



Street Conditions and Funding Scenarios



Agenda

- About the Pavement Condition Index
- Streets
 - Current funding
 - Future funding scenarios
 - Photos
- Questions



About the Pavement Condition Index (PCI)

- Developed by the U.S. Army Corps of Engineers.
- Used by the Federal Aviation Administration (FAA), the U.S. Department of Defense, and the American Public Works Association (APWA).
- ASTM D6433 standard.



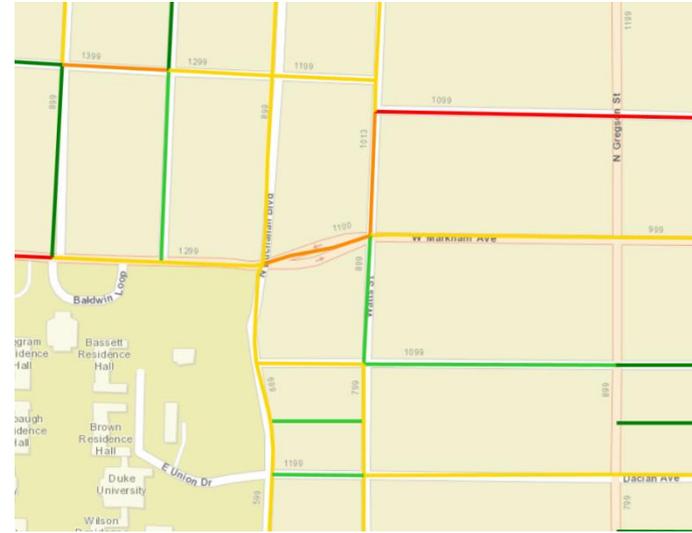
About Transmap

- North Carolina Professional Engineers
- Recent North Carolina Project Experience:
 - City of Durham
 - City of Wilmington
 - Town of Cary
 - City of Raleigh
 - City of Greenville
- 20 PCI Studies and software deployments within the last two years across the country



PCI Process

- Transmap van captured images of streets and sidewalks in 13 feet integrals
- Developed Representative sample areas
- Imagery in sample areas used to assign ratings on a street by street basis





Street Classes Detail

Street Class	Length (Miles)	Length (%)	PCI
Principal Arterials	3.79	0.5%	73
Minor Arterials	13.61	1.9%	70
Collectors	37.76	5.4%	73
Local Roads	643.44	91.9%	77
Alleys	1.75	0.2%	84
Total	700.35	100%	76



Streets – Current Funding

Current and Proposed Budgets:

