



Collaboration. Commitment. Confidence.SM

2021 PAVEMENT MANAGEMENT PROGRAM UPDATE



Purpose of Presentation

1. Overview for Council on results of the Pavement Management Program Update
2. Help answer the following questions:
 - What is a pavement management system?
 - How big is Fresno's street network?
 - What is the value of this publicly owned asset?
 - What condition is it in?
 - How much we do need to fix all streets? Do we have enough funding? If not, how much do we need?

What is a Pavement Management Program?



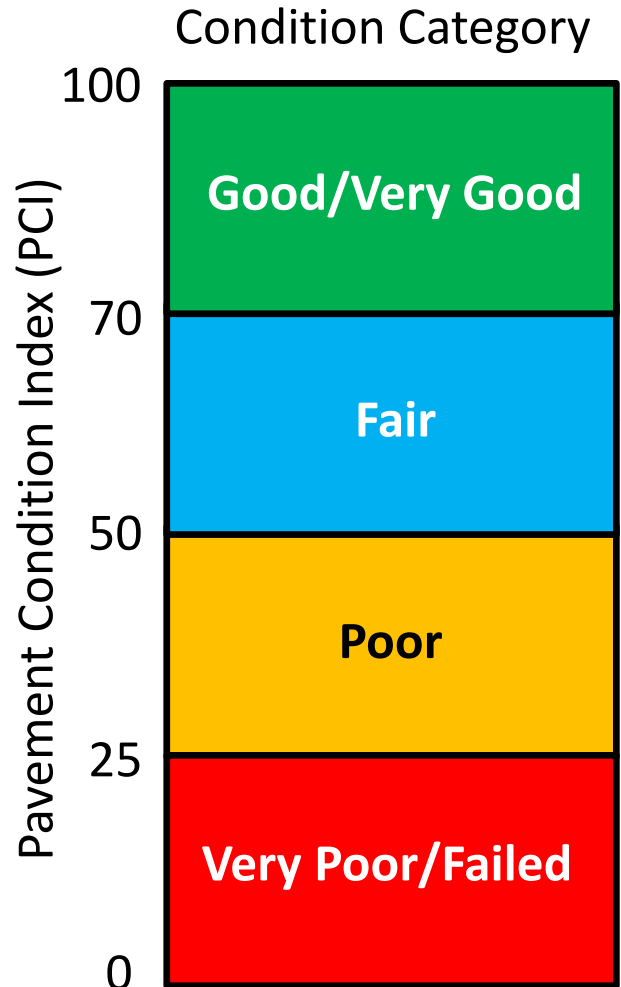
- Used to make cost-effective decisions
- Answers 4 main questions
 1. What streets does the City own/maintain?
 2. What condition are they in?
 3. What repairs are needed & when?
 4. How much funding is needed to maintain or improve streets?
- StreetSaver software

What Does the City Own/Maintain?

Functional Class	Centerline Miles	% of the Entire Network (by Pavement Area)
Arterials	340.7	20.9%
Collectors	209.6	15.8%
Residentials	1217.3	63.3%
Total	1767.6	100%

Asset value = \$4.5 billion

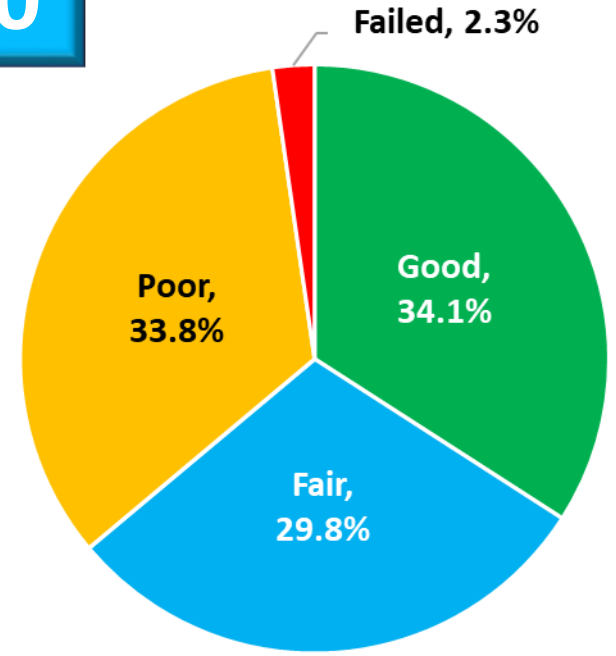
What Condition Are Streets In?



