

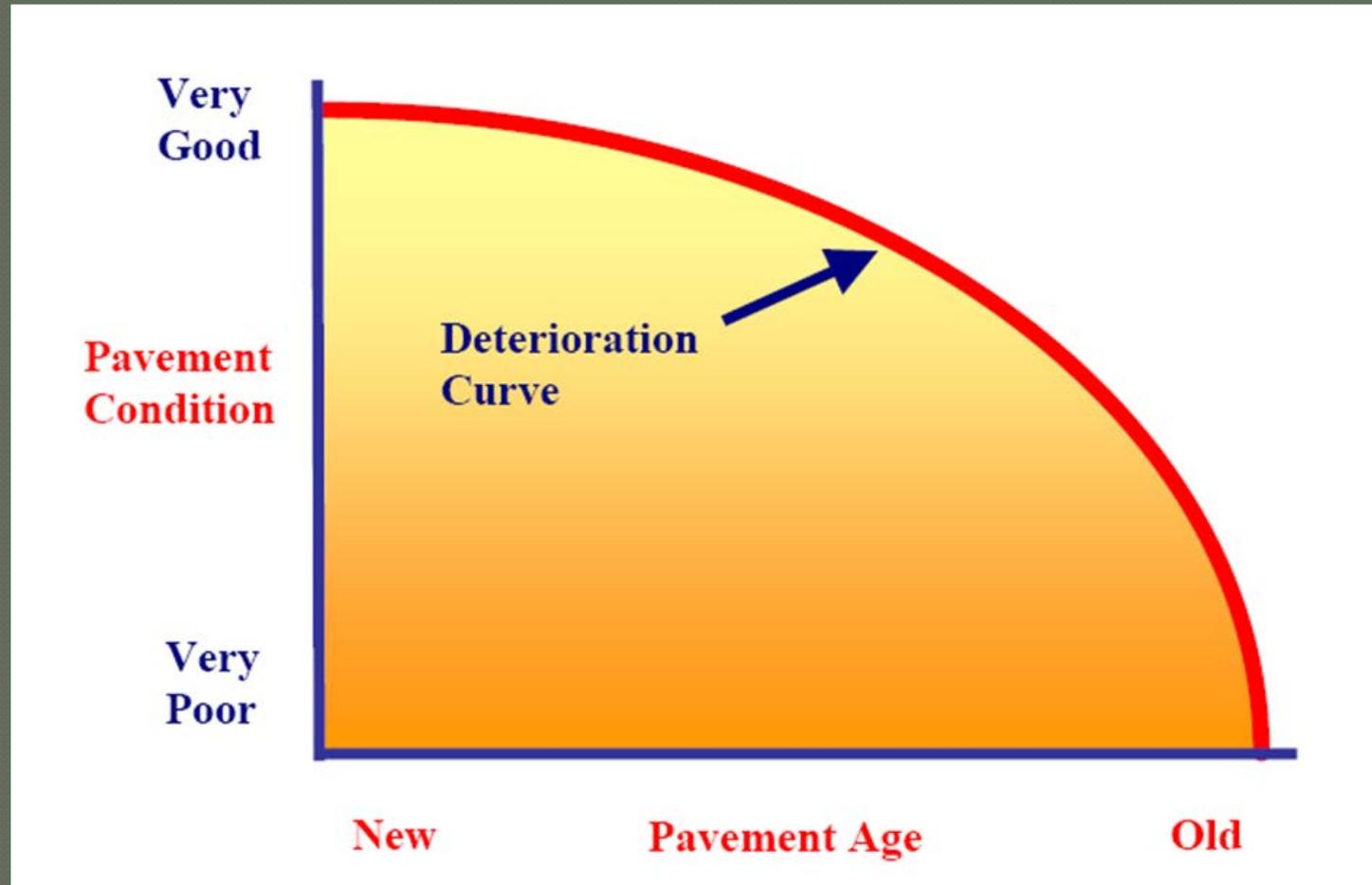
Pavement Management – State of Albany's Streets