Budget	FY14	FY15	FY16
Repaving	\$750k	\$1M	\$5M*
Operating	\$1.17M	\$1.19M	TBD

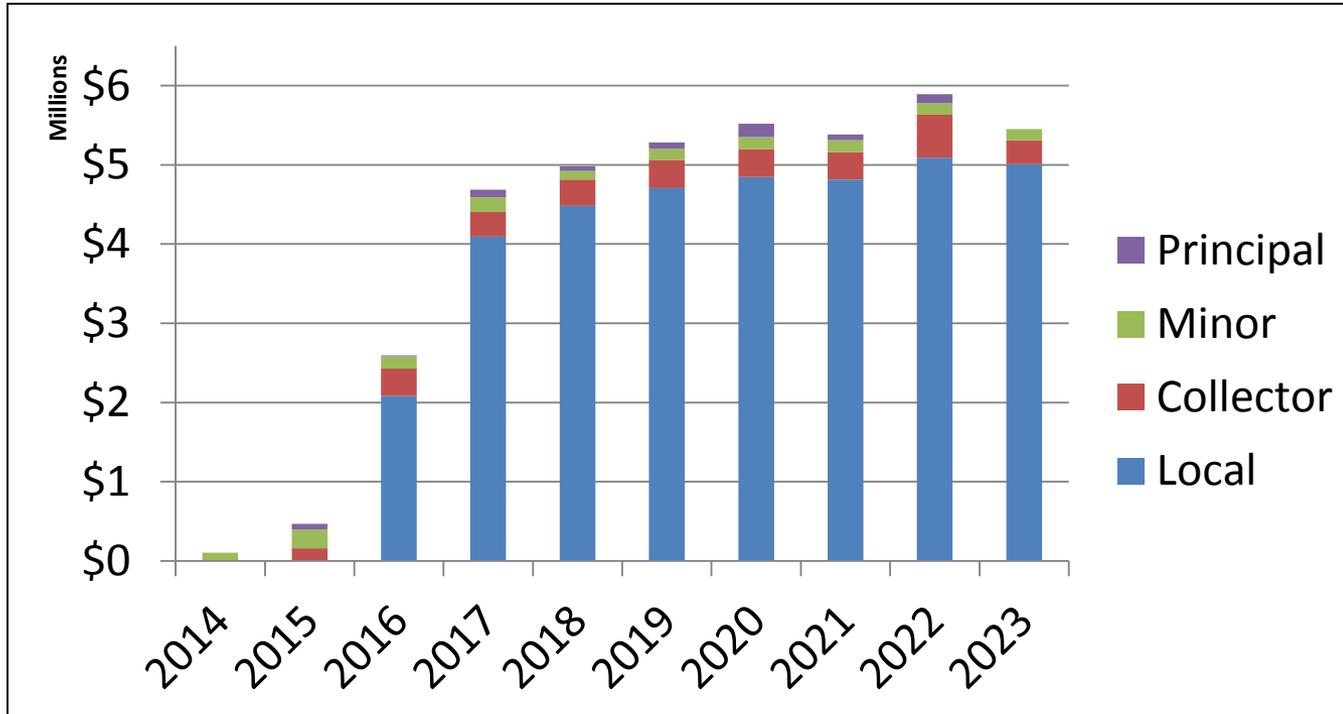
Street Treatment Options

	PCI	Rating	Remaining Life	2013 Centerline miles of Streets in each Category	Pavement Management/Rehabilitation Type of Work	Cost per Lane-Mile	Added Life and Benefit
PRESERVATION TREATMENTS	86-100	Good	15-25 Years	262	Fog Seal, Crack Seal	\$15,000	3-5 Years PCI +5 points
	71-85	Satisfactory	12-20 Years	240	Microsurfacing, Slurry Seal, Crack Seal	\$25,000	5-7 Years PCI +10 points
	51-70	Fair	10-15 Years	143	Cape Seals, Thin Overlays	\$40,000	8+ Years PCI +15 points
PAVING AND RECONSTRUCTION	21-50	Poor	5-10 Years	40	Mill and Repave - Regular Streets	\$65,000	10+ Years PCI 100
				15	Mill and Repave ADA Non-Compliant Streets	\$140,000	10+ Years PCI 100
	0-20	Very Poor	0-5 Years	3	Reconstruction, Full-Depth Reclamation	\$300,000	10+ Years PCI 100



Future Funding – Previous Proposal

- Maintain average PCI of 70 Across Entire Street Network
- Total 10 Year Network Budget = **\$40.4 M**

