

CARSON CITY LOCAL ROAD FUNDING SUMMARY

PART 1

CHRIS MARTINOVICH, PE – TRANSPORTATION MANAGER, CARSON CITY

AUGUST 14, 2024



1

BACKGROUND

2

ROADWAY FUNDING



- Board of Supervisors retreat in 2020 started the effort.
 - Staff was tasked with evaluating the condition of roads, the funding needed to maintain and repair our roads, and the potential solutions to increase revenue for roads, especially roads classified as 'local' roads.
- Further direction provided by the Board of Supervisors including direction to investigate 4 possible funding mechanisms in 2021.
 - NRS 271 (Local Improvement Districts)
 - NRS 318 (General Improvement District- GID)
 - NRS 377A (Special Purpose Transportation Sales Tax)
 - NRS 377B (Infrastructure Sales Tax) – V&T
- Board of Supervisors approved two ballot questions in April.
- This presentation is to provide the final summary of other investigated mechanisms.
- Project Website: www.preservecarsoncityroads.com

3

LOCAL ROAD FUNDING PROJECT: OBJECTIVES

Evaluate options related to roadway funding and ensure that the City:

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

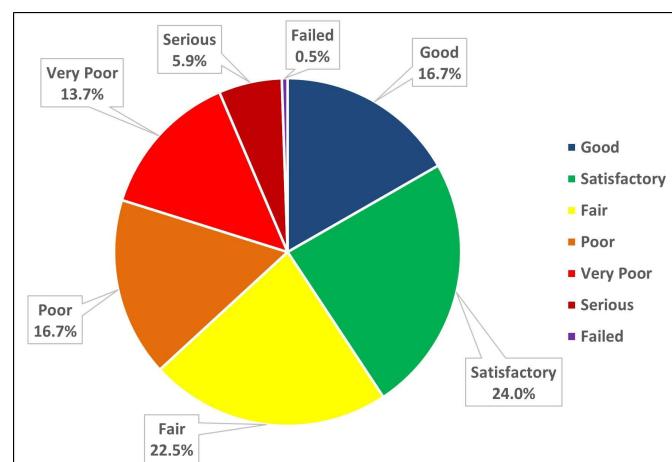
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MANAGING OUR ASSETS

5

NETWORK CONDITIONS (SPRING 2022)

Facility Type	PCI		Percent Change 2017 to 2022
	2017	2022	
Regional Roads	67	74	10%
Local Roads	61	56	-9%
All Roads	63	62	-2%



6

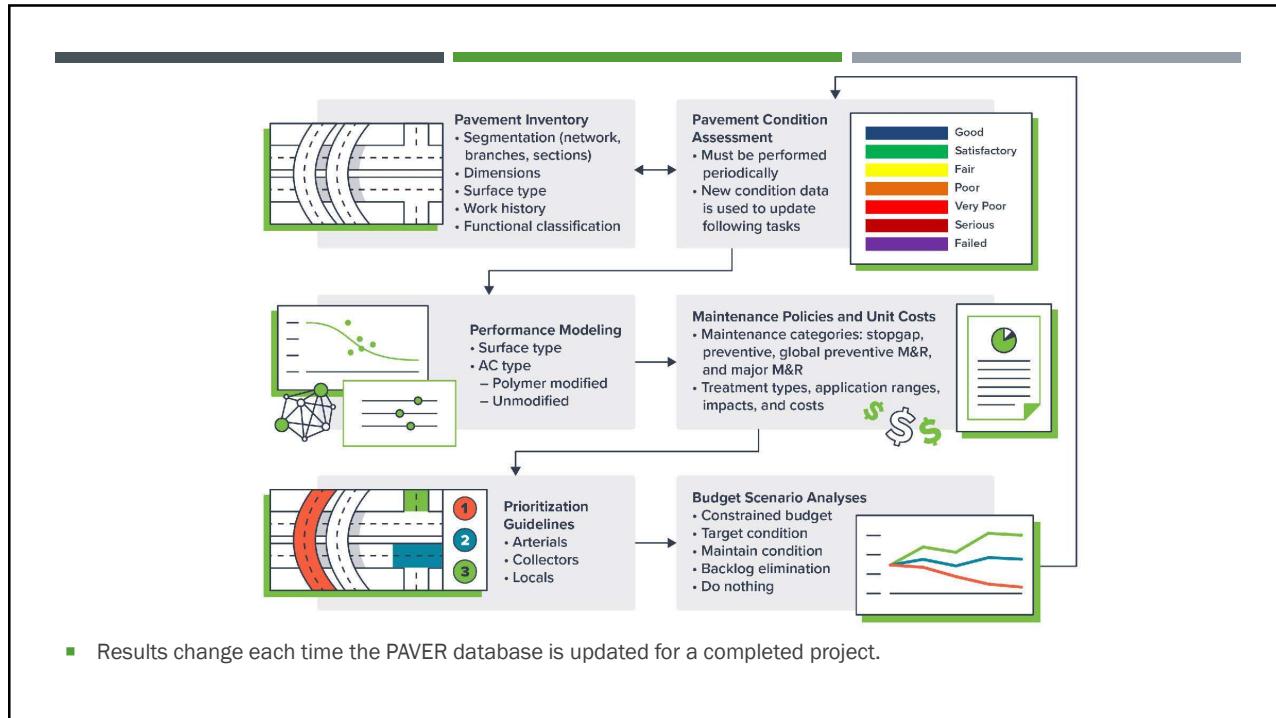
PAVEMENT ASSET MANAGEMENT

- City uses a pavement asset management software call 'PAVER'
 - EXHIBIT 4 Tech. Memo
- Physical Pavement Surveys
- Takes pavement survey and assesses each segment of road and sorts them into different needs – 4 categories of need
 - Preventative (Crack sealing, patching)
 - Stop-gap (Potholes)
 - Surface Treatment (Slurry)
 - Reconstruction (mill and overlay | remove and replace)
- Applies the cost parameters input by staff for each of those needs
- Iterates across Carson City over a given time (205), evaluating segments of road that will:
 - 1) meet the target condition, or
 - 2) maximize the available budget parameters
- Results in future modeling scenarios

Cost Parameters Used in PAVER

- Stop Gap = \$0.75/ ft
- Preventative = \$0.32/ sq ft
- Rehabilitation = \$3.00/ sq ft
- Reconstruction = \$4.00/ sq ft

7



8

NEW FUNDING SCENARIOS



Carson City Pavement Condition Analysis
Final Report (August 2022)

Prepared for
Carson City Public Works
2022-23 Pavement Condition
Report, August 2022
Applied Pavement
Technology, Inc.