Network PCI = 60

60

Arterials PCI = 62
 Collectors PCI = 64
 Residentials PCI = 60



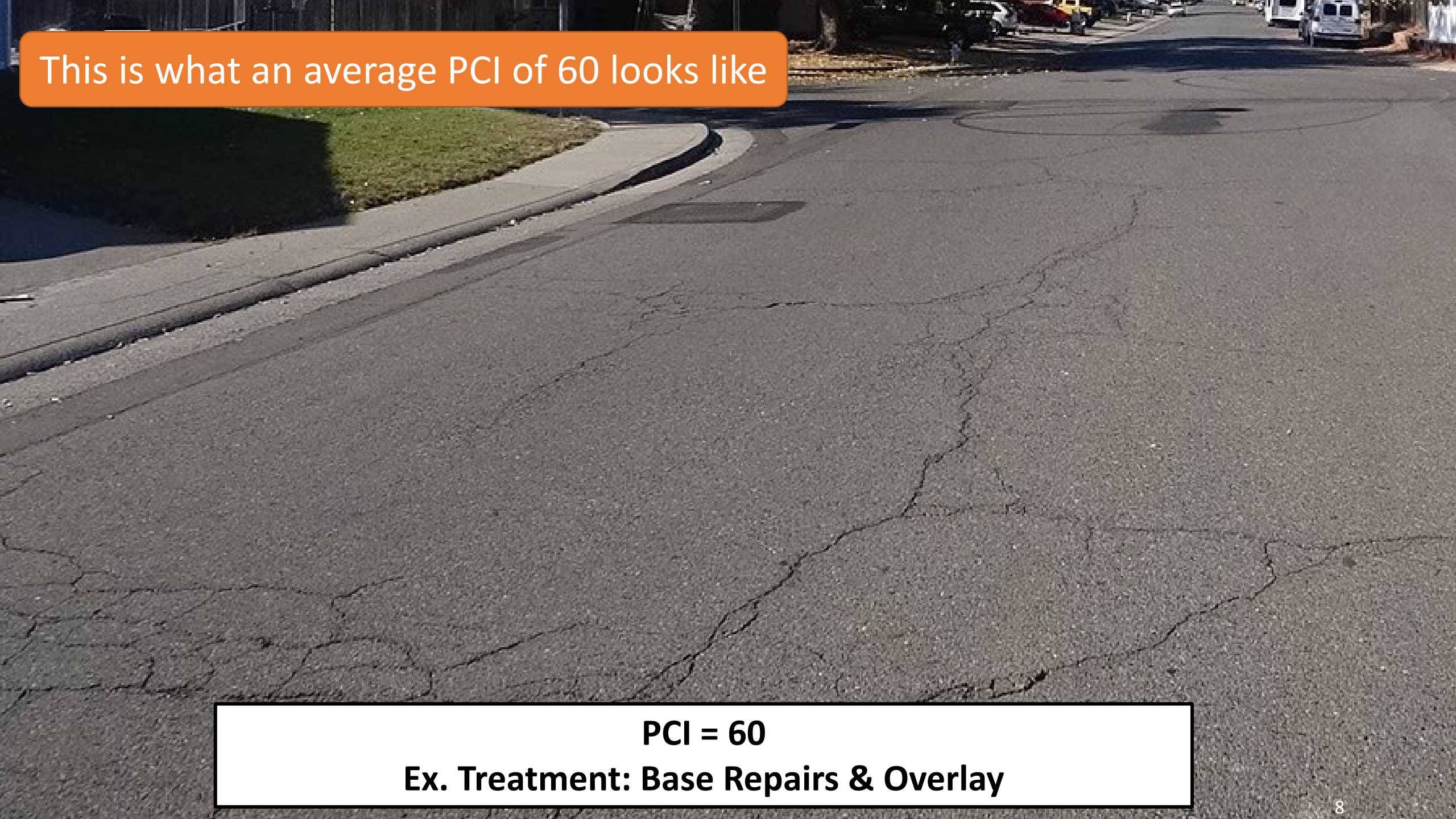


PCI = 90
Ex. Treatment: Do Nothing



PCI = 75
Ex. Treatment: Crack & Slurry Seal

This is what an average PCI of 60 looks like



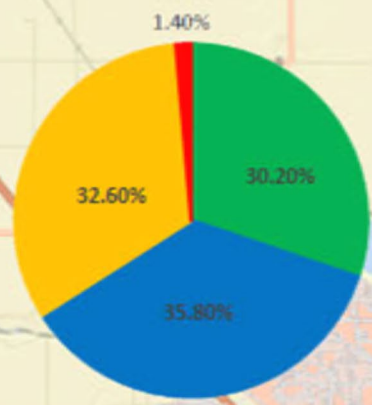
PCI = 60
Ex. Treatment: Base Repairs & Overlay



PCI = 40
Ex. Treatment: Mill and Overlay



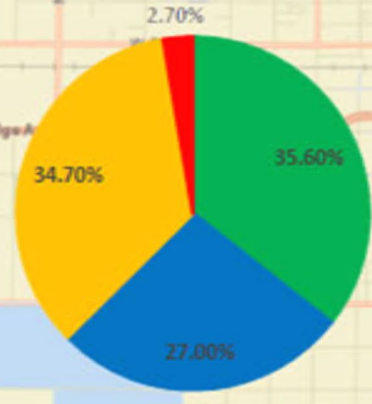
PCI < 20
Ex. Treatment: Surface Reconstruction



