



Carson City Local Roads Funding Strategy

FINAL

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Prepared with

HANSFORD
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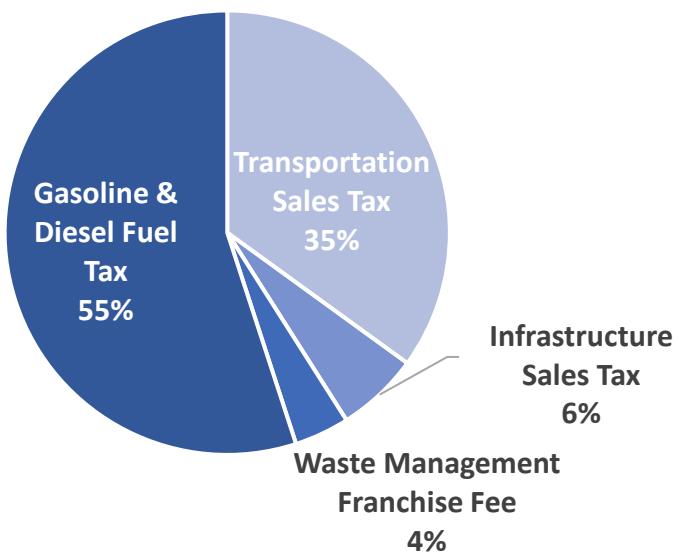
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01. Introduction

The City's Role

Carson City (City) plans for, constructs, maintains, and replaces roads and road-related improvements as well as plans and provides local transit services. A description of each of the road and road-related functions is provided in Appendix A. The City, like many governments in Nevada, has seen a decline in revenues for the preservation of roads because the majority of funding is from fuel taxes which are not indexed to inflation in Carson City, and because of the growth of more fuel efficient and non-gasoline powered vehicles taking a larger vehicle market share. As shown in Figure 1, 55% of revenues for roads is from gasoline and diesel taxes, about 40% is from sales taxes, and the remaining revenues are from the City solid waste disposal franchise fees (some miscellaneous revenues are not shown, such as federal funding, donations, permits, and transfers from the City General Fund).

Figure 1
 Annual City Roadway Maintenance Local Funding Sources



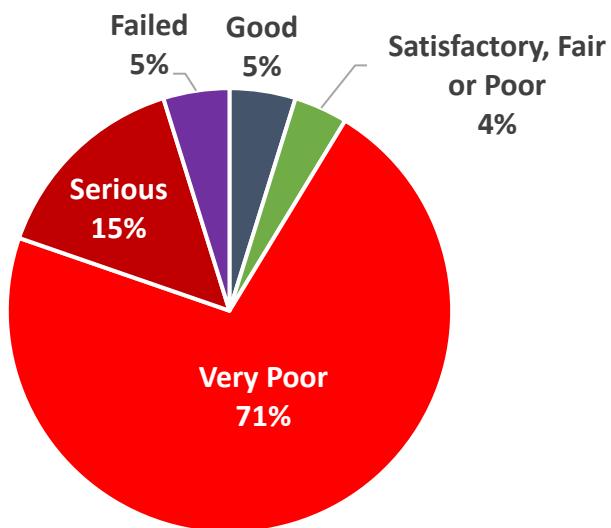
The effects of limited growth of gas taxes have been compounded by continual growth of the City (adding more assets to maintain), and a steep increase in road-related construction costs. Between 2000 and 2024, the City's gas tax revenue increased 31% while the miles of City-owned streets increased 29%, and highway construction costs increased 198%.

The City has annual revenue of approximately \$10.00 million for roads and road-related functions after debt service payments, excluding Federal and local grants. Typical annual operations and maintenance costs include staffing, services, and supplies, which total about \$5.50 million per year, leaving approximately \$4.50 million per year for road preservation projects.

There are three functional road classifications used by Carson City: local, collector and arterial roads. Local roads are sometimes termed 'neighborhood streets' in this report, but the term officially used by state and federal agencies is 'local'. Collector and arterial roads are collectively termed 'regional roads'. Regional roads are eligible to receive federal funding; however, local roads are not eligible to receive most federal funding sources and must primarily be maintained by local governments. Almost all roads capital monetary resources are currently spent on collector and arterial roads. Since 2018, the City has not budgeted for local road preservation or reconstruction because of funding limitations and the results of project prioritization tools used to select annual projects through the City's Pavement Management Plan.

The City periodically examines the condition of all local and regional roads and calculates a Pavement Condition Index (PCI) to assist with estimating the needed funding to halt the deterioration of roadways and identify potential projects. Without any increase in funding for roads maintenance, the roads will deteriorate from a current PCI of 62 (Fair) with about 80% of roads categorized as good, satisfactory, fair or poor, to a PCI of 33 (Very Poor) by 2050 with only about 10% of roads categorized as good, satisfactory, fair or poor, as illustrated in Figure 2.

Figure 2
Pavement Condition with Current Revenue in 2050



The City's most recent analyses have identified funding of neighborhood streets to be of greatest concern, as the PCI on these streets has declined the greatest. City paving consultants estimate that the funding requirement for Carson City to maintain the PCIs of existing local and regional roads until 2050 is at least \$25.50 million per year. At this level of funding, local roads would average a PCI of 56, which is considered a Poor Condition (described by moderate- and high-severity cracking, notable low- and moderate-severity fatigue cracking, patching, and rutting), and regional roads would average a PCI of 74, which

is considered a Satisfactory Condition (described as mostly low-severity distress, little to no fatigue cracking, and minor rutting). The pavement consultant's PCI analysis ("Carson City 2022 PAVER Scenarios and 2024 Supplemental Analysis") has been provided to the RTC with agenda packet staff reports.

To keep roads maintenance costs as low as possible means conducting regular pavement maintenance to keep roads in good condition because complete road reconstruction is expensive. In 2024, the City estimates the total cost to reconstruct a road is \$2.40 million per mile. The total cost to preserve a good road is \$300,000 per mile. The memo "Roadway Construction Project Cost per Mile Analysis" prepared by Public Works staff provides detail for these cost estimates. The memorandum is included in Appendix B.

The City has a funding gap of at least \$21.00 million per year (\$25.50 million less \$4.50 million) to maintain current local and regional road conditions. The gap will grow the longer it takes to secure dedicated funding because, 1) roads will continue to deteriorate whether cars drive on them or not, 2) the cost of construction will continue to increase, and 3) asset quantities continue to expand as the City grows.

Summary and Report Purpose

The Carson City Board of Supervisors (BOS) directed staff to explore local roads funding options to halt deterioration of the neighborhood street PCI at their February 27, 2020 retreat. An initial report was prepared ("Potential Options for Carson City Roadway Funding") in May 2021 that conceptually analyzed several funding mechanisms and financing options. Following completion of that report, the BOS directed staff to focus on the following four funding mechanisms in August 2021.

1. General Improvement District (GID) - NRS 318
2. Local Improvements Special Districts (SID)s - NRS 271
3. Special Purposes (Transportation) Sales Tax - NRS 377A
4. Infrastructure Sales Tax - NRS 377B

City staff initiated the 'Preserve Carson City Roads Project' (Project) in 2022 to analyze each option, detail potential implementation steps to deliver projects, and collect public feedback. Multiple reports and memos have been completed as part of the Project; some of which are attached to this report as appendices.

This report provides a summary of efforts taken by City staff and consultants over the past 2.5 years on the options listed above including additional detail of GID modeling as an option to provide funding, and exploration of other recommendations for a local roads funding strategy for Carson City.

In October 2022, a technical report, "Carson City Roads Funding, Local Funding Options" (the 2022 Technical Report) was prepared that:

- Described the roads and road-related functions that are the responsibility of Carson City Public Works.

- Discussed the funding gap to maintain existing roads in their current condition.
- Presented the benefits and limitations of four of five potential funding mechanisms to fill the roads preservation funding gap. After the 2022 Technical Report was completed, City staff researched the Supplemental Government Services Tax (GST) – NRS 371 and deemed it a good potential funding alternative. The GST was subsequently included in funding alternatives.
- Presented the broad steps and timeline for implementation of each of the funding mechanisms, and
- Provided observations and findings of the research presented and outlined steps in the path forward to fund roads preservation and reconstruction.