City Council Work Session
February 6, 2017

Discussion Outline

- ◉ Pavement Management Review
- ◉ State of Albany's Roads
- ◉ Funding Projections
- ◉ Next Steps

How Pavements Fail



From the National Center for Pavement Preservation

Pavement Condition Index (PCI)

| | Standard PCI™ Rating Scale | Suggested Colors |
|-----|-------------------------------|---------------------|
| 100 | Good | Dark Green |
| 85 | Satisfactory | Light Green |
| 70 | Fair | Yellow |
| 55 | Poor | Light Red |
| 40 | Very Poor | Medium Red |
| 25 | Serious | Dark Red |
| 10 | Failed | Dark Grey |
| 0 | | |

FIG. 1 Pavement Condition Index (PCI), Rating Scale, and Suggested Colors

City of Albany Streets

Good Condition – PCI = 85 to 100
[N. Albany Road near bridge – PCI = 96]



Fair Condition – PCI = 55 to 70
[34th Ave. near Columbus – PCI = 64]



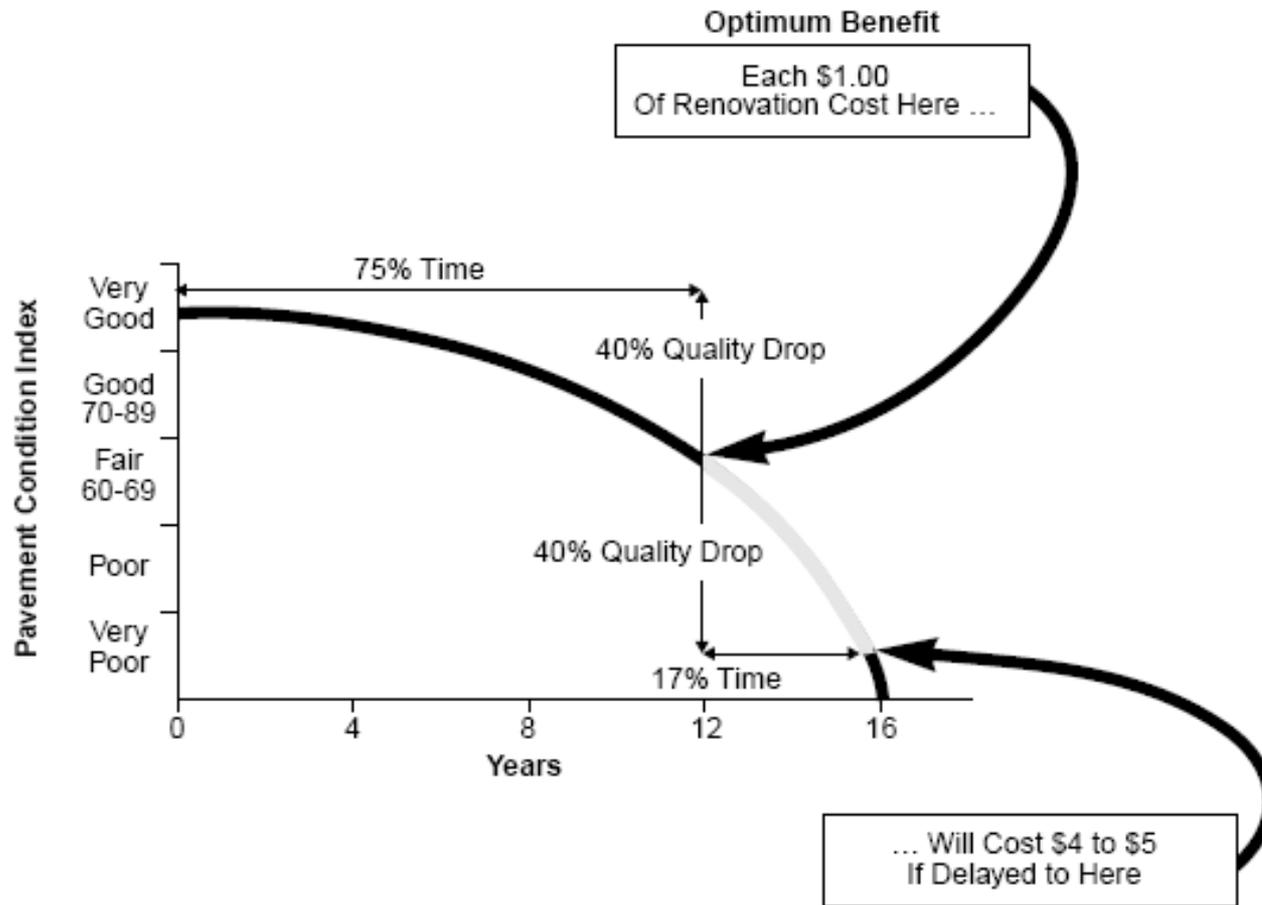
Very Poor Condition – PCI = 25 to 40
[Hill Street, 20th-24th Ave. – PCI = 33]



