024	03/05/2024	N/A	N/A
25-00	Adoption 2025-2029	09/20/2024	12/23/2024	Pending	Pending
25-01	Amendment 2025-2029	Pending	Pending	Pending	N/A

Current Change Reason

SCHEDULE / FUNDING / SCOPE - Other

Funding Change(s):

Total project cost increased from \$13,925,000 to \$27,725,000

State TIP ID WA20250003	MPO/TIP RTC Washoe 25-01	Local ID	Total Cost \$2,500,000
Lead Agency Nevada DOT	Contact Allisa Root 775-888-7865	<i>NDOT</i> District 2	County WASHOE
Project Type @Maintenance	Air Quality Exempt	TCM No	Construction2025 start

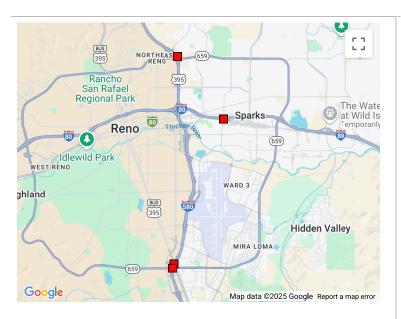
Project Name Multilayer Overlay on Various Structures Throughout Washoe County

At From 21.411 To 21.412 of Distance (mile) 0 Begin: 21.41 End: 21.41 At From 21.530 To 21.531 of Distance (mile) 0 Begin: 21.53 End: 21.53 At From 16.090 To 16.091 of Distance (mile) 0 Begin: Project

Limits 16.09 End: 16.09 At From 1.331 To 1.332 of Distance (mile) 0 Begin: 1.33 End: 1.33

Scope Multilayer Overlay on Various Structures Throughout Washoe County

Phase	Fund Source	Prior	FY2025	FY2026	FY2027	FY2028	FY2029	Future	Total
CON	Highway Infra Bridge Replacement	-	\$2,375,000	-	-	-	-	-	\$2,375,000
CON	State Match - Nv	-	\$125,000	-	-	-	-	-	\$125,000
	Total Construction	-	\$2,500,000	-	-	-	-	-	\$2,500,000
	Total Programmed	-	\$2,500,000	-	-	-	-	-	\$2,500,000



Version History

TIP Docume	ent	MPO Approval	State Approval	FHWA Approval	FTA Approval
25-01	Amendment 2025-2029	Pending	Pending	Pending	N/A

Current Change Reason

SCHEDULE / FUNDING / SCOPE - New Project

Meeting Date: 2/21/2025 Agenda Item: 6.1.

To: Regional Transportation Commission

From: Dale Keller, Director of Engineering

SUBJECT: Fiscal Year 2026 Street & Highway Projects for the RTC Street & Highway Program

RECOMMENDED ACTION

Approve the proposed new Fiscal Year 2026 Street & Highway Projects for the RTC Street & Highway Program; approve an Interlocal Cooperative Agreement with the City of Reno and Washoe County specifying responsibilities for delivering certain projects; approve an Interlocal Cooperative Agreement with the City of Sparks and Washoe County specifying responsibilities for delivering certain projects.

BACKGROUND AND DISCUSSION

The RTC is responsible for administering the regional street and highway program (S&H Program) in cooperation and coordination with Washoe County, the City of Reno, and the City of Sparks. The proposed new Fiscal Year 2026 Street and Highway Projects (FY26 S&H Projects) identify and prioritize funding in accordance with priorities established as part of the Regional Transportation Plan (RTP), Regional Transportation Improvement Plan (RTIP), and the regional road pavement preservation program.

The S&H Program is funded from a variety of local, state, and federal funding sources, including fuel tax. Pursuant to NRS 373.140, in evaluating and determining whether to approve the use of fuel tax on a project, the RTC Board must evaluate the project in terms of:

- (a) The priorities established by the RTP;
- (b) The relation of the proposed work to other projects already constructed or authorized;
- (c) The relative need for the project in comparison with others proposed; and
- (d) The money available.

Upon RTC Board approval, the FY26 S&H Projects will be brought to the Washoe County Commission for authorization.

The Interlocal Cooperative Agreements (ICAs) specify the responsibilities for delivering the new projects located within the jurisdiction of the city and/or the county. The ICAs will authorize the RTC to design, survey, engineer, acquire real property through purchase or eminent domain, and construct the projects. Upon approval of this item by the RTC Board, each ICA will be presented to the County Commission and

the respective City Council for their consideration and approval.

