

Road Repair and Street Safety Initiative

April 8, 2014



ROAD REPAIR AND STREET SAFETY INITIATIVE

- Review of Conditions
- Introduction to Pavement Preservation
- Economic Impacts of Roads
- Taxes and Financing Tools
- Citizen Survey
- Citizen Review Committee Recommendation
- Transportation Commission Recommendation



ROAD REPAIR AND STREET SAFETY INITIATIVE CONDITIONS AND BACKGROUND

Overview of Conditions:

- No inflation adjustments to gas tax
- No percentage of total average price per gallon
- HURF sweeps
- Decreased revenues due to more efficient vehicles
- Increase in the use of roads
- Costs will increase significantly with no action
- Increase in the miles of roads to maintain
- Increase to maintenance costs



ROAD REPAIR AND STREET SAFETY INITIATIVE CONDITIONS AND BACKGROUND

What if Gas Tax was adjusted for inflation?

	City Gas Tax Revenues	Inflation Adjusted Revenue	Revenue Uncollected
FY 14 Projected	5,956,000	8,040,000	2,084,000

What if the Gas Tax was a % Per Gallon vs. Flat Rate?

	Gas Price and Revenue Generated
1991	Average Price \$1.25/gallon / \$0.18 tax
2013	Average Price \$3.40/gallon / \$0.49 tax
2013 Revenue based on % of Each Gallon	\$10,974,000



ROAD REPAIR AND STREET SAFETY INITIATIVE CONDITIONS AND BACKGROUND

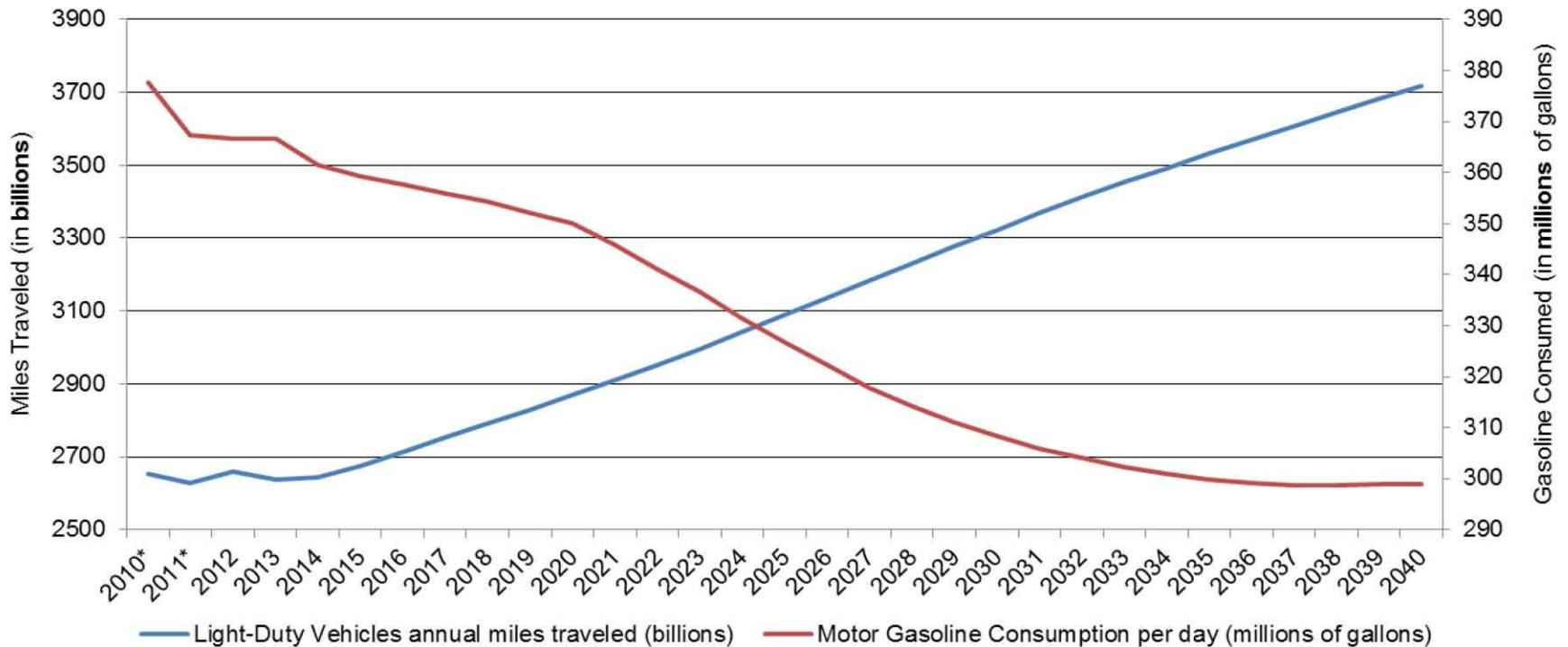
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Projected National Trend

Projected Vehicle Miles Traveled Compared to Gallons of Motor Gasoline Consumed[^]



[^]U.S. Energy Information Administration (EIA) Annual Energy Review 2011; Reference Case Tables A7 & A11. Accessed at: <http://www.eia.gov/analysis/projection-data.cfm#annualproj>

*Represents actual data

ROAD REPAIR AND STREET SAFETY INITIATIVE CONDITIONS AND BACKGROUND

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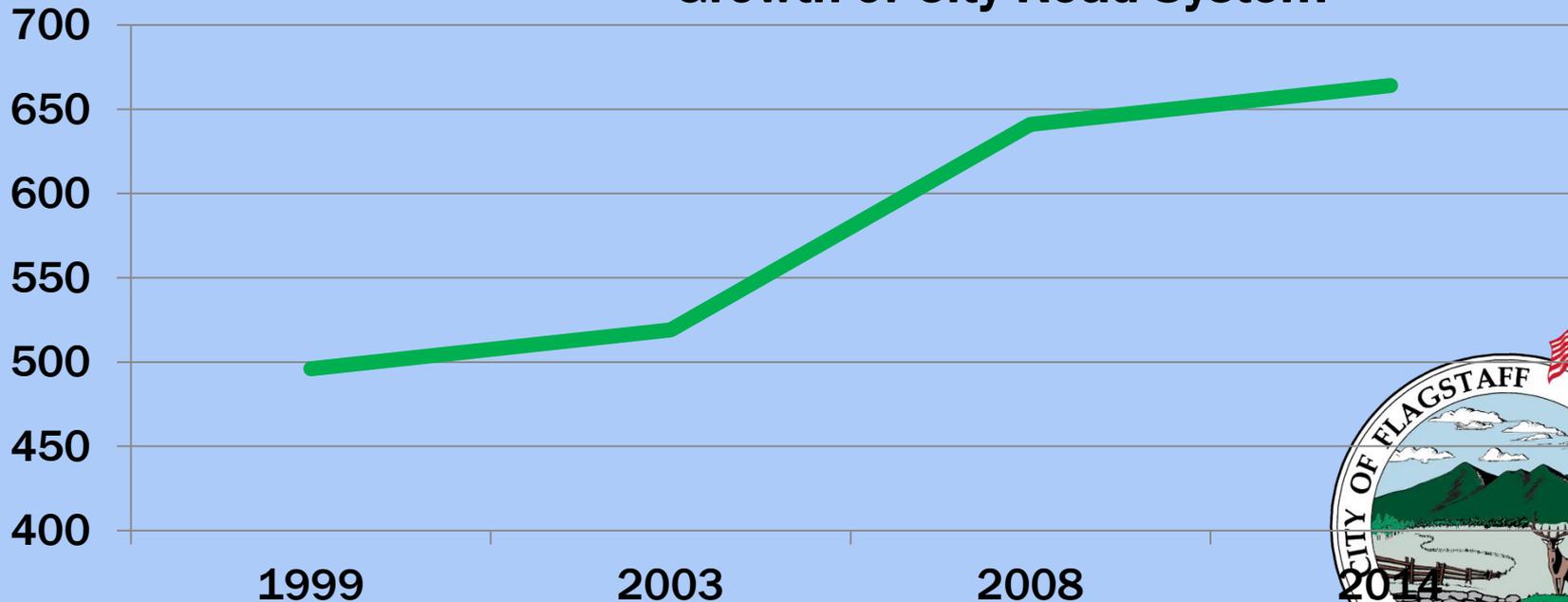
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ROAD REPAIR AND STREET SAFETY INITIATIVE CONDITIONS AND BACKGROUND