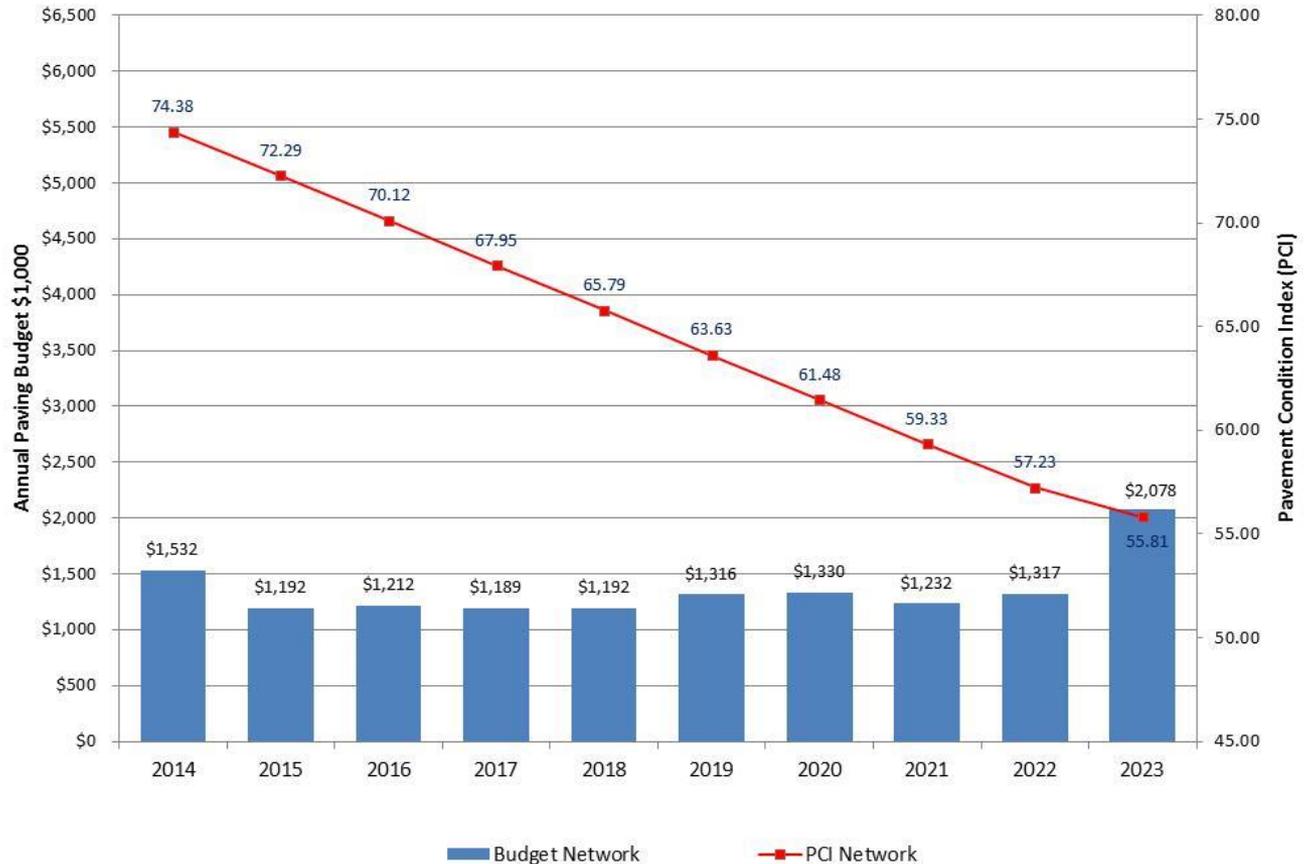


Year	Total Cost
2014	102,560
2015	467,145
2016	2,596,748
2017	4,687,434
2018	4,983,200
2019	5,282,216
2020	5,518,856
2021	5,381,998
2022	5,893,042
2023	5,451,291
Total	\$40,364,490



Future Funding - Scenario A

- Maintain Arterials at PCI 75 - Local Streets at PCI **55**
- \$1M Annual Budget for Local Streets – “Very Poor” to “Poor”
- \$0.2M to \$0.5M Annual Budget for Arterials as needed
- Total 10 Year Network Budget = **\$13.6 M**

