

# City of Palm Coast, Florida Agenda Item

**Agenda Date:** May 12, 2026

**Agenda Item:** E.5

<b>Department</b> STORMWATER AND ENGINEERING <b>Division</b> CONSTRUCTION MGT AND ENGINEERING	<b>Amount</b> <b>Org/Account #</b>
<b>Subject:</b> PRESENTATION - PAVEMENT MANAGEMENT PROGRAM FISCAL YEAR 2026 UPDATE	
<b>Presenter:</b> Carl L Cote, Director of Stormwater and Engineering	
<b>Attachments:</b> 1. PRESENTATION	
<b>Background:</b> Council Priority: D. Sustainable Environment and Infrastructure  This presentation is an update on the City Pavement Management Program's proposed funding options.	
<b>Recommended Action:</b> <b>FOR PRESENTATION ONLY</b>	



# **Pavement and Roadway Asset Management Program**

City Council Update: May 12, 2026

# City Council Focus Areas & Priority

## PILLARS OF PRIORITIES



### STRONG RESILIENT ECONOMY

Support the expansion and smart growth of both population and businesses to ensure success locally as well as regionally.

Improve financial strengths within the City to promote fiscal responsibility and secure future sustainability.



### SAFE & RELIABLE SERVICES

A safe community for all is the catalyst to ensure that residents and visitors experience exceptional quality amenities year-round.

Recruiting and retaining a quality, talented workforce to maintain uninterrupted services to the citizens.



### CIVIC ENGAGEMENT

Build a cooperative and trusting relationship between the City and the community.

Promote the opportunity for communication between the decision makers and the public. Enhance existing channels through which accurate and timely information is disseminated from the City.

Increase the public's understanding and support of the City's goals and strategies.



### SUSTAINABLE ENVIRONMENT & INFRASTRUCTURE

Build and effectively manage sustainable infrastructure that promotes clean water, safe streets, and green infrastructure.

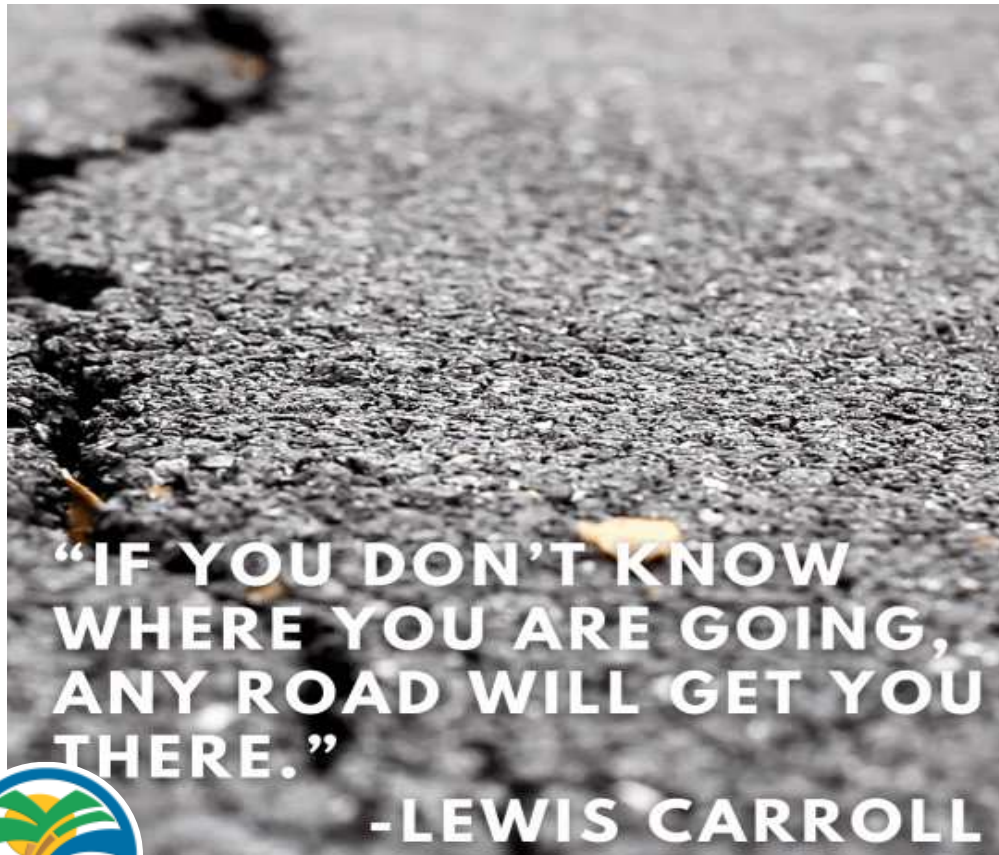
Anticipate the need for additional services and infrastructure. Continue to provide opportunities for development. Maintain visual appeal by caring for our land, water, air, and wildlife.