- Over 660 lane miles of roads
- 34% increase in last 15 years

Growth of City Road System



ROAD REPAIR AND STREET SAFETY INITIATIVE CONDITIONS AND BACKGROUND

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ROAD REPAIR AND STREET SAFETY INITIATIVE CONDITIONS AND BACKGROUND

What does HURF (The Gas Tax) Fund?

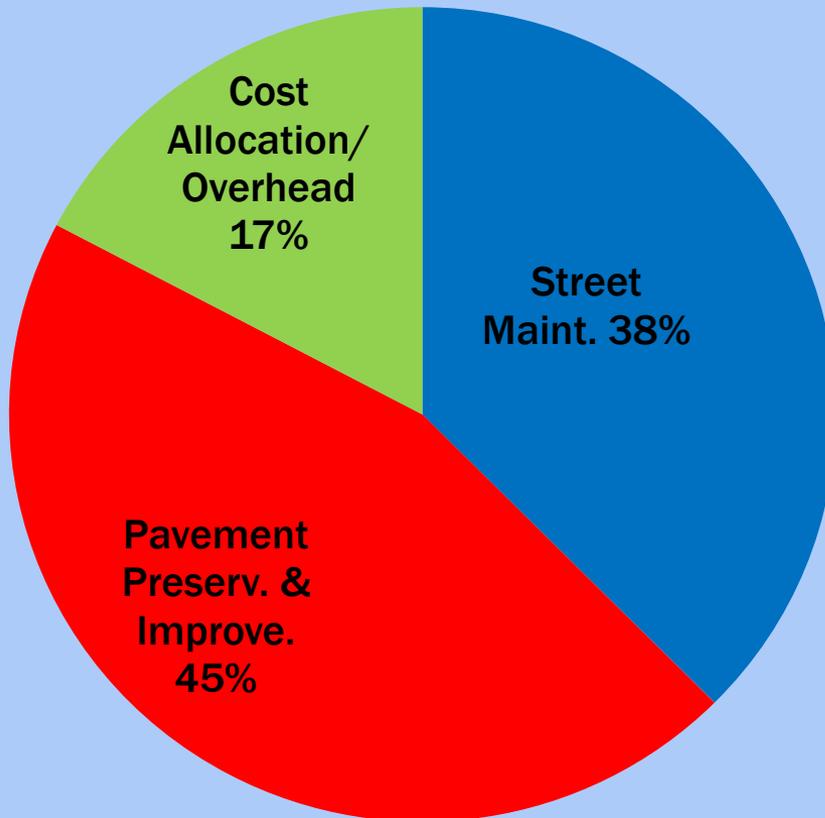
- Street Sweeping
- Snow Operations
- Administration
- Signs & Markings
- Street Maintenance
- Training
- Street Lighting (Energy and Maintenance)
- Traffic Signal Maintenance (Energy and Maintenance)
- Minor Transportation Improvements
- Sidewalk Replacements