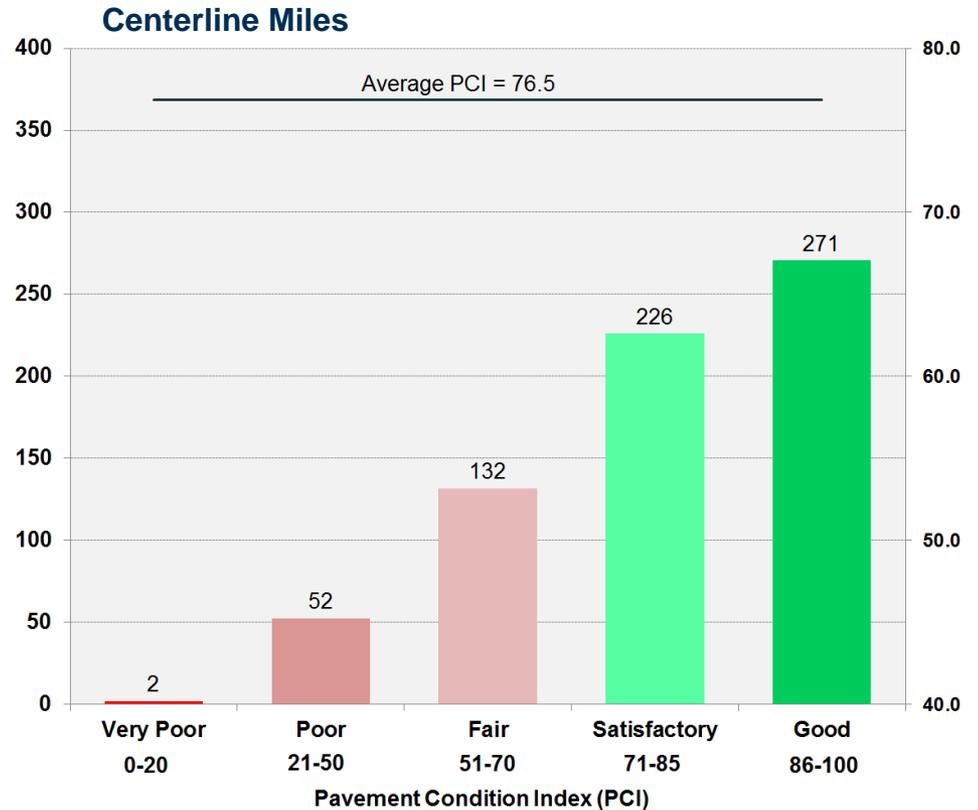


Future Funding - Scenario A

- \$1M Annual Budget for Local Streets – “Very Poor” to “Poor”
- PCI levels off at **55**