Following completion of the 2022 Technical Report, the BOS directed greater investigation into the GID option, and to conduct public outreach to gather data from stakeholders and the general public about the state of the roads and all four potential funding mechanisms. Section 02 of this report explains the additional investigative efforts completed and action taken by the City since early 2023. Section 03 of this report provides documentation of public outreach efforts. Section 04 provides details specific to the GID, and Section 05 concludes the report with a funding strategy for BOS consideration.



02. Investigative Efforts and Action Taken

The five funding mechanisms being considered to close the funding gap to keep existing roads in their current condition while adequately providing all road-related services, transit, and mobility options, each have pros and cons. Some are good at funding particular types of roads and transit projects, some cannot fund certain road and transit projects, and some can fund everything. Ultimately, the City's roads funding strategy may use one or a combination of the five funding tools to fill the funding gap. Four of the funding mechanisms would be new; the Infrastructure Sales Tax (NRS 377B) would not be a new tax, rather, it would extend an existing tax imposed to repay V&T Railroad debt beyond its currently authorized term and redirect the tax revenue to road funding.

Appendix C provides details of the five funding mechanisms. Details are provided on each funding mechanism's legal autonomy and accountability to the public, flexibility of service provision, where the mechanism can be charged, what the formation steps are to create the new funding streams, how the revenues can be charged and collected, the method of apportionment among beneficiaries, the authority to issue debt against the revenue stream, and how the funding source can be discontinued.

Public Works developed these guiding principles to craft the local roads funding strategy:

1. Prioritize pavement and roadway infrastructure where efficiency can be achieved.
2. Provide for a diversity of funding resources for different transportation users.
3. Allow for local funding to be leveraged to get additional state and federal funding.
4. Ensure needs of all streets are included as options for prioritization.
5. Be flexible, simple to explain, quantifiable, and easy to implement.
6. Provide for transparency of revenues and expenses.

Table 1 summarizes the legislative authority of each of the five potential local roads funding gap mechanisms, and how they can be implemented.

The 2006 Carson City Master Plan includes the goal of prioritizing infrastructure improvements with "a high priority on necessary transportation, water, and wastewater improvements in areas targeted by the Master Plan for infill and redevelopment to ensure adequate services are in place to accommodate increased densities." The Carson City FY 2022-2026 Strategic Plan also includes the goal of sustainable infrastructure specifically to increase street maintenance funding while working in partnership with residents and local businesses.

Table 1
Carson City Potential Local Roads Funding Gap Mechanisms

Local Special Improvements District	General Improvement District	Transportation Sales Tax	Supplemental Government Service Tax	Infrastructure Sales Tax
NRS 271 NEW	NRS 318 NEW	NRS 377A NEW	NRS 371 NEW	NRS 377B EXISTING
Improvement districts formed for discrete road and sidewalk projects in defined geographies	Separate legal entity responsible solely for maintenance of streets and alleys; could include curbs, gutter, and sidewalks, street lighting and snow removal in authorized powers	Up to an additional 0.25% sales tax applicable to all taxable transactions within the City specifically dedicated to roads funding	A 1% tax on new and annual vehicle registration (vehicle value depreciated with age) to pay for construction and maintenance of sidewalks and streets, collected by DMV	Continued collection of 0.125% sales tax applicable to all taxable transactions with the City that is currently used for V&T bond repayment
Implementation	Implementation	Implementation	Implementation	Implementation
Formed at request of neighborhoods or by City	Board of Supervisors; customers can protest to stop formation	Take to ballot in 2024 -must pass to implement	Take to ballot in 2024 -must pass to implement	Board of Supervisors approval following repayment of bonds

Potential Funding Mechanisms Revenue Generation

The estimated revenue gap is \$21.00 million annually to maintain a citywide PCI of 62. An additional 0.25% Transportation Sales Tax (which would have to be approved by voters) is expected to generate about \$4.25 million per year of new revenues. The Supplemental GST (which would also have to be approved by voters) is expected to generate about \$2.50 million annually. With implementation of these two revenue streams, the funding gap would be reduced from \$21.00 million to about \$14.25 million.

On April 18, 2024 the BOS directed City staff to place two questions on the November 2024 ballot. The two questions include:

- (1) whether the City should impose an additional 0.25% Transportation Sales Tax to be used solely for the reconstruction, maintenance and repair of local, public roads in Carson City under authority of NRS 377A.
- (2) whether the City should impose a Supplemental GST to be used solely for the reconstruction, maintenance and repair of local, public roads in Carson City under authority of NRS 371.

Both taxes would be collected by the State and distributed to the City in the same manner that other taxes are currently distributed. The BOS required, as part of the ballot question language, that any funding generated from the new Transportation Sales Tax and/or Supplemental GST be used on local roads only. Each ballot question must pass to be implemented in April 2025.

Continuation of the Infrastructure Sales Tax is expected to generate about \$1.25 million per year in new revenue for a total of about \$2.00 million per year. Additional funding could be filled with federal grants as the City has historically averaged two to four million dollars annually in grants, and SIDs to match or enhance projects. The remaining local roads funding gap could be filled with GID assessments; however, tolerance of assessment amount, including consideration of lower-income households must be included when estimating the amount that could be collected from a GID. Table 2, which summarizes potential new annual revenues from the five funding mechanisms, assumes that only \$5.00 million of the remaining \$10.00 million gap could reasonably be expected to be collected through a GID if it was to be implemented around the same time as the Transportation Sales Tax and the Supplemental GST for reasons described in Section 04 of this report. If, however, one or both of the latter two funding mechanisms fail at the ballot, the amount raised by the GID could be increased, as the main concern with GID assessment amounts is cost burden on residents.

Table 2
Potential New Revenue Generation

Funding Mechanism	Annual New Revenue
Transportation Sales Tax	\$4,250,000
Supplemental GST	\$2,500,000
Infrastructure Sales Tax	\$1,250,000
General Improvement District	\$5,000,000
Grants and Special Improvement Districts	\$3,000,000
Total Estimated Revenue	\$16,000,000



03. Public Outreach

Building Awareness

Website

In summer 2022, the City launched the project 'Preserve Carson City Roads' under the Public Works division (preservecarsoncityroads.com). The web pages provide background information about the need to invest in neighborhood streets, the conditions of local roads now and as they are projected in 2050, and a series of frequently asked questions. Presentations and reports are also posted under the documents page.

Stakeholder Engagement

In addition to multiple BOS and RTC meeting items, presentations related to the roadway funding challenges and financing options have been given to the following organizations by City staff:

- Carson City Land Development Roundtable 11.09.21
- Carson City Democrats luncheon 10.31.22 and 10.23.23
- Build 2 Win 12.6.22
- Kiwanis 1.24.24
- Sierra Nevada Realtors 2.12.2024
- Sierra Forum 4.09.24
- Rotary Club 5.21.24
- Nevada Builders Alliance 6.05.24

Targeted Surveys

Two surveys were conducted. While the surveys did not receive enough responses to be statistically valid, they did provide feedback that helped affirm the need to investigate new funding sources and act on securing additional neighborhood streets maintenance funding, as well as to shape development of the GID cost allocation methodologies that are summarized in Section 04 of this report.

1. An online survey notification was distributed summer 2022 to all persons and organizations who had signed up to receive news and information from Carson City Public Works. The survey was intended to reveal the public's sentiment regarding the condition of neighborhood streets. The survey remained online for a year. A total of 173 surveys were received; results are summarized in Figure 3.
2. The second survey was to garner input specifically regarding the concept of a GID. It was distributed at the October 2023 public workshops and posted online. A total of 120 surveys were received. Most of the responders own residential property in the City. Results of the GID survey are summarized in Figure 4.