Failed Condition Streets – PCI < 10
[Oak Street at school – PCI = 5]

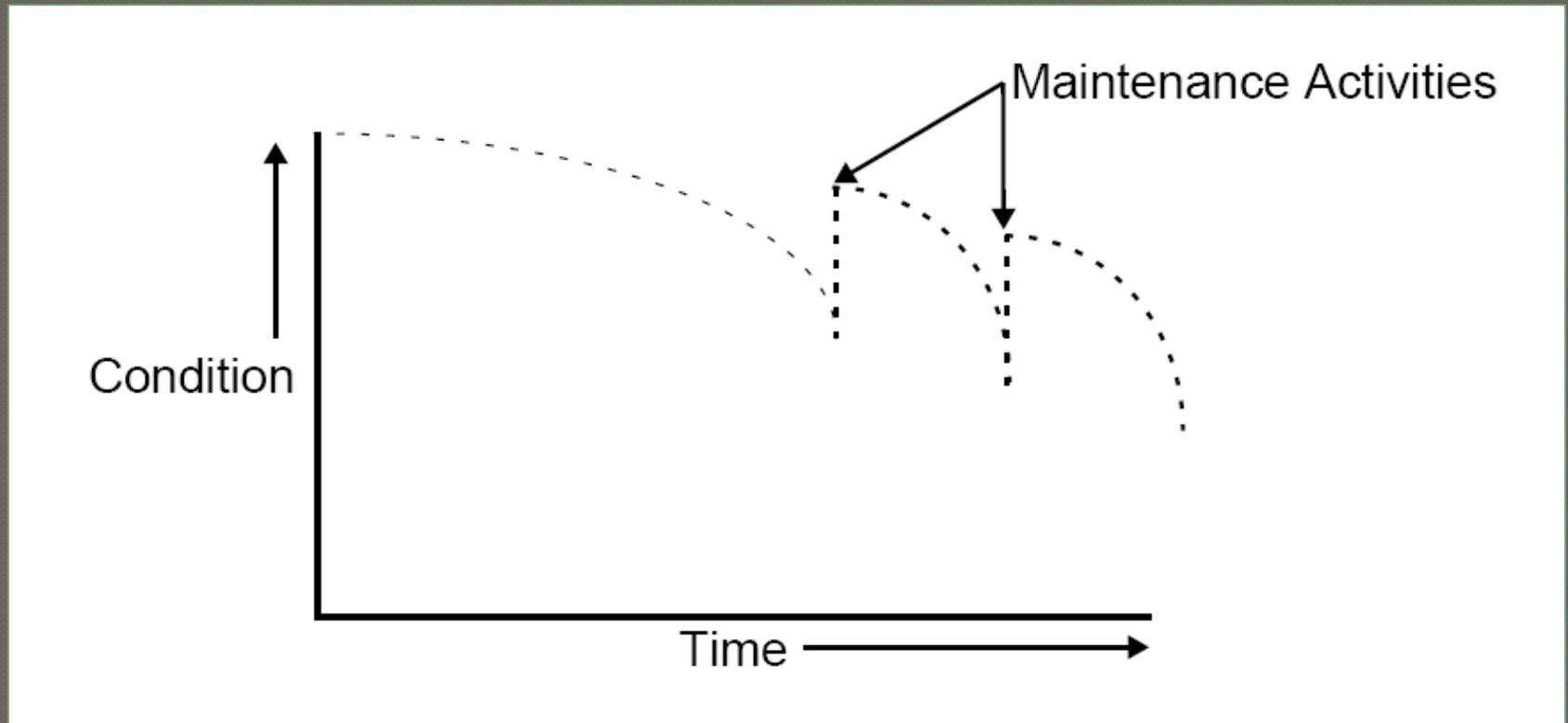


Pavement Renovation Economics



From the Local Agency Pavement Management Application Guide