## PRIORITY GOAL UPDATE



# Presentation Overview



Pavement Management History

Palm Coast's Road Network

Maintenance & Rehabilitation Strategies

Findings & Recommendation

Maintain Status Quo Implications

Looking Forward

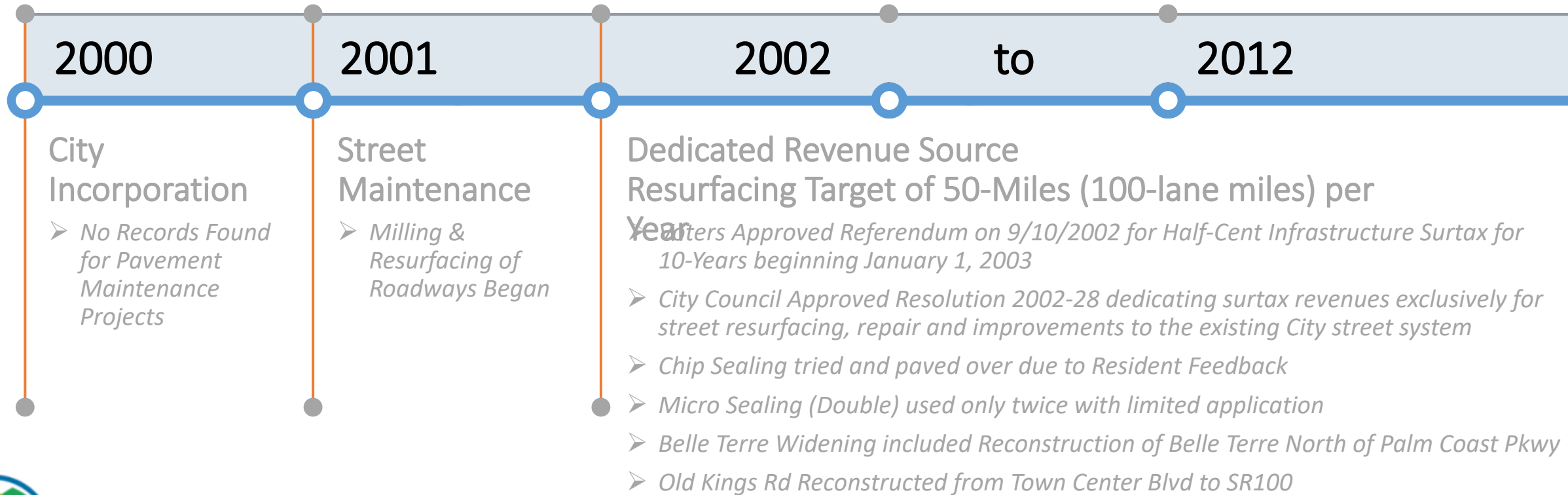


# Pavement Management History



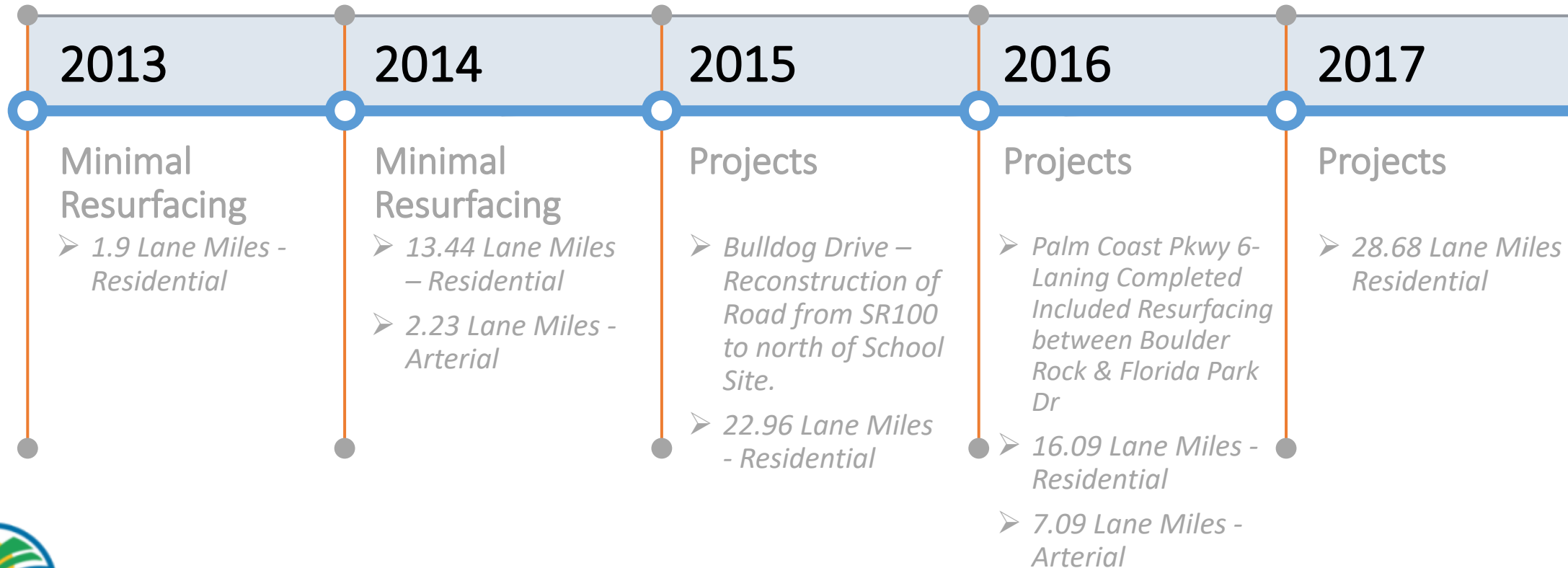
# Pavement Management History

## Dedicated Revenue Source



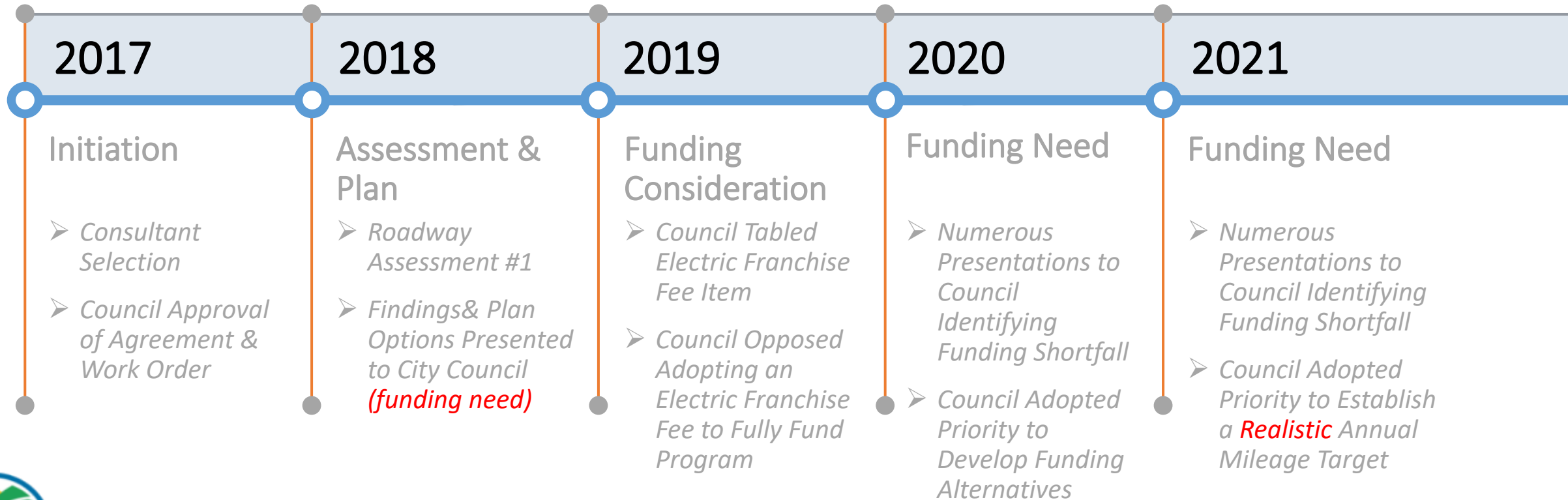
# Pavement Management History

## Loss of Dedicated Revenue Source



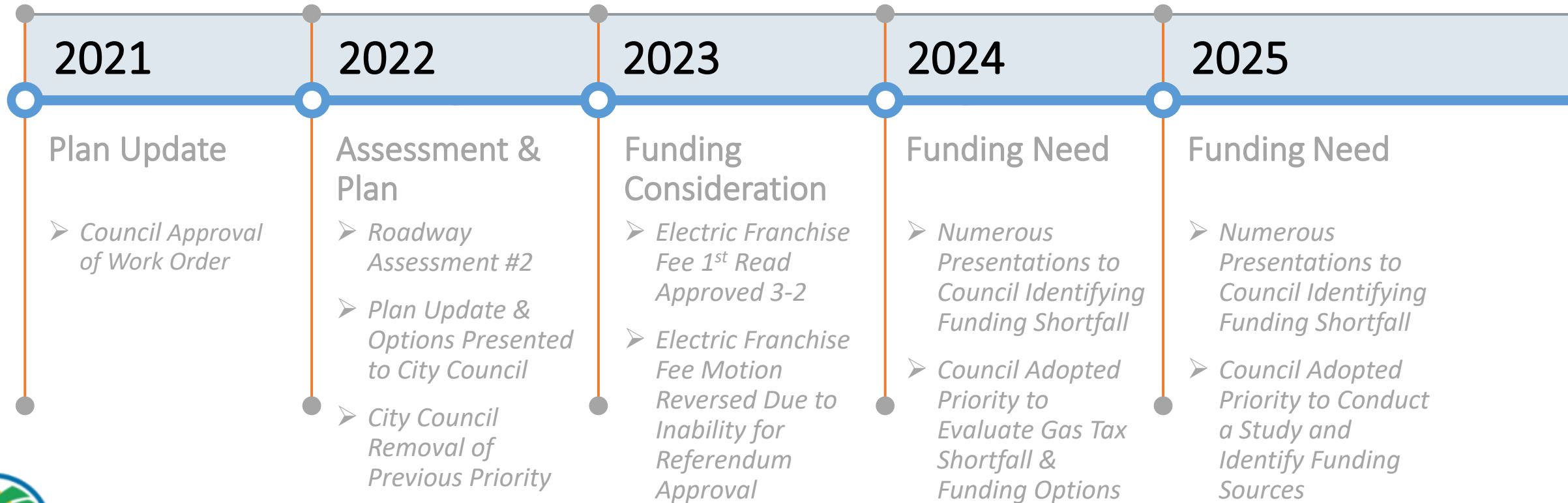
# Pavement Management History

## Creation of Pavement Management Program



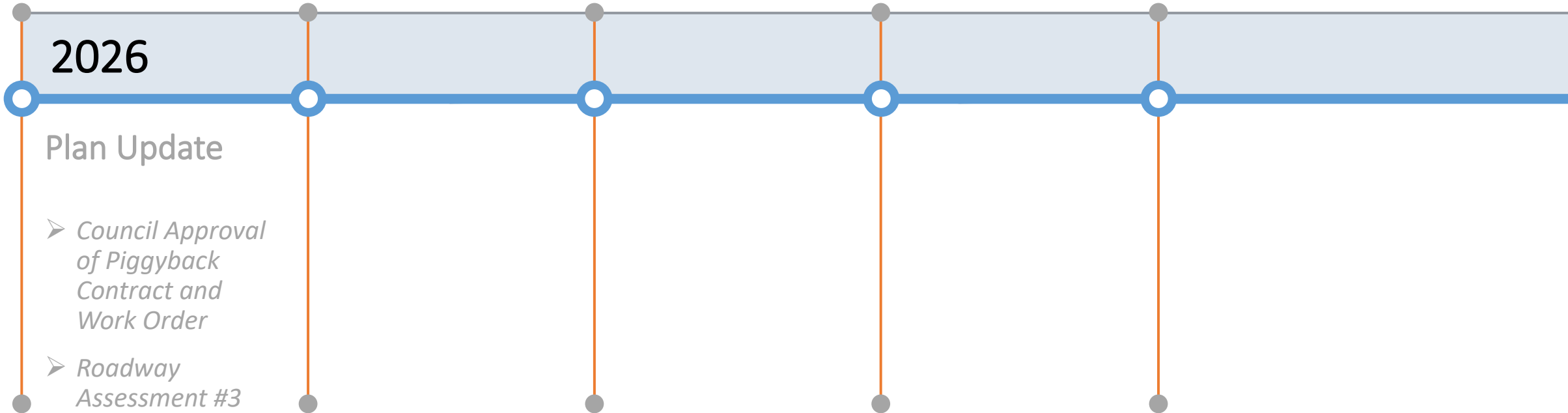
# Pavement Management History

## Program Update #1

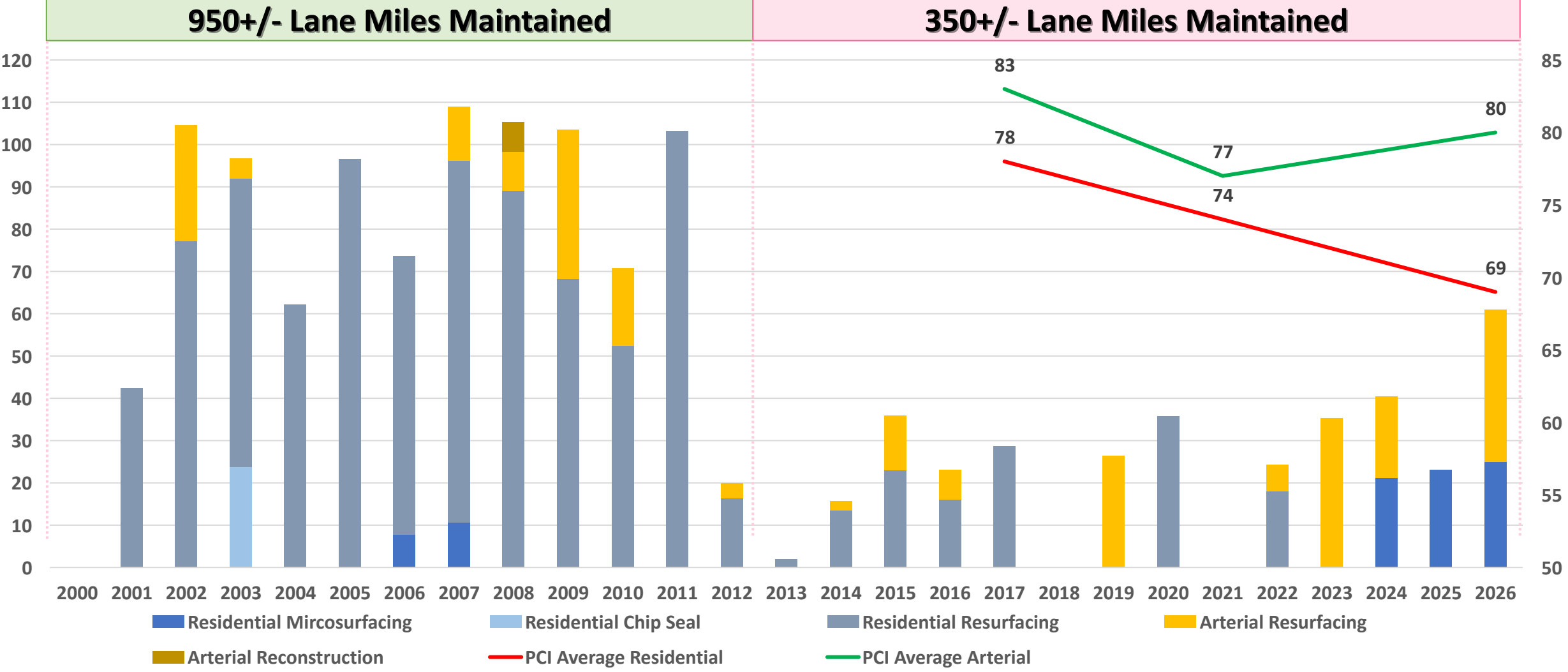


# Pavement Management History

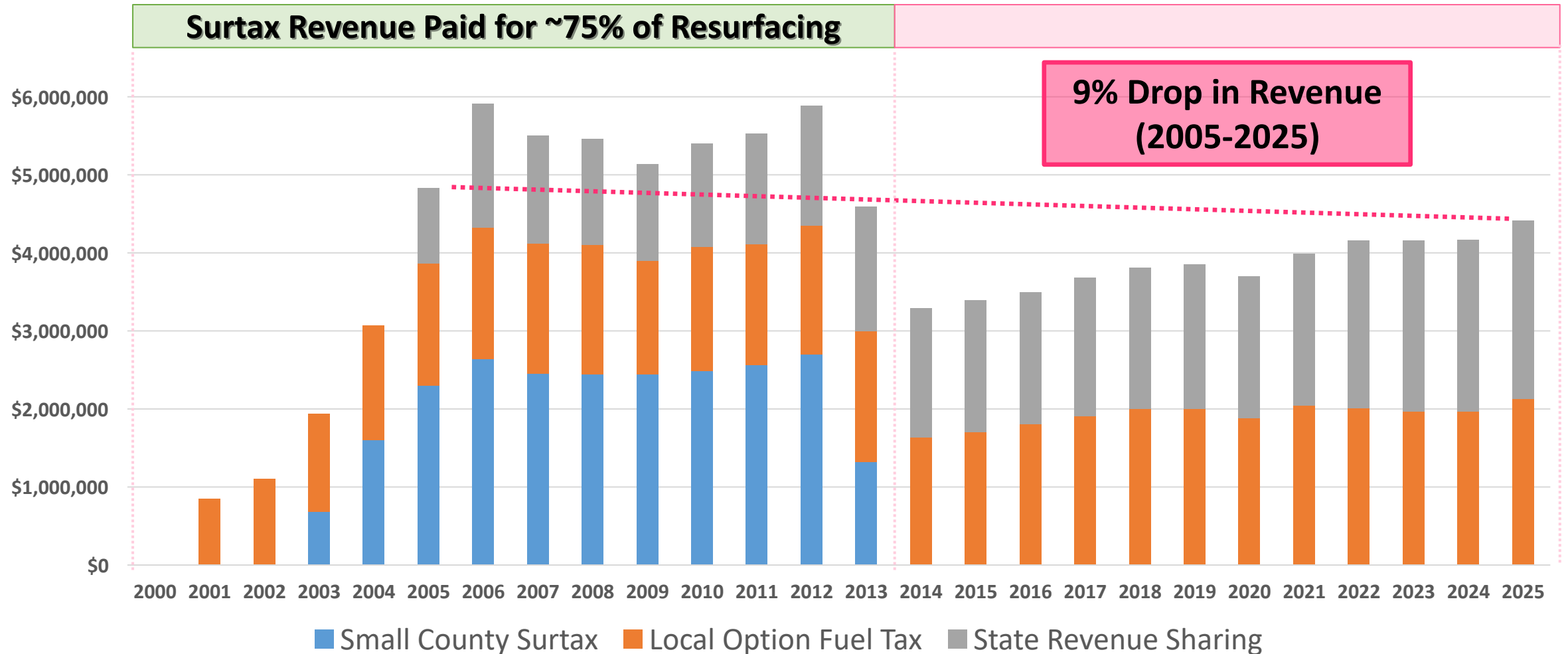
## Program Update #2



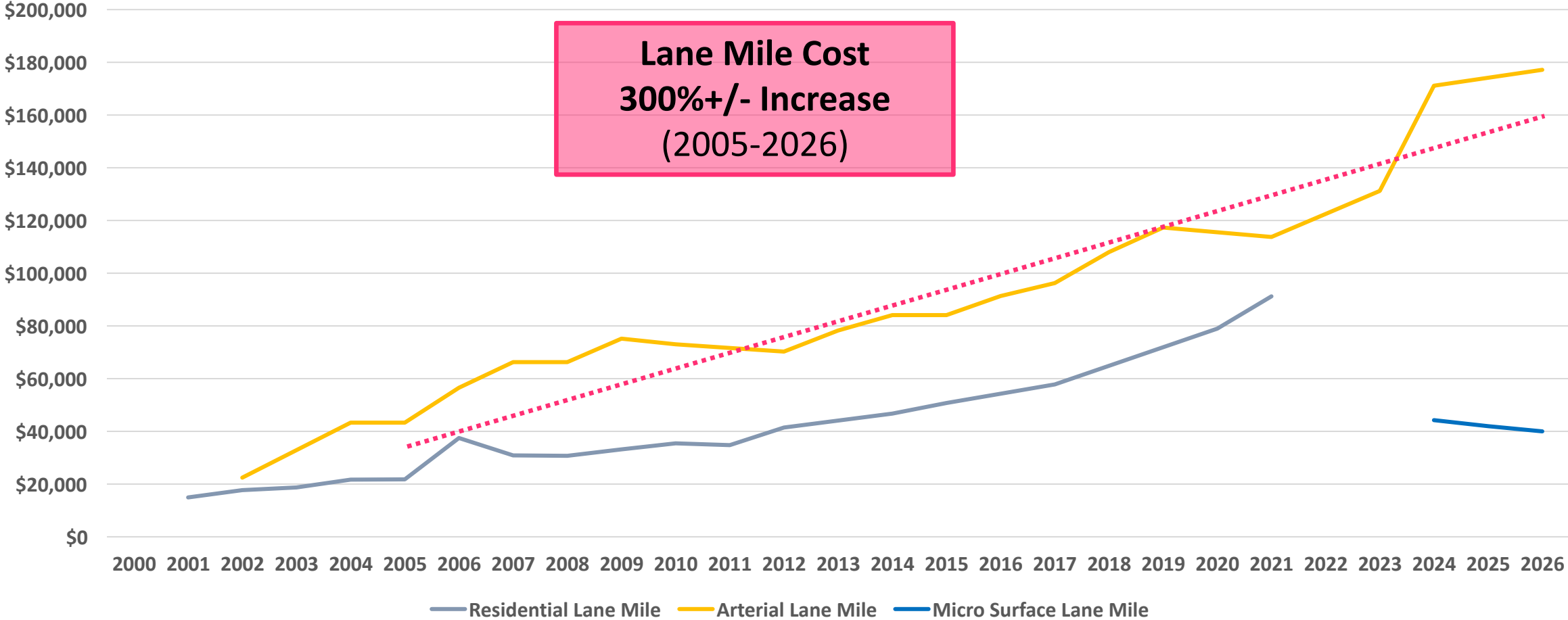
# History – Lane Miles by Year & PCI



# Street Maintenance Revenue History



# Milling & Resurfacing Cost History



# Common Global Treatments Used in Florida

Extends Pavement Life by 4-6 years



**Rejuvenation**

Extends Pavement Life by 3-4 years



**Patching/Crack Sealing**

Extends Pavement Life by 6-10 years



**Chip & Cape Seals**



**Microsurfacing**

Extends Pavement Life by 5-8 years



**Fog & Scrub Seals**

Extends Pavement Life by 2-5 years



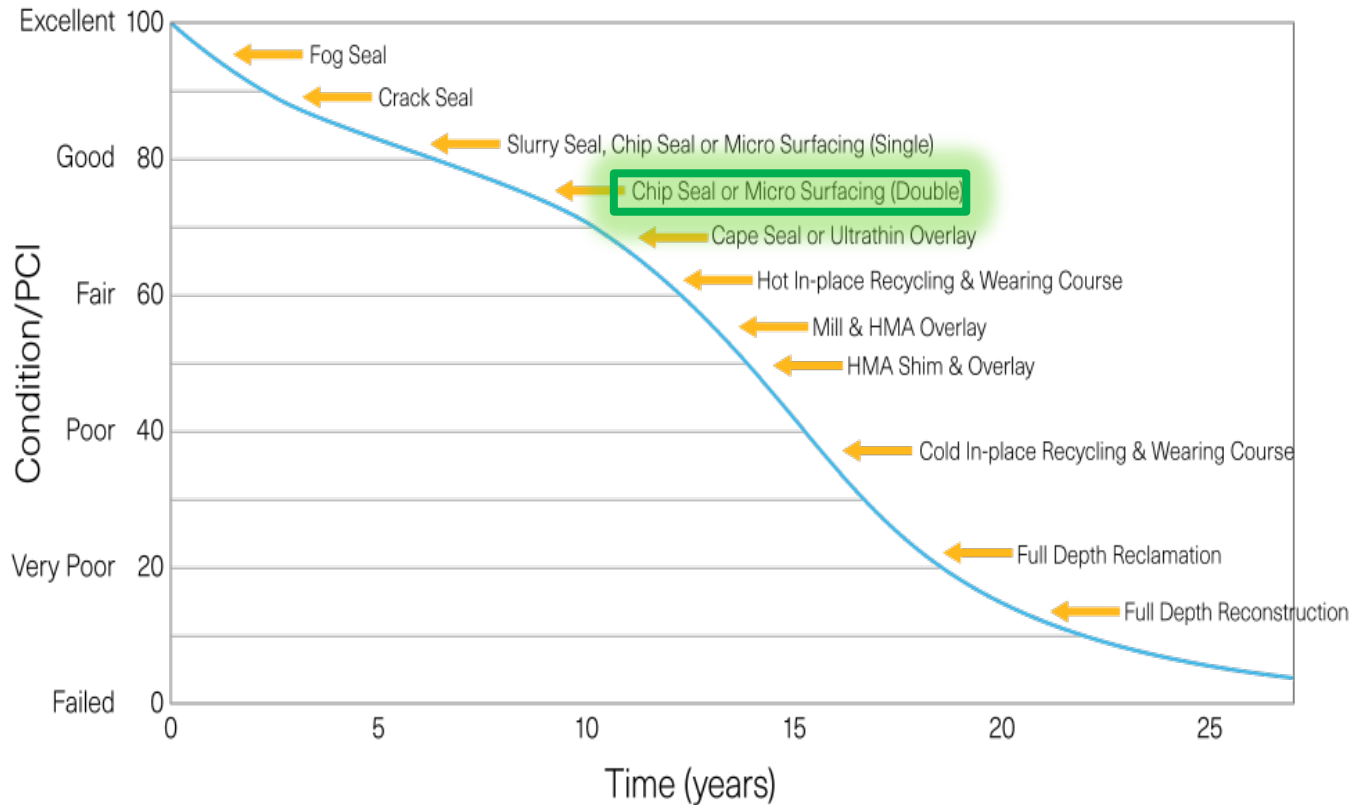
**CIR and FDR**

Extends Pavement Life by 10+ years