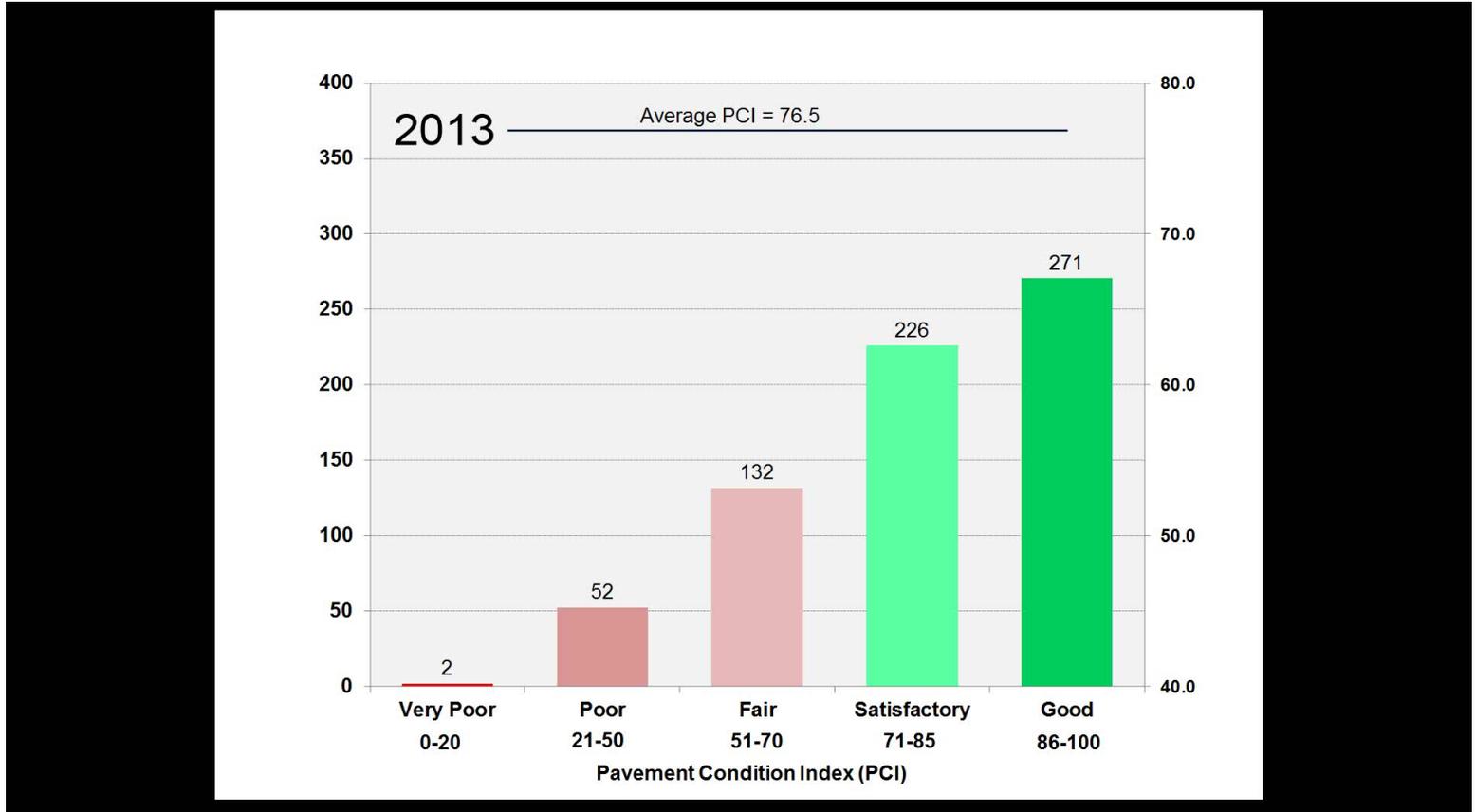


2013



Future Funding - Scenario A

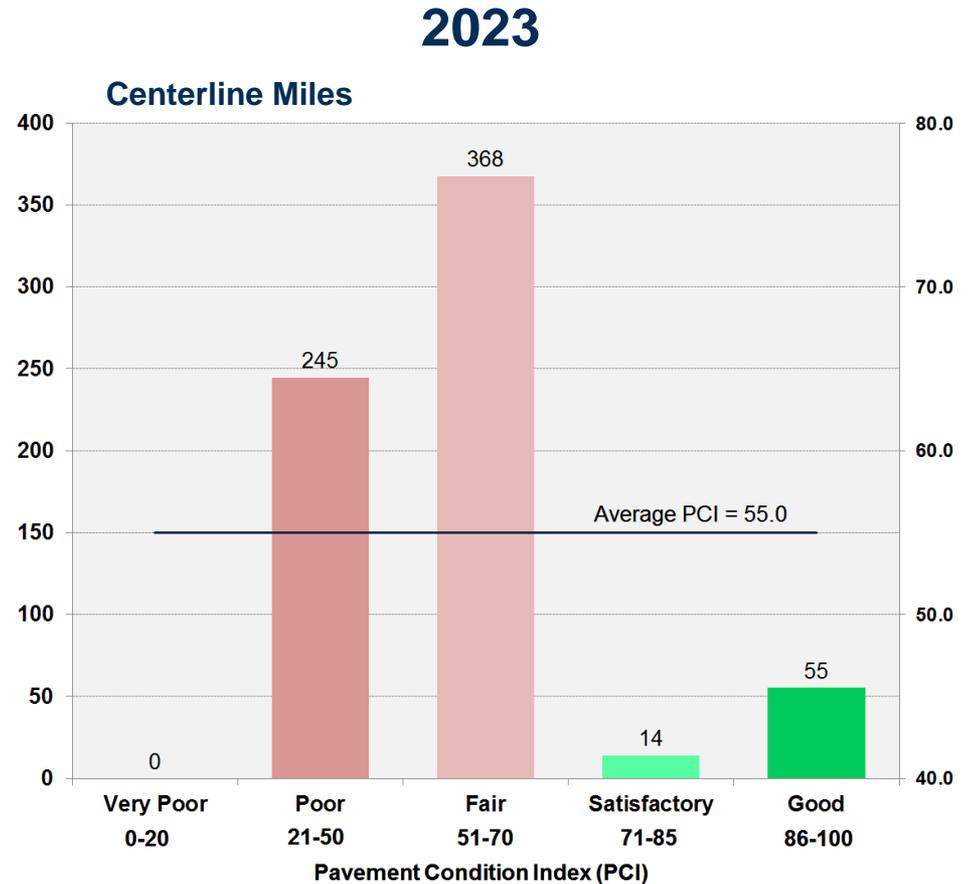
- \$1M Annual Budget for Local Streets – “Very Poor” to “Poor”
- PCI levels off at **55**