FISCAL IMPACT

Funding for the new Fiscal Year 2026 Street & Highway Projects will be included in the FY26 RTC Engineering Budget based on anticipated federal, state, and local revenue sources.

PREVIOUS BOARD ACTION

INTERLOCAL COOPERATIVE AGREEMENT

This agreement is made and executed this _____ day of ________, 2025, by and between the Board of Commissioners of Washoe County, Nevada (the "County"), the Regional Transportation Commission of Washoe County (the "RTC"), and the City Council of Reno, Nevada (the "City").

WITNESETH:

WHEREAS in 1979, the RTC was created by County ordinance through the consolidation of the Regional Street and Highway Commission, the Regional Transit Commission, and a previously existing metropolitan transit planning organization; and

WHEREAS, the RTC is responsible for the Regional Street & Highway Program, the Public Transportation Program, and Transportation Planning; and

WHEREAS, the RTC funds the Regional Street & Highway Program from a variety of local, state and federal funding sources, and expends money from a variety of funds including the Regional Street and Highway Fund (the "Fuel Tax Fund"), the Transportation Sales Tax Fund (the "Sales Tax Fund"), and the Regional Road Impact Fee Fund (the "RRIF Fund"); and

WHEREAS, pursuant to NRS 373.140(2), if a project is proposed to be financed in whole or in part from the Fuel Tax Fund, the RTC must evaluate the project based on the criteria set forth in NRS 373.140(2) before it approves the project; and

WHEREAS, pursuant to NRS 373.140(2), if the RTC approves a project that is proposed to be financed in whole or in part from the Fuel Tax Fund, the County must authorize the project; and

WHEREAS, pursuant to NRS 373.140(2), if the County authorizes a project that is proposed to be financed in whole or in part from the Fuel Tax Fund, the responsibilities for letting construction and other necessary contracts, contract administration, supervision and inspection of work and the performance of other duties related to the acquisition of the project must be specified in written agreement executed by the County and the governing bodies of the City of Reno and the City of Sparks, as appropriate; and

WHEREAS, pursuant to NRS 277A.250, the RTC may exercise the power of eminent domain for the acquisition, construction, repair or maintenance of public roads if the city or county which has jurisdiction over the property approves the exercise of eminent domain; and

WHEREAS, on _______, 2025, the RTC approved its FY 2026 Street & Highway Projects for the Regional Street & Highway Program; and

WHEREAS, on _______, 2025, the County approved the FY 2026 Street & Highway Projects, which authorized the projects proposed to be financed in whole or in part from the Fuel Tax Fund; and

WHEREAS, the projects listed in Exhibit A are located within the jurisdiction of the City and/or the County (the "Projects").

NOW, THEREFORE, in compliance with statutory requirements, and in consideration of the mutual promises contained herein and for other good and valuable consideration, it is hereby agreed by and between the parties hereto as follows:

I. PROJECT AUTHORIZATION

- A. The County and the City authorize the RTC to design, survey, engineer, acquire through purchase or eminent domain real property for, and construct, each of the Projects. This authority shall be for all continued work by or on behalf of the RTC as necessary to complete the Project and for any later fiscal year.
- B. The RTC may expend money from one or more than one of the Fuel Tax Fund, the Sales Tax Fund, the RRIF Fund, or any other eligible fund. The total estimated cost to complete each Project is estimated by the RTC as shown on Exhibit A. These costs are only estimates and the RTC may expend additional money as necessary from any one or more of the Fuel Tax Fund, the Sales Tax Fund or the RRIF Fund, or any other eligible fund, as such additional expenditures are reviewed and approved by the RTC pursuant to the RTC's policies and procedures.
- C. The County and the City authorize the RTC to adopt an appropriate resolution of condemnation and initiate and prosecute to judgment such eminent domain proceedings as may be necessary for the acquisition of such property within their jurisdictions as the RTC deems

necessary for the construction and/or maintenance of any Project and, if prudent, future expansions of each Project identified by the Regional Transportation Plan.