Figure 3
Key Findings of Online Survey (2022-2023)

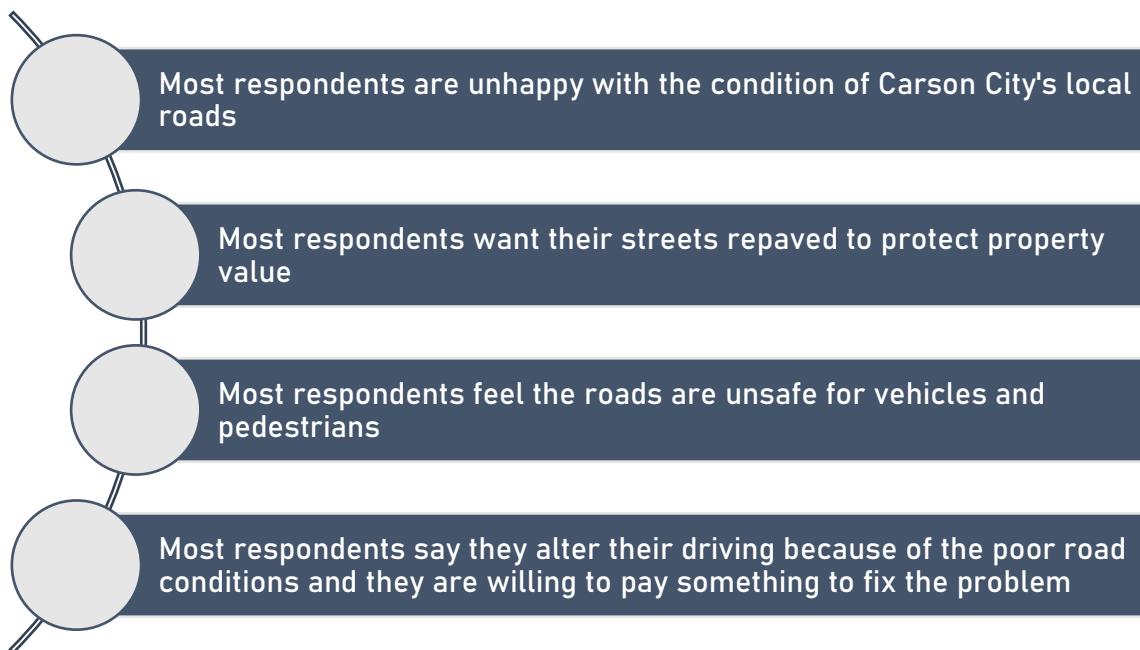
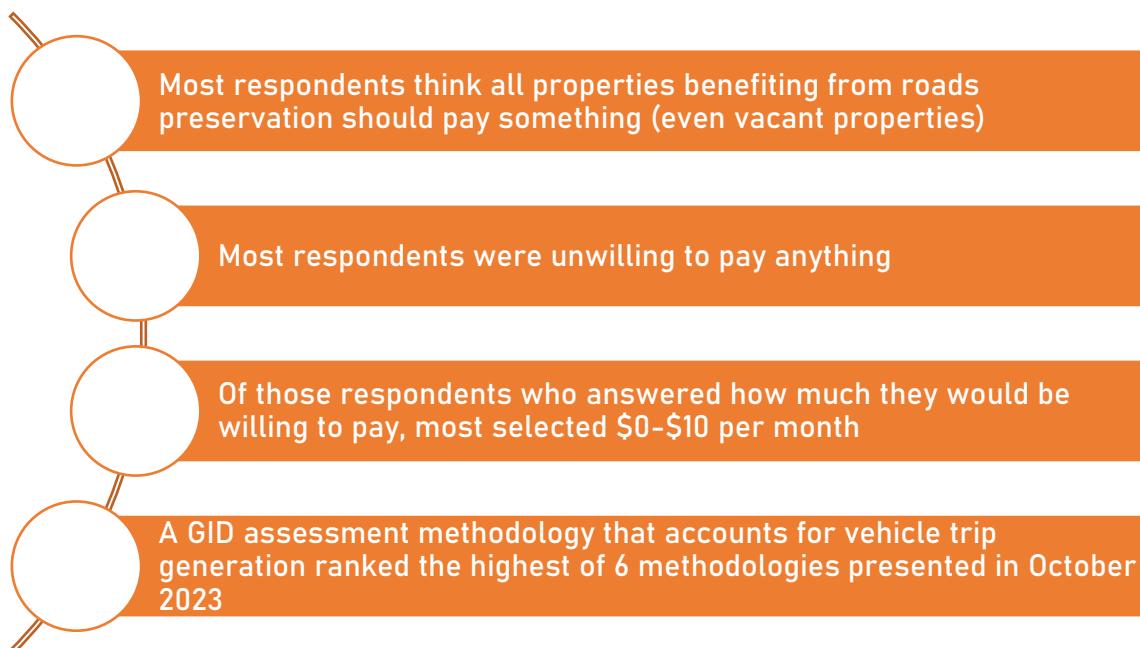


Figure 4
Key Findings of GID Survey (October 2023–February 2024)



Public Workshops

Public Works staff ran three public workshops. The first two workshops were identical but on different dates in different locations. The first workshop was held the evening of October 4th, 2023 at the Carson City Community Center, and the second workshop was held the evening of October 9th, 2023 at Seeliger Elementary School. Stations displayed information on the road functions provided by the City, condition of the roads, current funding sources, the funding gap, possible new funding sources, and how those new funding sources revenues could be applied. One station was dedicated to the concept of a GID, and potential cost allocation methodologies under that potential new revenue source. Public Works department personnel and/or consultants staffed all stations to answer any questions. More than 100 people attended these first two workshops.

The third workshop was held Saturday morning March 23rd, 2024 at the Carson City Community Center. This workshop featured four stations displaying information, and staff ran two presentations that addressed the key Project items, and how attendees could provide maximum feedback to the City on the station topics. Public Works department personnel and/or consultants staffed all stations to explain the topics and answer any questions. More than 60 people attended the workshop, which had been delayed due to weather (the workshop had originally been scheduled for February 24th, 2024).

At the March 2024 workshop, attendees were asked to participate in three voting exercises. These included:

- Voting (by way of stamp on the board) for the preferred condition (as measured by the PCI) of the City's streets. The board received 34 stamps. The results are summarized in Figure 5. Most people want to at least maintain the current citywide PCI through 2050.
- Voting (by way of casino chips in cups) for the preferred GID assessment methodology. The most chips were placed in the cup for Method C. Method C allocates cost by estimated vehicle trips and charges the assessment per unit for residential and per acre for non-residential land uses (see description in Section 04 of this report). The results of the exercise are displayed in Figure 6.
- Voting (by way of sticky note) for their preferred funding mechanism. Each participant was given two sticky notes and asked to place a sticky note on their preferred mechanism, and their least liked mechanism. Figure 7 ranks the funding mechanisms two ways: (1) by most positive votes, and (2) by most net positive votes, after accounting for negative votes. Comments addressing negative votes were mostly concerning having a sunset date for the tax or assessment, and lack of trust that the new revenues would be spent on local roads.

Regardless of how the voting is viewed, the Transportation Sales Tax was ranked highest, and SIDs was ranked lowest. The GID ranked second or fourth. The GST ranked second or third, and the Infrastructure Sales Tax continuation ranked third or fourth.