Future Funding - Scenario A

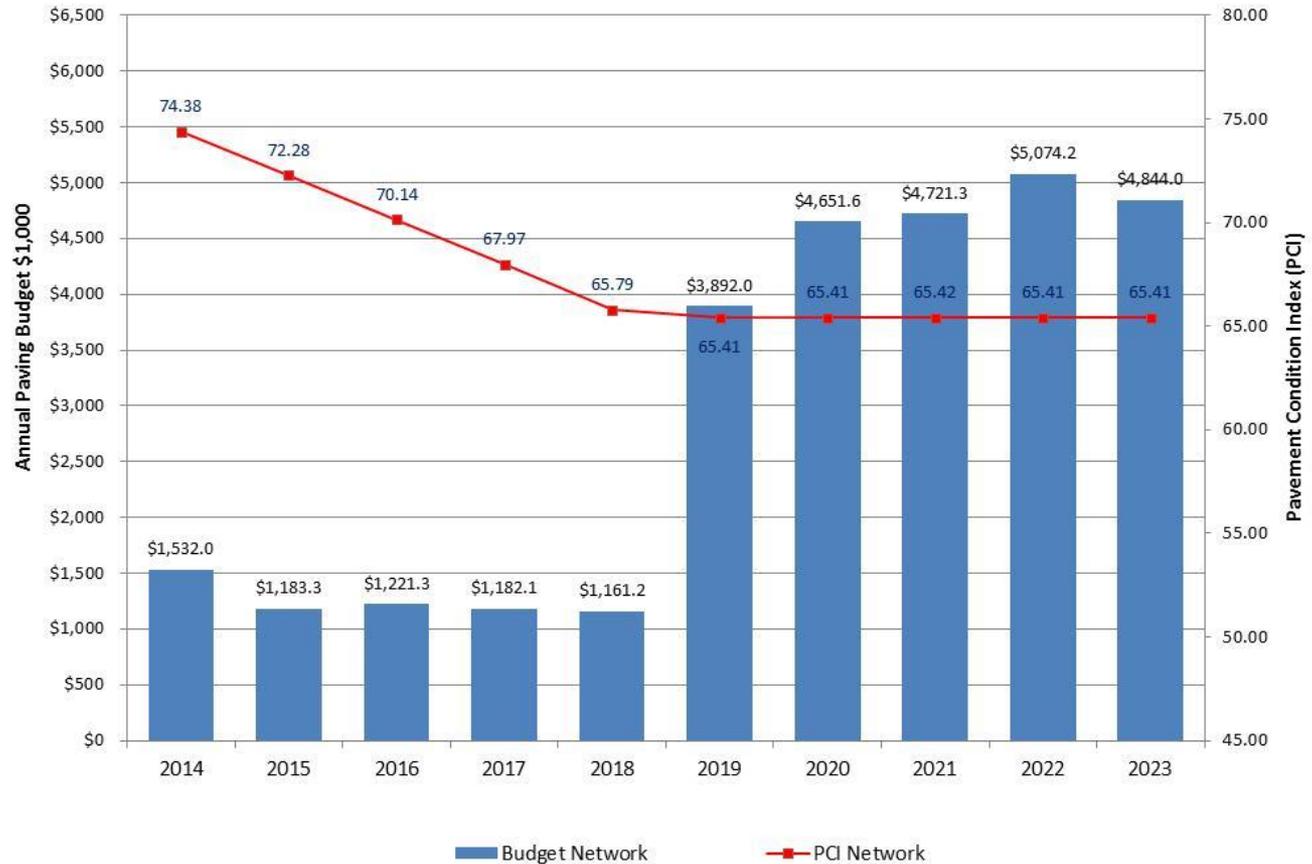
- \$1M Annual Budget for Local Streets – “Very Poor” to “Poor”
- PCI levels off at **55**





Future Funding - Scenario B

- Maintain Arterials at PCI 75 - Local Streets at PCI **65**
- \$1M Annual Budget for Local Streets – “Very Poor” to “Poor”
- \$0.2 – 0.5M Annual Budget for Arterials as Needed
- Total 10 Year Network Budget = **\$29.5 M**