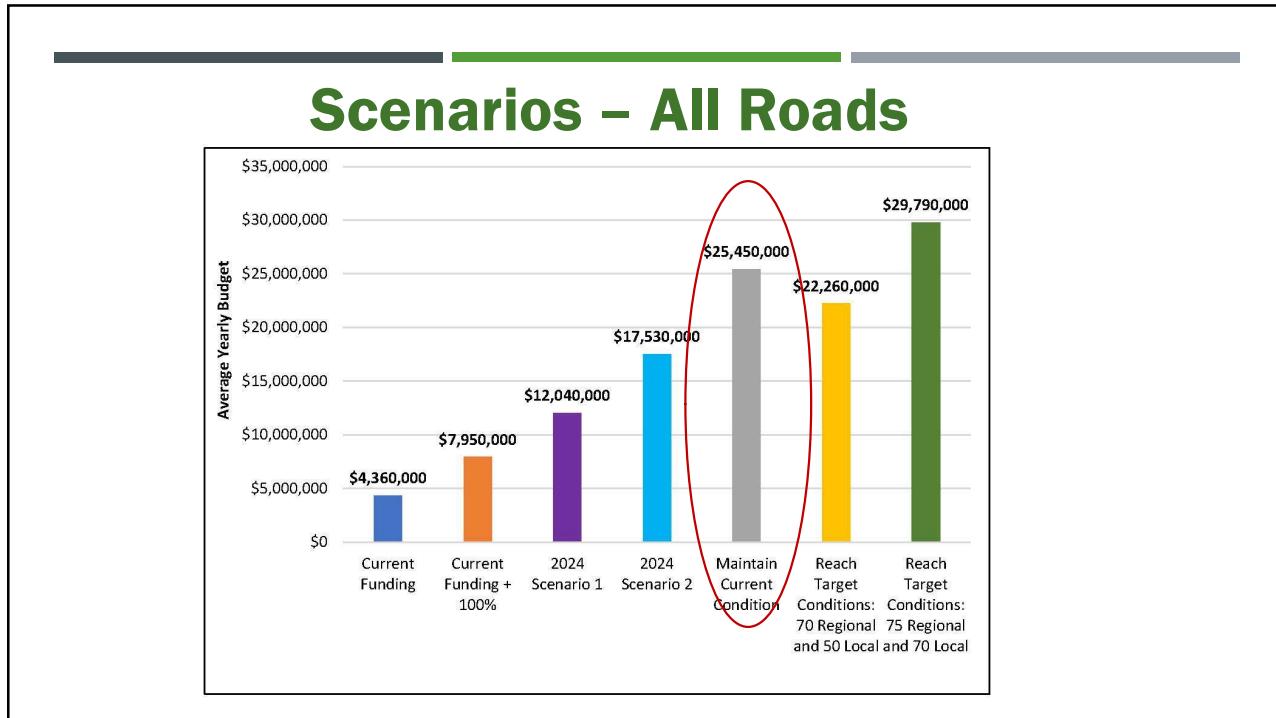
Prepared By
Applied Pavement Technology, Inc.
2022-23 Pavement Condition
Report, August 2022
Applied Pavement
Technology, Inc.

CARSON CITY
PUBLIC WORKS

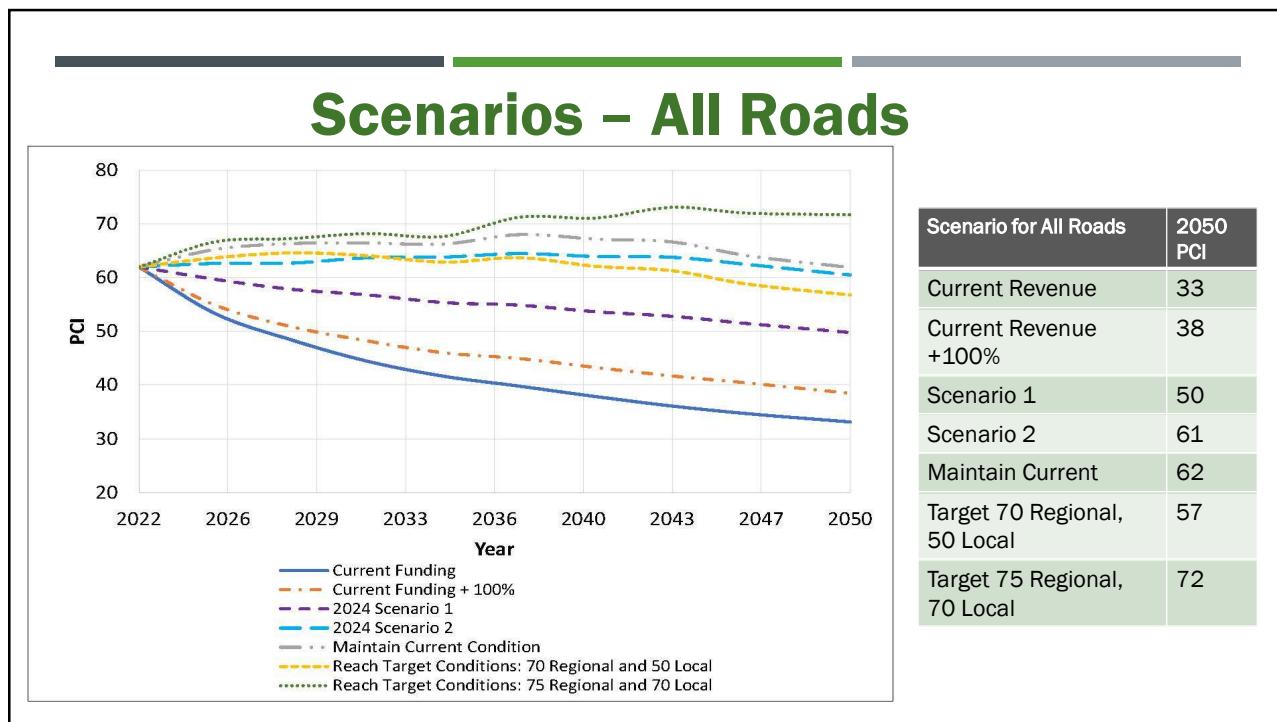
applied pavement
technology

- Completed scenarios
 - Current Revenue
 - Current Revenue + doubling of local funding
 - 2024 Scenario 1 – Existing Revenue + \$7M for local roads only
 - 2024 Scenario 2 – Existing Revenue + \$7M for local roads only + \$5M for all roads
 - Maintain Current Condition
 - Meet Target PCI of 70 for Regional and 50 for Local
 - Meet Target PCI of 75 for Regional and 70 for Local
- Uses the same base assumptions and costs as the 2022 analysis
- Refer to Exhibits 2 and 3.