# Right Road, Right Treatment, Right Time

## Deterioration Curve



**Micro Surfacing: A thin, tough layer of asphalt emulsion blended with finely crushed stone for traction**



# Micro Surfacing - What We've Learned...

- **Adds NO Strength to Roadway**
  - Cracks Begin to Reform Within 2-Years
- **Additional Staff Time**
- **Limited Residential Roadways Remaining**
  - 70 or Above PCI Over Entire Roadway
- **Better Use of Funds to Mill & Resurface Roadways Before they Require Reconstruction**
- **Exploring Ability to Utilize an Alternate Thin Layer Structural Mix**





# City of Palm Coast Pavement Network

Functional Class	Lane Miles	Centerline Miles	# of Square Yards	% by # of Square Yards	Weighted Average PCI
Arterials	196.78	78.41	1,728,882	22.2%	80
Residential Collectors	152.81	76.40	1,023,115	13.2%	69
Residential Local Roads	632.45	315.94	3,857,153	49.6%	69
Residential Cul-de-sacs	151.87	75.94	1,169,184	15.0%	70
<b>Total</b>	<b>1,133.91</b>	<b>546.69</b>	<b>7,778,334</b>	<b>100.0%</b>	<b>72</b>

• **Total Value - \$846M**

Average full construction cost, \$1.56M/mile – Transmap Report 2021



# Who is Transmap?

- Extensive Florida experience
- MicroPAVER Trainer Developers
- Best Technology (LCMS/LiDAR)
- Esri Public Works Partner - 20 Years
- 300 Cities and Counties
- Open Source
- APWA Public Works Partner
- Registered Engineering Company (1994)



# Data Collection:

## Scans

- #1: 8/28/17-9/8/17
- #2: 10/13/21-10/21/21
- #3: 2/2/26-2/22/26

## Laser Crack Measurement System

- 4,000-Point Laser
- Length, Width, and Depth of Cracks
- 100% Coverage – Roadway Profiles