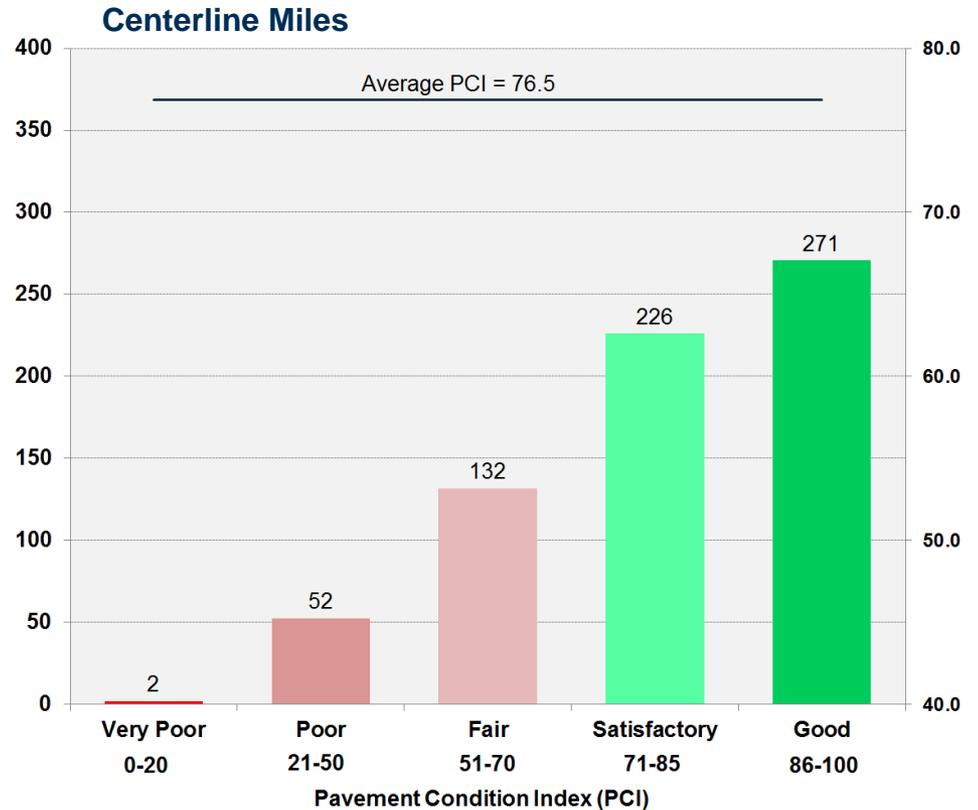


Future Funding - Scenario B

- \$1M Annual Budget for Local Streets – “Very Poor” to “Poor”
- Until PCI levels off at **65** – *Then Increase as Necessary*