II. RTC RESPONSIBILITIES AND DUTIES

RTC agrees to perform the followings tasks and the County and the City hereby authorize the RTC to do so:

- A. Provide all required services, including but not limited to design, environmental assessments and studies, surveying, construction engineering, construction management and quality assurance inspection, utilizing RTC staff and/or qualified consultants;
- B. Obtain appraisal reports for any property being considered as necessary for the implementation of any Project and, if prudent, future expansions of the Project identified within the Regional Transportation Plan, conduct negotiations with the owners in an effort to arrive at a mutually agreeable purchase price and negotiate, execute and close contracts to purchase the property;
- C. Offer not less than the appraisal value for the property and property rights deemed necessary for a Project and, where the prospect of reaching a mutually agreeable purchase price appears unlikely following reasonable negotiations, cause the RTC Board of Commissioners to adopt a "Resolution of Condemnation" finding that particular properties are necessary to the success of a Project and authorize legal counsel to seek acquisition through eminent domain proceedings;
- D. Coordinate all activities related to a Project including, but not limited to, advertising, receipt and review of construction bids, and execution of a contract with the contractor submitting the lowest responsive and responsible bid;
 - E. Maintain necessary files on each Project:
- F. Pay all authorized Project costs from the Fuel Tax Fund, the Sales Tax Fund, the RRIF Fund, and any other eligible fund. Payments for construction or engineering services will be paid to the contractor or consultant upon receipt of a claim or claims which have been certified as a true and correct account of the expenses incurred as a result of or in conjunction with the

provisions of a contract entered into as a result of this Agreement. All submitted claims will have supporting documents attached which substantiate the basis of the claim. Such claim or claims shall be reviewed and approved in accordance with the policies and procedures of the RTC; and

G. Not permit the payment of non-reimbursable or non-payable items established by the policies and procedures of the RTC.

III. COUNTY AND CITY RESPONSIBILITIES AND DUTIES

The County and the City shall do the following:

- A. Cooperate with RTC and its consultants in all phases of each Project located within their respective jurisdictions;
- B. Assist the RTC in communicating with the public regarding the Project(s) located within their respective jurisdictions;
- C. Accept ownership of and maintain each Project located wholly or partially within their respective jurisdictions upon completion of construction;
- D. Upon notification from the RTC, require utilities having franchise agreements that require relocation to relocate their facilities prior to award of the Project in accordance with the franchise agreement; for utilities that do not address the issue of relocation in the franchise agreement, require relocation of the subject facilities prior to the award of the Project if state law provides authority to do so; and
 - E. Coordinate development and administration of the Project with the RTC.

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This Agreement is effective from and after the date first above written.

REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY

BY:	
BY:EXECUTIVE DIRECTOR	
BOARD OF COMMISSIONERS, WASH	IOE COUNTY, NEVADA
BY:CHAIRMAN	
ATTEST:	APPROVED AS TO FORM AND CONTENT:
BY: WASHOE COUNTY CLERK	BY:ATTORNEY
CITY COUNCIL OF RENO, NEVADA	
BY:MAYOR	_
ATTEST:	APPROVED AS TO FORM AND CONTENT:
BY:RENO CITY CLERK	BY: DEPUTY CITY ATTORNEY

Exhibit A City of Reno New Projects for 2026

NAME	DESCRIPTION	EST. COSTS	PROPOSED YEAR OF CONSTRUCTION	WORK PHASE FOR FY2026
2026 Preventative Maintenance*	Patching/slurry seals on regional roads	\$7.5 Million	2026	Design/ Construction
2026 Roadway Reconstruction*	Reconstruction/rehabilitation of failing segments of regional roads	\$13 Million	2026	Design/ Right-of-Way/ Construction
2026 Corrective Maintenance*	Patching/mill and fill/grind and overlays on segments of regional roads	\$2 Million	2026	Design/ Construction
2026 Traffic Signals and Intersection Improvements*	Intersection improvements throughout the region including new signals and geometry upgrades Intersection improvements \$6 Million		Design/ Right-of-Way/ Construction	
2026 ITS/Traffic Management*	Improvements to regional infrastructure using new technology to manage traffic	\$4 Million	2026	Design/ Right-of-Way/ Construction
2026 Active Transportation Program*	Pedestrian and bicycle improvements developed from the Neighbor Network Plan	\$5 Million	2026	Design/ Right-of-Way/ Construction
Boomtown Garson Road Interchange Improvements	Add southbound lane between the westbound off- ramp and Blue Heron Circle	\$2 Million	2028	Design/Utilities
University Area Roadway Improvements Phase 1	Traffic and safety improvements to the area south of the University between 9th Street and 7th Street, and University Way and Valley Road	\$3.5 Million	2028	Design
Wedekind Road Pedestrian Improvements	Install new sidewalks along Wedekind Road between Lund Lane and Sullivan Lane.	\$3 Million	2027	Environmental
Rio Wrangler Parkway Roadway Improvements	Intersection improvements at Steamboat Pkwy and McCauley Ranch Blvd	\$4.5 Million	2028	Design for new roundabout at Steamboat Parkway; scoping study at McCauley Ranch Blvd