■ PCI >= 70 ■ 50 <= PCI < 70 ■ 25 <= PCI < 50 ■ PCI < 25

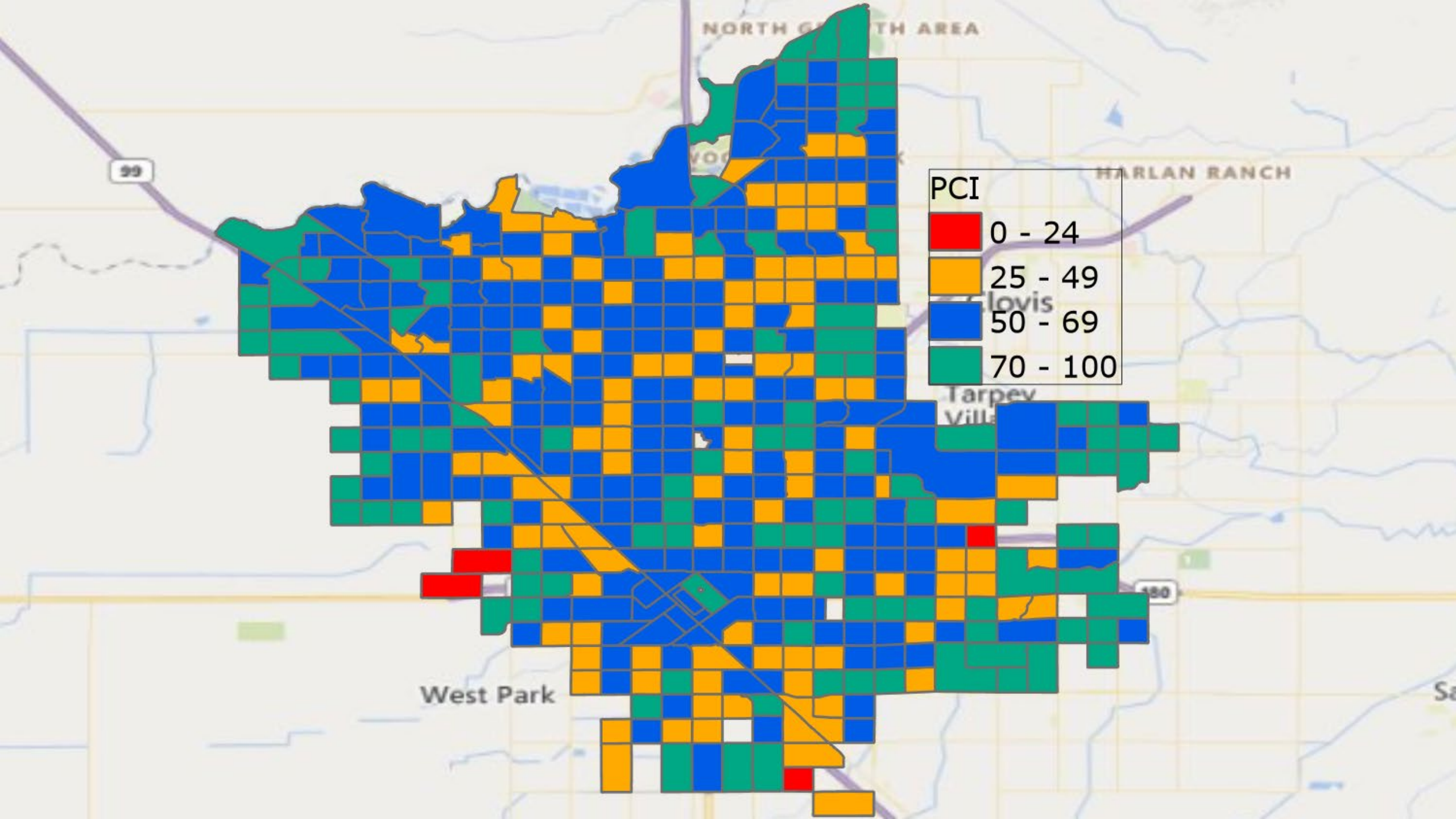
PCI : 59

Shaw Ave is dividing line

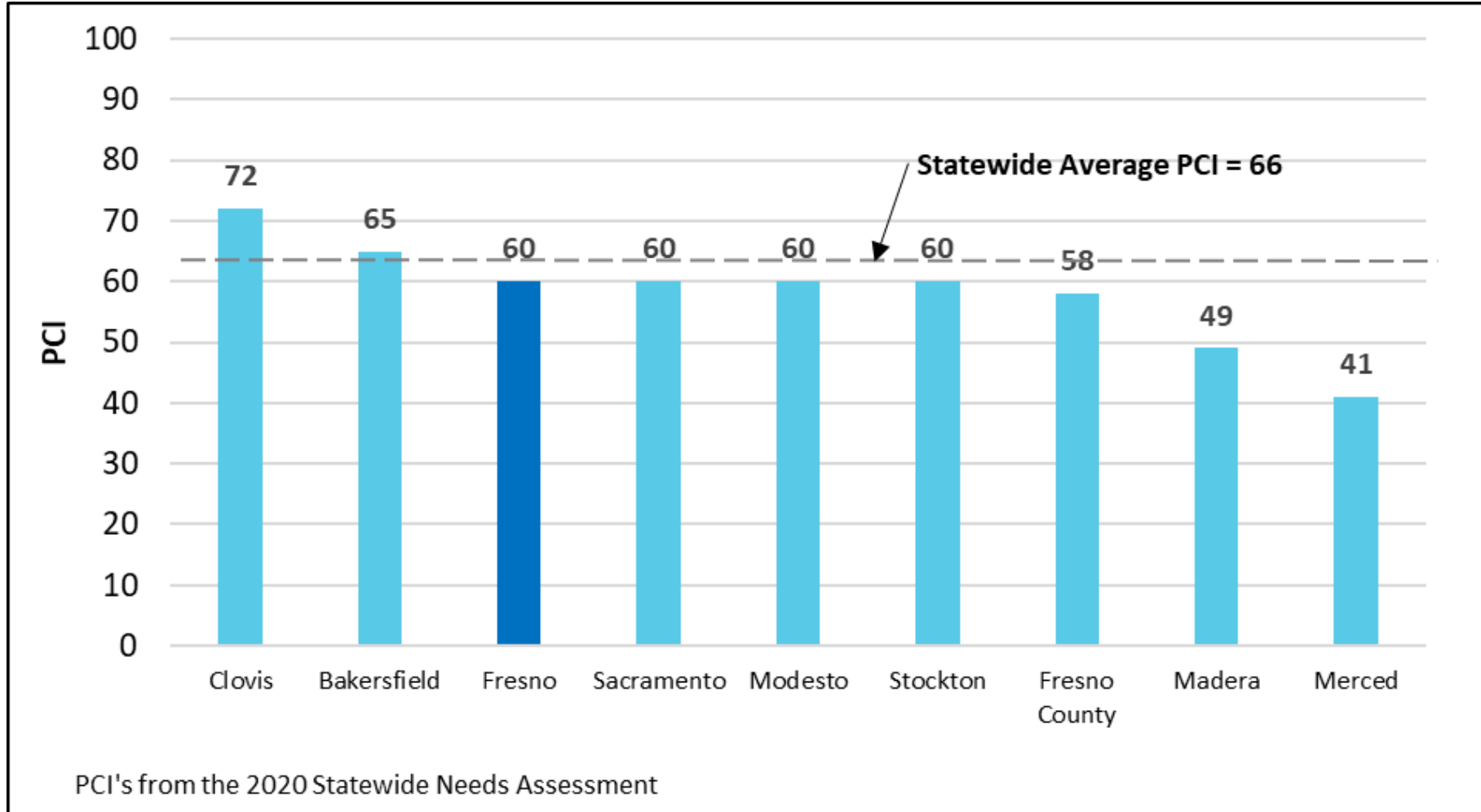