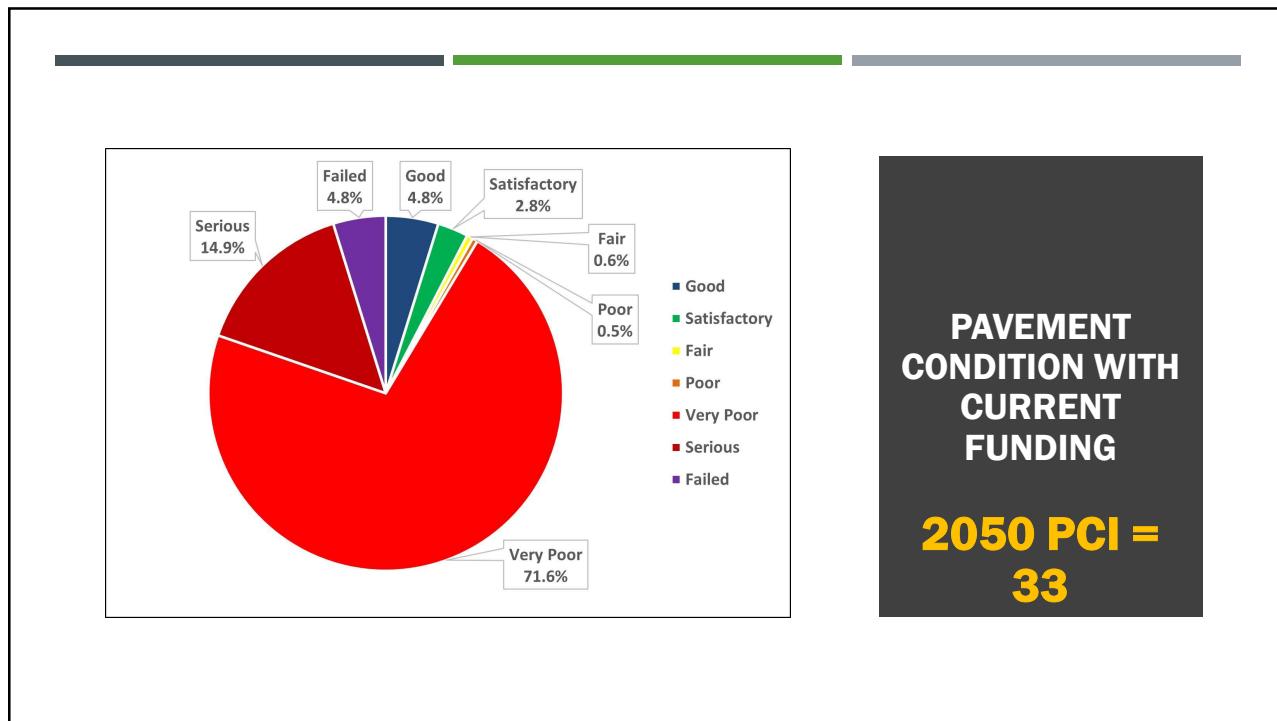
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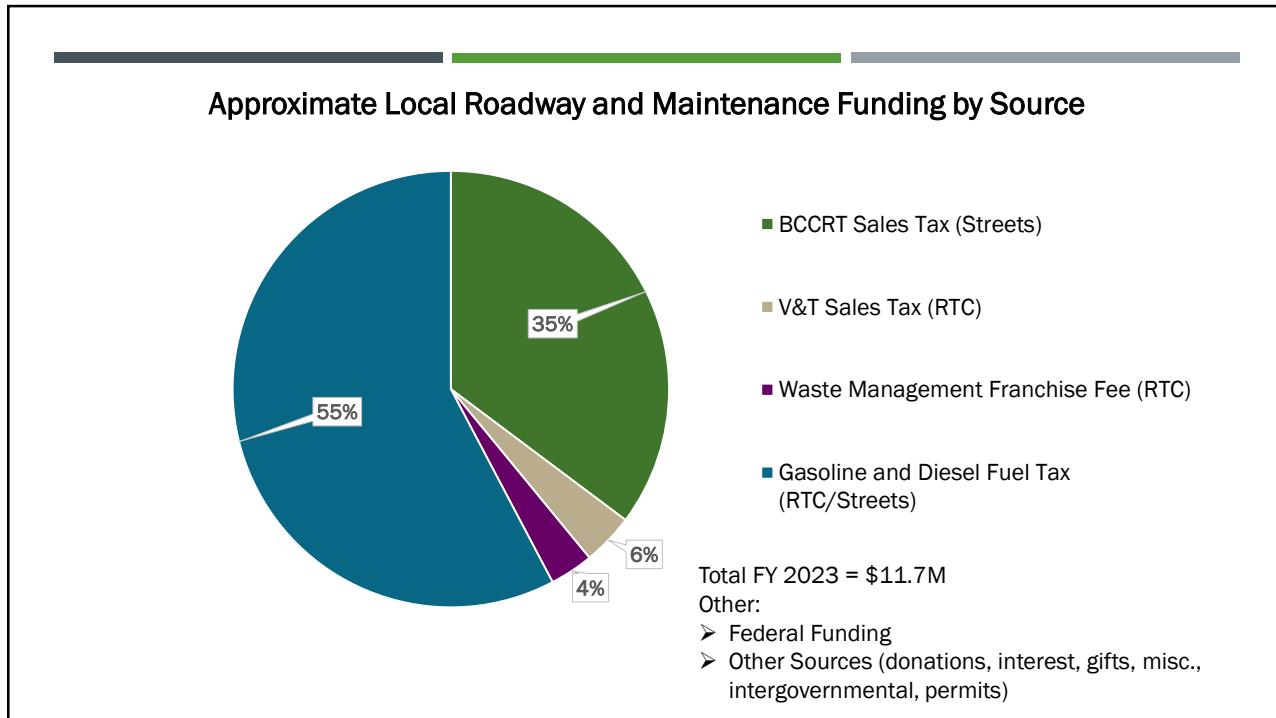
NEW FUNDING SCENARIOS – SUMMARY

- Any additional revenue will improve the condition of Carson City's roads.
- Using the maintain current condition scenario, staff estimate it will take 30-years (2055) to reach every road in Carson City.
- A dedicated funding source to local roads has additional benefit to the City PCI average.
- Under a scenario 2 example, staff estimate that all regional roads, and 52% of local roads will be maintained by 2050.
- Pavement data reporting subject to future collection of actual pavement conditions – Maturing of the data collection.