## SmartPano Elite 72MP

- LiDAR 640,000 points
- Colorized LiDAR with image

## Dual GPS

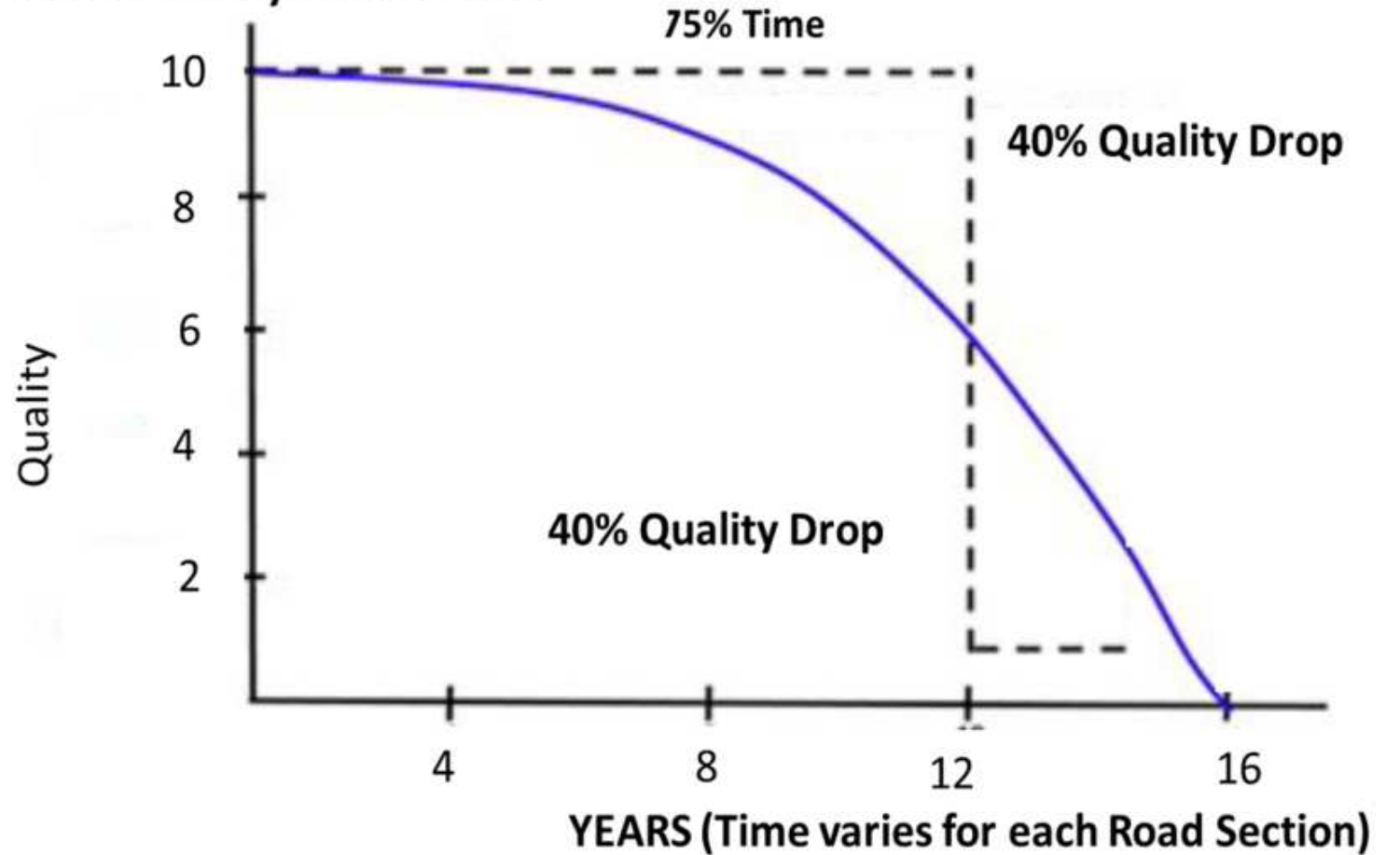
- NovAtel Precision time Protocol
- Best Alignment
- Orthophotography Creation



# PCI Ranges & Life Cycle Curve

PCI Range	Condition
86-100	Good
71-85	Satisfactory
56-70	Fair
41-55	Poor
26-40	Very Poor
11-25	Serious
0-10	Failed

Cost of Timely Maintenance



# PCI 100-86 (Good Condition)



# PCI 85-71 (Satisfactory Condition)



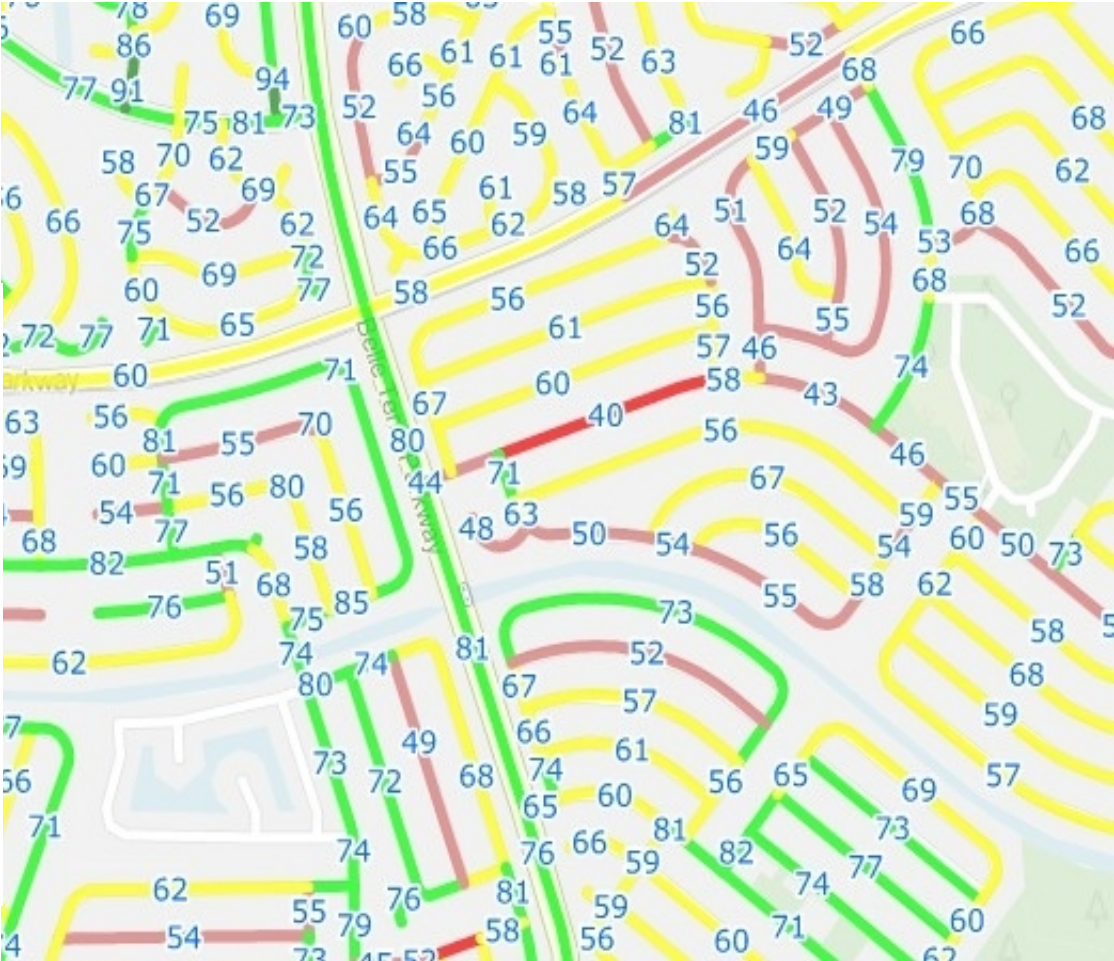
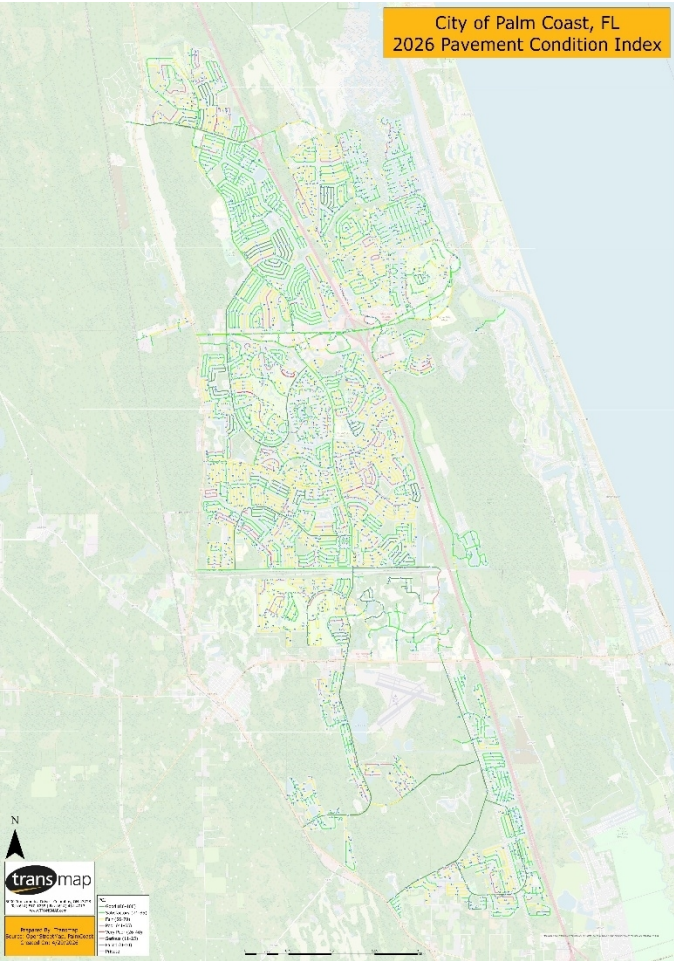
# PCI 70-56 (Fair Condition)



# PCI 55-41 (Poor Condition)



# 2026 Pavement Condition Index Map



- PCI
- Good (86-100)
  - Satisfactory (71-85)
  - Fair (56-70)
  - Poor (41-55)
  - Very Poor (26-40)
  - Serious (11-25)
  - Failed (0-10)
  - Private



# Roadway Conditions – Arterials

		2017	2021	2026
		PCI=83	PCI=77	PCI=80
PCI Range	Condition	%	%	%
86-100	Good	36.50%	10.99%	31.39%
71-85	Satisfactory	53.71%	67.05%	47.18%
56-70	Fair	8.54%	17.39%	19.36%
41-55	Poor	1.25%	4.10%	1.82%
26-40	Very Poor	0.00%	0.48%	0.25%
11-25	Serious	0.00%	0.00%	0.00%
0-10	Failed	0.00%	0.00%	0.00%



# Roadway Conditions – Residential

		2017	2021	2026
		PCI=78	PCI=74	PCI=69
PCI Range	Condition	%	%	%
86-100	Good	14.53%	4.10%	5.13%
71-85	Satisfactory	59.51%	59.27%	43.24%
56-70	Fair	25.02%	32.65%	40.93%
41-55	Poor	0.75%	3.75%	10.25%
26-40	Very Poor	0.08%	0.21%	0.46%
11-25	Serious	0.11%	0.02%	0.00%
0-10	Failed	0.00%	0.00%	0.00%