Figure 5
Voting for Road Conditions

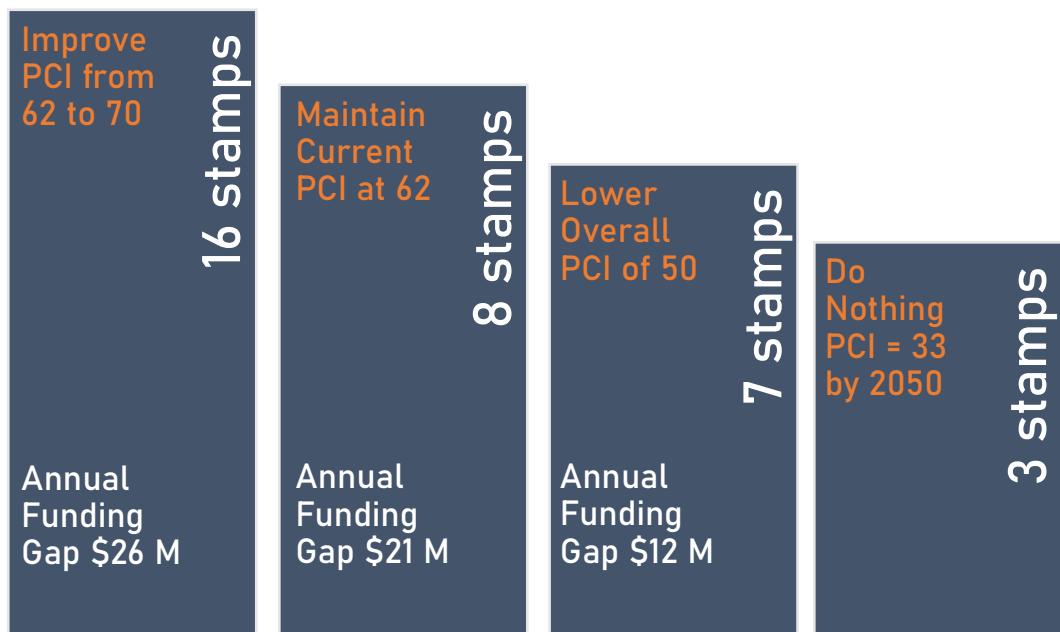


Figure 6
Voting for Preferred GID Assessment Methodology

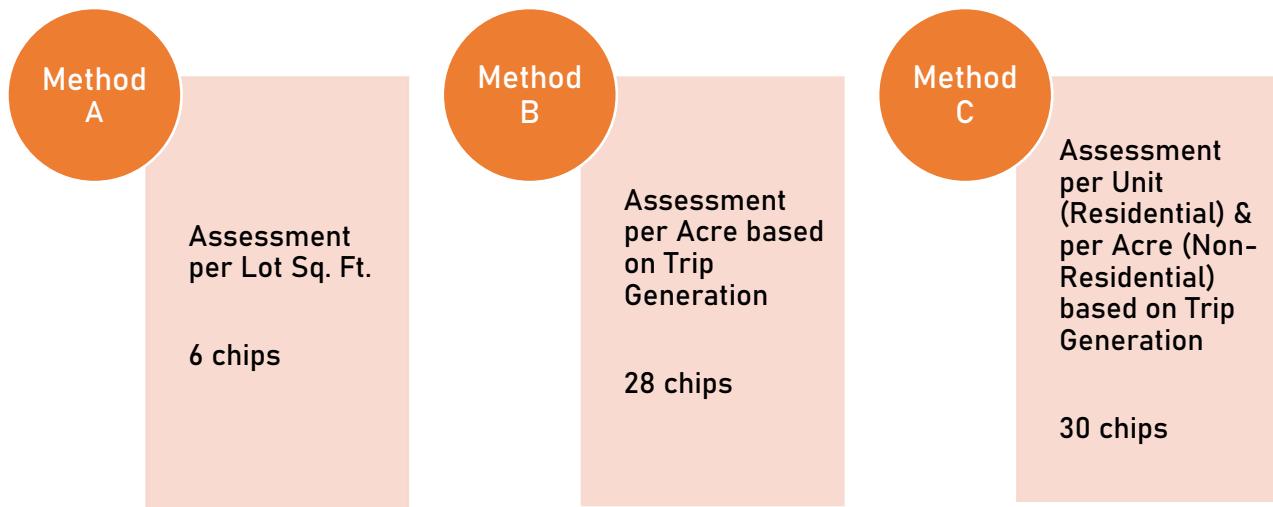


Figure 7
Voting for Preferred Funding Mechanism



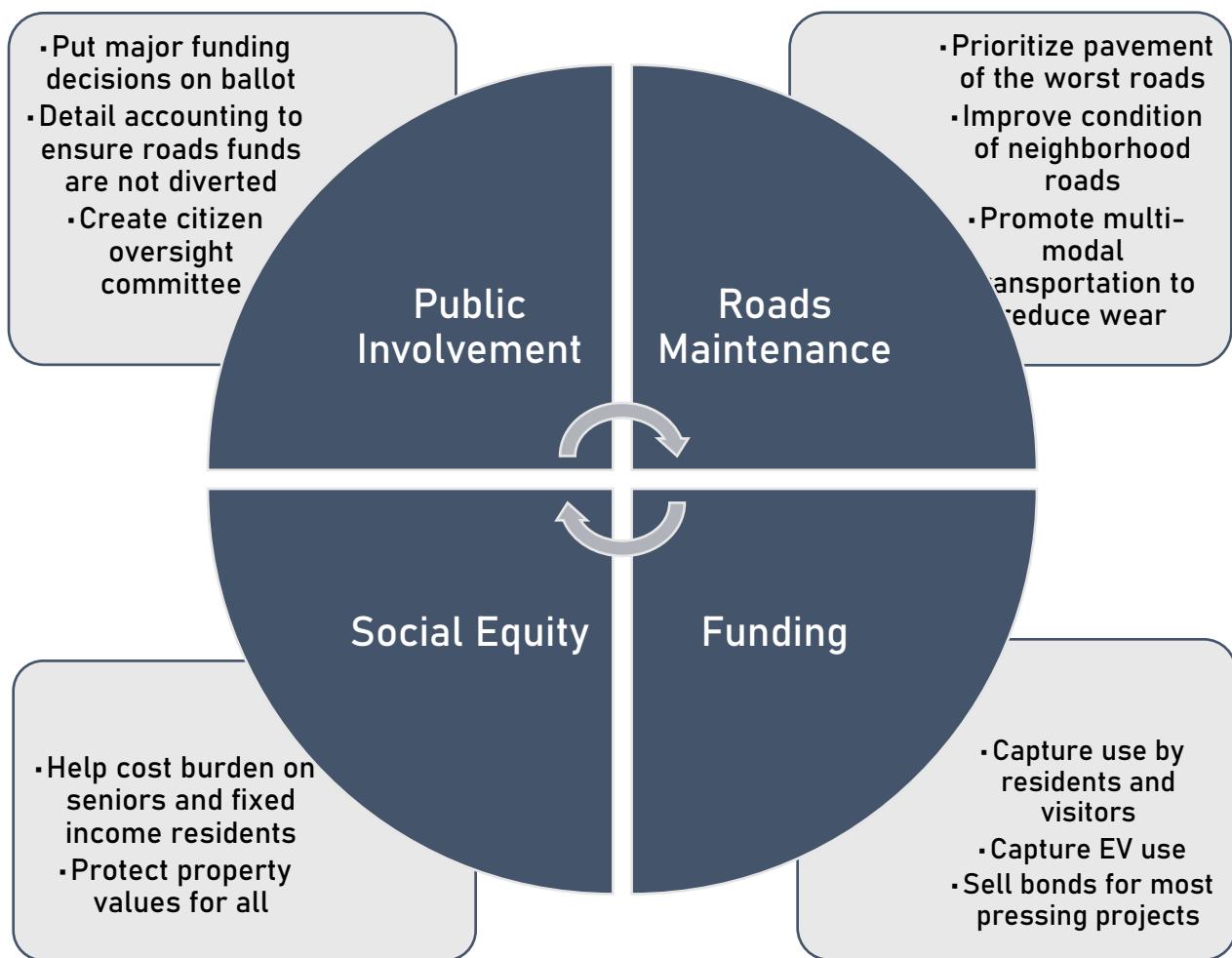
Appendix D contains photographs of the voting exercises for preferred road conditions and preferred funding mechanisms.