^{*}Region-wide programs with specific improvement locations in both the City of Reno and the City of Sparks.



City of Reno New Projects FY 2026

WEDEKIND RD PEDESTRIAN IMPROVEMENTS

Install new sidewalks along Wedekind Rd between Lund Ln & Sullivan Ln

2027

\$3 Million Investment

Work Phase for FY 26 - Environmental

UNIVERSITY AREA ROADWAY IMPROVEMENTS PHASE 1

Traffic and safety improvements to the area south of the University between 9th Street and 7th Street, and University Way and Valley Road

2028

\$3.5 Million Investment

Work Phase for FY 26 - Design

BOOMTOWN GARSON RD INTERCHANGE IMPROVEMENTS

Add southbound lane between westbound off-ramp & Blue Heron Cr

2028

\$2 Million Investment

Work Phase for FY 26 - Design/Utilities

RIO WRANGLER ROADWAY IMPROVEMENTS

Intersection improvements at Steamboat Pkwy & McCauley Ranch Blvd

2028

\$4.5 Million Investment

Work Phase for FY 26 - Design for new roundabout; scoping study at McCauley Ranch Rd

INTERLOCAL COOPERATIVE AGREEMENT

This agreement is made and executed this _____ day of ________, 2025, by and between the Board of Commissioners of Washoe County, Nevada (the "County"), the Regional Transportation Commission of Washoe County (the "RTC"), and the City Council of Sparks, Nevada (the "City").

WITNESETH:

WHEREAS in 1979, the RTC was created by County ordinance through the consolidation of the Regional Street and Highway Commission, the Regional Transit Commission, and a previously existing metropolitan transit planning organization; and

WHEREAS, the RTC is responsible for the Regional Street & Highway Program, the Public Transportation Program, and Transportation Planning; and

WHEREAS, the RTC funds the Regional Street & Highway Program from a variety of local, state and federal funding sources, and expends money from a variety of funds including the Regional Street and Highway Fund (the "Fuel Tax Fund"), the Transportation Sales Tax Fund (the "Sales Tax Fund"), and the Regional Road Impact Fee Fund (the "RRIF Fund"); and

WHEREAS, pursuant to NRS 373.140(2), if a project is proposed to be financed in whole or in part from the Fuel Tax Fund, the RTC must evaluate the project based on the criteria set forth in NRS 373.140(2) before it approves the project; and

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WHEREAS, pursuant to NRS 373.140(2), if the County authorizes a project that is proposed to be financed in whole or in part from the Fuel Tax Fund, the responsibilities for letting construction and other necessary contracts, contract administration, supervision and inspection of work and the performance of other duties related to the acquisition of the project must be specified in written agreement executed by the County and the governing bodies of the City of Reno and the City of Sparks, as appropriate; and

WHEREAS, pursuant to NRS 277A.250, the RTC may exercise the power of eminent domain for the acquisition, construction, repair or maintenance of public roads if the city or county which has jurisdiction over the property approves the exercise of eminent domain; and

WHEREAS, on ______, 2025, the RTC approved its FY 2026 Street & Highway Projects for the Regional Street & Highway Program; and

WHEREAS, on _______, 2025, the County approved the FY 2026 Street & Highway Projects, which authorized the projects proposed to be financed in whole or in part from the Fuel Tax Fund; and

WHEREAS, the projects listed in Exhibit A are located within the jurisdiction of the City and/or the County (the "Projects").