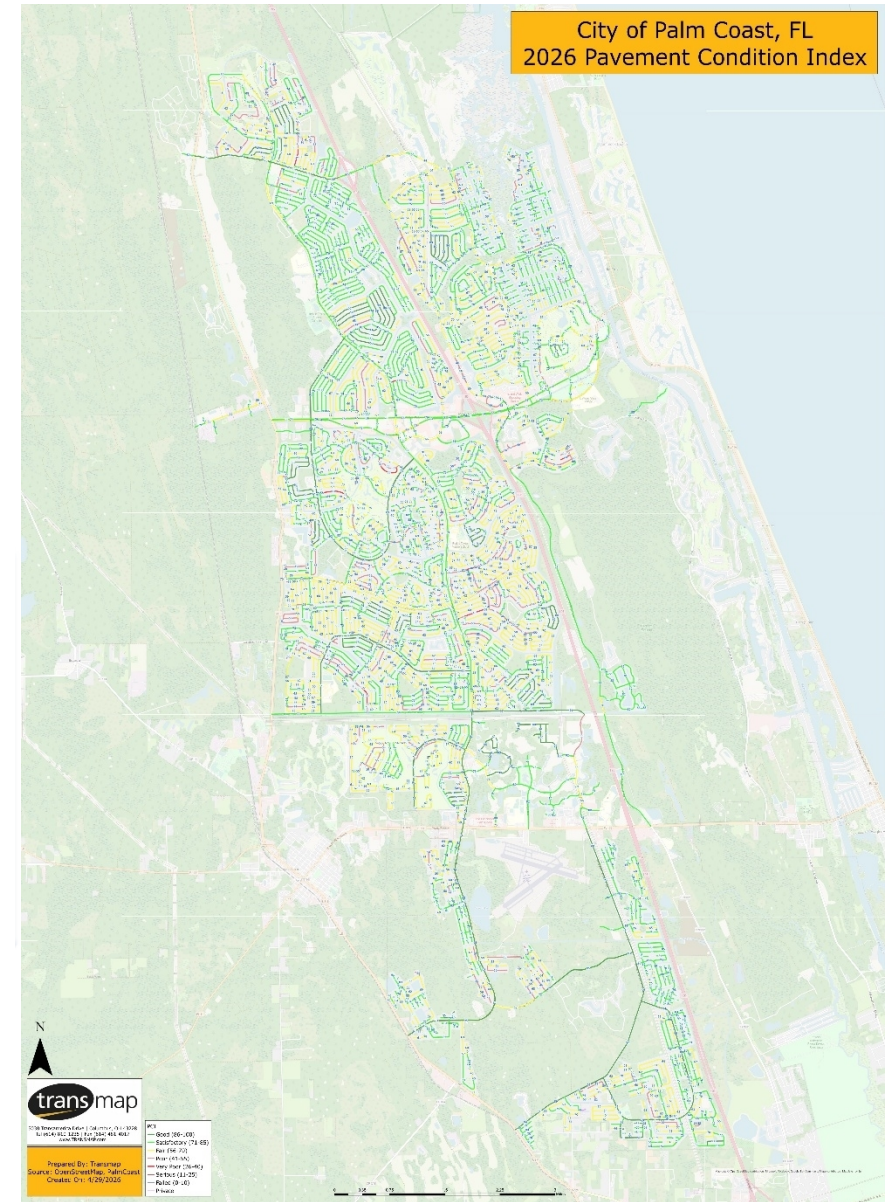
# Average Network PCI Comparison

Community	Average PCI
Average in Florida	76
Palm Coast 2017	79
Palm Coast 2021	75
Palm Coast 2026	72

Community	Year of Inventory	# of Miles	Average Network PCI
Weston	2022	52	85
Clermont	2022	98	83
Baypoint	2025	11	82
Coral Springs	2022	231	81
Osceola County	2024	1057	81
Oakland Park	2025	110	80
Key Biscayne	2024	19	79
Bartow	2023	102	76
Callaway	2022	62	76
Tamarac	2022	136	76
Hollywood	2020	359	75
Sarasota	2024	228	75
St Petersburg	2024	890	75
Clearwater	2024	320	74
Pinellas Park	2025	162	74
Largo	2020	139	73
<b>Palm Coast</b>	<b>2026</b>	<b>547</b>	<b>72</b>
Dade City	2022	38	68
Escambia	2025	312	68



# Findings & Recommendation



# 5-Year Pavement Management Plan

## Options

### ➤ Current Funding:

- Arterial Roadway Only

### ➤ Current Funding:

- Arterial and Residential Collectors

### ➤ Required Funding:

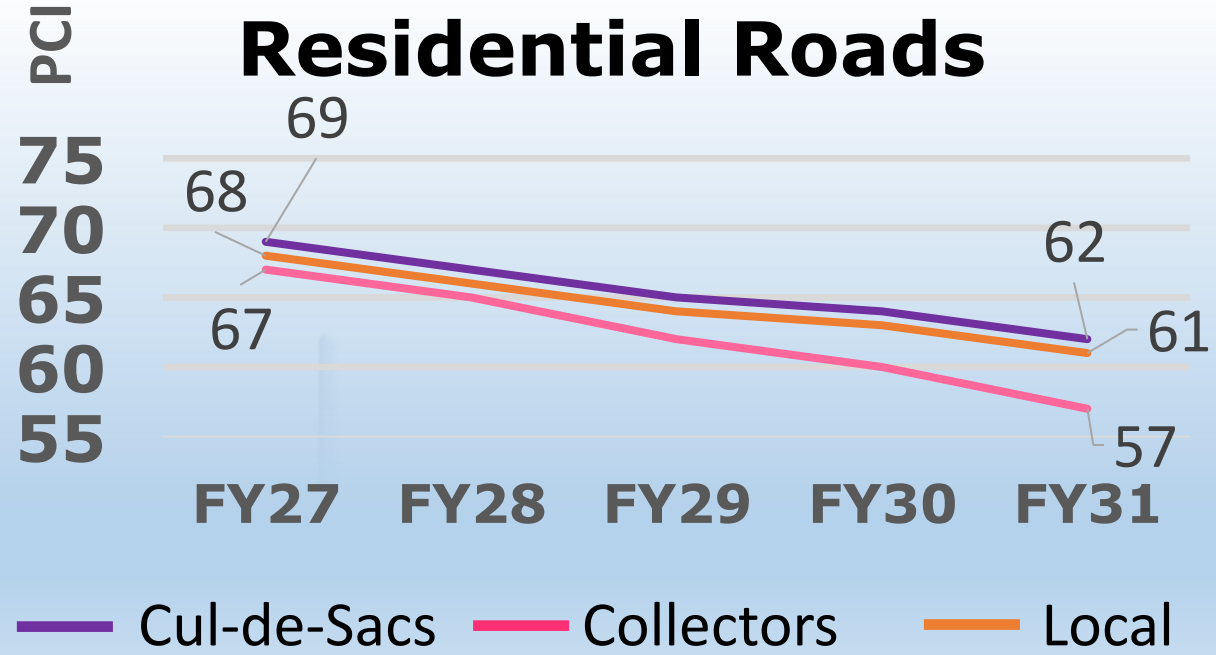
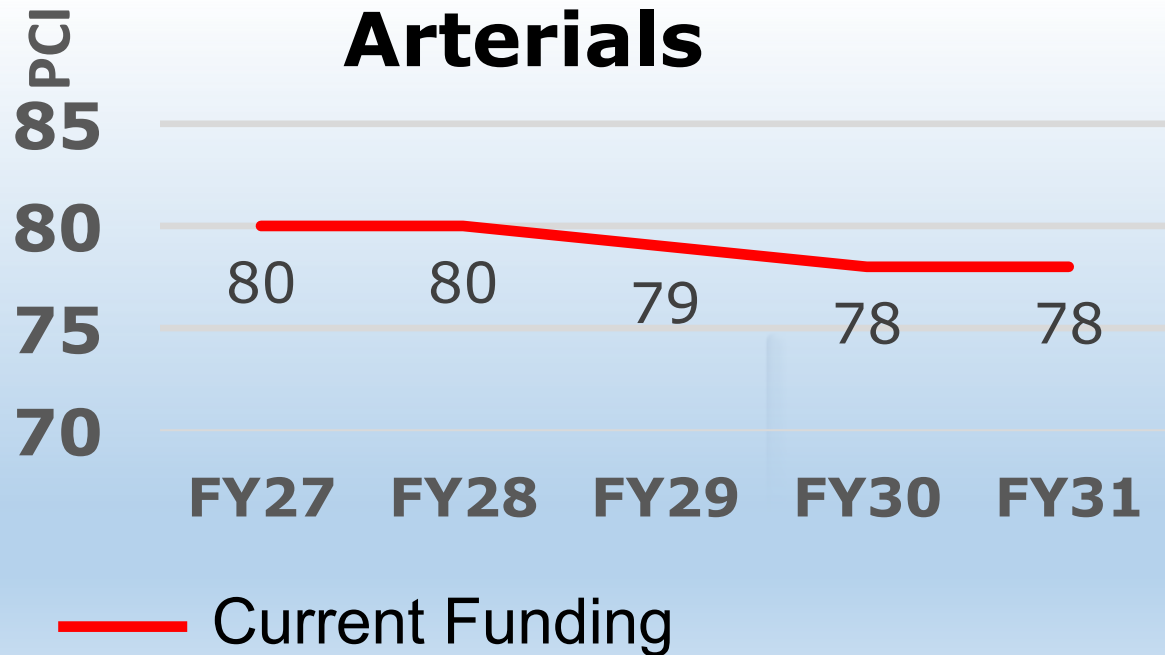
- Arterial: Maintain Average PCI of 79
- Residential: Maintain Average PCI of 70

## Assumptions

- 3% Inflation per Year
- OKR Phase 2 Funded by State Appropriation
- PCI Projection Includes resurfacing of Palm Coast Pkwy and Whiteview Pkwy (already funded)



# 5-Year PCI Projection - Current Funding



Functional Class	Current Funding
Arterial	\$2,500,000
Residential	\$ 0
<b>Totals</b>	<b>\$2,500,000</b>



# 5-Year Pavement Management Plan

## Arterial Roadways

### ➤ FY27:

- Belle Terre Pkwy (Matanzas to Bird of Paradise)
- Town Center Blvd (North of Central)

### ➤ FY28:

- Belle Terre Pkwy (Bird of Paradise to Palm Coast Pkwy)

### ➤ FY29:

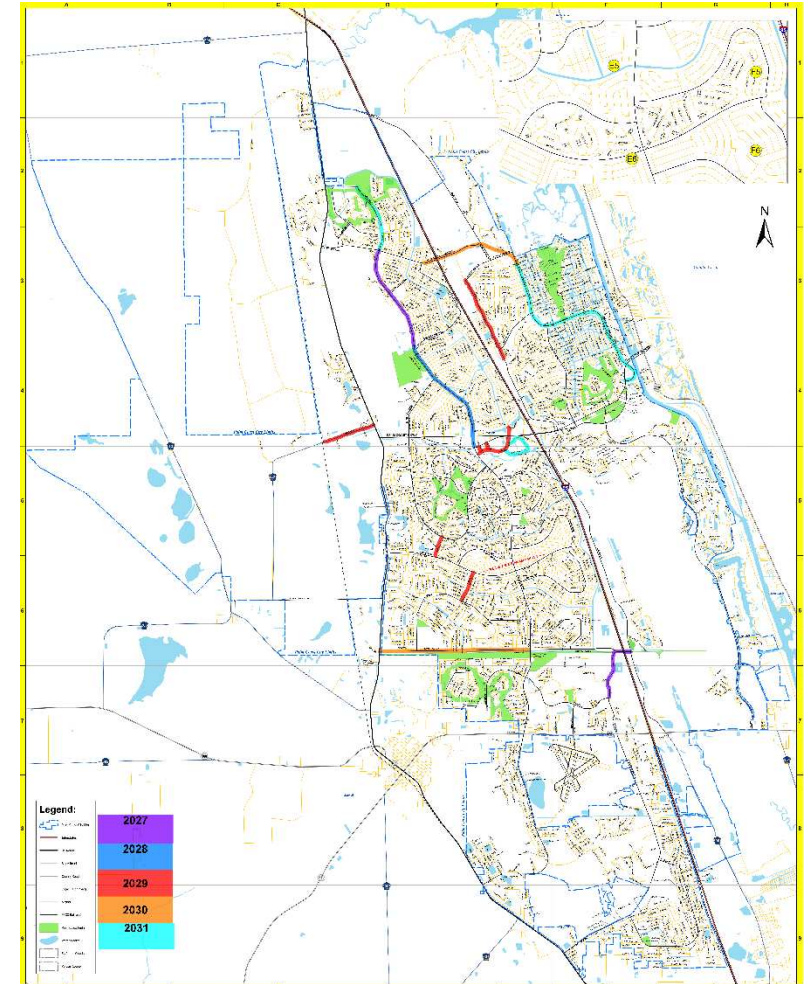
- Old King's Rd (Farnum Ln to Forest Gr)
- Boulder Rock Dr (Palm Coast Pkwy to Garden St)
- Whitemill Dr, Ravenwood Dr., Hargrove Gr, Cypress Point Pkwy, Cypress Branch Way, Pine Cone Dr