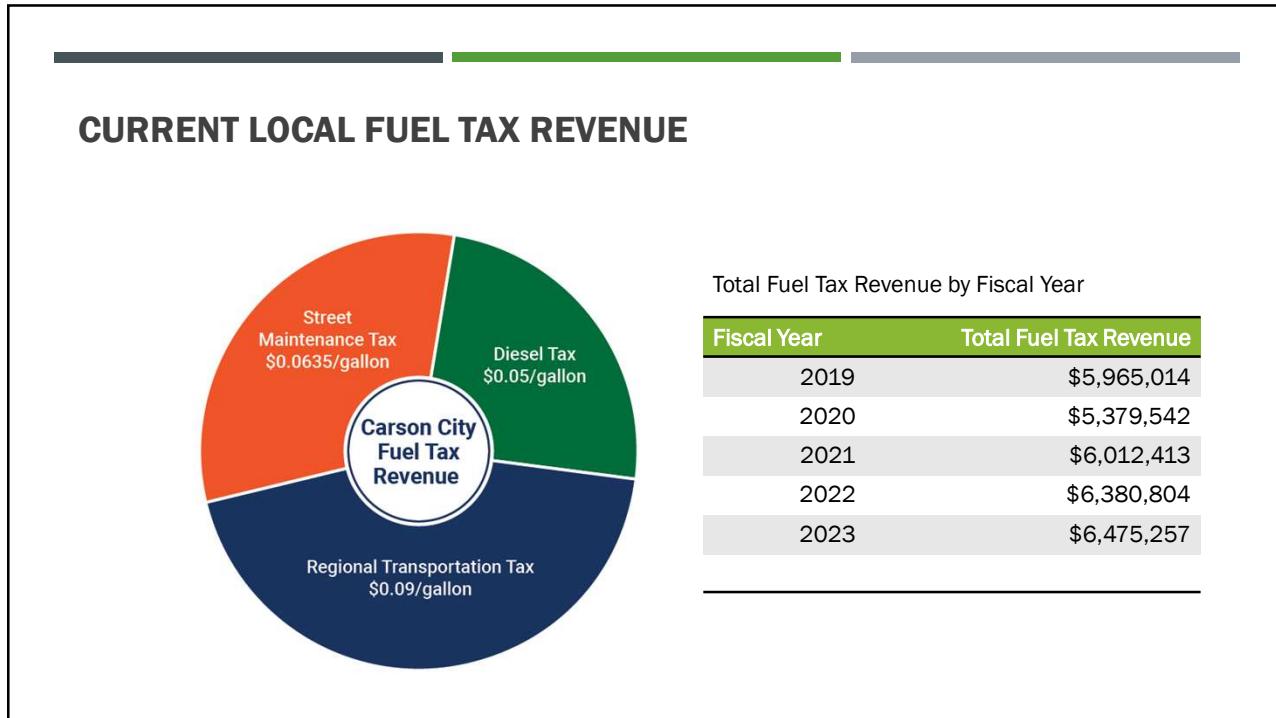
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CURRENT - FUNDING REVENUE AND EXPENSE

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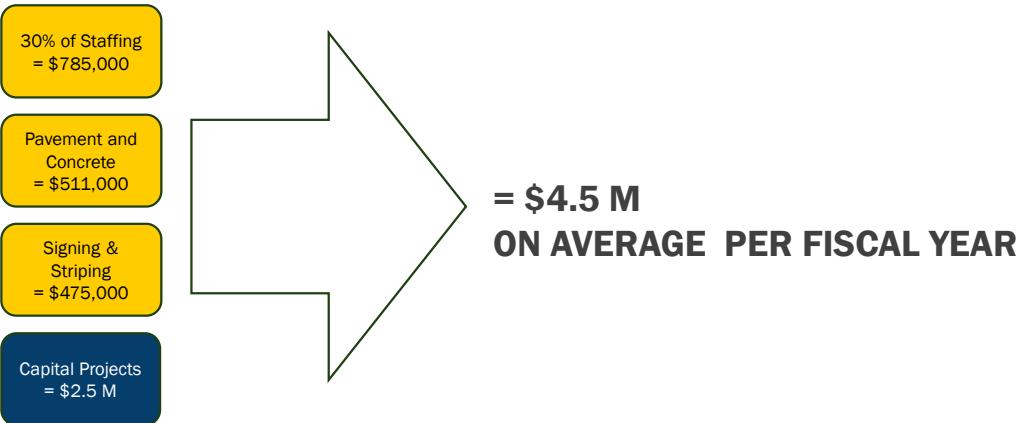
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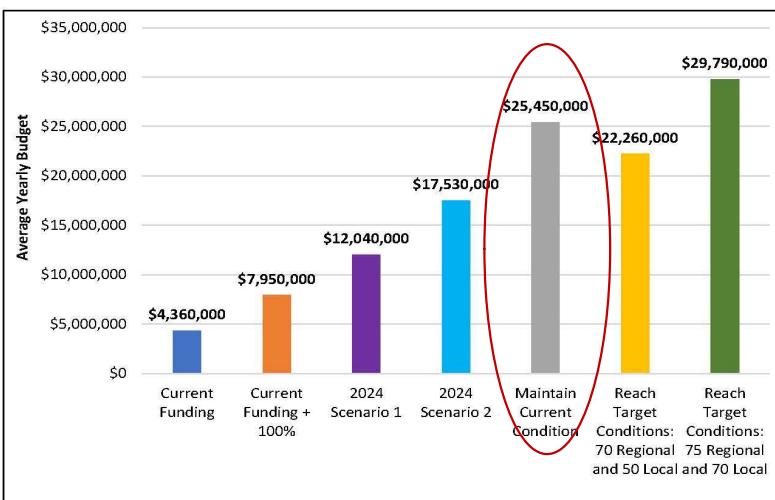
FUNDING FOR PROJECTS

After accounting for items such as debt service, vehicles, services and supplies, signals, snow removal, etc.:



17

Cost to Maintain- All Roads

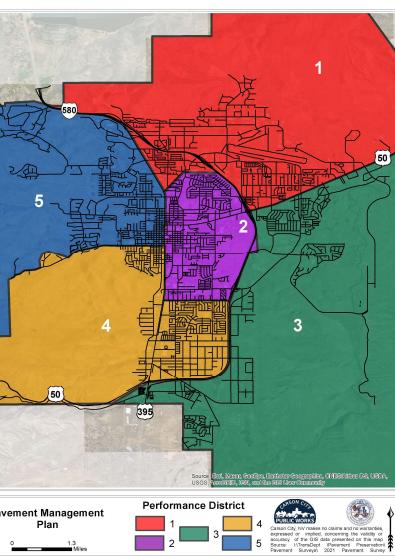


ANNUAL FUNDING GAP: \$25.5 M - \$4.5 M = \$21.0M

18

PROJECT SELECTION AND DELIVERY

19



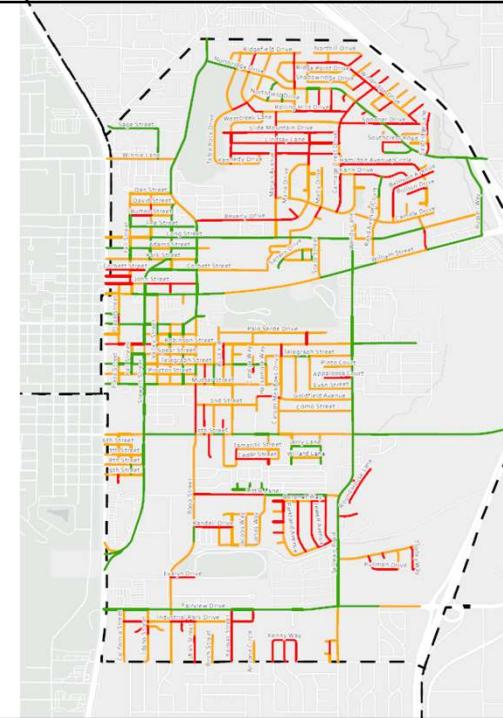
- Current version of pavement management plan approved in 2023, but process has been followed since 2018.
- Outlines a general process to identify and select projects based several factors.
- Guides how funding will be obligated to projects – Regional Roads
- **Goal – Reconstruction is expensive, so keep the good Roads Good.**

