



Public Works Department

Pavement Management

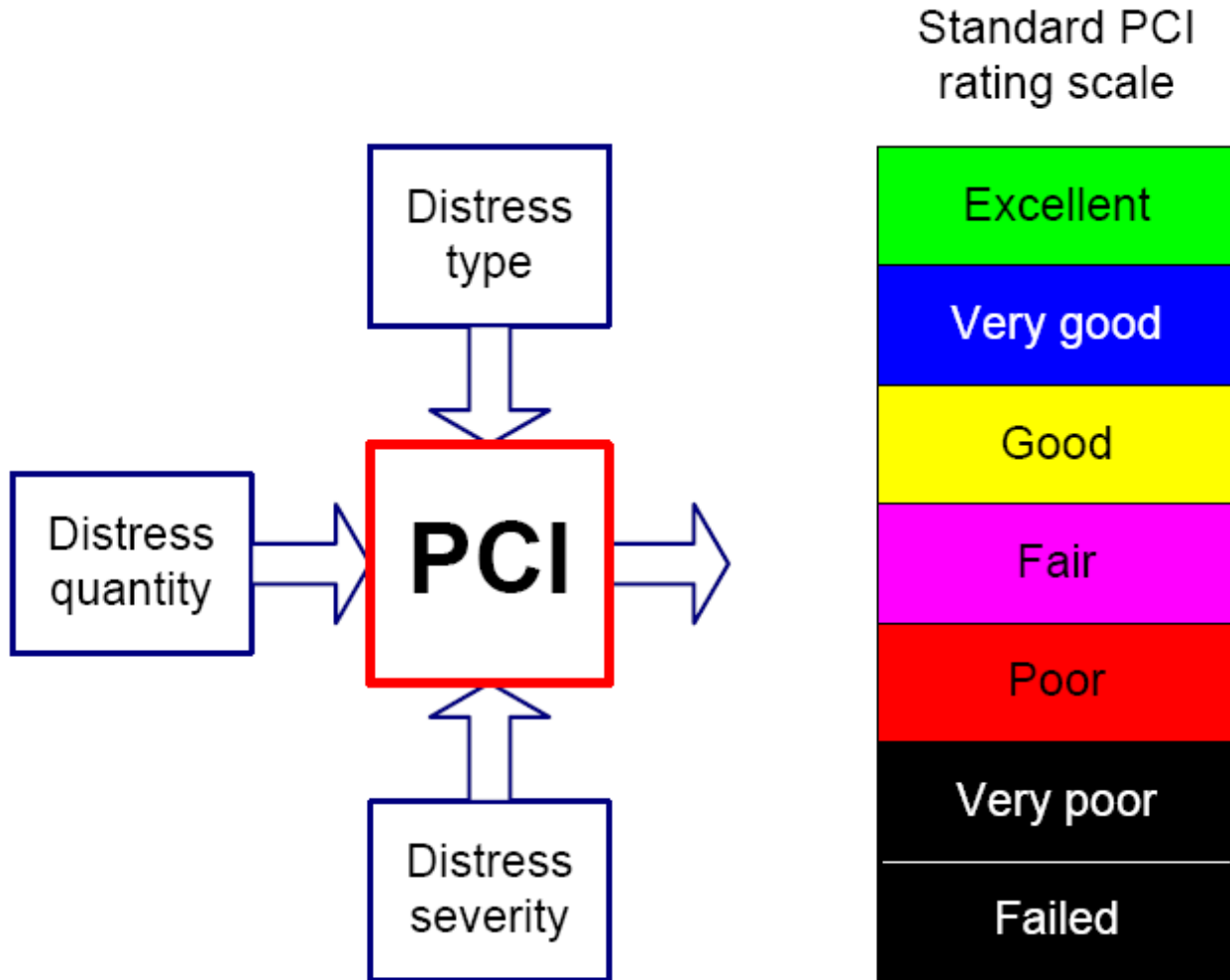
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Pavement Management

- Pavement Condition Analysis
- Pavement Management Approach
- GMP for Contract Work