Maintenance

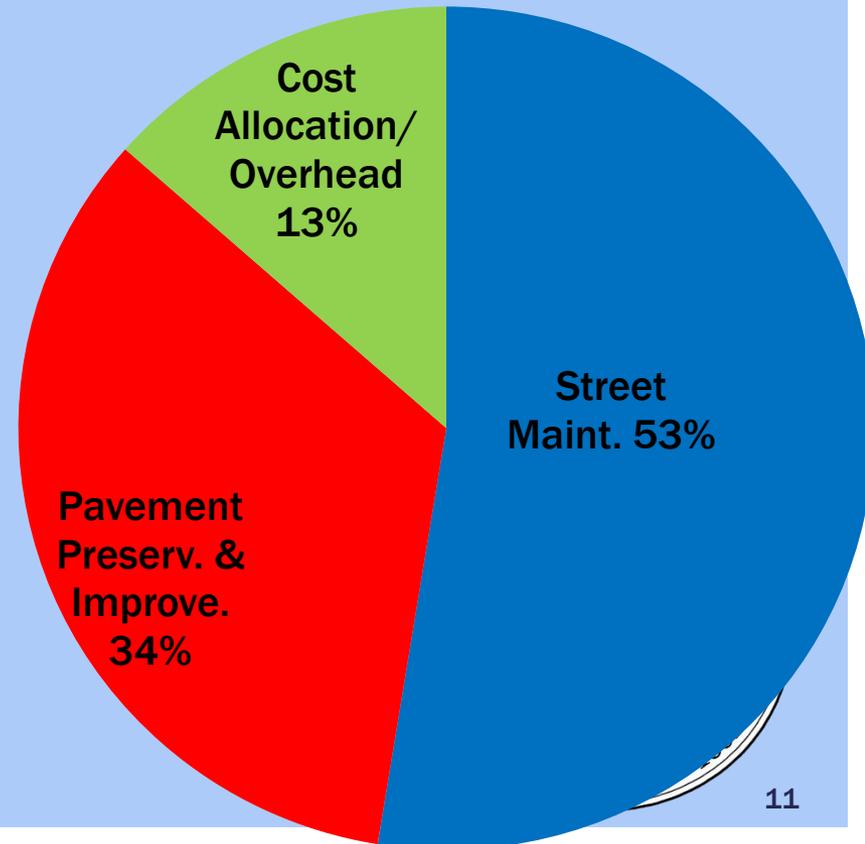


ROAD REPAIR AND STREET SAFETY INITIATIVE CONDITIONS AND BACKGROUND

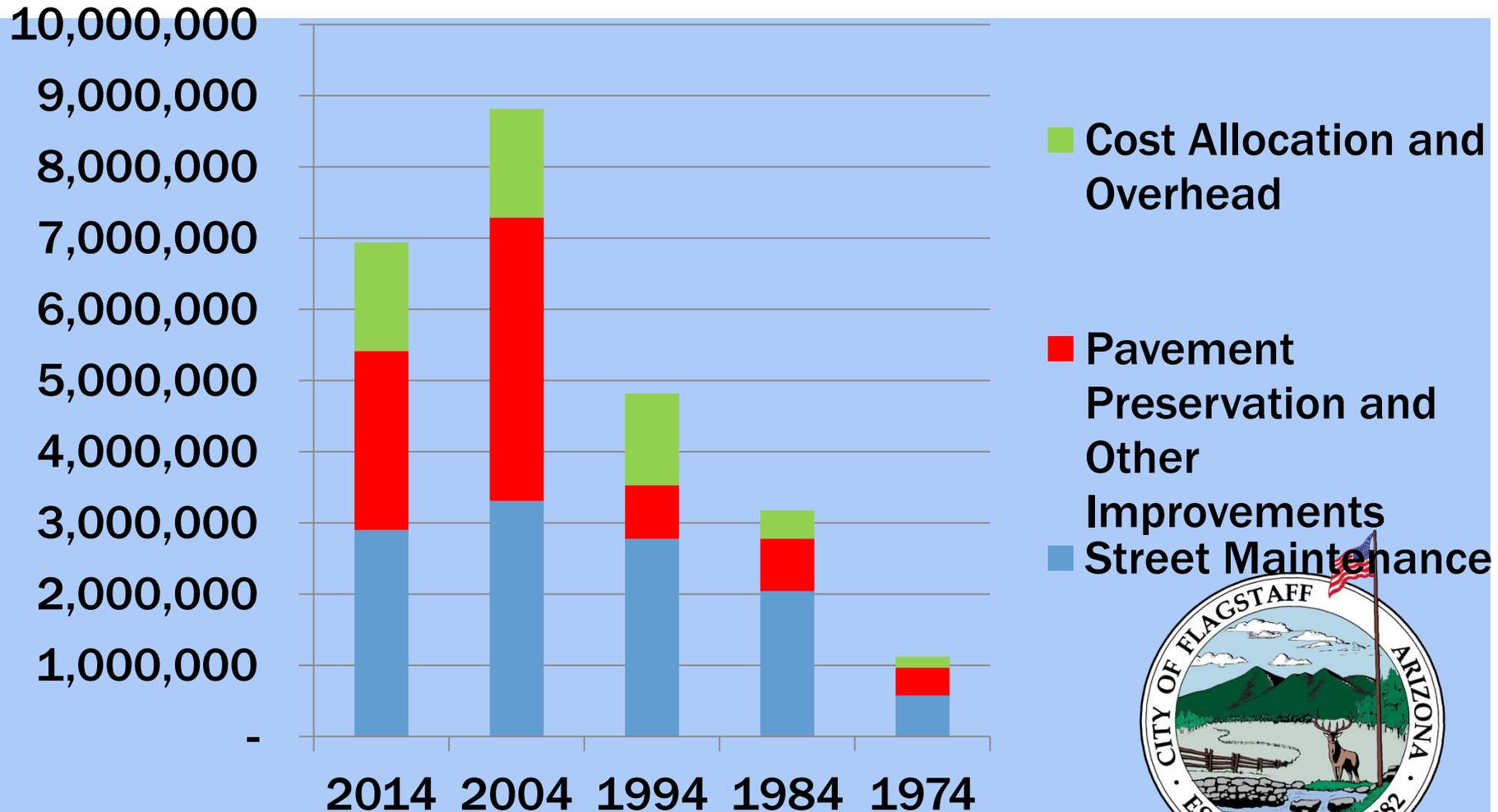
2004 - HURF Funded Programming
\$8,813,362



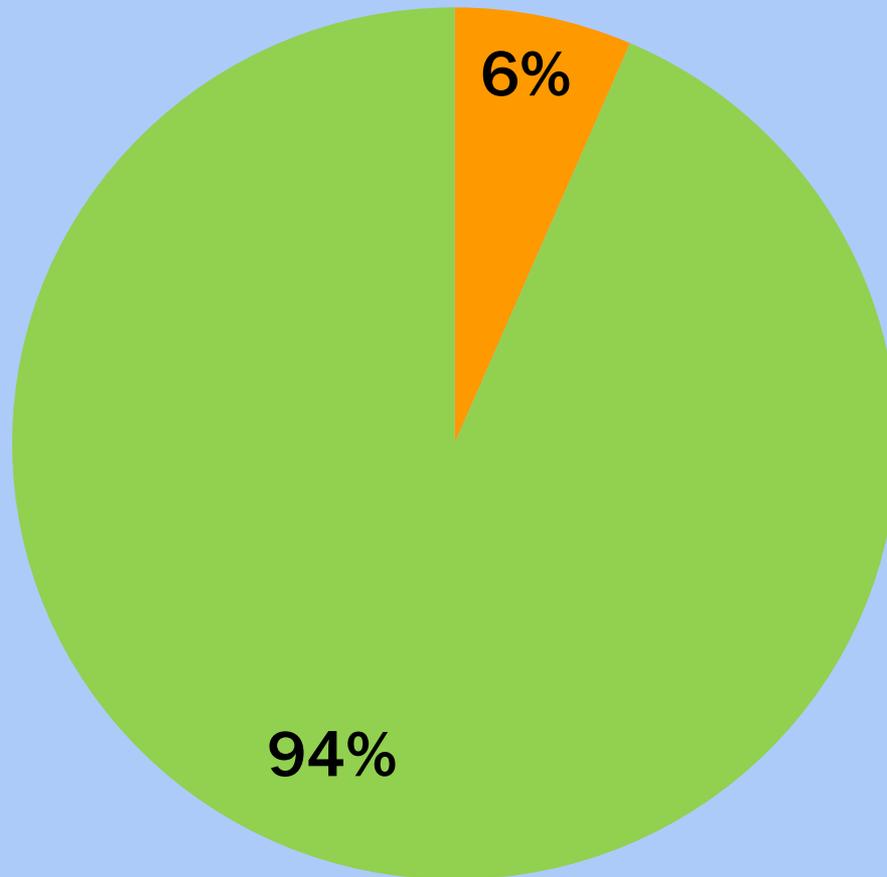
2014 - HURF Funded Programming
\$7,400,657



ROAD REPAIR AND STREET SAFETY INITIATIVE CONDITIONS AND BACKGROUND



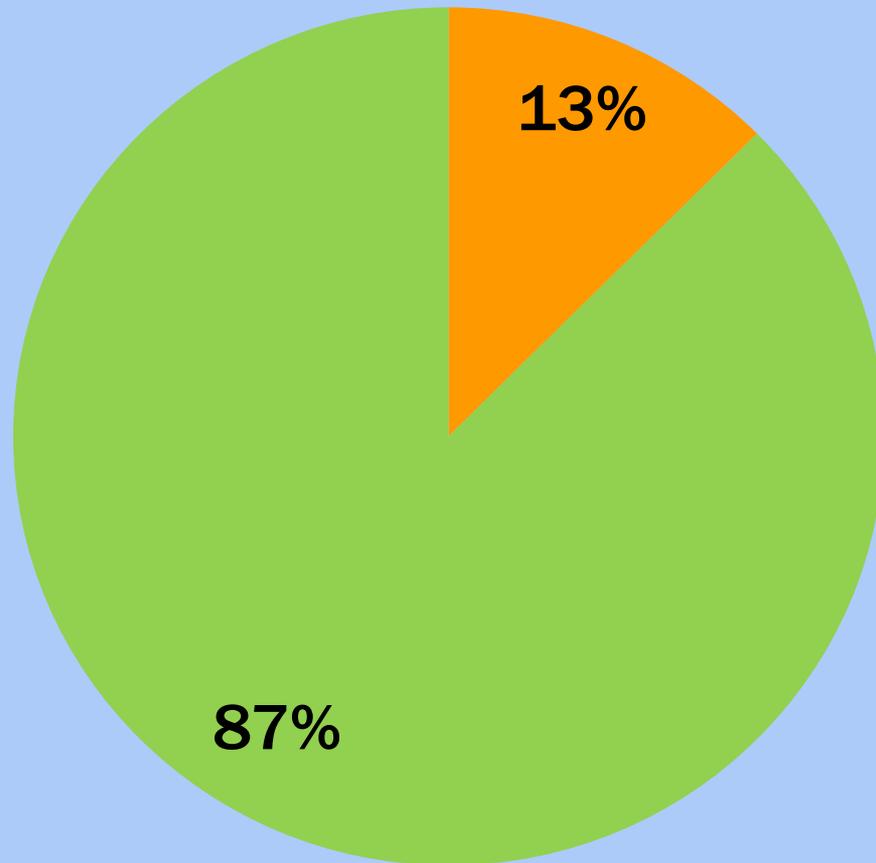
2014 – HURF FUNDING COMPARED TO CITY BUDGET