2021 District 3 - Transportation Projects					
Transportation Facility Information	Fifth Street Fairview Drive to Marsh Road	Deer Run Road U.S. 50 to a half mile north of Sedge Road	Old Clear Creek U.S. 395 to Vista Grande Boulevard	Lompa Lane U.S. 30 to Menlo Drive	Snyder Avenue Bigelow Drive to Center Drive
Pavement Condition	55	72	66	52	74
Square Footage	187,422	401,704	122,136	29,700	78,510
Project Length (Centerline ft)	4,764	11,014	2,181	825	2,447
Project Scoring Criteria (Step 1)					
Pavement Condition (Maximum Available Points 3)					
Volume, Annual Average Daily Trips (Maximum Available Points 3)					
History of Crashes (Maximum Available Points 2)					
Function Classification (Maximum Available Points 1)					
No Past Work History (Maximum Available Points 2)					
Bus Route (Maximum Available Points 1)					
Roadway Utility Coordination (Maximum Available Points 2)					
Safe Routes to School Master Plan (Maximum Available Points 2)					
ADA Transition Plan/Improvements (Maximum Available Points 2)					
Project Score (Max Score 18)	10	5	7	7	6
Order of Ranking	1st	4th	2nd	2nd	3rd

20

PROJECT PRIORITIZATION PROCEDURE

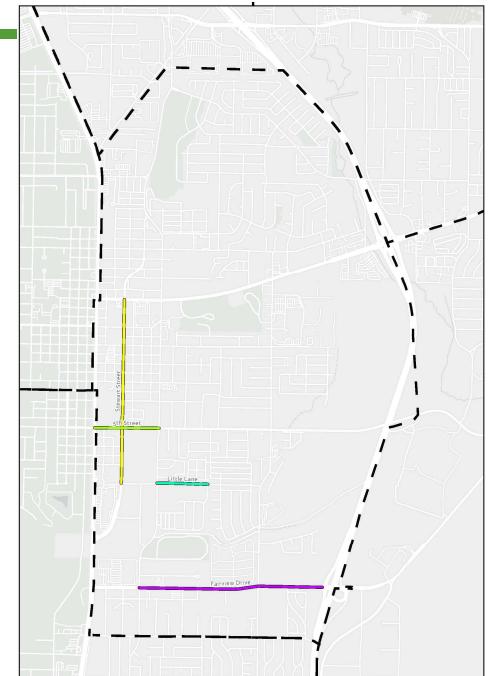
- A multi-step prioritization procedure was developed to select projects annually using the framework from prior years.
 - Please refer to Exhibit 5.
- Process is repeatable and set up to consider every road in a District.
- The prioritization steps were completed for Performance District 2 on both Regional and Local Roads.
- Presented to RTC on June 12, 2024



21

DISTRICT 2 - REGIONAL ROAD PROJECT SELECTION

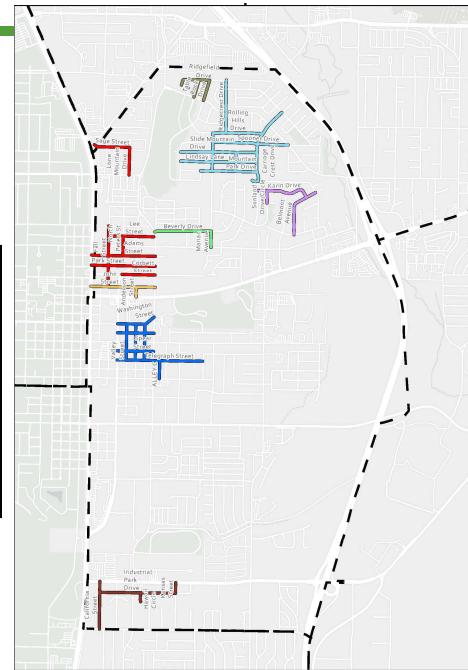
2025 District 2 - Selected Regional Road Transportation Projects						
Project Name	Treatment	PCI Condition	Project Length (Centerline mi)	Project Score (Max 13)	Preliminary Estimated Cost	
5th Street Project	Rehabilitation	45	0.33	5.83	\$ 1,026,000	
Little Lane Project	Rehabilitation	36	0.5	4.24	\$ 1,185,000	
Stewart Street Project	Preservation	62	0.9	6.47	\$ 701,000	
Fairview Drive Project	Preservation	63	0.92	6.33	\$ 472,000	



22

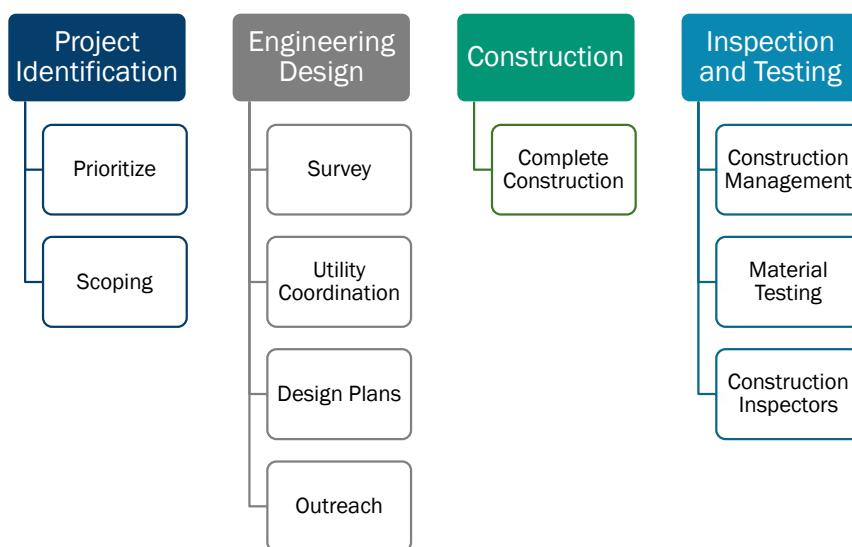
DISTRICT 2 – LOCAL PROJECT THEORETICAL PROJECTS (NO FUNDING)