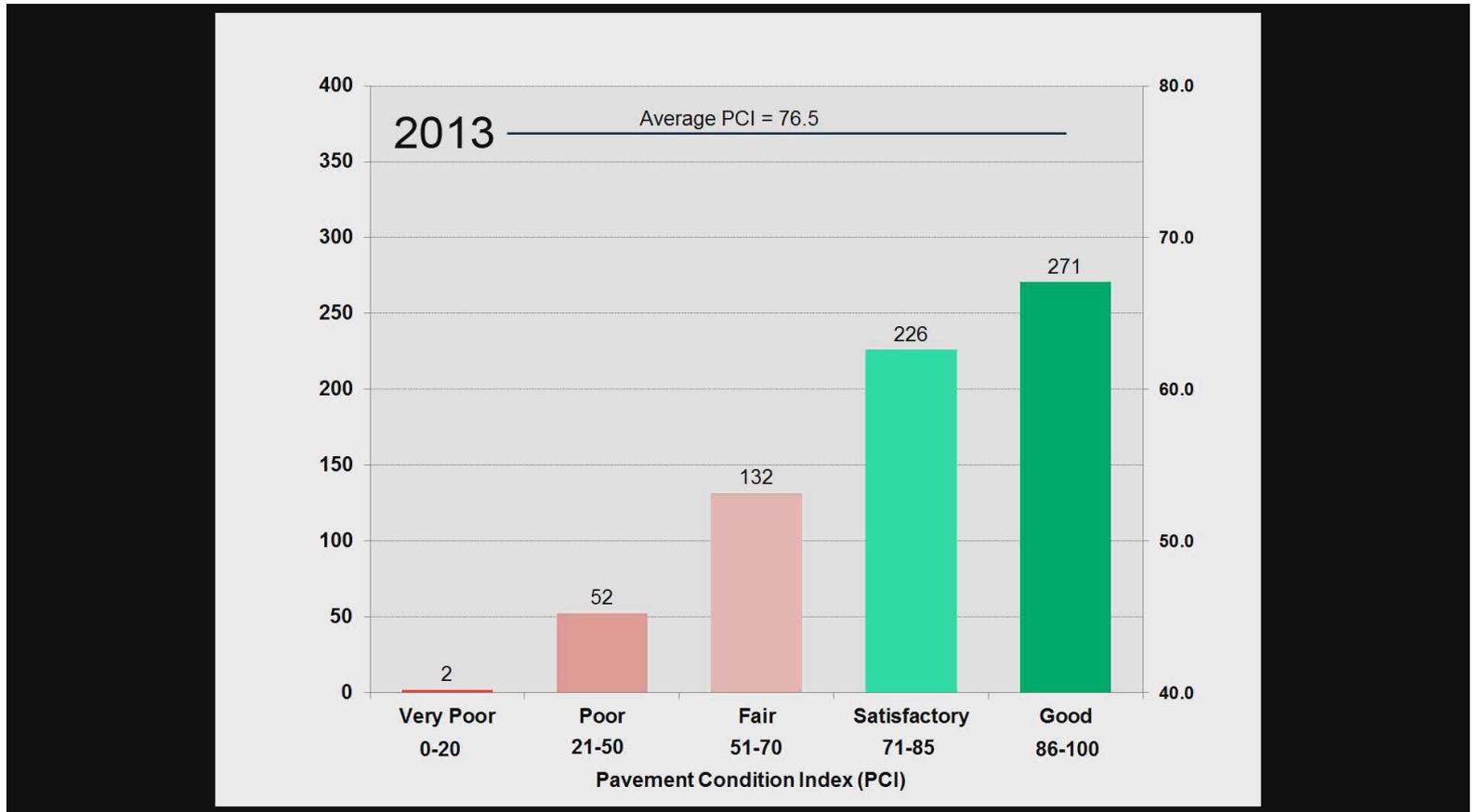
2013





Future Funding - Scenario B

- \$1M Annual Budget for Local Streets – “Very Poor” to “Poor”
- Until PCI levels off at **65** – *Then increase as necessary*

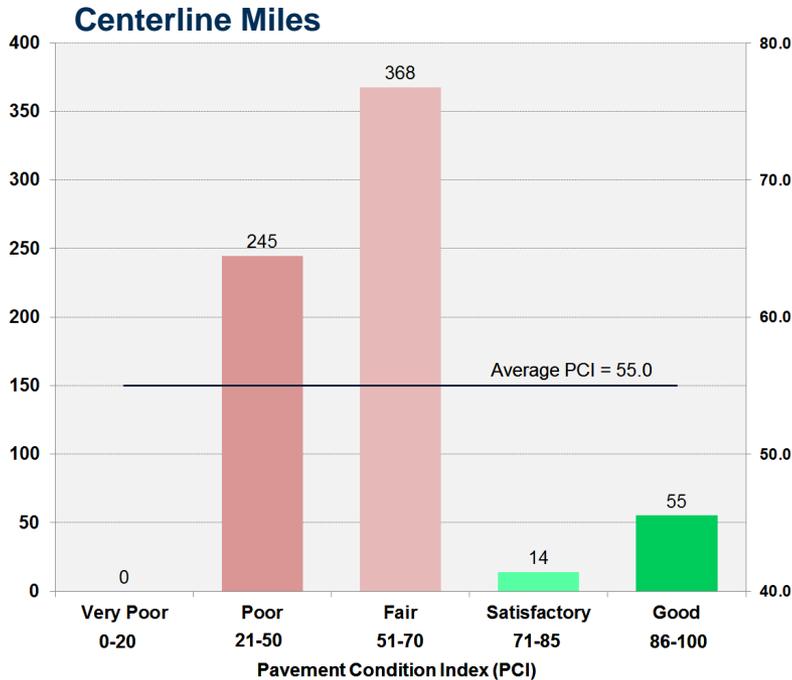




Future Funding - Comparison

- Compare PCI at 2023
- Scenario A – Total 10 Year Network Budget = \$13.6 M
- Scenario B – Total 10 Year Network Budget = \$29.5 M

Scenario A



Scenario B





Street PCI Rating 0-20



Street PCI Rating 21-50





Street PCI Rating 21-50





Street PCI Rating 51-65



Street PCI Rating 66-75





Street PCI Rating 66-75





Street PCI Rating 76-85





Street PCI Rating 86-100





Questions?

- What average PCI rating does the City want to achieve?
 - Is an average PCI rating of 70 acceptable? 65?
- Which City streets should receive a higher level of service – Arterials or local residential streets?
- Does the Council have an idea as to what amount of funding may be dedicated to City street resurfacing on an annual basis?