Published by the Northwest Technology Transfer Center

Optimized Investment Strategy



From the Northwest Technology Transfer Center

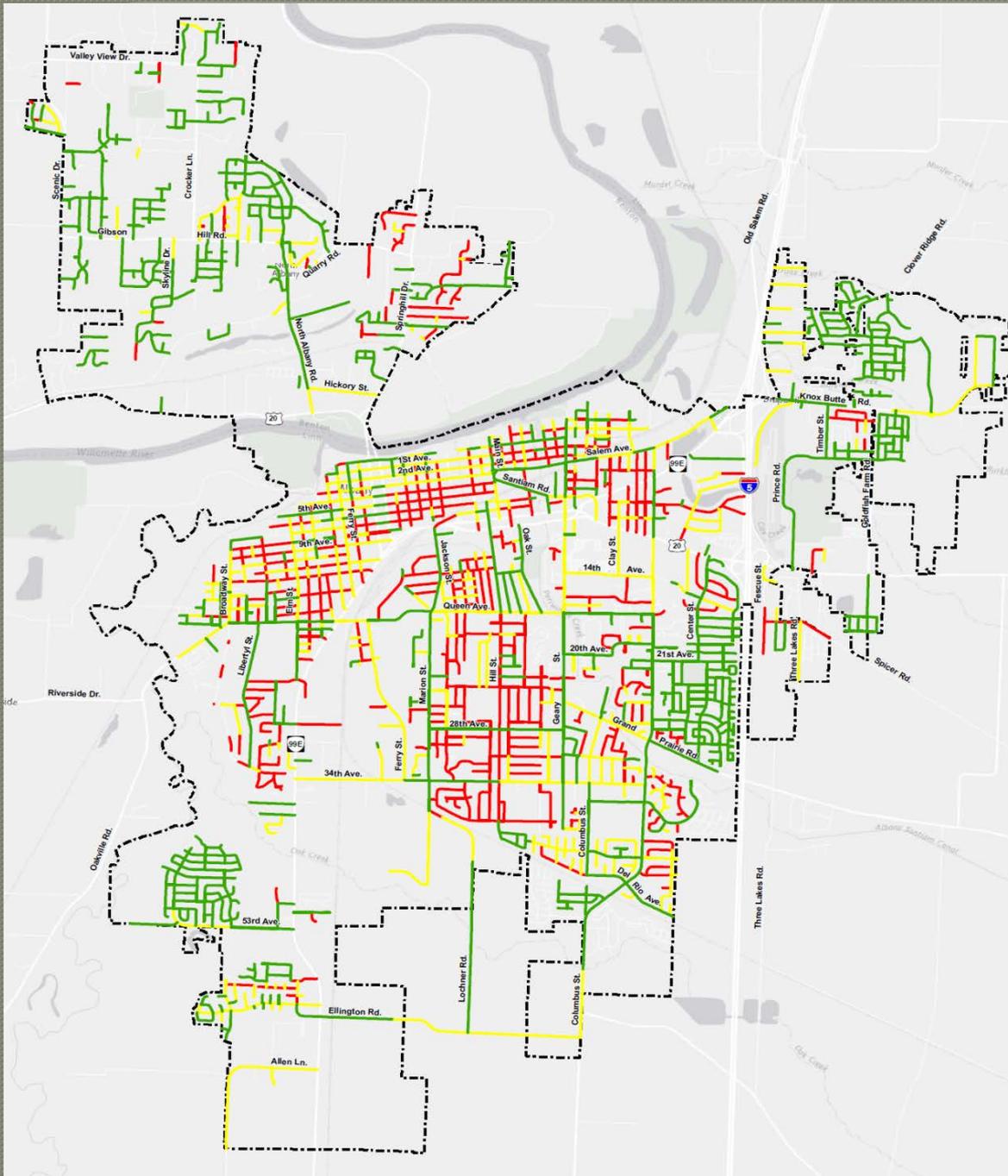
“Keeping the Good Pavements Good”