■ PCI >= 70 ■ 50 <= PCI < 70 ■ 25 <= PCI < 50 ■ PCI < 25

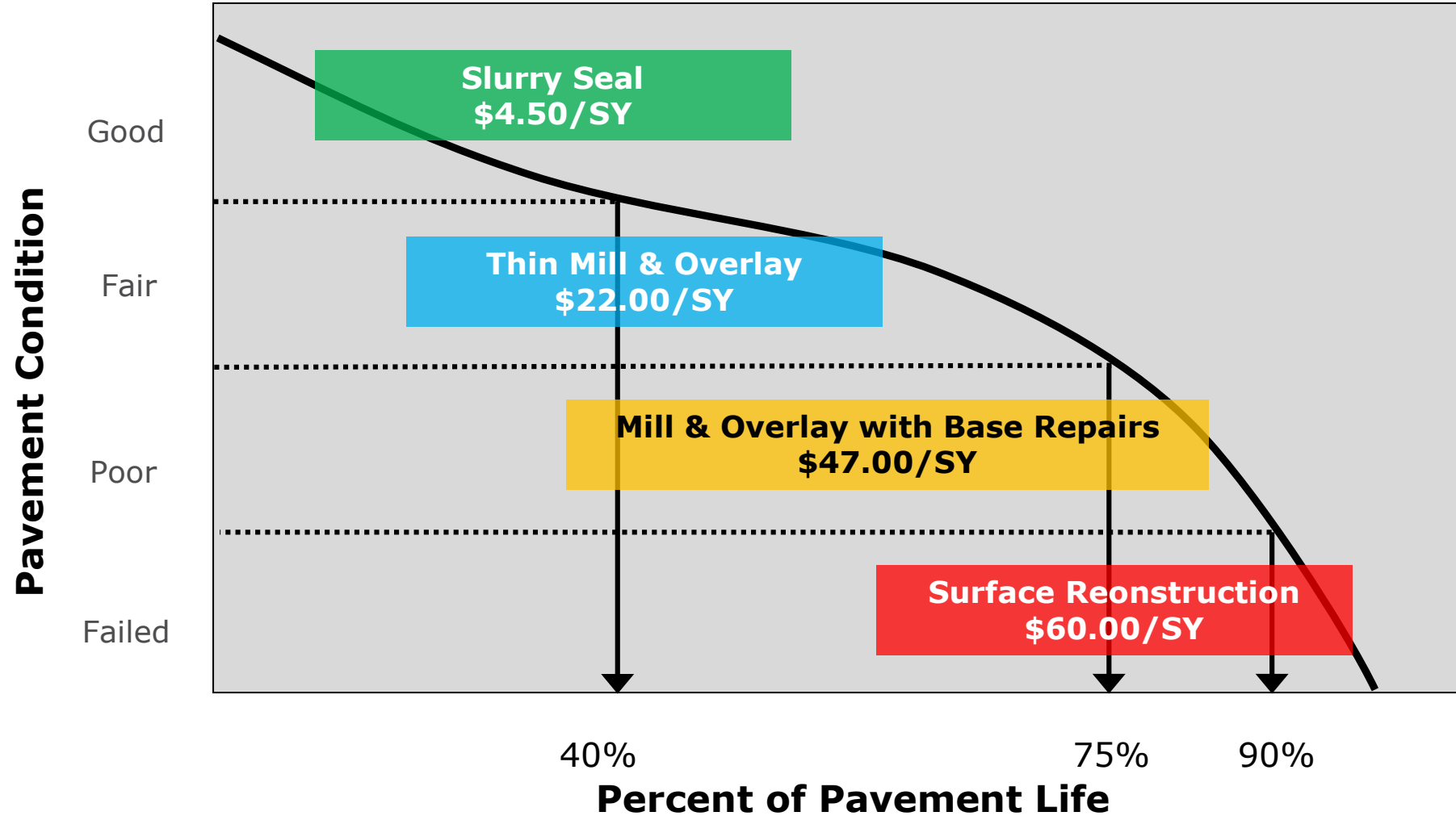
PCI : 60



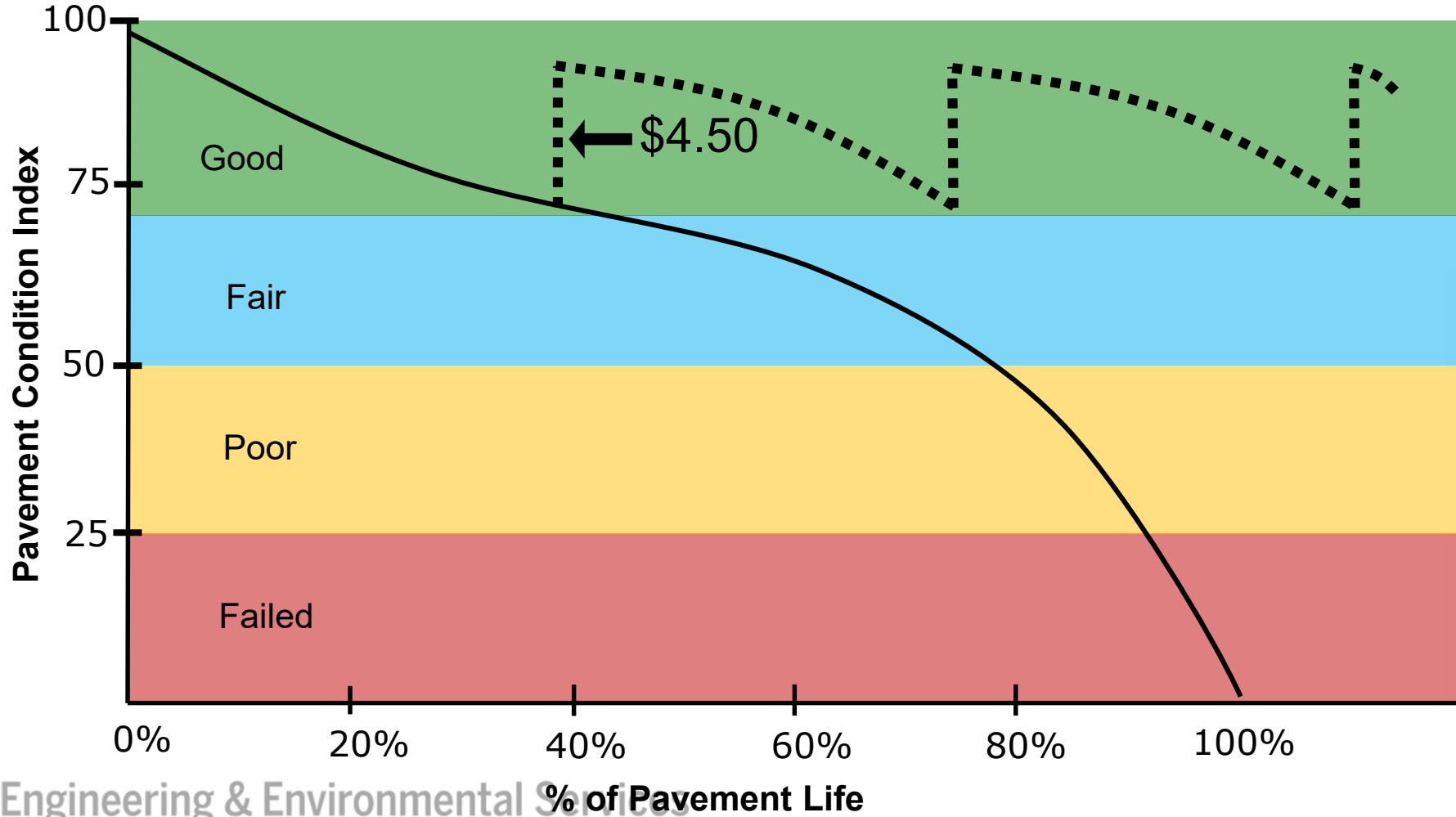
How Does Fresno Compare With Other Cities?