- Total HURF Funding
- Total Budget Less Capital



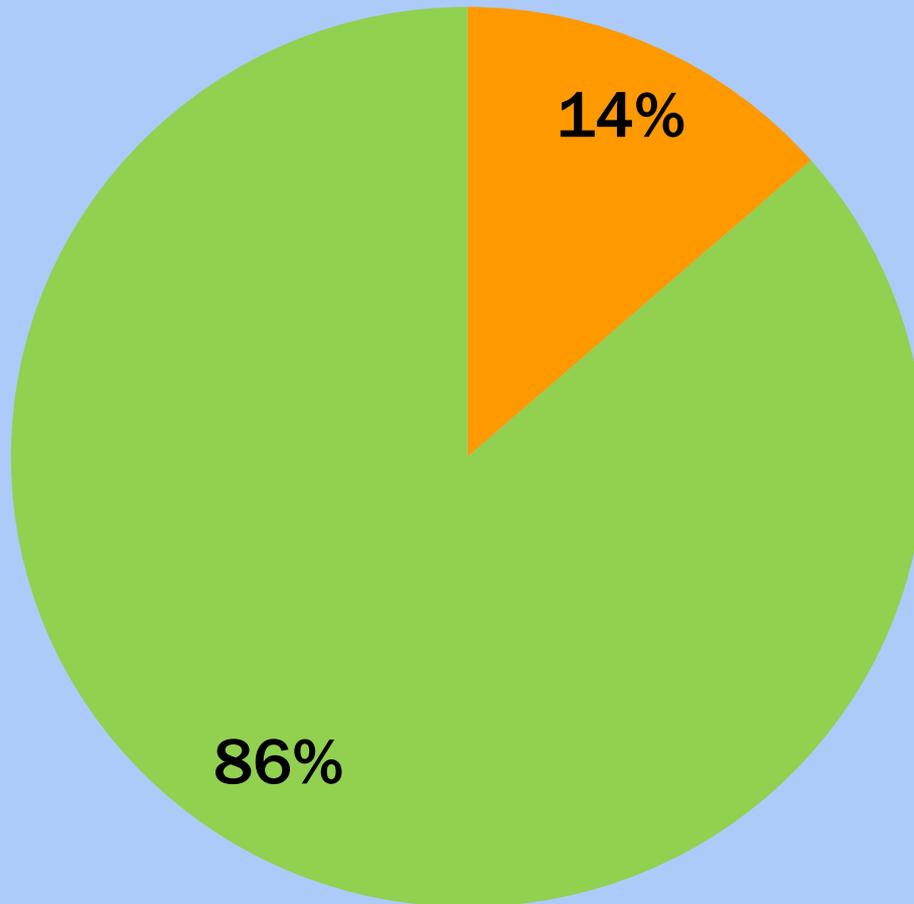
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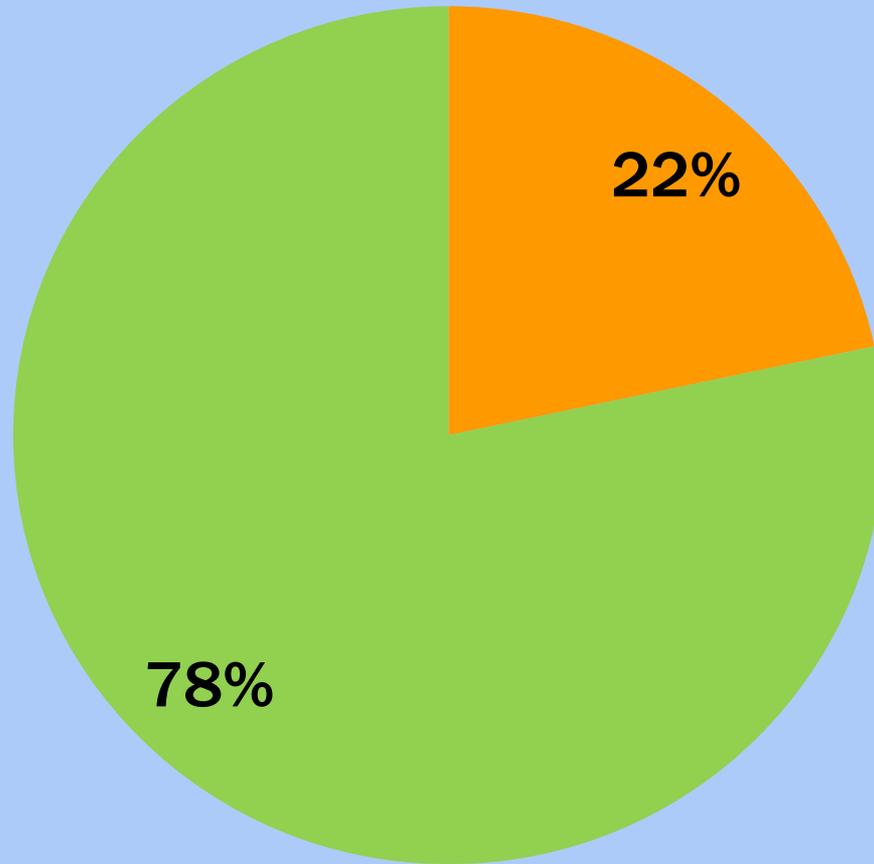
1994 – HURF FUNDING COMPARED TO CITY BUDGET