### ➤ FY30:

- Royal Palms Pkwy (Belle Terre to US1)
- Matanzas Woods Pkwy (Bird of Paradise to Pirate Nation Way)
- Palm Harbor Pkwy (Pirate Nation Way to Fernmill Ln)

### ➤ FY31:

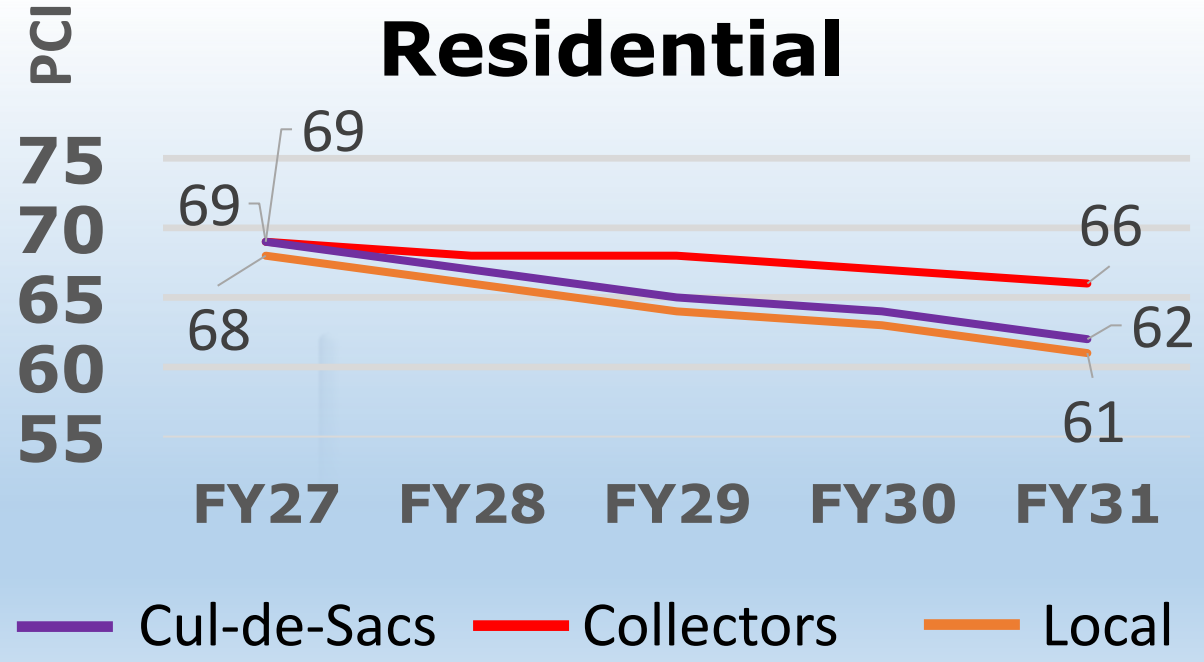
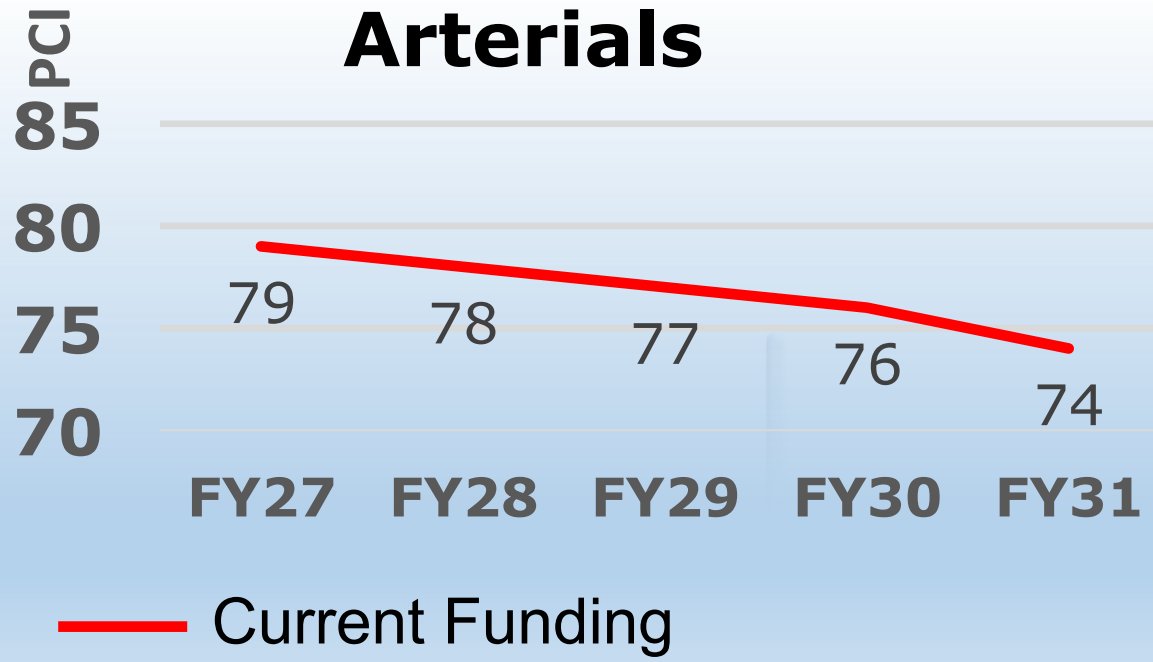
- Palm Harbor Pkwy (Fernmill to Palm Coast Pkwy)
- Cypress Edge Dr & Lakeview Blvd



CITY OF PALM COAST STREET MAP



# 5-Year PCI Projection - Current Funding



Functional Class	Current Funding
Arterial	\$1,500,000
Residential Collectors	\$1,000,000
<b>Total</b>	<b>\$2,500,000</b>



# 5-Year Pavement Management Plan

## Arterial Roadways

### ➤ FY27:

- Belle Terre Pkwy (Matanzas to Burroughs)
- Town Center Blvd (North of Central)

### ➤ FY28:

- Belle Terre Pkwy (Burroughs to Pine Lakes Pkwy)

### ➤ FY29:

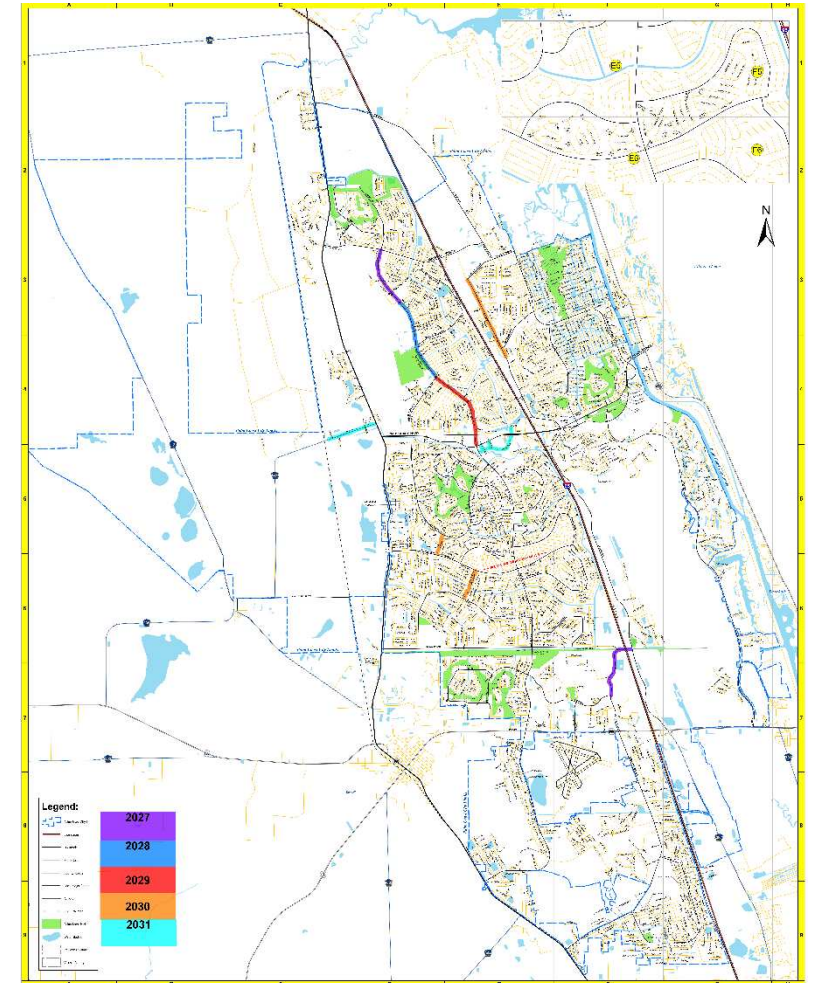
- Belle Terre Pkwy (Pine Lakes Pkwy to Palm Coast Pkwy)

### ➤ FY30:

- Old King's Rd (Farnum Ln to Forest Gr)
- Whitemill Dr & Ravenwood Dr

### ➤ FY31:

- Boulder Rock Dr (Palm Coast Pkwy to Garden St)
- Hargrove Gr, Cypress Point Pkwy, Cypress Branch Way