Good Roads Cost Less to Maintain

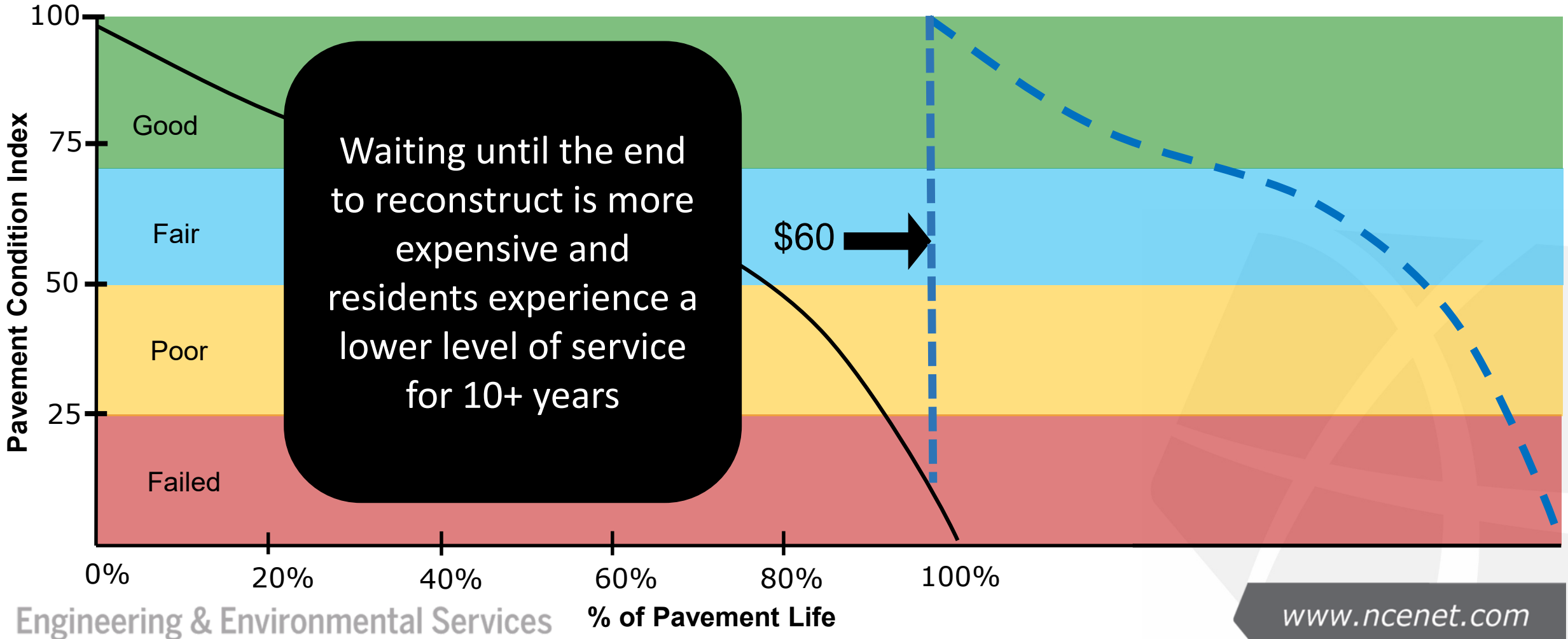


Importance of Preventive Maintenance



Residents experience a higher level of service & City saves money

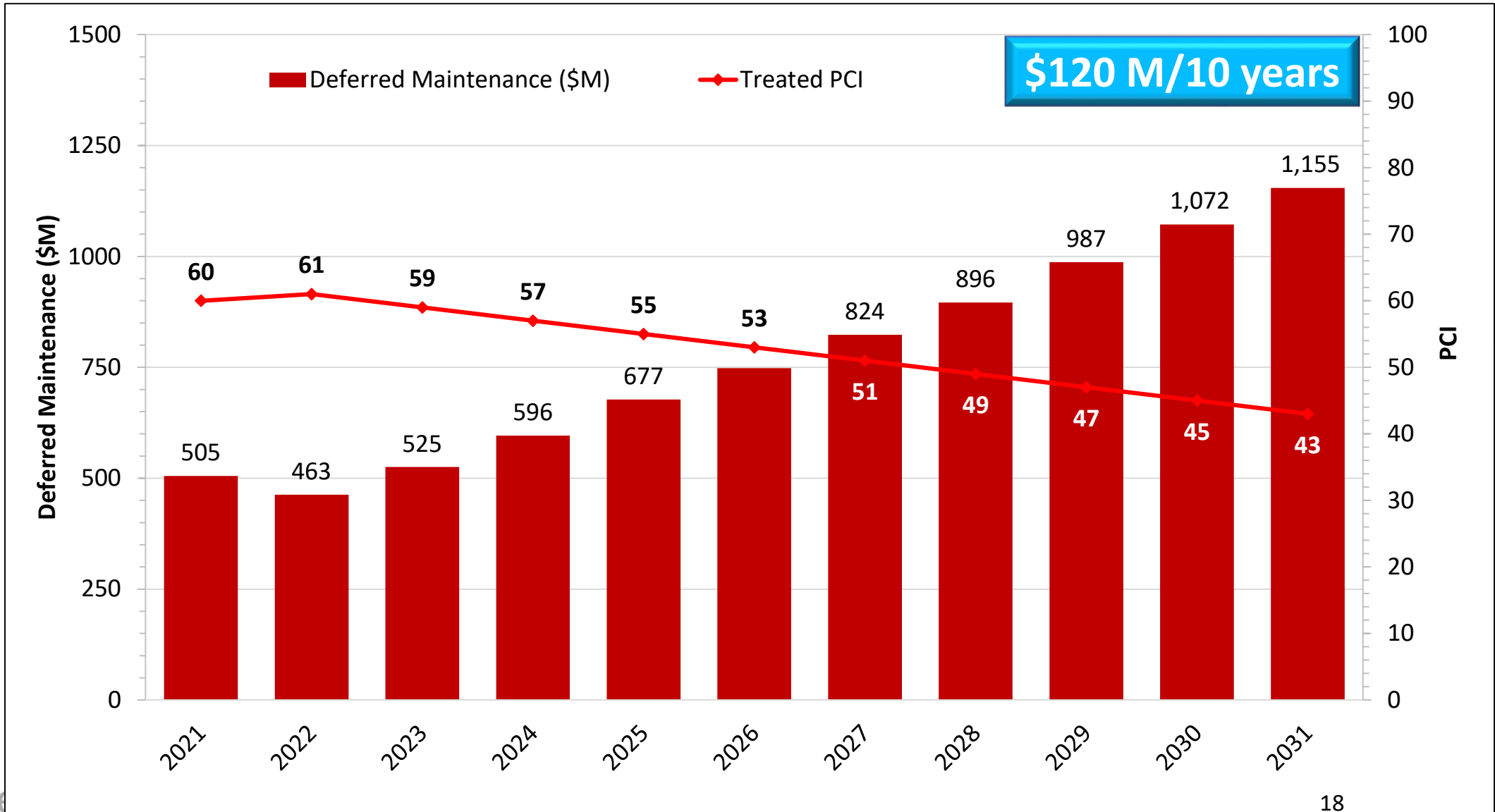
Reconstruction Is Not As Cost-Effective