NOW, THEREFORE, in compliance with statutory requirements, and in consideration of the mutual promises contained herein and for other good and valuable consideration, it is hereby agreed by and between the parties hereto as follows:

I. PROJECT AUTHORIZATION

- A. The County and the City authorize the RTC to design, survey, engineer, acquire through purchase or eminent domain real property for, and construct, each of the Projects. This authority shall be for all continued work by or on behalf of the RTC as necessary to complete the Project and for any later fiscal year.
- B. The RTC may expend money from one or more than one of the Fuel Tax Fund, the Sales Tax Fund, the RRIF Fund, or any other eligible fund. The total estimated cost to complete each Project is estimated by the RTC as shown on Exhibit A. These costs are only estimates and the RTC may expend additional money as necessary from any one or more of the Fuel Tax Fund, the Sales Tax Fund or the RRIF Fund, or any other eligible fund, as such additional expenditures are reviewed and approved by the RTC pursuant to the RTC's policies and procedures.
- C. The County and the City authorize the RTC to adopt an appropriate resolution of condemnation and initiate and prosecute to judgment such eminent domain proceedings as may be necessary for the acquisition of such property within their jurisdictions as the RTC deems necessary for the construction and/or maintenance of any Project and, if prudent, future expansions of each Project identified by the Regional Transportation Plan.

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RTC agrees to perform the followings tasks and the County and the City hereby authorize the RTC to do so:

- A. Provide all required services, including but not limited to design, environmental assessments and studies, surveying, construction engineering, construction management and quality assurance inspection, utilizing RTC staff and/or qualified consultants;
- B. Obtain appraisal reports for any property being considered as necessary for the implementation of any Project and, if prudent, future expansions of the Project identified within the Regional Transportation Plan, conduct negotiations with the owners in an effort to arrive at a mutually agreeable purchase price and negotiate, execute and close contracts to purchase the property;
- C. Offer not less than the appraisal value for the property and property rights deemed necessary for a Project and, where the prospect of reaching a mutually agreeable purchase price appears unlikely following reasonable negotiations, cause the RTC Board of Commissioners to adopt a "Resolution of Condemnation" finding that particular properties are necessary to the success of a Project and authorize legal counsel to seek acquisition through eminent domain proceedings;
- D. Coordinate all activities related to a Project including, but not limited to, advertising, receipt and review of construction bids, and execution of a contract with the contractor submitting the lowest responsive and responsible bid;
 - E. Maintain necessary files on each Project;
- F. Pay all authorized Project costs from the Fuel Tax Fund, the Sales Tax Fund, the RRIF Fund, and any other eligible fund. Payments for construction or engineering services will be paid to the contractor or consultant upon receipt of a claim or claims which have been certified as a true and correct account of the expenses incurred as a result of or in conjunction with the provisions of a contract entered into as a result of this Agreement. All submitted claims will have supporting documents attached which substantiate the basis of the claim. Such claim or claims shall be reviewed and approved in accordance with the policies and procedures of the RTC; and

G. Not permit the payment of non-reimbursable or non-payable items established by the policies and procedures of the RTC.

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- B. Assist the RTC in communicating with the public regarding the Project(s) located within their respective jurisdictions;
- C. Accept ownership of and maintain each Project located wholly or partially within their respective jurisdictions upon completion of construction;
- D. Upon notification from the RTC, require utilities having franchise agreements that require relocation to relocate their facilities prior to award of the Project in accordance with the franchise agreement; for utilities that do not address the issue of relocation in the franchise agreement, require relocation of the subject facilities prior to the award of the Project if state law provides authority to do so; and
 - E. Coordinate development and administration of the Project with the RTC.

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This Agreement is effective from and after the date first above written.

REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY

BY:	
BY:EXECUTIVE DIRECTOR	
BOARD OF COMMISSIONERS, WASH	OE COUNTY, NEVADA
BY:CHAIRMAN	
ATTEST:	APPROVED AS TO FORM AND CONTENT:
BY:WASHOE COUNTY CLERK	BY:ATTORNEY
CITY COUNCIL OF SPARKS, NEVADA	
BY:MAYOR	
ATTEST:	APPROVED AS TO FORM AND CONTENT:
BY:SPARKS CITY CLERK	BY: DEPUTY CITY ATTORNEY