2025 District 2 - Theoretical Local Road - Transportation Projects						
Project Name	Treatment	PCI Condition	Project Length (Centerline mi)	Project Score (Max 14)	Order of Rank	Preliminary Estimated Cost
Adams / Park Project	Preservation	60	2.2	5.13	2	\$ 1,370,000
Anderson / Walsh Project	Preservation	54	1.45	5.02	3	\$ 580,000
Beverly Drive Project	Rehabilitation	11	0.35	5.17	1	\$ 1,230,000
John Street Project	Rehabilitation	24	0.4	4.61	4	\$ 1,540,000
Carriage Crest Project	Rehabilitation	24	2.8	3.9	5	\$ 6,100,000
California Street Project	Rehabilitation	37	0.67	3.83	6	\$ 1,100,000
Table Rock Drive Project	Rehabilitation	35	0.4	3.5	7	\$ 1,290,000
Belmont Avenue Project	Rehabilitation	28	0.7	3.36	8	\$ 1,560,000
Totals			8.97			\$ 14,770,000



23

PROJECT STEPS



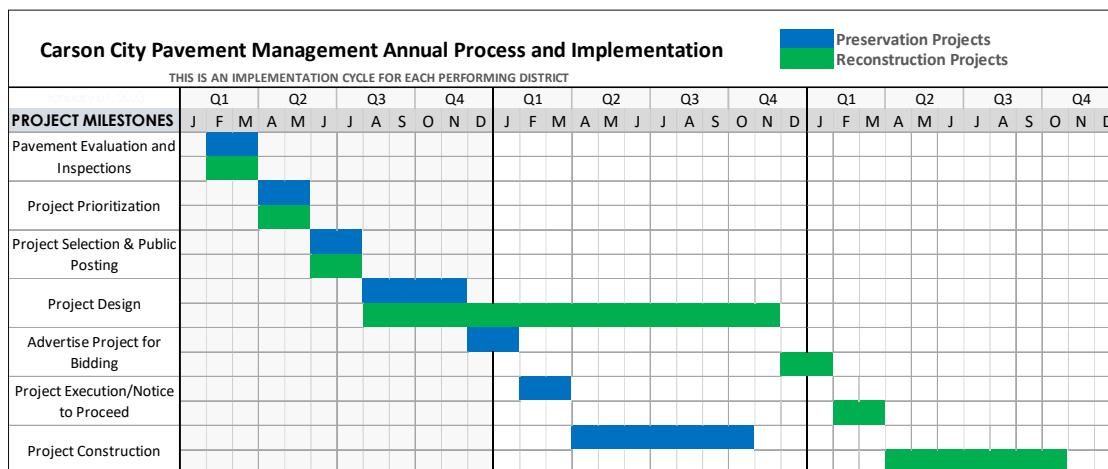
24

PROJECT STAFFING

- Current City Staff responsible for Transportation Projects (# of staff)
 - City Engineer / Transportation Manager (2) – Program oversite
 - Transportation Engineer (1) – Project identification, scoping, and design reviews
 - Project Managers (5) – Day-to-day management of project
 - Accounting (2) – Fund and grant tracking and payment of project invoices
 - Designers (3) – Prepare project plans and specifications
 - Construction Manager (1) – Oversite of all construction activities
 - Inspector (2) – coordinates day-to-day inspection of project construction
 - Document Controller (2) – manages all documents and payroll of contractor as well as project logs
- This same staff also manage all other City capital projects such as water, sewer, stormwater, and facilities projects.
- Use consultant support to assist with design of projects
- City staff and consultants currently working on 14 transportation related projects with 4 more starting.
 - Refer to the Project Status Report
- Increasing the number of projects will require either an increase in staff or the increased use of consultants.

25

PROJECT SCHEDULE

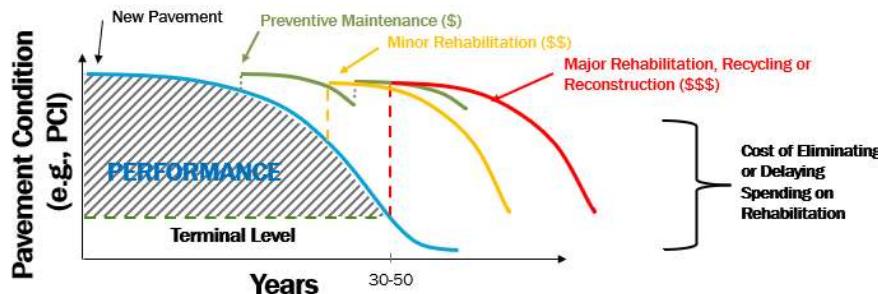


- Average reconstruction project takes 2 years to design and construct.
- Longer projects as well as federally funded projects may take longer.

26

PROJECT COSTS

- Engineering Design = 5% to 12% of construction costs
- Construction = Varies based on size and scope of project
- Inspection and Testing = 1% to 3% of construction costs



27

PROJECT ACCOUNTABILITY

- Considerations and requirements:
 - Safety
 - Federal funding uses and limitations
 - Accessibility and required American with Disabilities Act (ADA) upgrades with any project other than surface treatment
 - Complete Street elements
 - Projects by others
- Reporting:
 - Annual selection of project by RTC (typically June)
 - Project Status Report – Report Given to RTC every other month (posted online)

<https://www.carson.org/government/departments-g-z/public-works/transportation/transportation-resource-advisory-forum-for-carson-city>
 - Map of active projects online
 - Tracking of revenue received monthly from various sources

28

LOCAL ROADWAY FUNDING OPTIONS

29

ROADWAY FUNDING



- Board of Supervisors retreat in 2020 started the effort.
- Further input from RTC and direction from Board of Supervisors to narrow the mechanisms occurred in 2021.
- In 2022, Carson City began an educational and outreach campaign designed to educate Carson City residents about current roadway conditions, preservation solutions, funding sources, and what will happen if an investment to preserve Carson City roads is not made.
- Continued research into 2023 and 2024 on the various mechanisms.
- Project Website: www.preservecarsoncityroads.com

30

POSSIBLE MECHANISMS

- Several Funding Mechanisms
 - New Diesel Tax – PASSED 2022
 - Increase Gas Tax NRS 373 (Washoe and Clark County) – FAILED 2016
 - Property Tax Override
 - Local Improvement Districts NRS 271
 - General Improvement District NRS 318
 - Special Purpose Transportation Sales Tax NRS 377A
 - Infrastructure Sales Tax – V&T NRS 377B - Existing
 - Transportation Utility
 - Supplemental Government Services Tax NRS 371
 - Road User Charge
 - Parcel Delivery Fee – As part of State’s Sustainable Funding Working Group

31

POSSIBLE MECHANISMS

- BOS directed investigation of 4 possible funding mechanisms in 2021
 - NRS 271 (Local Improvement Districts)
 - NRS 318 (General Improvement District- GID)
 - NRS 377A (Special Purpose Transportation Sales Tax)
 - NRS 377B (Infrastructure Sales Tax) – V&T
- Supplemental Government Services Tax – NRS 371
- Detailed summaries of mechanisms documented in various reports and past presentations.
 - Local Road Funding Strategy (Exhibit 1 to this Item)