Public Participation Feedback Themes

In addition to the voting exercises conducted at the March 2024 public workshop, comment cards were available at each of the workshops for participants to provide any additional comments. As might be expected, there are many different views about the best path forward. Four main themes for consideration are captured in Figure 8. The themes include:

- **Public Involvement.** Citizens want to ensure new funding sources are accounted for in a transparent manner so that they can see the revenue streams are not being diverted for other City purposes. There is interest in creating a citizen oversight committee to monitor expenditures on City roads, and many feel that citizens should be able to vote on the major funding decisions.
- **Roads Maintenance.** There is consensus that the condition of neighborhood roads needs to be improved, and that the pavement of the worst roads should be prioritized. Some citizens would like to see greater promotion of multi-model transit and encouragement of non-powered mobility options to reduce wear of the roads.
- **Social Equity.** Citizens understand that the improvements will cost money, and many are willing to pay for it to protect their property values, but some are concerned about the potential impact to seniors and other residents on fixed incomes.
- **Funding.** Many residents understand the problem with gas and diesel tax declining over time in relation to number of street users due to the increasing market share of electric vehicles. Generally, support is demonstrated toward funding mechanisms that capture use of residents and visitors, and that capture use by electric vehicles. A few comments supported selling bonds to take care of the most pressing / failing roads. Some citizens noted that weight of vehicles should be a consideration of a funding mechanism, if possible.

Figure 8
Public Participation Comment Themes





04. General Improvement District

A GID is a special district created for provision of services when there either isn't an organization in place already to provide the services needed, or when existing funding sources are inadequate to provide the level of services desired. GIDs are widely used in Nevada for a variety of services (examples include utilities provision, roads maintenance, rodent control, and recreation facilities). GIDs can charge ad valorem taxes, parcel charges, assessments, and fees for regulatory activities; however, they can only charge ad valorem taxes and assessments for road maintenance activities, and a Carson City Roads GID would not charge ad valorem tax to preserve the City's ad valorem tax rate available under statutory limits.

Special assessments to fund streets, curbs, gutters, and sidewalks may be charged to lands and premises abutting the street or alley improved or proposed to be improved, and any other lands that may be specially benefited by authorized road maintenance activities upon affirmative vote of at least two-thirds of the GID's Board of Trustees (BOT). One of the key components of a Citywide Roads GID is determining the best method by which to allocate the costs of the Local Roads Maintenance Program (LRMP) to be funded by the GID to beneficiaries of the LRMP.

Cost Allocation Methodologies

NRS 271.045 requires assessments to be charged on a front foot, zone, area, or other equitable basis, as may be determined by the BOT. At the October 2023 public workshops, six potential cost allocation methodologies for a Carson City Roads GID were presented. These included:

1. Front footage of parcel
2. Uniform parcel charge
3. Parcel acreage
4. Livable building square feet
5. Estimated vehicle trip generation
6. Assessed value

Using GID survey results and the available data upon which to conduct the cost allocation analysis, three methodologies were removed from consideration. Front footage of parcels was removed because for a citywide GID, this would require tremendous administrative work each year. There are also many exceptions and inequities with this methodology, such as lack of assessment for parcels abutting private roads. Livable building square feet was removed as an option because the data could not be released by the Assessor (it is not publicly available for all parcels). Assessed value was removed because data is not publicly available for all parcels, and because many governmental properties that the GID has authority to assess do not have an assessed value.

Remaining cost allocation methodologies include a flat parcel charge, a parcel acreage charge, and a charge based on vehicle trip generation. Case study research was conducted

on similar funding mechanisms used in other Western U.S. states. Using findings of that research (see Appendix E) and using the Project's GID survey results and public comments which indicated support for all parcels receiving some level of assessment because all parcels benefit from use of City roads, a hybrid assessment structure was crafted with Part 1 and Part 2 assessments.

The Part 1 assessment was set at \$5 per month per parcel and the target GID annual revenue was set at \$5.00 million. Table 3 shows the Part 1 assessments would generate about \$1.20 million, and Part 2 assessments would need to generate about \$3.80 million each year.

Table 3
GID Revenue from Part 1 and Part 2 Assessments

Assessment [1]	Estimated Annual Revenue	Share of Revenue
PART 1 Assessments [2]		
Charge per Parcel per Month	\$5	
Number of Parcels Served by Carson City Roads	20,130	
Annual Part 1 Assessment Revenue	\$1,207,800	24%
PART 2 Assessments [3]		
	\$3,792,200	76%
Target GID Revenue	\$5,000,000	100%

[1] Assessments charged to all parcels except the following exempt parcels: School District, City-owned, common area, open space, unbuildable lots, road/easements lots and cemeteries.

[1] The base charge applies to every property benefiting from City roads maintenance including developed and undeveloped property.

[2] Collected from developed properties only.

The target GID revenue was set at \$5.00 million for this analysis for these reasons:

- Case study research showed most municipalities charge between \$5 and \$18 per month for a LRMP.
- The GID cost burden is in addition to potential additional cost paid by residents and businesses registering vehicles (the Supplemental GST) and buying retail goods in Carson City (the Transportation Sales Tax). The Supplemental GST will vary depending on original cost and age of vehicle, making it difficult to estimate for a household. The Transportation Sales Tax is estimated to cost each household about \$12 per month.

- c. Public comment received about the GID was that it would be a good tool to phase in increased costs and ramp up the amount of road maintenance work completed each year. It might be unrealistic to expect the City to manage an additional \$20 million plus in road maintenance projects each year at the outset of the Project.

Part 1 Assessments. The Part 1 assessment is a uniform parcel charge. Every parcel in Carson City, developed or undeveloped (except exempt parcels), would pay the same assessment each month. Exempt parcels include Carson City School District (CCSD) parcels (the CCSD can elect to be assessed), City-owned parcels, cemeteries, common area, open space, road/easement parcels, and unbuildable parcels. Assessment modeling assumptions are listed in Figure 9.

Figure 9
Assessment Modeling Assumptions

City properties do not pay because the same residents and businesses would pay twice for the same service

Undeveloped properties (with potential to develop) only pay the Part 1 assessment

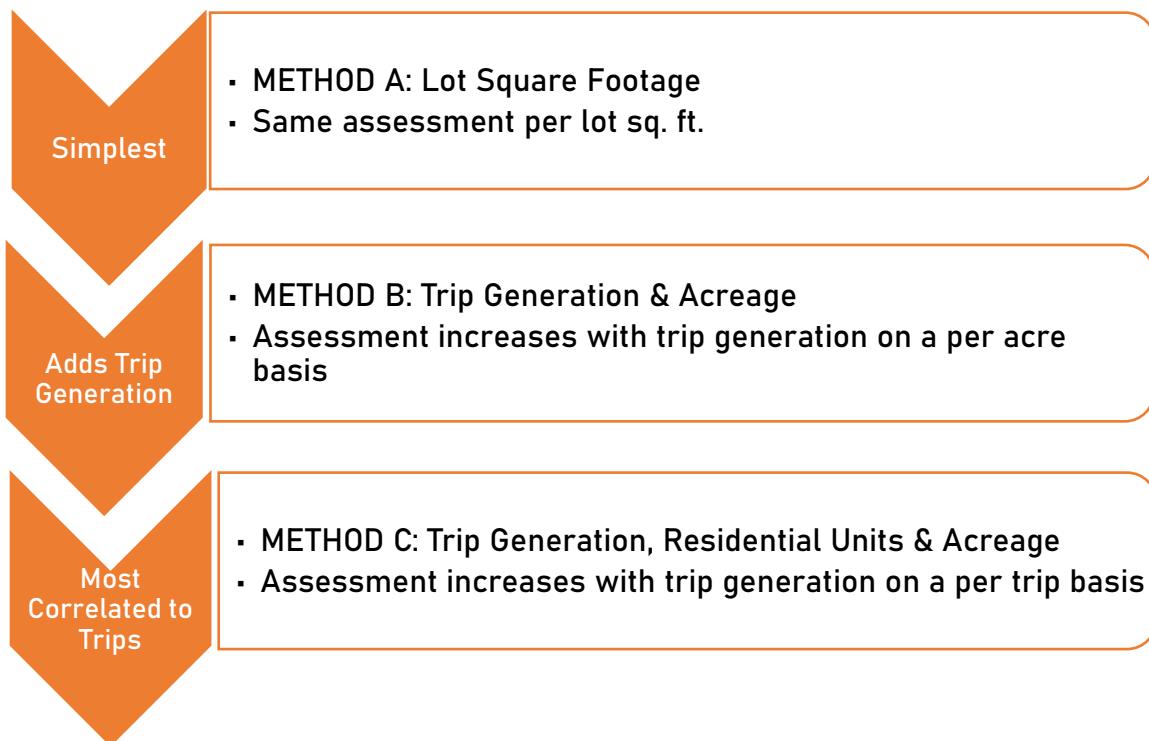
Common areas, open space, unbuildable lots, road/easement lots, and cemeteries are not charged

Part 2 Assessments. The Part 2 assessment is applied to developed properties only, modeled using three cost allocation methods shown in Figure 10.