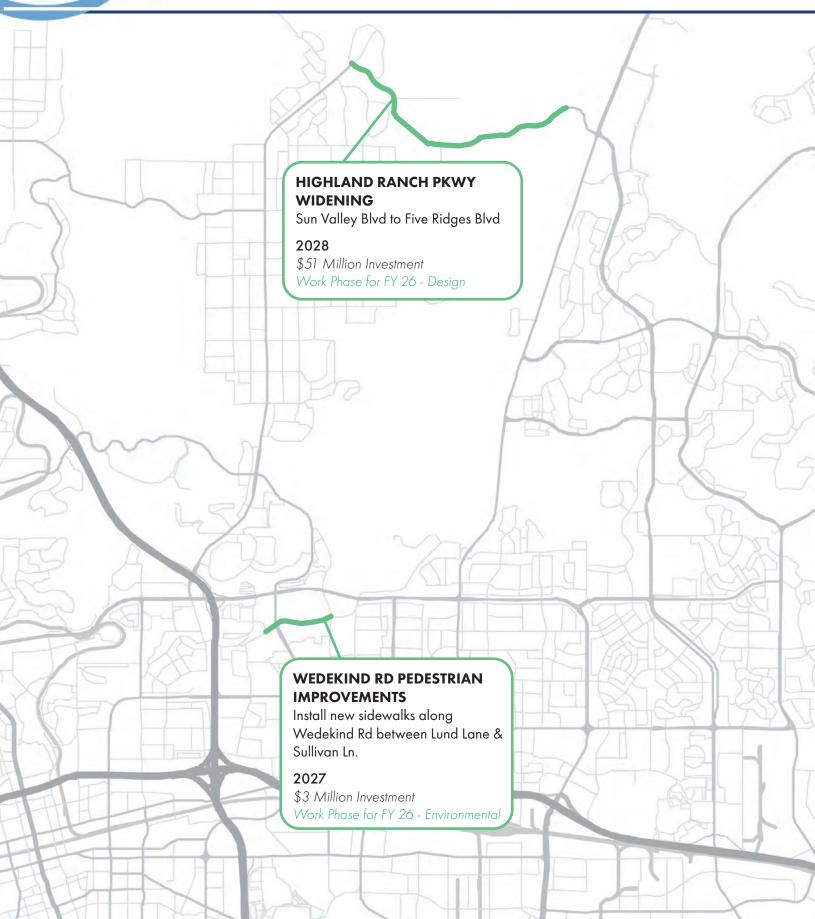
Exhibit A City of Sparks New Projects for 2026

NAME	DESCRIPTION	EST.	PROPOSED YEAR	WORK PHASE FOR FY2026
		COSTS	OF	
			CONSTRUCTION	
2026 Preventative	Patching/slurry seals on regional	\$7.5	2026	Design/
Maintenance*	roads	Million	2020	Construction
2026 Roadway	Reconstruction/rehabilitation of	\$13		Design/
Reconstruction*	failing segments of regional roads	Million	2026	Right-of-Way/
Reconstruction	lanning segments of regional roads	IVIIIIIOII		Construction
2026 Corrective	Patching/mill and fill/grind and	\$2		Design/
Maintenance*	overlays on segments of regional	Million	2026	Construction
Wantenance	roads	IVIIIIOII		Construction
Traffic Signals and	Intersection improvements	\$6		Design/
Intersection	throughout the region including	Million	2026	Right-of-Way/
Improvements*	new signals and geometry upgrades	IVIIIIIOII		Construction
ITS/Traffic	Improvements to regional	\$4		Design/
-	infrastructure using new technology	۶ 4 Million	2026	Right-of-Way/
Management*	to manage traffic	IVIIIIIOII		Construction
2026 Active	Pedestrian and bicycle	Ċ٢		Design/
Transportation	improvements developed from the	\$5	2026	Right-of-Way/
Program*	Neighbor Network Plan	Million		Construction
Highland Ranch	Roadway widening from Sun Valley	\$51	2028	Dosign
Parkway Widening	Blvd to Five Ridges Blvd	Million	2028	Design
Wedekind Road	Install new sidewalks along	\$3		
Pedestrian	Wedekind Road between Lund Lane	دد Million	2027	Environmental
Improvements	and Sullivan Lane.	IVIIIIIUII		

^{*}Region-wide programs with specific improvement locations in both the City of Reno and the City of Sparks.