Pavement Conditions

Pavement Condition Index (PCI)

-  Poor
-  Fair
-  Satisfactory

City Maintained
Roads

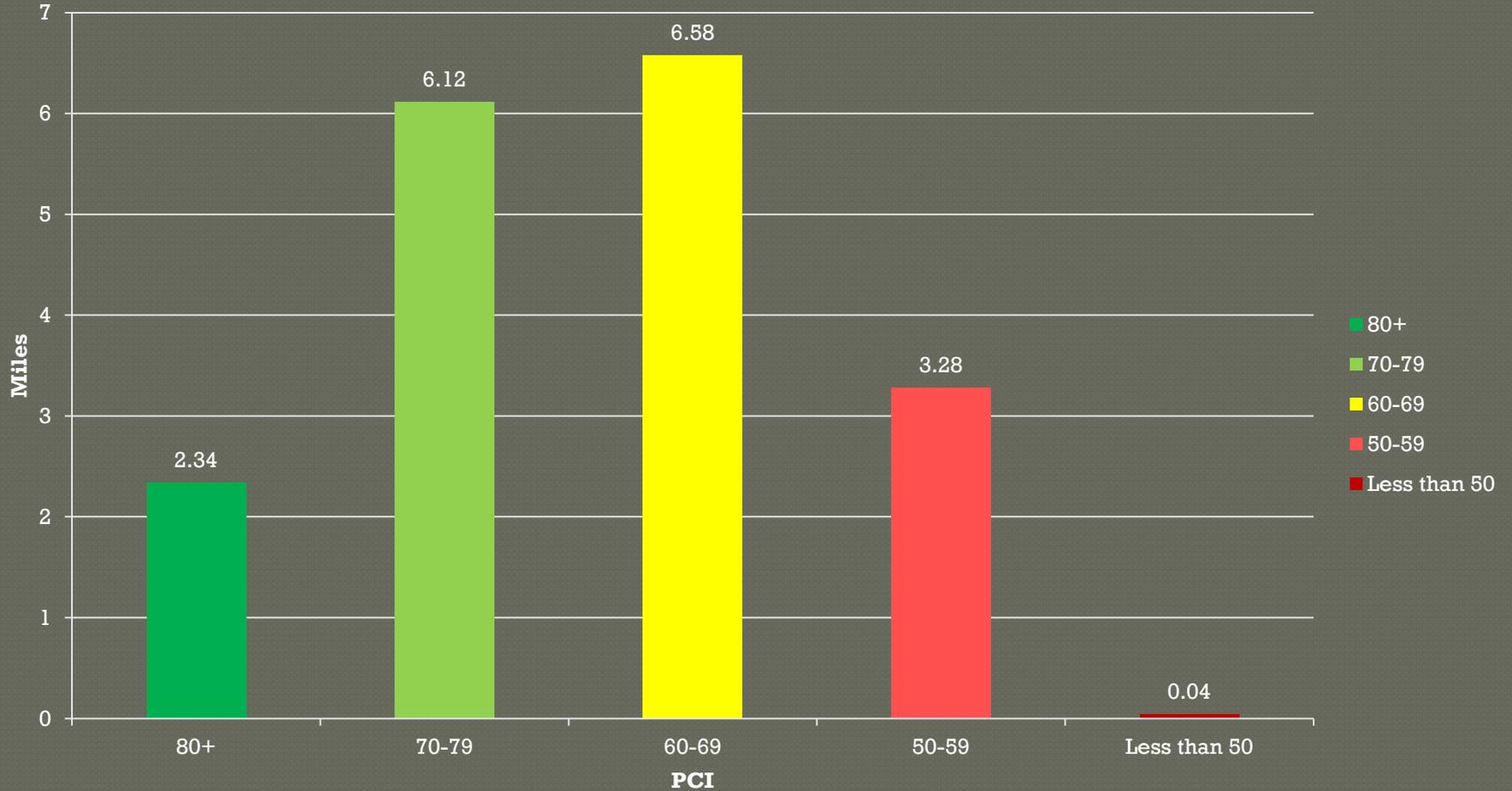


Current Condition

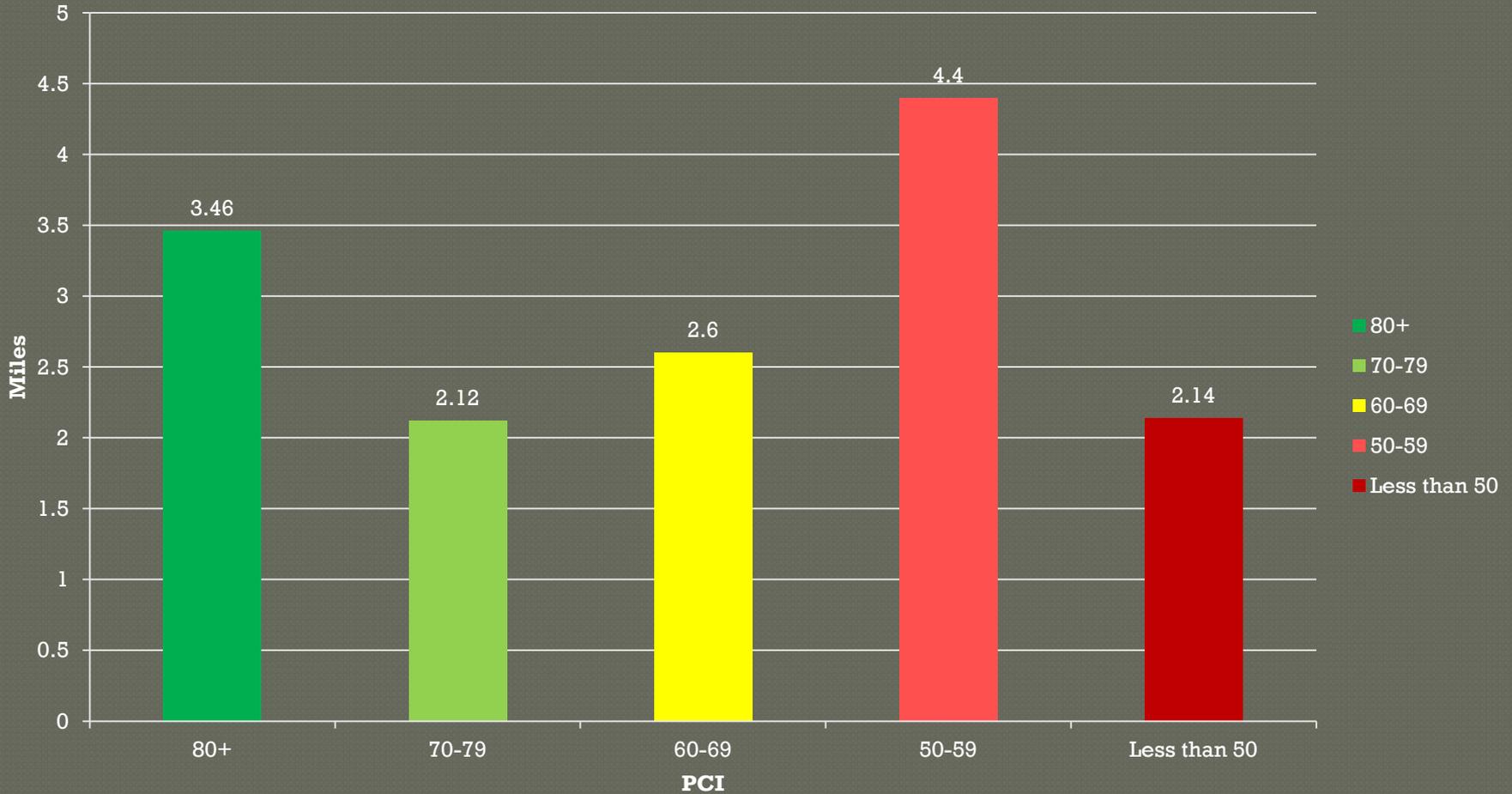
Condition Assessment Results

| PCI Break-out | Arterial | | Collector | | Local | | Total Miles |
|-------------------------------|----------|-------|-----------|-------|--------|-------|-------------|
| | Miles | % | Miles | % | Miles | % | |
| System Average: 60 | 18.36 | 100 | 14.72 | 100 | 153.63 | 100 | 186.71 |
| 80+ | 2.34 | 12.7% | 3.46 | 23.5% | 38.85 | 25.3% | 44.65 |
| 70-79 | 6.12 | 33.3% | 2.12 | 14.4% | 29.30 | 19.1% | 37.54 |
| 60-69 | 6.58 | 35.8% | 2.60 | 17.7% | 14.77 | 9.6% | 23.95 |
| 50-59 | 3.28 | 17.9% | 4.40 | 29.9% | 15.50 | 10.1% | 23.18 |
| Less than 50 | 0.04 | 0.2% | 2.14 | 14.5% | 55.21 | 35.9% | 57.39 |