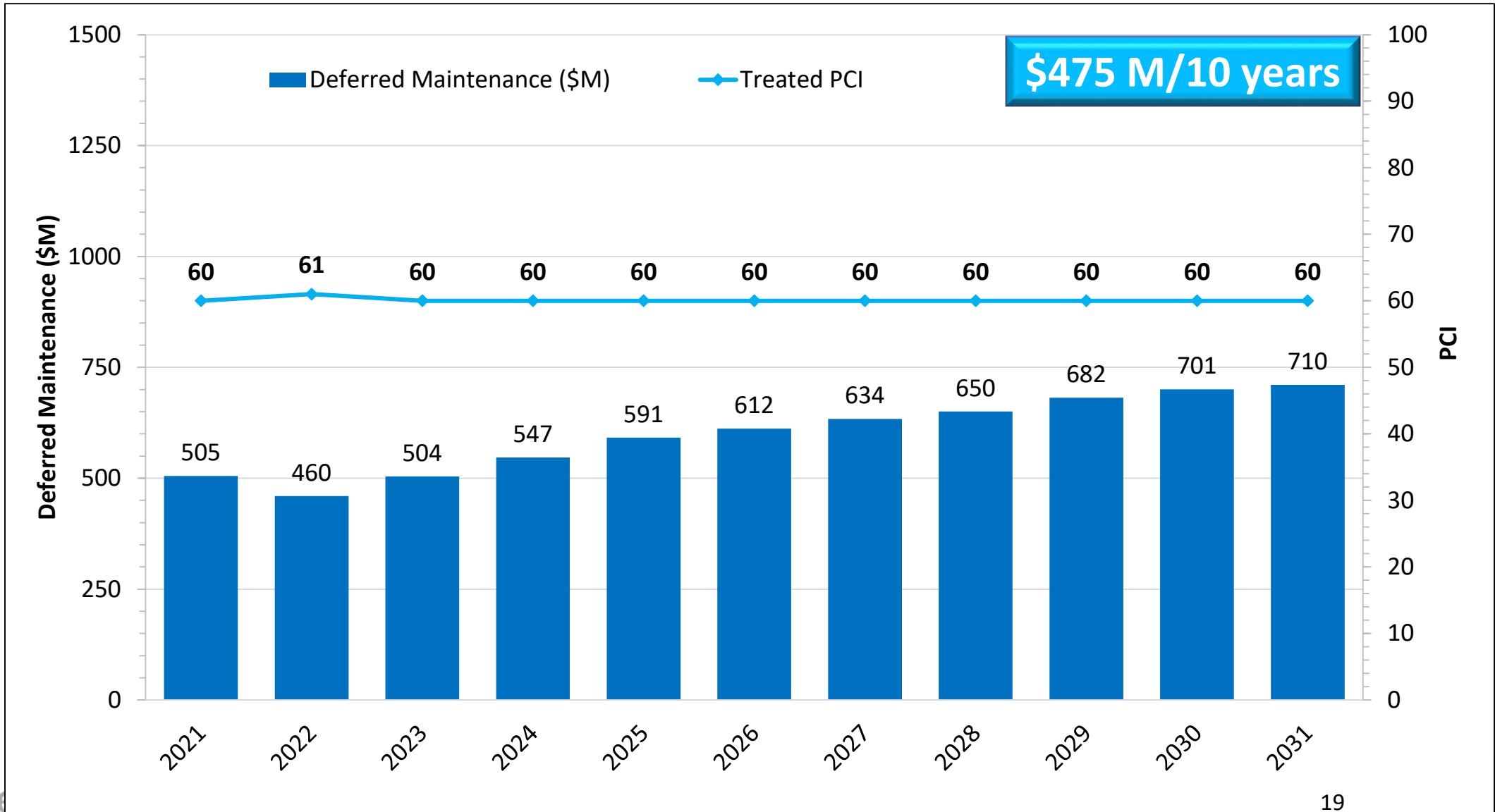
Funding Scenarios

- Scenario 1: City's Existing Funding (\$12 M/year)
- Scenario 2: Maintain PCI at 60
- Scenario 3: Improve PCI by Functional Class
 - Arterials/Collectors PCI → 70
 - Residential PCI → 65