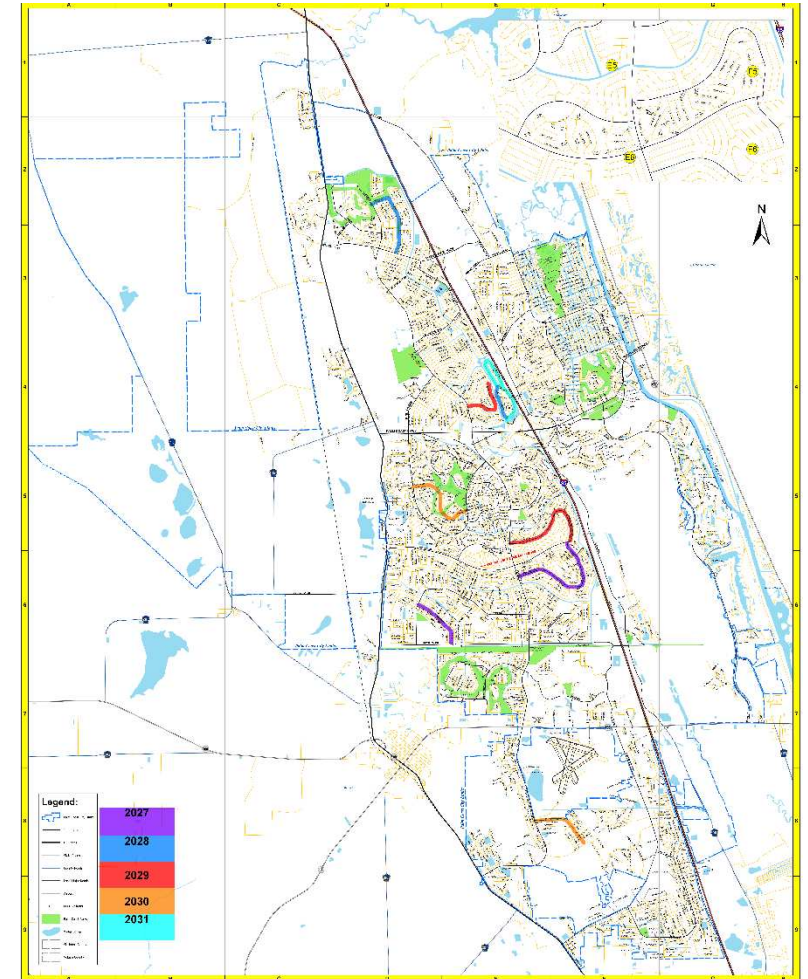
CITY OF PALM COAST STREET MAP



# 5-Year Pavement Management Plan

## Residential Collector Roadways

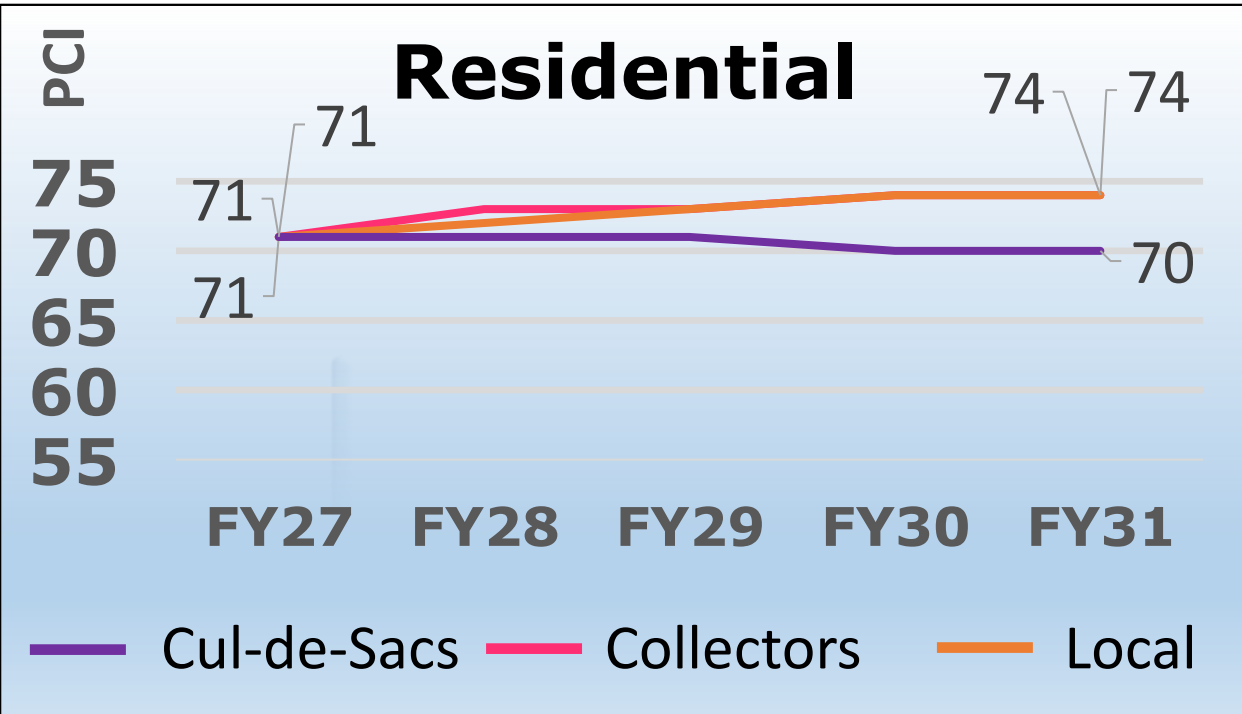
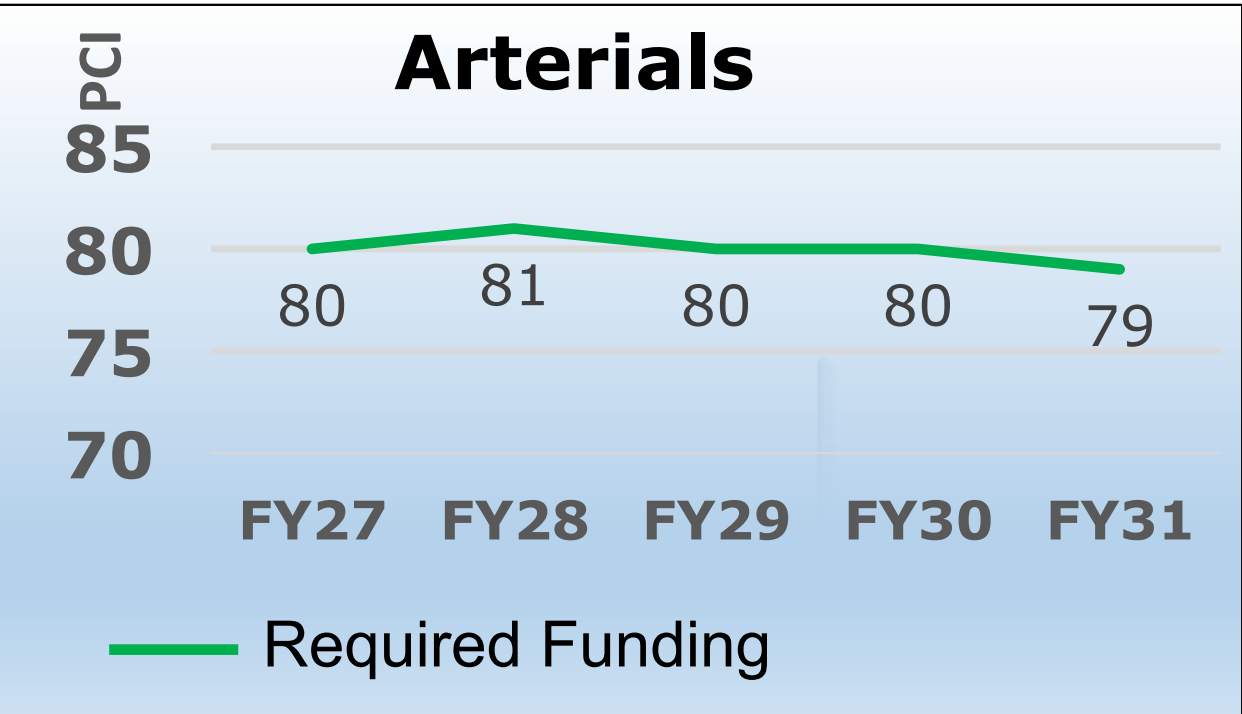
- **FY27:**
  - Rickenbacker Dr. & Pine Grove Dr.
- **FY28:**
  - Boston Ln. & Laramie Dr.
- **FY29:**
  - Pritchard Dr. & Belleaire Dr.
- **FY30:**
  - Laguna Forest Tr. & Westhampton Dr.
- **FY31:**
  - Boulder Rock Dr. (Garden St to Terminus)



CITY OF PALM COAST STREET MAP



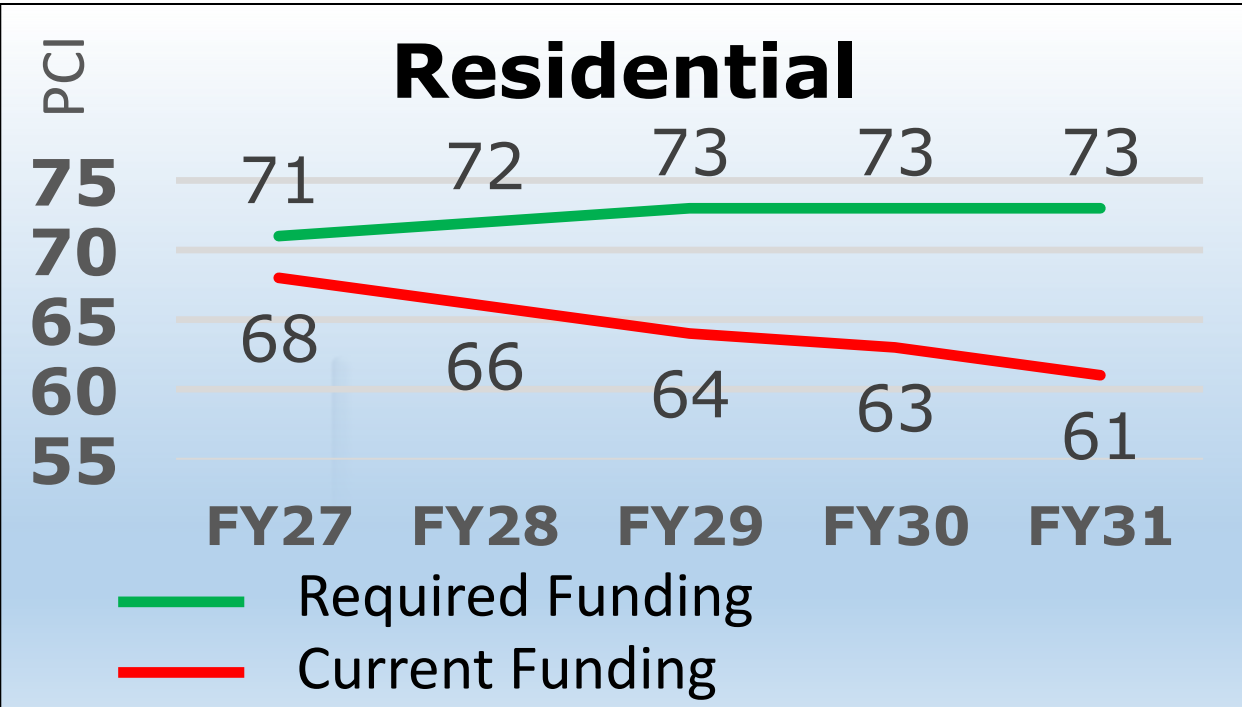
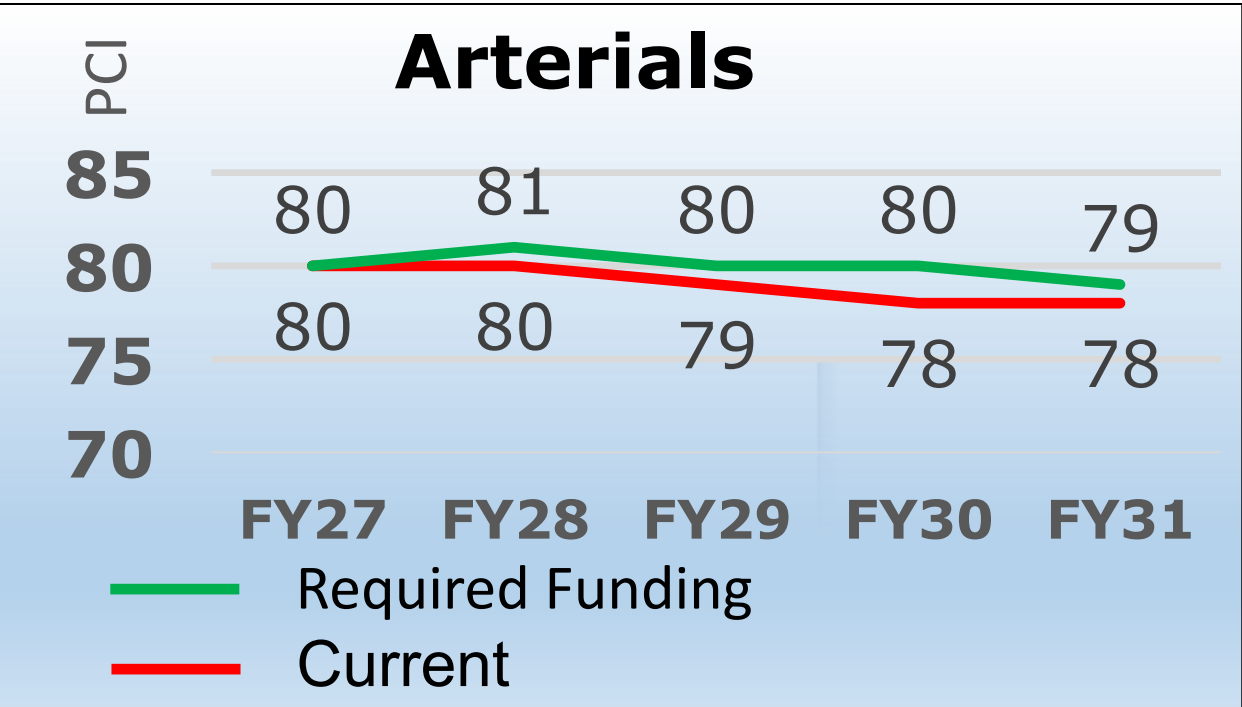
# 5-Year PCI Projection - Current Funding