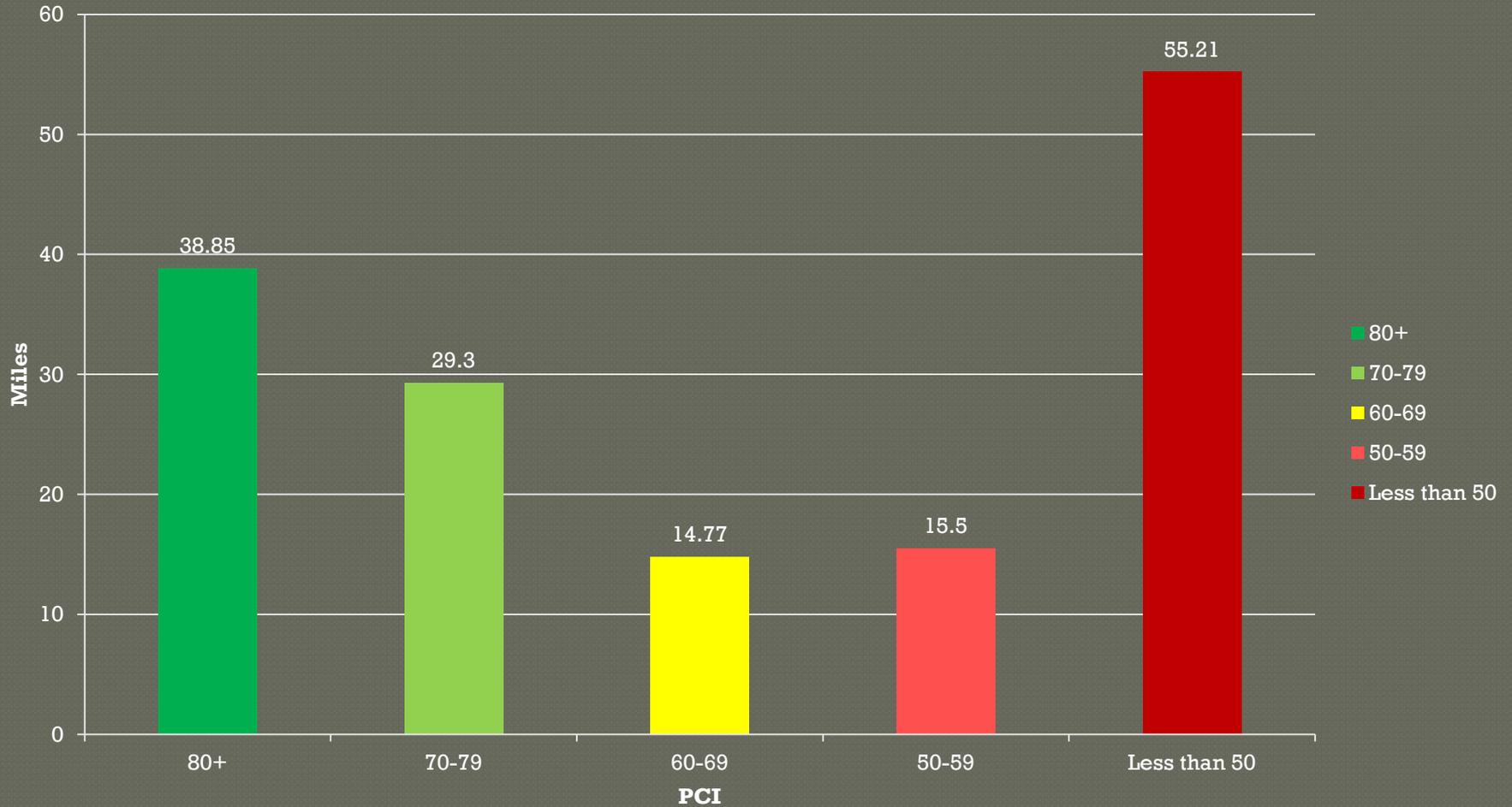
Current Condition - Arterials



Current Condition - Collectors



Current Condition - Locals



Current Funding

- Approximately \$1.6M
 - STP Funds Through MPO (arterial and collector)
 - ~\$450K
 - Water and Sewer ILFF
 - SDC Reimbursement Fees

PCI Projection: Current Funding

Projected PCI with No Additional Funding

| | Existing | +10 yrs | +20 yrs | +30 yrs |
|-----------|----------|---------|---------|---------|
| Arterial | 70 | 51 | 29 | 26 |
| Collector | 63 | 47 | 33 | 27 |
| Local | 58 | 45 | 33 | 24 |

Required Funding

Required Annual Investment (in \$Millions) to Achieve PCI Targets

| PCI Target | Arterial | | | Collector | | | Local | | |
|----------------------|----------|--------|--------|-----------|--------|--------|--------|--------|--------|
| | 10 yrs | 20 yrs | 30 yrs | 10 yrs | 20 yrs | 30 yrs | 10 yrs | 20 yrs | 30 yrs |
| 60 (Fair)* | \$3.2 | \$5.9 | \$4.7 | \$2.8 | \$2.5 | \$2.3 | \$5.5 | \$5.0 | \$5.7 |