- Total HURF Funding
- Total Budget Less Capital



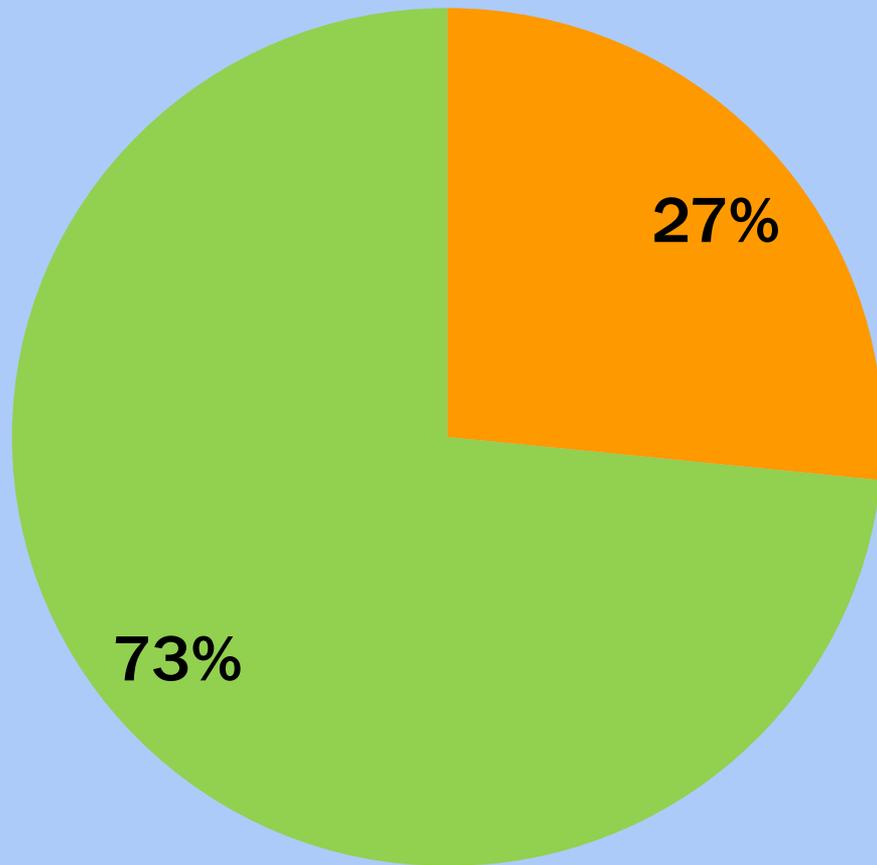
1984 – HURF FUNDING COMPARED TO CITY BUDGET



- Total HURF Funding
- Total Budget Less Capital



1974 – HURF FUNDING COMPARED TO CITY BUDGET



- Total HURF Funding
- Total Budget Less Capital



ROAD REPAIR AND STREET SAFETY INITIATIVE CONDITIONS AND BACKGROUND

Cost Cutting Efforts Since 2009

- Elimination of Sign & Markings FTE
 - \$50K savings/ impact on efficiency
- Elimination of a temporary asphalt crew
 - \$95K savings/ unable to proactively address pavement condition
- Deferred equipment purchases (purchasing used equipment instead of new)
 - Variable savings/ increased risk of equipment failure



ROAD REPAIR AND STREET SAFETY INITIATIVE CONDITIONS AND BACKGROUND

- Reduce service levels for
 - Sweeping
 - \$30K savings/ 50% cut in residential service level
 - Snow Operations
 - Not able to haul snow from cul de sac
- Refurbishing of the Paint Striper
 - \$100K savings
- Utilizing the SAVE program for State contracts for purchasing equipment and materials (Motor graders, Thermo machine, sign & markings material)
 - \$500K savings on grader purchase



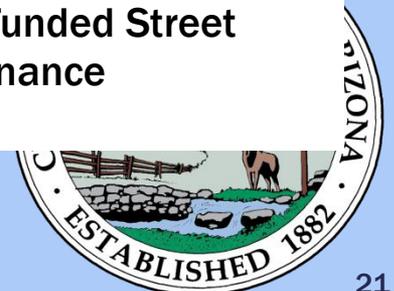
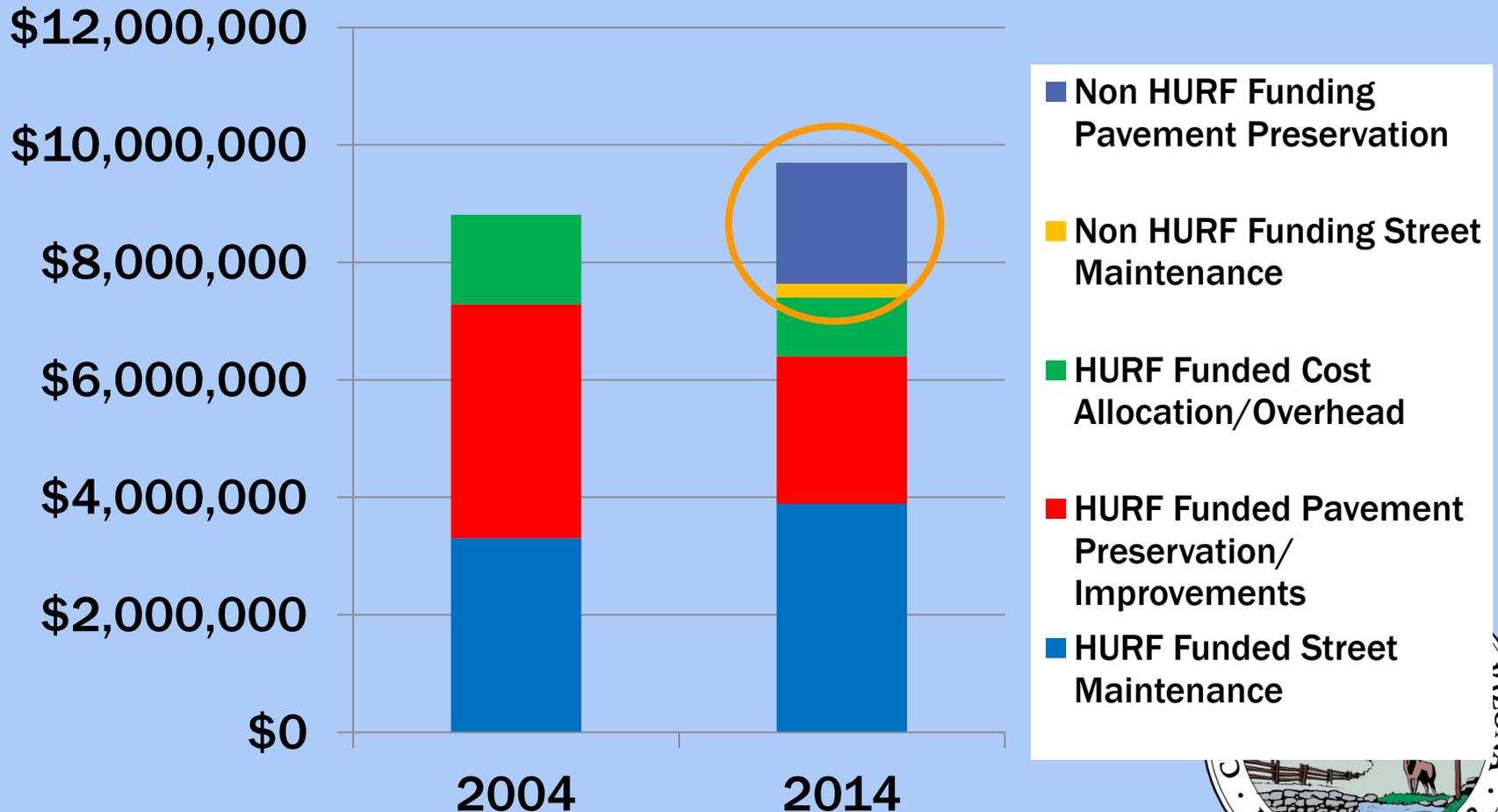
ROAD REPAIR AND STREET SAFETY INITIATIVE CONDITIONS AND BACKGROUND

Cost Cutting Efforts Since 2009

- Reducing fleet by trading in 3 pieces of equipment when purchasing 2 (2 motor graders and 1 dozer)
 - Reduced overall replacement value
- Reducing traffic signal replacement components purchases; purchasing used components (walk/don't walk modules)
 - 75% savings on equipment purchase
- Utilizing DOC crews to help with work load (cost effective)