Functional Class	Required Funding
Arterial	\$ 2.946M
Residential	\$ 9.409M
<b>Total</b>	<b>\$12.355M</b>



# Pavement Management – Funding Need



Functional Class	Current Funding	Required Funding	Shortfall
Arterial/Collector	\$2.5M	\$ 2.946M	<b>\$0.446M</b>
Residential	\$0.0M	\$ 9.409M	<b>\$9.409M</b>
<b>Total</b>	<b>\$2.5M</b>	<b>\$12.355M</b>	<b>\$9.855M</b>



# Maintain Status Quo Implications



# Implementation Criteria

- **Utilize Only Current Funding Sources; NO New Dedicated Revenue Source**
- **Continue to Not Provide Funding for Median Beautification, Entry/Gateway/ Neighborhood Signs, and Sidewalks**
- **Option A: Arterial & Collector Roadways Only (No Residential)**
  - Milling and Resurfacing Only (full-depth repair as needed)
  - Funding to Maintain a 78 PCI in the 5-Year Outlook
- **Option B: Arterial & Collector Roadways + Residential Collector Roadways**
  - Milling and Resurfacing Only (full-depth repair as needed)
  - \$1.5M Arterial & Collector Funding to Maintain a 74 PCI in the 5-Year Outlook
  - \$1.0M Residential Collector Funding to Maintain a 66 PCI in the 5-Year Outlook



# STREETS IMPROVEMENT FUND

## Local Option Fuel Tax

- Currently 6 cents per gallon on fuel purchased in Flagler County
- Distributed per Inter-local agreement based on road miles
- Restricted for Transportation Expenses

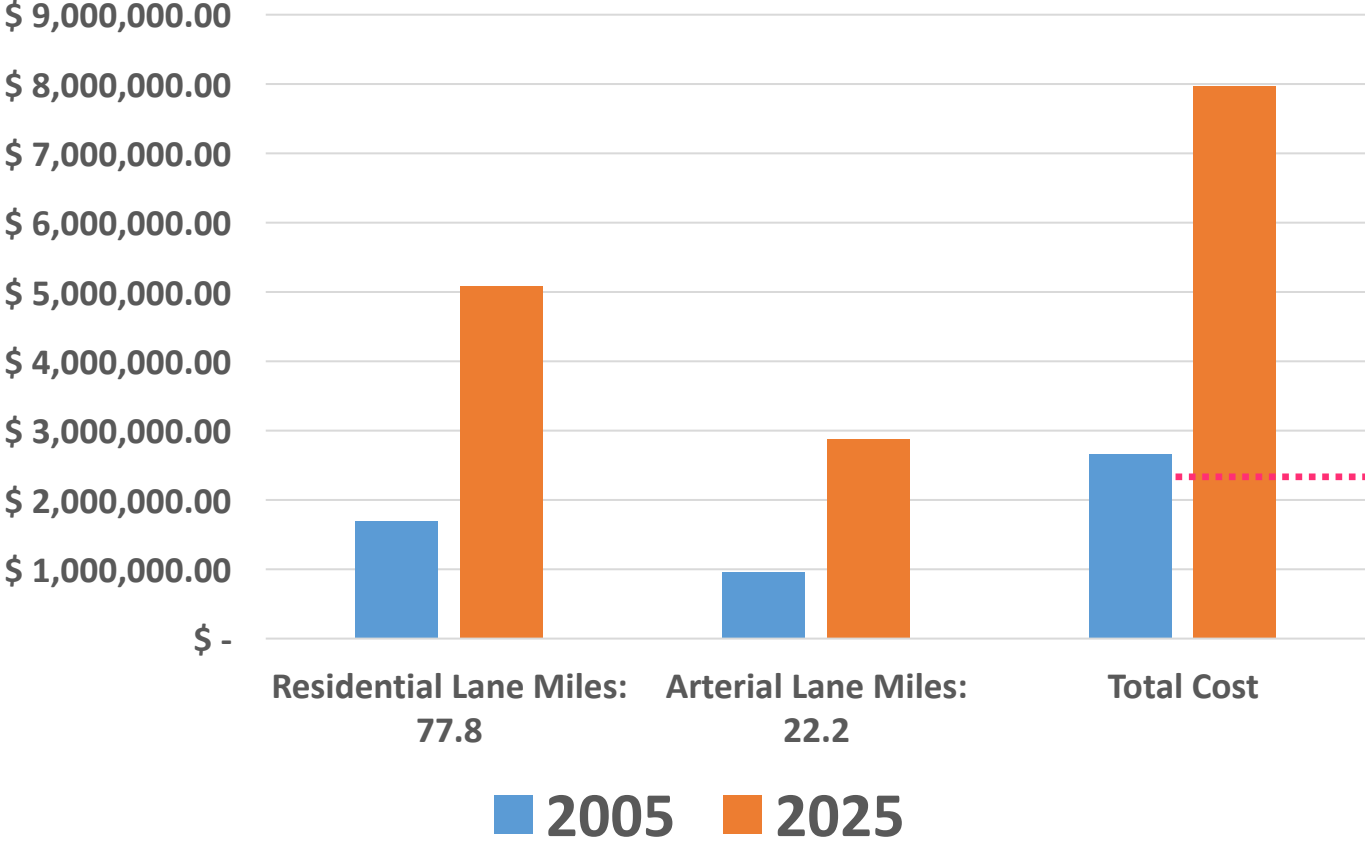
## State Revenue Sharing (b)

- Portion of State sales and use tax collections & one-cent municipal fuel tax
- State requires use of 17.4% of these funds to be used for street maintenance costs; City transferred 40% of fees received from the State to this fund in FY26



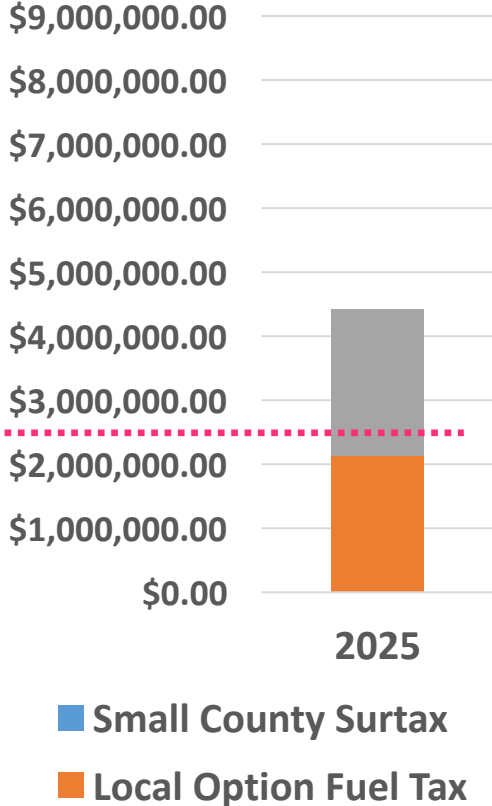
# Revenue Versus Expense - Inflation

Cost Per Lane Mile – Inflation Adjustment



**\$2.5M  
Funding  
Availability  
for  
Resurfacing**

Street Maintenance Revenue

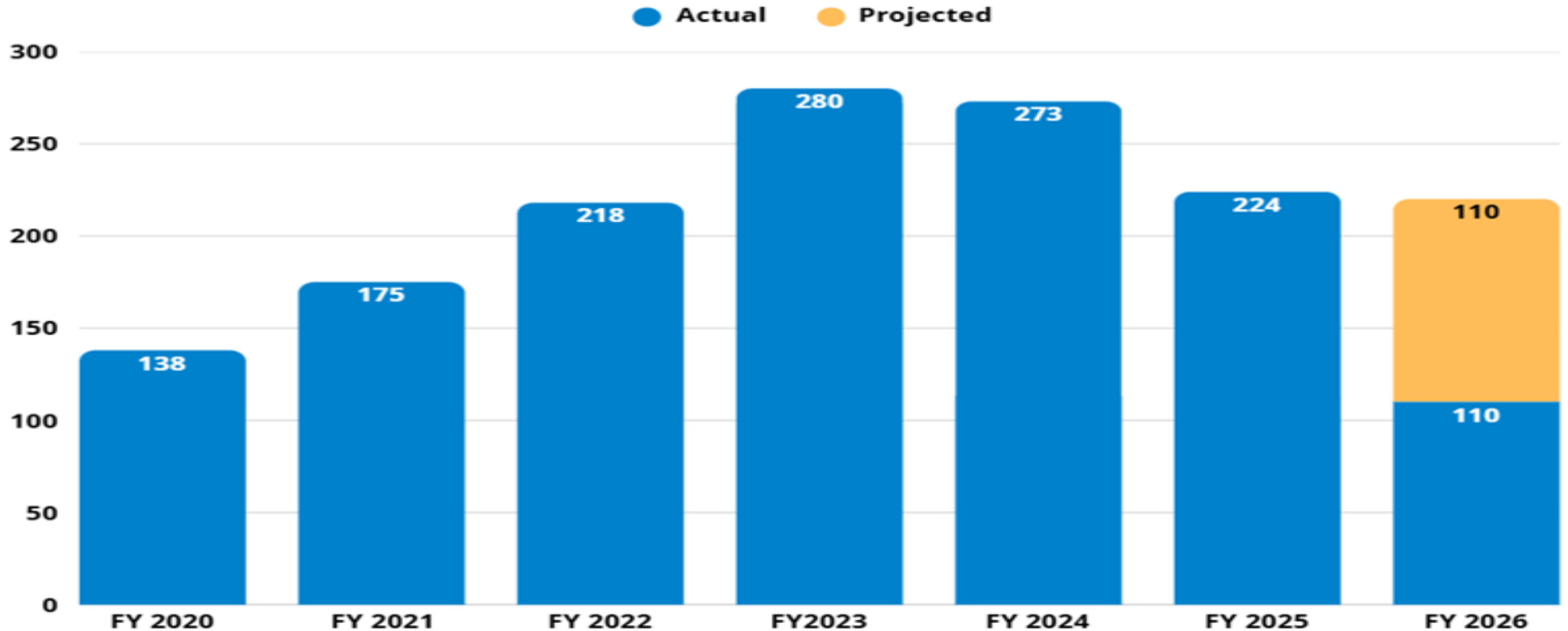


# Roadway Impact – Deferred Maintenance

	Deferred Maintenance
<b>FY27</b>	<b>\$ 69,100,000</b>
<b>FY28</b>	<b>\$ 75,500,000</b>
<b>FY29</b>	<b>\$ 81,900,000</b>
<b>FY30</b>	<b>\$ 94,500,000</b>
<b>FY31</b>	<b>\$ 115,700,000</b>



# City Work Order Requests – Potholes....



# Looking Forward



# Funding Options for Consideration

## Electric Franchise Fee

Applicable to commercial, residential and industrial

State allows a fee 3% to 6%

Amount and use is at the sole discretion of City Council

Added to FPL Bill

## Public Service (Utility) Tax

Can Include electric, natural or propane gas, and water

State allows up to a 10% tax (can exempt first 500KW)

Rate and use determined by City Council

Added to Utility Bills

## Ad Valorem (Property Tax)

Dedicated Millage



# Questions?