Method A is based on parcel size. Methods B and C incorporate vehicle trip generation in the cost allocation methodology; however, Method B only uses the vehicle trip generation to establish relative difference in traffic volume between land use types while Method C allocates costs according to the estimate of vehicle trips generated by every residential unit and every non-residential parcel. Vehicle trip generation estimates are primarily based on the SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, provided in Appendix F, and the City of Austin, Texas estimates of residential vehicle trip generation per acre.

Most fee methodologies use the ITE trip generation rates; however, the ITE trip rates cannot be used for Methods B and C because building square feet data is not available from the Carson City Assessor for all parcels that would be included in the GID.

Figure 10
Part 2 Assessments Methods



Method A: Under this cost allocation method, real property is charged the same assessment per lot square foot; however, the square footage of parcels is capped according to land use and size of parcel. This methodology is based on the methodologies used for citywide road maintenance districts created in Montana, most particularly the City of Bozeman, which has a population size similar to Carson City.

Detached single family parcels are capped at 15,000 square feet because the developed portion of a lot with a home is unlikely to exceed this area. For all other land uses, lots smaller than 35 acres are charged for the entire lot area, lots between 35 and 80 acres are charged 75% of the lot area. Lots between 80 and 160 acres are charged 50% of the lot area, and golf courses and lots larger than 160 acres are charged 25% of the lot area. These brackets were developed by examining the Carson City real property parcel sizes and uses of land. The larger the lot, the lower the proportion of the parcel acreage is likely to be developed or to benefit from the maintenance of Carson City roads.

Method B: Method B is based on street fee structures used in Oregon, which was one of the first states to impose street utility fees. The cities of Hillsborough, Lake Oswego, and Newberg have similar fee structures for residential land uses and classifications of non-

residential land uses. While the Oregon examples base trip generation on the Institute of Transportation Engineers (ITE) Trip Generation Manual, Method B uses a trip generation method based on the SANDAG vehicle trip generation estimates for non-residential land uses and vehicle trip generation rates for residential uses employed by Austin, Texas to establish street fees. Two different data sources are used because the SANDAG guide does not provide trip generation per acre for residential land uses. The trip generation rates are used only to establish the relative ratio of traffic generated by land use types. Costs are allocated to land uses based on their share of equivalent acres, where equivalent acres are the actual acres multiplied by the traffic generation ratio of the non-residential land use to residential.

Method C: This cost allocation methodology also separates residential from other land uses (note that ten or more manufactured homes are classified mobile home properties and are included under 'other' land use) but further differentiates between single-family detached units, single-family attached units, and apartments. These residential land use categories align with the ITE Trip Generation Manual residential categories and SANDAG's residential land use categories which are used to estimate the number of weekday vehicle trips per household/unit. The methodology is based on street fee structures used in Oregon and Texas. This methodology establishes a cost per weekday trip which can be used to determine the assessment for a land use that does not fit well within the categories established under Method C.

Results of GID Part 2 Assessment Cost Allocation Modeling

The GID assessment modeling resulted in three assessment structures. For all three structures, the calculations did not include CCSD properties which are exempt pursuant to NRS 318.350 unless the CCSD agrees to pay the assessments.

- Method A calculated Part 2 annual assessments are shown in Table 4.
- Method B calculated Part 2 annual assessments are shown in Table 5.
- Method C calculated Part 2 annual assessments are shown in Table 6.

Support tables are provided in Appendix F.

The assessment amounts differ from the amounts presented at the public workshop March 26, 2024 because of an update to the parcel database, and an adjustment to residential trips per acre under Method B. For all three cost allocation methodologies, if the CCSD agreed to be charged assessments, the assessments could be lower because greater revenue could be generated from these properties.

Table 4
Part 2 Annual Assessments under Method A

Land Use	Cap [1]	Parcels Area Square Feet	Share of Sq.Ft.	Cost Allocation
Detached Single-Family	15,000 sq. ft.	140,104,128	47%	\$1,781,948
All Other Land Uses		Parcel Area		
Group 1: Lots < 35 Acres	100%	122,618,573	41%	\$1,559,554
Group 2: Lots between 35 and 80 Acres	75%	10,747,123	4%	\$136,690
Group 3: Lots between 80 and 160 Acres	50%	9,280,240	3%	\$118,033
Group 4: Golf Courses and Lots > 160 Acres	25%	15,408,435	5%	\$195,976
Total All Other Land Uses		158,054,372	53%	\$2,010,252
Total Land Uses		298,158,499	100%	\$3,792,200
Annual Assessment per Capped Parcel Sq. Ft.				\$0.01272

[1] Detached single-family home parcel area capped at 15,000 square feet (about 1/3rd acre).

Table 5
Part 2 Annual Assessments under Method B

Assessment Category	Acres	Trips per Acre	Ratio to Residential	Calculated Equivalent Acres	Share of Equiv. Acres	Cost Allocation	Annual Assessment per Acre
Residential [1]	6,956	50	1.0	6,956	32%	\$1,230,110	\$176.84
Non-Residential		[2]					
C1	417	5	0.1	42	0%	\$7,369	\$17.68
C2	479	30	0.6	287	1%	\$50,787	\$106.11
C3	141	125	1.7	240	1%	\$42,487	\$300.63
C4	781	250	3.3	2,577	12%	\$455,804	\$583.58
C5	2,194	400	4.6	10,093	47%	\$1,784,872	\$813.48
C6	17	600	6.9	119	1%	\$21,117	\$1,220.22
C7	103	1,100	11.0	1,129	5%	\$199,654	\$1,945.27
Subtotal Non-Res.	4,132			14,488	68%	\$2,562,090	
Totals	11,088			21,444	100%	\$3,792,200	

[1] Calculated average trips per acre for Carson City residential using Austin, Texas motor vehicle trips per acre per day.

[2] Mid-point of trips per acre for land uses in the SANDAG "(Not so) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region", April 2002.

Table 6
Part 2 Annual Assessments under Method C

Assessment Category	Cost Allocation	Units / Acres	Annual Assessment
Residential			
Single-Family Detached [1]	\$384,014	14,887	\$25.80
Single-Family Attached [2]	\$116,512	5,646	\$20.64
Apartments [3]	\$29,128	1,882	\$15.48
Subtotal Residential	\$529,654	22,415	
Non-Residential			
weekday trips		acres	per acre
C1	less than 10	\$7,525	417
C2	10-50	\$51,284	479
C3	51-199	\$32,928	141
C4	200-300	\$566,022	781
C5	301-500	\$2,263,930	2,194
C6	501-700	\$31,244	17
C7	>700	\$309,613	103
Subtotal Non-Residential	\$3,262,546	4,132	
Total Cost			\$3,792,200

[1] Includes detached units and manufactured homes.

[2] Includes condominiums, 2-4 attached units, townhomes, and low-rise apartments.

[3] Includes mid-rise and high-rise apartments, and mixed use buildings with residential as primary use.

Hypothetical monthly bills for customers under each of the three assessment structures are provided in Figure 11 for a single-family residential home. Using the assessor's data, the median lot size of a detached single family home in Carson City is 7,840 square feet. A larger lot size (16,000 square feet) was also selected to demonstrate how size of a lot impacts total assessments due under methodologies A and B.