ROAD REPAIR AND STREET SAFETY INITIATIVE CONDITIONS AND BACKGROUND



	2004 HURF Funding	2014 HURF Funding	2014 Non HURF Funding
Admin	\$204,000	\$371,000	-
Sweeping	\$725,000	\$192,000	\$40,000
Snow Removal	\$627,000	\$557,000	\$197,000
Sign Signal & Marking	\$293,000	\$337,000	-
Street maintenance	\$849,000	\$1,418,000	-
Drainage	\$78,000	\$1,000	\$288,000
Training	\$2,000	\$2,000	-
Street Lights	\$325,000	\$382,000	-
Traffic Signal maintenance	\$202,000	\$343,000	-
Street Maintenance Total	\$3,306,000	\$3,602,000	\$525,000
Street Maintenance per Lane Mile	\$6,300	\$5,500	-
Pavement Preservation (overlay)	\$1,601,000	\$1,146,000	\$1,000,000
Pavement Preservation (1x)	\$0	\$1,250,000	\$200,000
Sunnyside Improvements	\$1,804,000	\$0	\$850,000
Minor Transportation Improvements	\$513,000	\$50,000	-
Reserve for Improvements	\$50,000	\$50,000	-
Sidewalk Replacement	\$15,000	\$15,000	-
ADA Sidewalk Compliance	\$155,000	\$0	-
Pavement Preservation Total	\$3,983,000	\$2,511,000	\$2,050,000
Pavement Preservation per Lane Mile	\$7,600	\$3,800	-
Cost Allocation/Overhead	\$1,525,000	\$999,000	-
Total Budget	\$8,813,000	\$7,113,000	\$2,575,000
Total Budget per Lane Mile	\$16,800	\$11,000	22

ROAD REPAIR AND STREET SAFETY INITIATIVE CONDITIONS AND BACKGROUND

- Council Goal: “Repair, Replace and Maintain Infrastructure” (Streets and Utilities)
- FY2014 Budget Highlights:
 - Increased on-going pavement preservation in FY14 from \$1.2M to \$2.2M.
 - Increased one time pavement preservation in FY14 from \$0 to \$1M.
- Council Budget Priority for next year
- City Legislative Priority to address funding sweeps