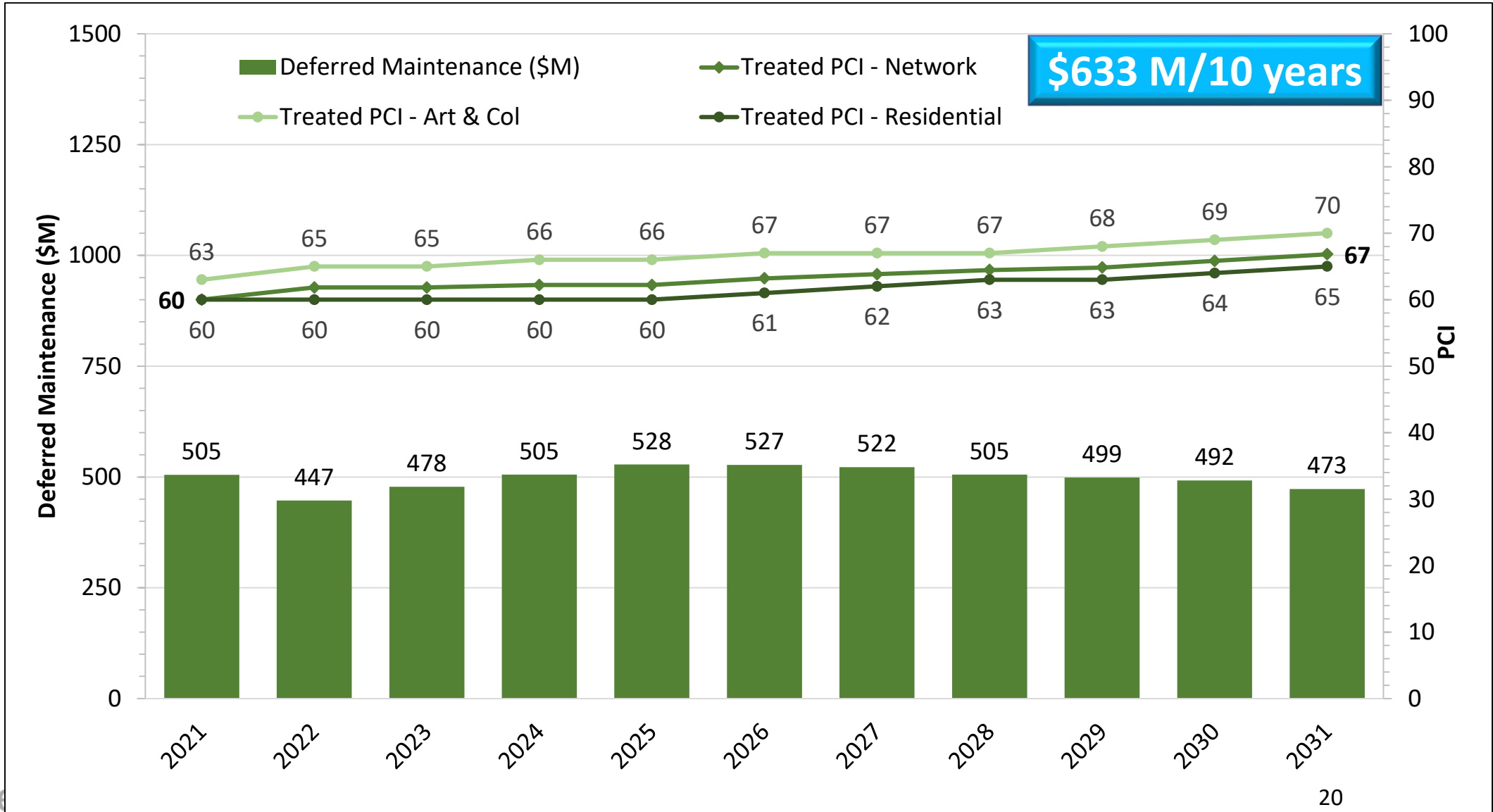
Scenario 1: City's Existing Funding



Scenario 2: Maintain PCI at 60



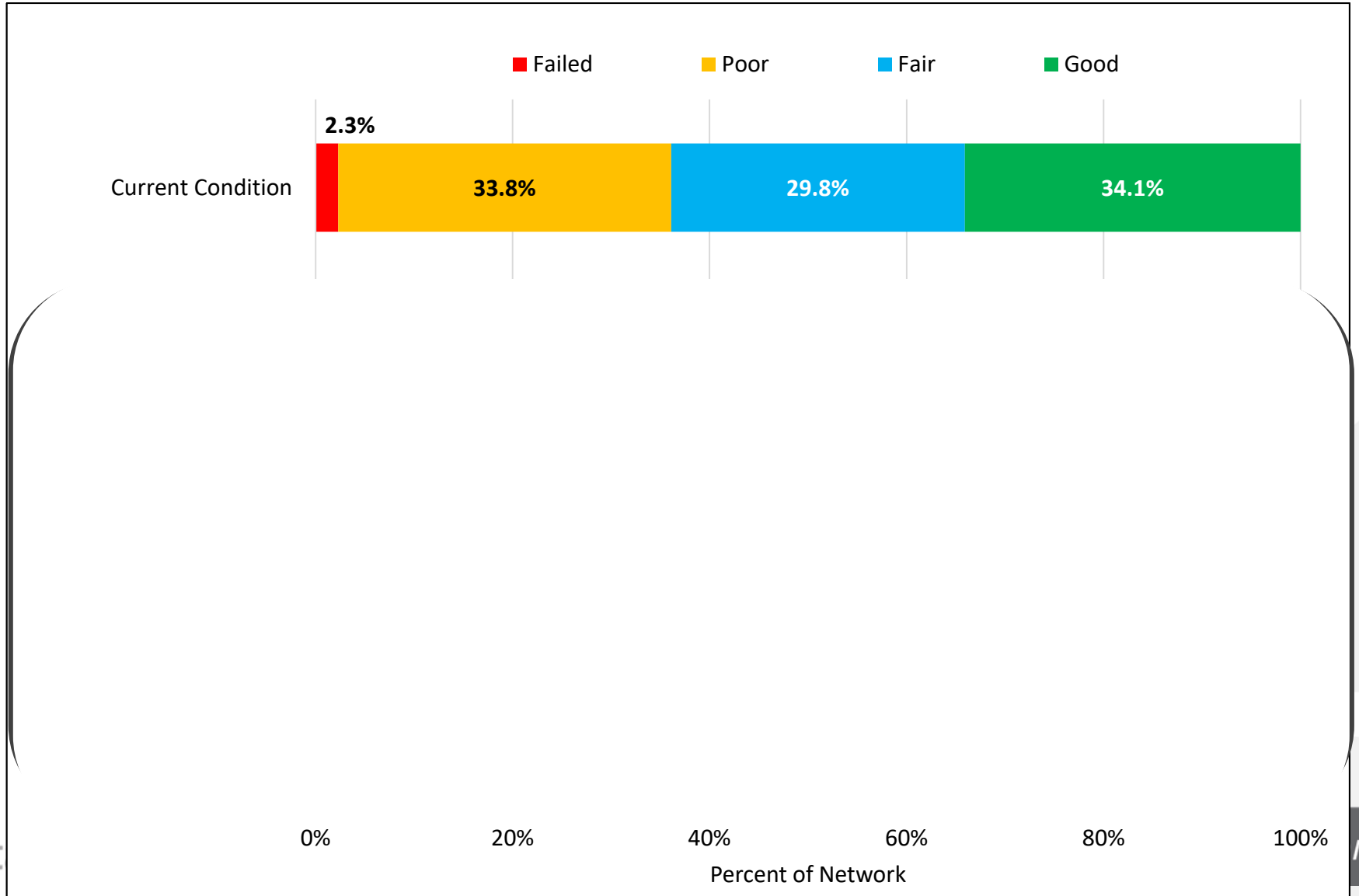
Scenario 3: Improve PCI by Functional Class



Network Condition Breakdown

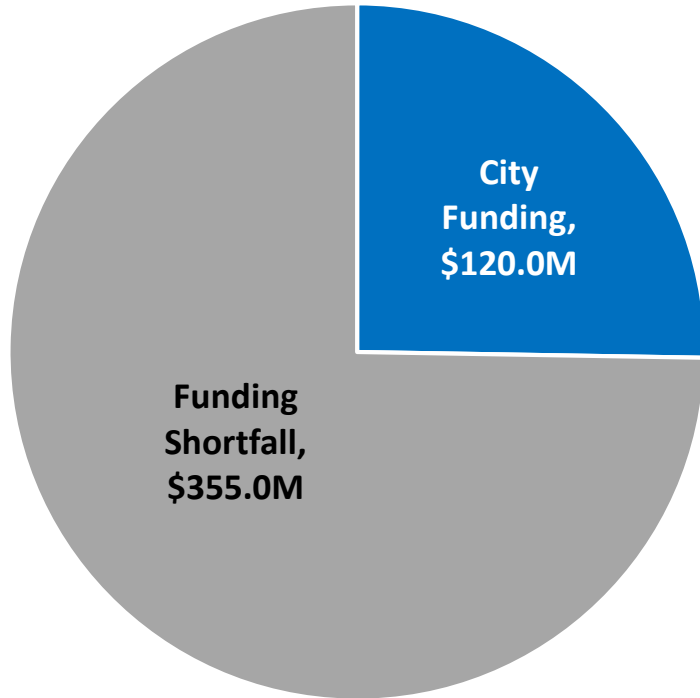
Today
(2021)

Future
2031
Projections

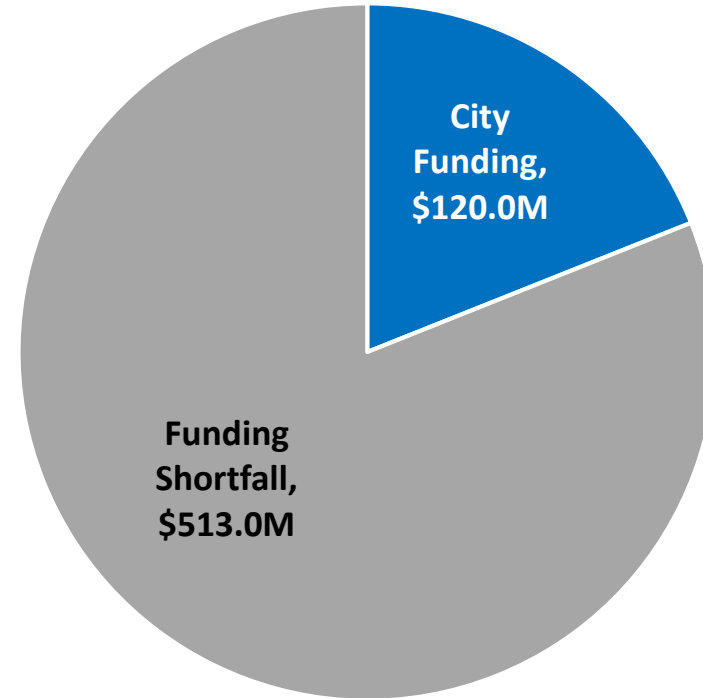


10-Year Funding Shortfall

**Scenario 2:
Maintain PCI at 60**



**Scenario 3:
Improve PCI by Functional Class**



Conclusions

- City has a substantial investment in the street network (\$4.5 Billion)
- Network is in “Fair” condition with a PCI of 60
- Existing budget (\$12 M/year) is insufficient
 - PCI will deteriorate to 43
 - Deferred maintenance will double to \$1,155 Million
 - 56.8% of network will be in “Poor” or “Failed” condition by 2031

Other Considerations

- Pursue Additional Funding Sources
 - Local sales measure, grants, general funds, etc.
- Maintain streets in good condition
 - Preventive maintenance
- Perform Regular Inspections
- Employ Cost Saving Treatments
 - Cold-in-Place Recycling, Full Depth Reclamation
- Community Facility Districts (new subdivisions only)



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