32

Local Special Improvements District	General Improvement District	Transportation Sales Tax	Supplemental Government Service Tax	Infrastructure Sales Tax
NRS 271 NEW Improvement districts formed for discrete road and sidewalk projects in defined geographies	NRS 318 NEW 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	NRS 377A NEW Up to an additional 0.25% sales tax applicable to all taxable transactions within the City specifically dedicated to roads funding	NRS 371 NEW 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	NRS 377B EXISTING 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 Formed at request of neighborhoods or by City	Implementation Board of Supervisors; customers can protest to stop formation	Implementation Take to ballot in 2024 -must pass to implement	Implementation Take to ballot in 2024 -must pass to implement	Implementation Board of Supervisors approval following repayment of bonds

33

REVENUE POTENTIAL

Possible Funding Mechanism	Estimated Revenue per Year
Local Improvement Districts	Varies
General Improvement District	\$ 5M - \$ 12M
Special Purpose Transportation Sales Tax	\$ 4.5M
Supplemental Government Services Tax	\$ 2.5M
Infrastructure Sales Tax	\$ 2M

34

CARSON CITY LOCAL ROAD FUNDING SUMMARY

PART 2

CATHERINE HANSFORD – HANSFORD ECONOMIC CONSULTING

AUGUST 14, 2024

35

GID CONCEPTUAL SUMMARY

Write a Service Plan

- Describe the services to be furnished by the GID
- Detail how the services are to be provided
- Provide estimated annual costs; Randomly set a **target at \$5 M.**
- Demonstrate how proposed services are to be financed; three cost allocation methodologies studied; a **methodology based on a uniform parcel charge (PART 1 assessment) and estimated trips (PART 2 assessment) recommended**
- Write a proposed agreement with Public Works for contracted functions (assessment billing, staffing)

Form the District and Establish Governance

- Conduct an organizational hearing; written notice to all property owners
- Barring protest by a majority of property owners, the BOS can form the GID with at least 4 out of 5 affirmative votes
- Board of Supervisors as the ex officio Board of Trustees and appoint a local managing board (could be the RTC)

36

GID REVENUE TARGET

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%

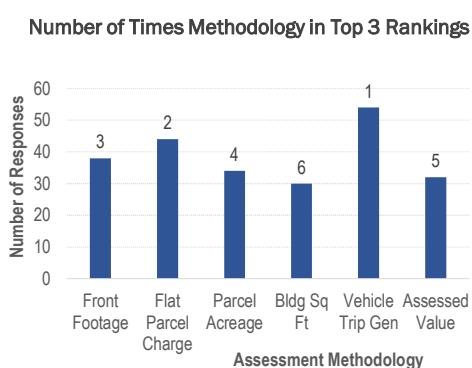
[1] Assessments charged to all parcels except the following exempt parcels: School District, City-owned, common area, open space, unbuildable lots, road/easements lots and cemeteries.

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

[3] Collected from developed properties only.

37

METHODOLOGY DEVELOPMENT: SURVEY RESPONSES & DATA PRACTICALITIES



Rank	Methodology	Path Forward	
1	Estimated Vehicle Trip Generation	Feasible	
2	Parcel Charge	Feasible	
3	Front Footage	NOT Feasible	Calculating front footage each year cumbersome; administratively difficult & expensive & would not charge all parcels benefiting from use of City roads
4	Parcel Acreage	Feasible	
5	Assessed Value	NOT Feasible	Many properties do not have an assessed value in Carson City
6	Livable Building Square Feet	NOT Feasible	Assessor cannot provide at this time

38

ASSESSMENT MODELING ASSUMPTIONS

Based on Survey Responses and Case Studies Research

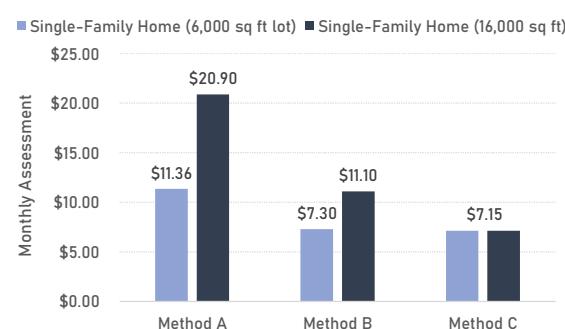
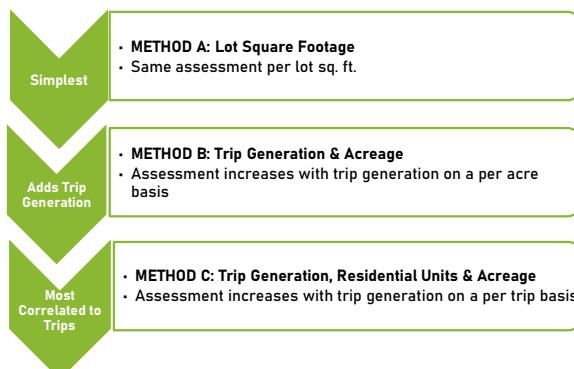
City properties do not pay because the same residents and businesses would pay twice for the same service

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

39

GID COST ALLOCATION METHODOLOGIES AND HOME BILL IMPACTS



- All methodologies include the PART 1 Assessment; the PART 2 Assessment is allocated differently

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PUBLIC INPUT

41

OUTREACH SUMMARY

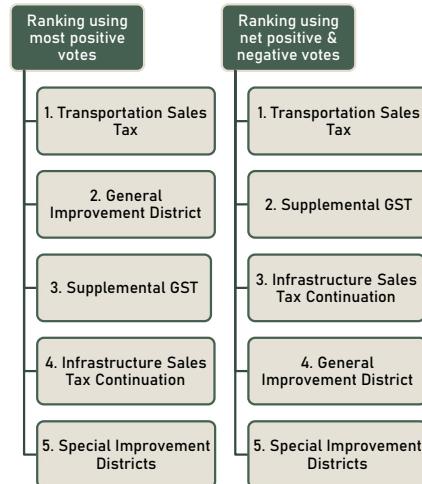
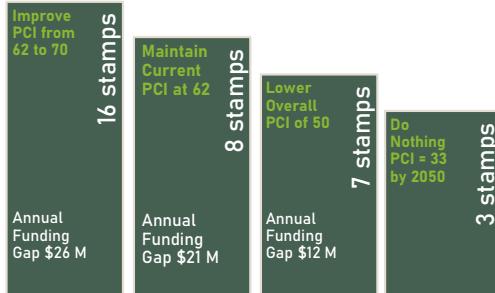
- Public Workshops 1 & 2 – October 2023
- Public Workshop 3 – March 2024
- Various other outreach activities and presentations
- RTC, BOS, community organizations, service clubs, etc.