A hotel and restaurant were randomly selected to illustrate impacts to local businesses, as shown in Figure 12. The figures show how the cost allocation methodology affects the bills for different types of customers. The figures are inclusive of the Part 1 and Part 2 assessments.

- A single-family home generates about the same amount of traffic whether it is located on a smaller or larger lot. Under Method C, both homes would pay the same. Under Method B, the larger lot would pay a bit more, but under Method A the larger lot would pay considerably more than the smaller lot, even with the assessment cap of 15,000 square feet.

- The hotel assessment does not vary much between methods A and B but increases under Method C as the assessment is more closely correlated with estimated number of trips generated.
- The restaurant assessment is much lower under Method A than either methods B or C because it does not occupy much land, but it does generate comparatively many more trips than a single-family home.

Figure 11
Residential Roads Monthly Assessments

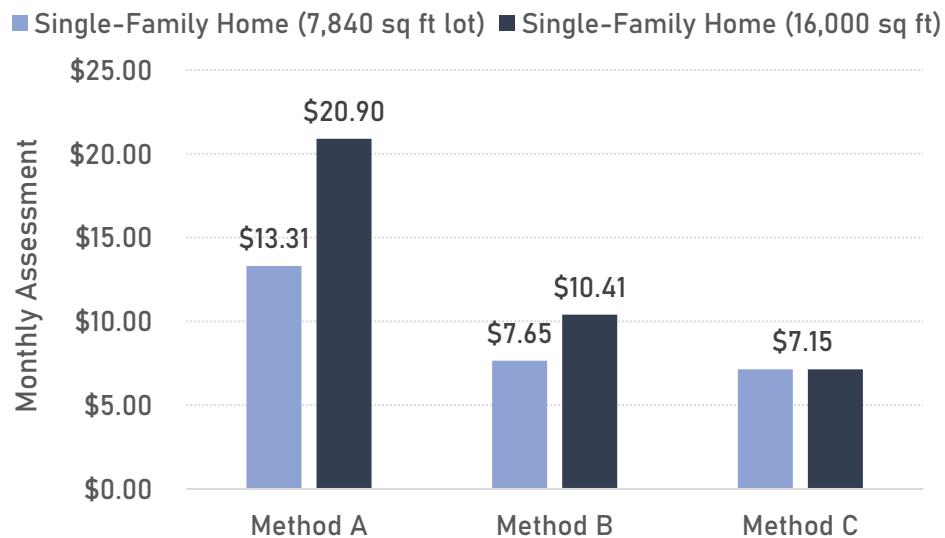


Figure 12
Hotel and a Restaurant Roads Monthly Assessments



Carson City Roads GID Findings and Recommendations

The greatest concern expressed by citizens regarding formation of a Citywide Roads GID was the addition of a new layer of government, and financial accountability of the GID to ensure funds are not co-mingled with the City General Fund. As a new governmental entity, the GID would be required to provide a budget to the Department of Taxation; be limited in its activities pursuant to its basic powers and enacting ordinances; the expenditure of GID assessments would be transparent. The GID funds cannot be mingled with other City funds.

Questions raised about a GID include:

- Will a GID count against the City's total ad valorem tax levy?
 - A GID has authority to levy ad valorem taxes, but only special assessments would be imposed for a Roads GID. Assessments and regulatory charges do not count toward the statutory and constitutional tax limits.
- Can the Roads GID receive consolidated taxes?
 - No, a GID created after July 1, 1998 is only entitled to consolidated taxes if it provides police protection and at least two of the following services: fire protection, roads services, or parks and recreation.
- Can the City also continue to provide some road-related services if a Roads GID is formed?
 - Yes, if the BOS finds that the GID would provide a level of service that the City cannot with existing funding sources for public convenience and necessity.

Although a new GID would be a separate legal entity from the City, it would be governed by the BOS as the ex officio BOT, ensuring the vision and execution of activities of the GID are in line with the City's goals. A GID can also create SIDs for major neighborhood street capital projects if the City wanted to keep all roads special assessments under the umbrella of one entity.

Recommendations, should the City move forward with Carson City Roads GID are:

- The BOT exercises its ability, by way of ordinance, to appoint a local district managing board that is comprised of between 5 and 12 members who are qualified electors of the district to manage the affairs of the district. The managing board could be the RTC.
- Nevada's constitution allows for special assessments to be collected with property tax bills (quarterly) or with the City's utility bills (monthly). It is recommended that the City's utility billing process be used. The GID can contract placement of roads assessments on utility bills with the City. Advantages of utility billing include charging properties that cannot be charged with property taxes, creating payment programs and discounted assessments to qualifying customers, enhancing cash flow, changing status of parcels served (from vacant to developed for example) to bill correctly more quickly, and to utilize utility bill inserts and other City communications

platforms to message customers regarding upcoming projects and timelines and other important information.

- Use a two-part assessment methodology with Part 1 being a uniform parcel charge, and Part 2 being Method C, or a variation of Method C if the BOS directs staff to act on creation of a GID. Method C received most support through the public workshop activities, written public comments, and verbal comments at stakeholder meetings. The Part 2 assessment methodology should be further vetted if a GID is pursued.

05. Funding Strategy

The funding strategy presented in this section draws on the information gathered over the past 2.5 years about the five potential additional revenue streams to fund local road preservation and restoration. The guiding principles outlined in Section 02 of this report provide the foundation upon which the funding strategy is built.

- 1. Prioritize pavement and roadway infrastructure where efficiency can be achieved.**
A goal of the City's Pavement Management Plan is to keep good roads good and minimize additional future revenue needed to reconstruct failed roads. Each of the funding mechanisms allow for both the maintenance and reconstruction of roads along with the required repair and replacement of roadway elements such as curb, gutter and sidewalk.
- 2. Provide for a diversity of funding resources for different transportation users.**
The Transportation Sales Tax (NRS 377A) and Supplemental GST (NRS 371) mechanisms both capture a wide variety of users including visitors, residents, owners of fuel efficient and alternative fuel vehicles, cyclists, and other beneficiaries of good roads who buy retail goods in Carson City. Funding from these two mechanisms would be applied to maintenance and reconstruction of roads for vehicles and bicyclists along with the repair and replacement of sidewalks for pedestrians and transit riders. A GID can be crafted to cover a variety of road maintenance functions for many different types of users.
- 3. Allow for local funding to be leveraged to get additional state and federal funding.**
The City's Pavement Management Plan outlines flexibility to allow for matching grant funds. Increases in local funding associated with all mechanisms, but especially the Infrastructure Sales Tax (NRS 377B) because it is not limited to spending on local roads, allow the City to request larger or additional federal grants.
- 4. Ensure needs of all streets are included as options for prioritization.**
Project prioritization methods must include a process whereby all roads (local and regional) are considered for funding. Priority should be set based on the requirements established by the funding sources, for instance, the Transportation Sales Tax and Supplemental GST are to be dedicated to fund local roads only, should the ballot measures pass. Other mechanisms such as the GID (NRS 318) can be dedicated to both regional and local roads, while the Infrastructure Sales Tax should continue to be dedicated to regional roads.
- 5. Be flexible, simple to explain, quantifiable, and easy to implement.**
Implementation of each funding mechanism must be transparent in proceedings, providing the community ample opportunity to provide input. The Transportation Sales Tax and Supplemental GST mechanisms are simple to explain and are understandable as versions of these are already in place in Carson City for other purposes. A GID provides the most creativity and flexibility in use and can be implemented easily with existing staff and the City's utility billing system.

6. Provide for transparency of revenues and expenses.

For all funding mechanisms, accounting must be transparent. Reports showing expenditures against each revenue source should be provided to the governing body at least annually. The Transportation Sales Tax and Supplemental GST require revenue generated to be deposited in a separate fund dedicated solely to constructing, maintaining and repairing local public roads. A GID requires the creation of a separate governing body tasked with oversight of the GID projects and finances.