ROAD REPAIR AND STREET SAFETY INITIATIVE

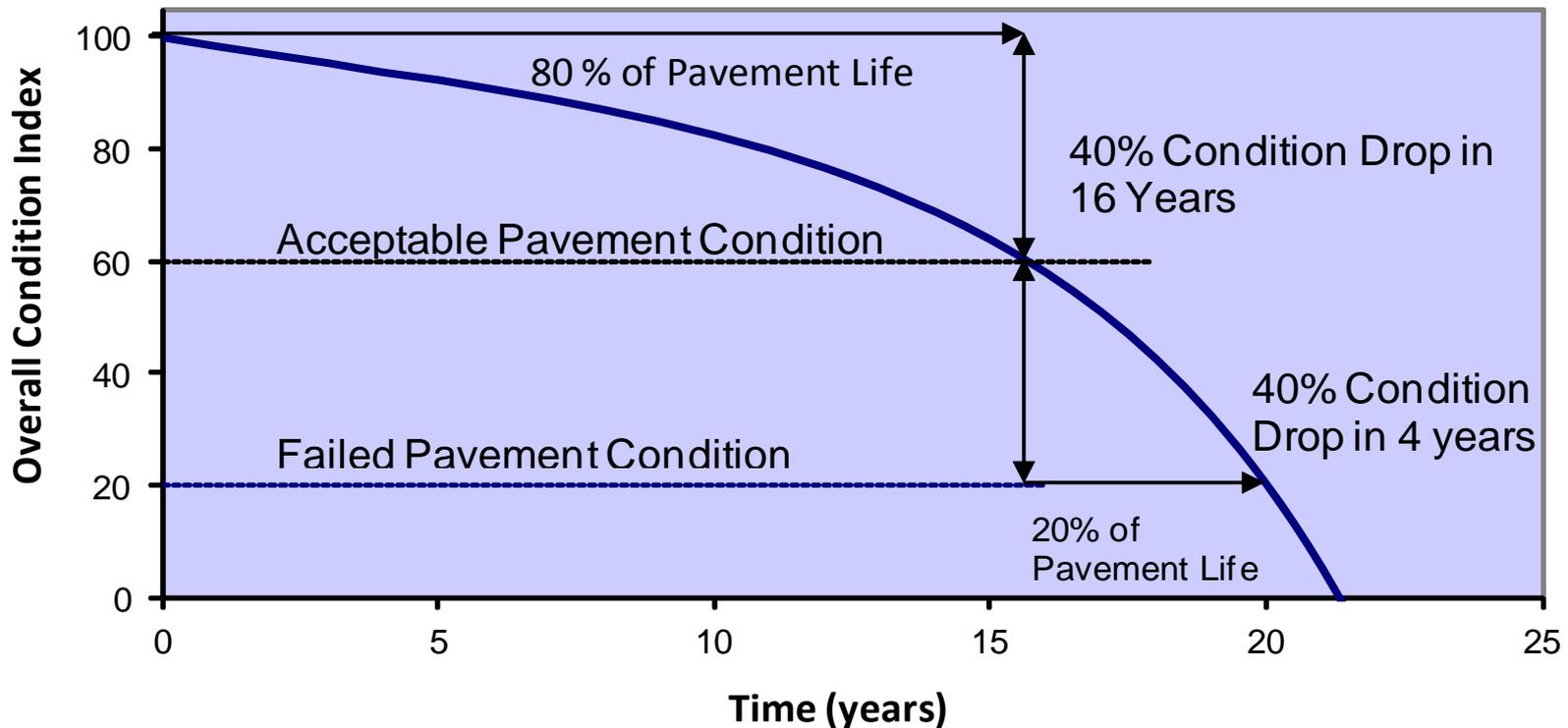
INTRODUCTION TO PAVEMENT PRESERVATION



ROAD REPAIR AND STREET SAFETY INITIATIVE

INTRO TO PAVEMENT PRESERVATION

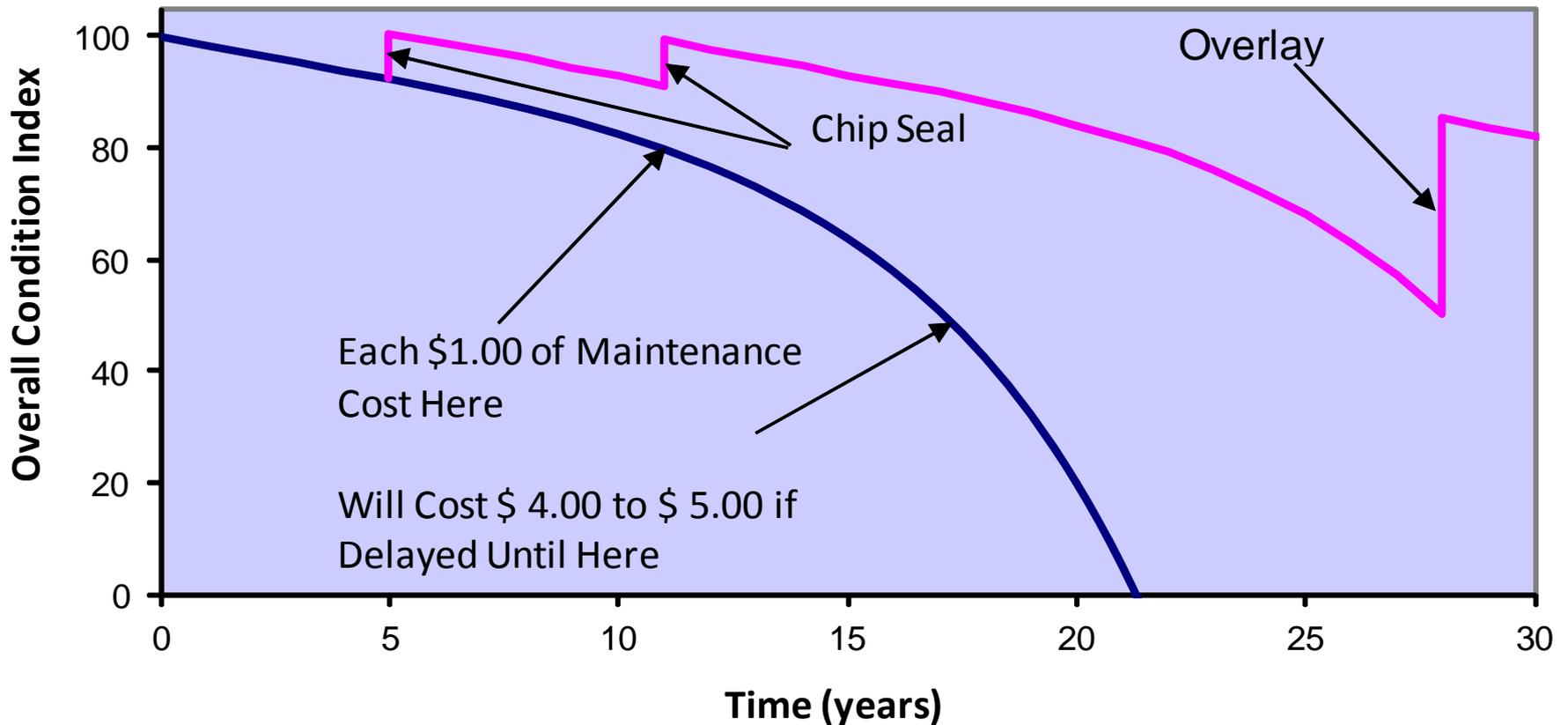
Pavement Deterioration Curve



ROAD REPAIR AND STREET SAFETY INITIATIVE

INTRO TO PAVEMENT PRESERVATION

Pavement Deterioration Curve



ASSET (Current)	Target Condition Rating	Projected Average 5 Year Condition Rating	Projected Average 10 Year Condition Rating	Current Cost to Upgrade to Target Condition⁽¹⁾	5 Year Cost to Upgrade to Target Condition⁽¹⁾	10 Year Cost to Upgrade to Target Condition⁽¹⁾
Streets - OCI < 40	70 +	18.5	-6.5	\$11,933,850	\$33,370,908	\$48,827,750
Streets - OCI = 40-50	70 +	31.9	11.9	\$5,805,069	\$4,093,902	\$1,598,824
Streets - OCI = 50-60	70 +	43.7	27.7	\$5,838,716	\$1,799,721	\$3,253,527
Streets - OCI = 60-70	70 +	56.5	44.5	\$13,571,191	\$17,639,849	\$14,348,274
Streets - OCI = 70-80	70 +	67.1	57.1	\$3,140,429	\$3,088,543	\$3,847,203
Streets - OCI = 80-90	80 +	77.7	69.7	\$3,550,821	\$3,777,514	\$1,417,748
Streets - OCI = 90-100	90 +	87.2	80.2	\$3,135,963	\$1,501,135	\$2,066,667
TOTALS				\$46,976,038	\$65,271,573	\$75,359,994

ROAD REPAIR AND STREET SAFETY INITIATIVE INTRO TO PAVEMENT PRESERVATION



ROAD REPAIR AND STREET SAFETY INITIATIVE

ECONOMIC IMPACT OF ROADS AND PAVEMENT PRESERVATION



ROAD REPAIR AND STREET SAFETY INITIATIVE

ECONOMIC IMPACT OF ROADS

Jobs during construction and O&M

- Every 1 billion dollars in expenditure supports 13,000 to 30,000 job years. This includes multiplier effects
- * \$50,000,000 in short-term preservation projects would yield **650-1500** job years
- * \$2,500,000 annual increase in operations yields **33-75** jobs for length of expenditure



ROAD REPAIR AND STREET SAFETY INITIATIVE

ECONOMIC IMPACT OF ROADS

Access for employees and customers and access to markets for goods and services

- Pavement preservation is not likely to improve access for customer and employees except in extreme conditions. Bicyclists and pedestrians will be affected more.
- Local pavement preservation efforts (meaning non-ADOT roads) will have nominal impacts on access to larger markets as relatively short distances are traveled on city streets.



ROAD REPAIR AND STREET SAFETY INITIATIVE

ECONOMIC IMPACT OF ROADS

Reduced delay (congestion) and secondary impacts (emissions)

- Time is valued at \$16.34/hour in 2010 dollars multiplied by 1.5 people per car
- * **\$9.9 million** in delay costs per year assuming a 2 mile per hour decrease in speed

Impact to private automobiles

- AAA reports \$377 in additional maintenance costs per year for the average driver due to rough roads
- * **\$14.5 million** per year in Flagstaff assuming 1.5 average drivers per household

Avoiding significant future costs in road repair



ROAD REPAIR AND STREET SAFETY INITIATIVE

ECONOMIC IMPACT OF ROADS

Improved safety / Reduced liability

- Fatalities, injuries and property damage crashes occur in Arizona at the respective rates of 1.4, 323 and 517 per 100 million vehicle miles of travel.
- The Flagstaff region travels approximately 600 million VMT annually.
- * **\$7.5 million** in cost avoidance annually due to crash reduction for better roads considering costs per crash type, distribution of VMT by road type, excluding major roads, and estimated reduction in crashes due to improved pavement conditions
- * **\$3.0 million** in cost avoidance due to improved striping and marking



ROAD REPAIR AND STREET SAFETY INITIATIVE

TAXES AND FINANCING TOOLS



ROAD REPAIR AND STREET SAFETY INITIATIVE TAXES AND FINANCING TOOLS

- Revenue Sources
- Sales Tax
 - 1/10 of 1% generates \$1.6M (10 cents per \$100)
- Primary Property Tax
 - 2% generates \$100,000
- HURF (State Gas Tax)
 - 1 cent increase = \$120,000, no local control
 - Eliminate current sweeps = \$700,000+ annual
- Water/Sewer Rates
 - Water - 7% rate increase = \$1M additional revenue
 - Sewer - 12% rate increase = \$1M additional revenue



ROAD REPAIR AND STREET SAFETY INITIATIVE TAXES AND FINANCING TOOLS

- Current Transportation Sales Tax is 0.721%
 - 0.291% (\$4.6M) - NAIPTA
 - 0.16% (\$2.5M) - Debt Service (4th Street Overpass)
 - 0.186% (\$2.9M) – Traffic Flow and Safety/ RTP
 - 0.08% (\$1.2M) - Safe Schools
 - Set to expire 2020



ROAD REPAIR AND STREET SAFETY INITIATIVE

CITIZEN SURVEY



2013 CITIZEN SURVEY QUESTION #14 CONT.

Please rate the quality of each of the following services provided in Flagstaff:

- **Street Maintenance**

- Excellent (8%)
- Good (25%)
- Fair (33%)
- Poor (34%)



2013 CITIZEN SURVEY QUESTION #18

To what extent do you support or oppose each of the following sales tax increases, which would be dedicated to street improvements in Flagstaff?