| 70 (Satisfactory) | \$2.8 | \$4.5 | \$3.9 | \$3.4 | \$2.8 | \$2.8 | \$8.2 | \$6.3 | \$6.7 |
| 80 (Good) | \$4.2 | \$4.6 | \$5.9 | \$4.8 | \$3.4 | \$3.2 | \$11.8 | \$7.8 | \$7.7 |

*Albany's existing system wide average

Required Funding

Required Annual Investment (in \$Millions) to Achieve System Wide PCI

| PCI Target | System Wide | | |
|-------------------|-------------|--------|--------|
| | 10 yrs | 20 yrs | 30 yrs |
| 60 (Fair)* | \$11.5 | \$13.4 | \$12.7 |
| 70 (Satisfactory) | \$14.4 | \$13.6 | \$13.4 |
| 80 (Good) | \$20.8 | \$15.8 | \$16.8 |

*Albany's existing system wide average

Funding Gap

Gap = ~\$10M to \$19M per year*

*Depends on desired Level of Service (LOS) and amount of time to achieve

Next Steps

- **March 6 Work Session**
 - **Level of Service Objectives**
 - **Funding Alternatives**

Questions?

Pavement Management Review

- ① Asset Management
- ① Pavement Deterioration Curve
- ① Costs of Pavement Renewal Treatments
- ① Best (Optimized) Investment Strategy