42

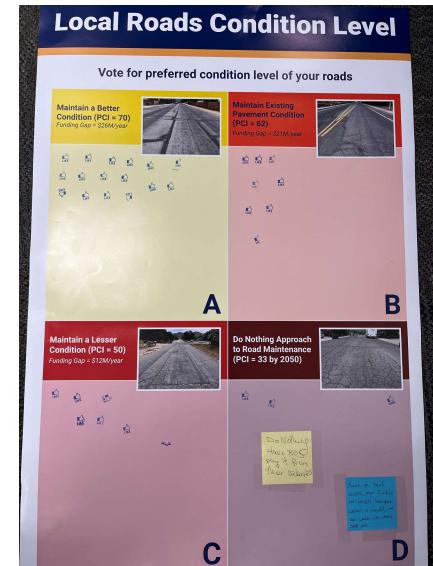
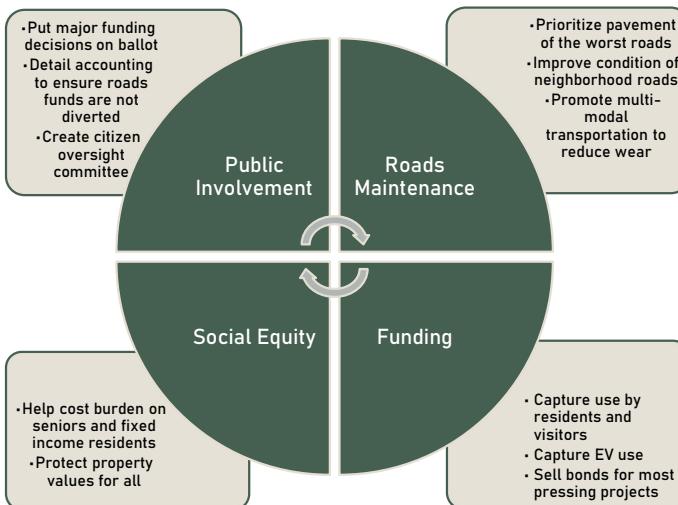
WORKSHOP 3 VOTING RESULTS

- Most people want the PCI to be maintained or improved
- Transportation Sales Tax most favored funding mechanism
- Special Improvement Districts least liked



43

PUBLIC FEEDBACK THEMES



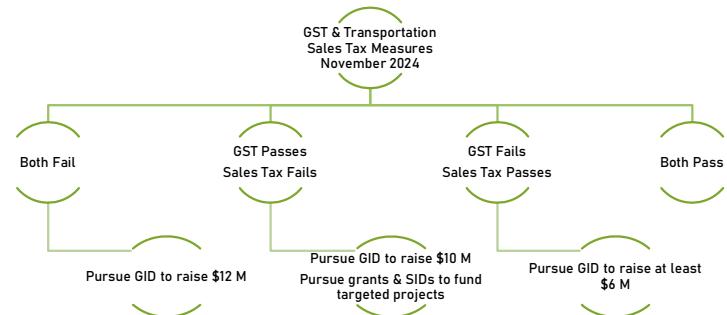
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FUNDING, ACCOUNTABILITY & NEXT STEPS

45

FUNDING STRATEGY

- Evaluate outcome of the ballot measures – example decision tree (\$ amounts for GID can change to meet PCI target)
 - If both measures pass;*
 - Implement Projects. No GID.*
 - If one measure passes, but not the other;*
 - Implement projects and consider other options.*
 - If measures fail;*
 - Review the need to pursue other options.*



- Continue the Infrastructure Sales Tax in January 2026 directing funding to roads
- Continue pursuing grants for all roads that make sense; could supplement funding with SIDs

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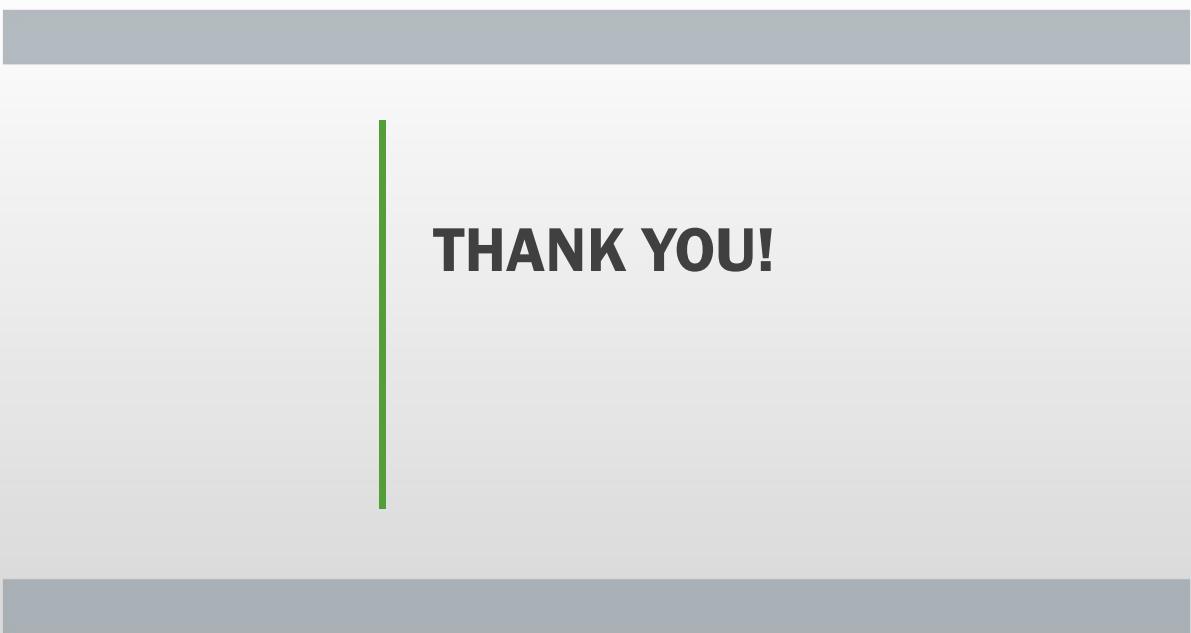
NEXT STEPS



The logo features a blue background with a white border. Inside, there is a white house icon with a chimney and a small tree. Below the icons, the text "Invest In Your Neighborhood Streets" is written in white, bold, sans-serif font. At the bottom, in a smaller font, it says "PRESERVE CARSON CITY ROADS".

- Incorporate RTC comments and directed actions.
- Evaluate outcome of ballot questions and engage staff on any next steps.
- Develop an expenditure plan for the Transportation Sales Tax and Supplemental GST, should they pass in November, that will include a description of the project, cost estimates, and implementation concepts.
- Continue to identify, prioritize, and deliver projects.

47



THANK YOU!

48