- A small increase in the sales tax for a longer period of time (20-25 years)
 - Strongly Support (20%)
 - Somewhat Support (42%)
 - Somewhat Oppose (11%)
 - Strongly Oppose (28%)



2013 CITIZEN SURVEY QUESTION #18

To what extent do you support or oppose each of the following sales tax increases, which would be dedicated to street improvements in Flagstaff?

- A larger increase in the sales tax for a shorter period of time (3-5 years)
 - Strongly Support (9%)
 - Somewhat Support (19%)
 - Somewhat Oppose (27%)
 - Strongly Oppose (45%)



ROAD REPAIR AND STREET SAFETY INITIATIVE

CITIZEN REVIEW COMMITTEE RECOMMENDATION



ROAD REPAIR AND STREET SAFETY INITIATIVE

- The Flagstaff City Council directed staff to develop a funding proposal that will address the backlog of road repaving, repairs and maintenance as well as safety improvements to the City's transportation infrastructure.

Feedback:

- Citizen Review Committee Recommendation
- Transportation Commission
- City Council



ROAD REPAIR AND STREET SAFETY INITIATIVE CITIZEN REVIEW COMMITTEE

Citizen Review Committee Objective:

- To Review financial and performance history, understand trends and issues, provide recommendation to City Manager on how best to fund improvements to Flagstaff's transportation infrastructure including road repairs and safety enhancements.

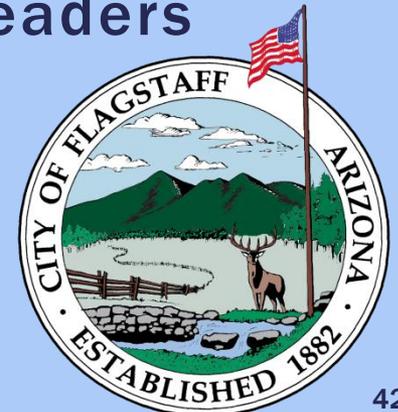


ROAD REPAIR AND STREET SAFETY INITIATIVE CITIZEN REVIEW COMMITTEE

Committee Members

Represent:

- Auto dealership
- NAU
- ECONA
- Downtown Business
- Restaurant/Lodging
- Engineering
- Chamber
- Flagstaff Biking
- Southside Neighborhood
- Realtors
- FMC
- NAIPTA
- Transportation Commission
- Flagstaff Arts Council
- Friends of the Rio
- City Commissions
- Community Leaders
- Gore
- Construction



ROAD REPAIR AND STREET SAFETY INITIATIVE CITIZEN REVIEW COMMITTEE

Committee Members:

- Scott Baugh
- Rich Bowen
- Kiwon Choi
- Guillermo Cortes
- Eck Doerry
- Deborah Harris
- Jacquie Kellog
- Aaron Kotzin
- Shari Miller
- Kevin Parkes
- Minesh Patel
- Steve Peru
- Eve Ross
- John Tannous
- Jack Welch
- Nat White
- Don Walters



ROAD REPAIR AND STREET SAFETY INITIATIVE CITIZEN REVIEW COMMITTEE

- Should the City ask voters to fund road repairs with a sales tax?
- What should the amount of the tax proposal be?
- Should the tax fund road repairs and ongoing road preservation?
- Should the new tax fund new roads or traffic congestion projects?
- What should the scope of the tax fund?
 - Ongoing repairs?
 - Utilities – Water, Sewer and Stormwater
 - Bicycle Lanes
 - Sidewalks – Missing Sidewalks?



ROAD REPAIR AND STREET SAFETY INITIATIVE CITIZEN REVIEW COMMITTEE

City Manager's Guard Rails Provided to Citizen Committee:

1. We should repair and maintain existing investments before we ask voters to pay for new investments.
2. Annual pavement preservation funding of \$2.5M is essential beginning in year 5 to ensure we maintain the improved condition, as is contingency funding.
3. Citizens overwhelmingly support a smaller road repair tax over a longer period of time.
4. The solution has to take into account connectivity of improvements - if you are going to fix it, fix it right!
5. This is a large scale problem that requires a large scale solution.
6. We are okay recommending multiple options.



Option	Cost	New Sales Tax Rate		CRC PROPOSAL	NOTES:
		20 Years NO BONDS	20 Year BONDS	Sales Tax	
Pavement Preservation - ANNUAL (\$2.5M/ Year based on ALL Streets)	\$50,000,000	0.156%	N/A	0.156%	
DELAYED Pavement Preservation - ANNUAL (based on ALL Streets)	\$37,500,000	0.117%	0.172%		
ALL STREETS (inc. curb, gutter, ADA, sidewalk, existing bike lanes OCI <70)	\$47,000,000	0.147%	0.216%		
Streets OCI <70 (inc. curb, gutter, ADA, sidewalk, existing bike lanes OCI <70)	\$38,000,000	0.119%	0.175%	0.175%	
ALL WATER, SEWER, STORMWATER	\$38,900,000	0.122%	0.179%		
Utilities <50 (Water = \$7.3M; Sewer = \$5.7M; Storm = \$7.1M)	\$18,100,000	0.057%	0.083%	0.083%	
Repair Existing Sidewalks OCI >70	\$9,800,000	0.031%	0.045%		2020 Renewal
Missing Sidewalks OCI <40	\$300,000	0.001%	0.001%		Property Tax
Missing Sidewalks OCI <70	\$4,100,000	0.013%	0.019%		Property Tax
Missing Sidewalks OCI >70	\$4,200,000	0.013%	0.019%		
Bicycle Improvements	\$750,000	0.002%	0.003%	0.003%	
Bus Pullouts	\$2,500,000	0.008%	0.011%	0.011%	
FUTS	\$3,700,000	0.012%	0.017%	0.017%	
Pedestrian Crossings	\$400,000	0.001%	0.002%	0.002%	
New Lone Tree Bridge (Butler to Rt. 66)	\$50,000,000				2020 Renewal
Milton Road Congestion (NOTE: City Share based on ADOT \$\$)	\$13,000,000	0.041%	0.060%	0.060%	
Replace 4th Street over I40	\$10,000,000	0.031%	0.046%		2020 Renewal
Total	\$230,450,000			0.508%	
				\$126,450,000	

ROAD REPAIR AND STREET SAFETY INITIATIVE

TRANSPORTATION COMMISSION RECOMMENDATION



ROAD REPAIR AND STREET SAFETY INITIATIVE TRANSPORTATION COMMISSION

- Critical issue
- Emphasis on existing roads
 - Planning is needed for bigger and new projects but this tax is not the right time to do so
- Consideration of County proposal
- Prioritize roads
- Consideration of voter tax capacity



ROAD REPAIR AND STREET SAFETY INITIATIVE TRANSPORTATION COMMISSION

The City of Flagstaff Transportation Commission recognizes that transportation infrastructure funding is declining on a federal, state and local level and that existing funding solutions are inadequate to solve the problem. We recognize that the work of City staff and the Citizen Review Committee have adequately explored the issues and we support sending a Road Repair and Street Safety referendum to the voters for consideration in November 2014.



ROAD REPAIR AND STREET SAFETY INITIATIVE

COUNCIL DISCUSSION