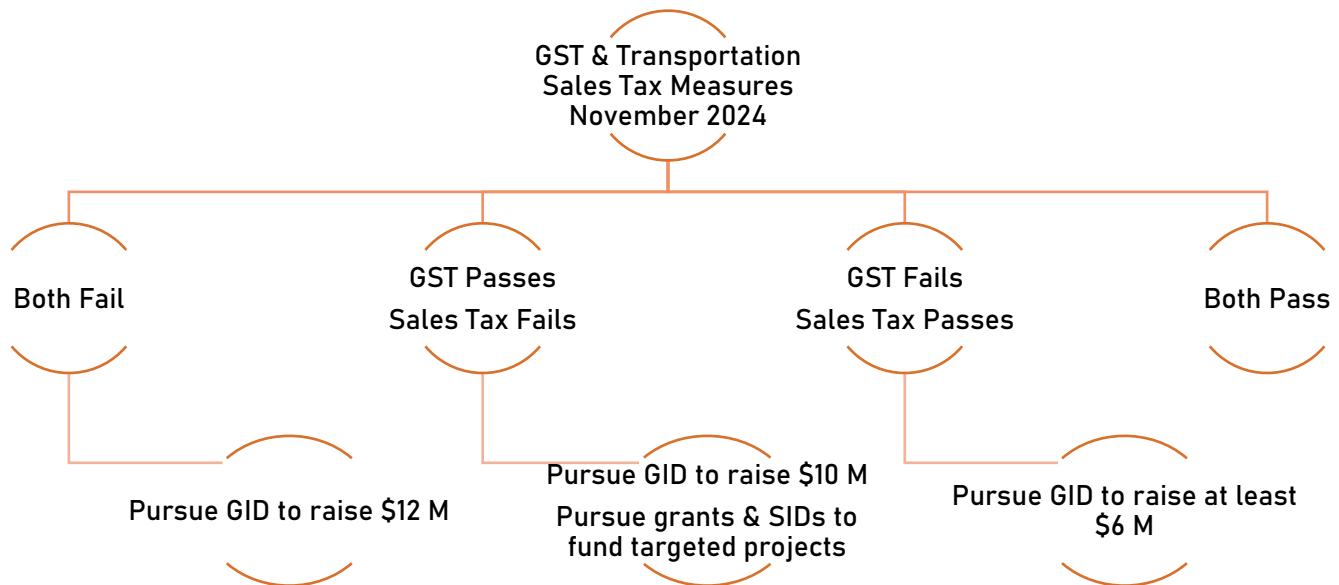
Preserve Carson City Project Conclusion

In conclusion, additional funding for the City's roads is required to ensure the City meets the desires of the community and the goals outlined in the 2006 City Master Plan. Recent scenarios completed by the City's pavement asset consultant indicate that the passage of the Transportation Sales Tax and the Supplemental GST have significant potential to improve the pavement condition in Carson City. This same analysis also indicates that the creation of a GID with a target revenue generation of \$5.00 million, coupled with the Transportation Sales Tax and Supplemental GST have the potential of ensuring Carson City's roads remain with PCIs similar to today's condition in 2050.

The funding strategy begins with an initial funding strategy listed as steps 1 through 3 below. These steps should be taken in the next eighteen months. Steps 4 through 6 are part of the longer-term funding strategy.

1. Take the two funding sources requiring voter approval to the ballot
 - Allows for direct citizen input and transparency.
 - Anticipated to raise approximately \$7.00 million for local roads only.
2. Continue the Infrastructure Sales Tax in January 2026
 - No additional cost burden to residents and businesses.
 - Anticipated to raise an additional \$1.25 million for regional roads.
 - Since visitors also contribute to this funding source, it is appropriate that the majority of the tax revenue be spent on regional roads consistent with the current plan of expenditure.
3. Evaluate the outcome of the ballot measures
 - Run through a decision-tree process as illustrated in Figure 13 (dollar amounts to be adjusted based on desired PCIs).
 - Evaluate the PCI for regional and local roads and have City staff and the RTC decide if a lower PCI is acceptable for regional roads, local roads, or both.
 - If the GST passes, allocate all the proceeds to local roads as recommended by the RTC and directed by the BOS.
 - If the Transportation Sales Tax passes, allocate all funding to local roads as recommended by the RTC and directed by the BOS.
 - If one, or both, of the proposed measures fail, pursue creation of a GID. GID assessment levels will depend on which of the proposed measures fails.

Figure 13
Decision Tree for Ballot Outcomes



4. Keep a Roads GID in the conversation

- Although not in the initial funding strategy, the building blocks for a GID have been developed to the point that it can be taken forward relatively quickly (can be implemented within a year).
- GID formation is not subject to voter approval, but it is subject to property owner protest; there is a process for public involvement, and with sufficient outreach, this funding mechanism could be adopted with confidence that the public had opportunity to voice their opinions on it.
 - The BOS may also consider placing an advisory question on the ballot during a future election.
- Revenue generated by a Citywide Roads GID can be directed to both local and regional roads because the tax is paid by residential units located along local roads and commercial businesses that are typically located along regional roads; however, depending on how the PCIs of regional and local roads are faring, the BOS has discretion to restrict revenues to only local roads expenditures.

5. Continue to aggressively pursue grants for regional roads, and use SIDs

- The more successful the City is with securing grants and using SIDs for specific regional roads projects, the more money can be shifted from regional road funding to local road funding. Garnering support for one-time projects with demonstrated need can be less challenging than garnering support for multiple repetitive maintenance projects. However, the administrative cost and effort associated with federal grants and SIDs should be weighed against the possible benefits. Federal grants require additional environmental reviews and project performance reporting and require staff time to develop grant applications. Success is not guaranteed.

6. Create a Citywide Transit SID

- A Citywide Transit SID created under authority of NRS 271.237 that assesses property owners (depending on the benefits received from the project, programs, and services) can fund new transit infrastructure, programs and services, and maintenance of transit assets within the boundary of the SID.
- As with a Citywide Roads GID, no examples of this type of improvement district currently exist in Nevada, but similar examples do exist in other states.
- By creating a new revenue stream for transit, there would be more money available for roads maintenance. Proceeds of the assessment must be placed in a special fund and used only to fund the activities of the SID.

In addition to this strategy for funding pavement preservation, several recommendations are provided for the City's consideration.

Funding Strategy Supporting Recommendations

- Continue to use the City's Pavement Management Plan to prioritize projects based on:
 - Roadway functional classification
 - Preventive and corrective maintenance schedule
 - At-risk infrastructure
 - Safety needs/targets
 - Traffic volume
 - ADA Accessibility
 - Multimodal opportunities
 - Connectivity
 - Utility improvement coordination
 - Constructability and construction efficiencies ("dig once")
 - Funding eligibility and availability

Revisions to the Pavement Management Plan are needed to incorporate additional revenue sources for local roads.

- Sales taxes are familiar to most people; less familiar to most are special assessments and parcel charges that can be levied by General and Special Improvement Districts, and the GST payable to DMV. Pursuing the Supplemental GST and the GID will require development of public outreach and education materials.
- Modify City policies as best fits current road and transit funding needs. The City has prioritized regional roads conditions for many years. With BOS direction, the City has the flexibility to re-allocate existing funds among the road and road-related functions it performs as part of the overall funding strategy. Depending on which of the revenue streams comes to fruition, the City needs to be ready to allocate resources where the need is greatest. It is recommended that City keep funding information current, updating the funding uses of revenue mechanisms, as shown in Appendix G.
- A new Roads GID should focus on its primary function to fund local roads pavement

preservation in its enacting ordinances; however, it should be created including other basic powers of sidewalks, snow removal, and street lighting to allow for future provision of these services for the City. Including them as basic powers at creation of the GID reduces time and cost should they be desired added GID services in the future.

- Consistent monitoring of the pavement conditions is important to measure progress toward maintaining and/or improving the citywide PCI, and reporting progress to the public. The City should continue to periodically survey pavement conditions and report progress on an annual basis of how much revenue is generated and where funding is being applied to roads.