City of Sparks New Projects FY 2026





RTC PROJECT UPDATE - Sparks

Planned Projects	Scope/ Design	2025	2028 2027 2026	Construction	2025	2026	2027	2028	Completed
Traffic Signal Fiber 26-01	2025 Preventative Maintenance (La Posada Drive)		30% Design	Sparks Boulevard Capacity Improvement		0% Co	mplete		2023 Traffic Signals & Intersections Imp. (Prater Way/4th St)
Vista Boulevard Widening	Eagle Canyon Safety and Operations		0% Design	Traffic Signal Modifications 24-01 (Rock/York)		0% Co	mplete		2024 Preventative Maintenance (Standford Way)
	Legends Roundabouts (TSM 24-01)		30% Design	Vista Boulevard/Disc Dr Intersection Improvement		0% Co	mplete		Oddie/Wells Multimodal Improvements
	McCarran Boulevard Safety & Operational Improvements		30% Design	Vista Boulevard/Prater Way ITS (TE Program)		0% Co	mplete		Pyramid Highway Intelligent Corridor (TE Program)
	Prater Way Rehabilitation		0% Design						
	Pyramid Highway Operations Improvements		30% Design						
	Sparks/Ion Traffic Signal		0% Design						
	Traffic Signal Fiber 25-01		0% Design						
	Traffic Signal Modifications 25-01		0% Design						
	Traffic Signal Modifications 26-01		0% Design						



RTC PROJECT UPDATE - Reno

Planned Projects	Scope/ Design	2028 2027 2026 2025	Construction	2026 2025	2028	Completed
7th/6th/West Pavement Rehab	2025 Bridge Maintenance	30% Design	Arlington Avenue Bridges	0% Com	plete	2023 Bridge Maintenance Project
Moya Boulevard Widening	2025 Preventative Maintenance (Meadowood Rehab)	30% Design	Mill Street Capacity	0% Com	plete	2023 Traffic Signals & Intersection
Mt. Rose Highway Operational Improvements	2025 Preventative Maintenance (Wedge & Arrowcreek)	30% Design	Traffic Signals Modification 24-01 (N McCarran & 7th Street)	0% Com	plete	Improvements 2024 ITS/Traffic Management (Kietzke Lane)
RSIC River Path	Biggest Little Bike Network	0% Design	Veterans Parkway ITS Fiber (TE Program)	0% Com	plete	2024 Traffic Signals & Intersection Imp. (Midtown Safety)
Stead Signal Improvements	Buck Drive Circulation	30% Design				2024 Traffic Signals & Intersection Imp. (Moana / Baker Install.)
White Fir Rehabilitation	Butch Cassidy Drive Extension	0% Design				2024 Traffic Signals and Intersection Imp.(Vassar Street and Harvard)
	Geiger Grade Realignment	30% Design				2024 Preventative Maintenance (N Virginia Street University)
	Keystone Avenue Bridge Replacement	0% Complete				2024 Preventative Maintenance (Raleigh Heights)
	Lemmon Drive Segment 2 Traffic Improvements and Resiliency	30% Complete				2024 Preventative Maintenance (Selmi Drive)
	McCarran Boulevard Safety & Operational Improvements	30% Complete				2025 Preventative Maintenance (Somersett Parkway)
	Military Road Capacity	50% Complete				Oddie / Wells Multimodal Improvements
	North Valleys North Virginia Street Capacity	30% Complete				South Meadows Traffic Enhancements (TE Program)
	Pembroke Drive Capacity & Safety	60% Complete				Steamboat Parkway Improvement (TE Program)



RTC PROJECT UPDATE - Reno Cont.

Planned Projects	Scope/ Design	2025	2026	2027	Construction	2020	2025	2026	2027	2028	Completed
	Sierra Street Bridge Replacement		30% De								S Virginia St & I580 Exit 29 Capacity & Safety
	Sixth Street - Safety for All		0% De	sign							
	Sun Valley Blvd Phase 2		30% De	esign							
	Traffic Signal Fiber 25-01		0% De	sign							
	Traffic Signal Modifications 25-01		0% De	sign							
	Traffic Signal Modifications 26-01		0% De	sign							
	West Fourth Street Downtown		90% De	esign							
	West Fourth Street Safety		90% De	esign							
	Virginia Line BRT Improvements		90% De	esign							
	Veterans Parkway Roundabout Maintenance (TE Program)		90% De	esign							

Meeting Date: 2/21/2025 Agenda Item: 7.1.

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

Meeting Date: 2/21/2025 Agenda Item: 7.2.

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

Meeting Date: 2/21/2025 Agenda Item: 7.3.

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