Pavement Condition



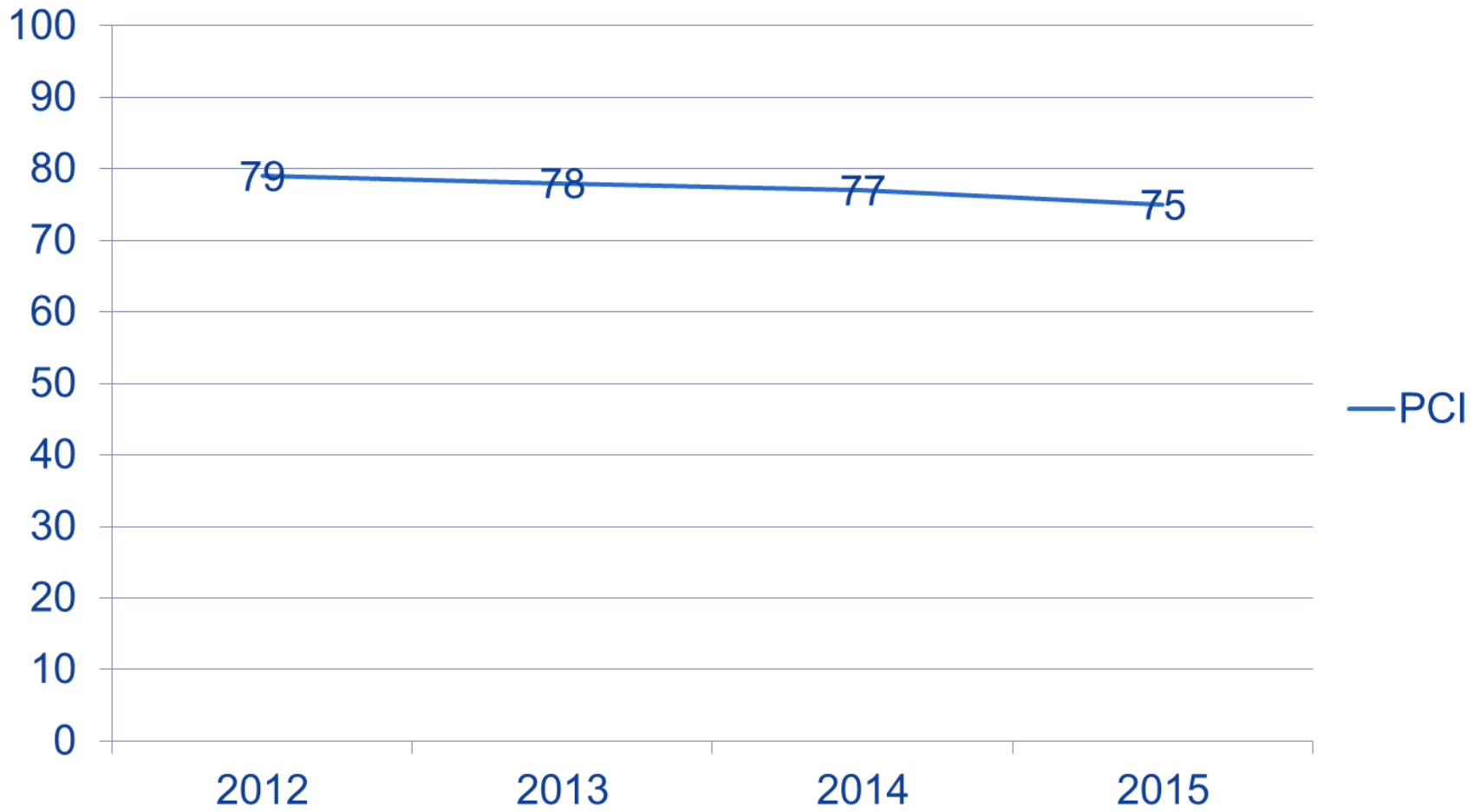
Pavement Condition by PCI

| Condition Category | Low PCI Value | High PCI Value |
|--------------------|---------------|----------------|
| Excellent | 92 | 100 |
| Very Good | 82 | 91 |
| Good | 68 | 81 |
| Fair | 50 | 67 |
| Poor | 35 | 49 |
| Very Poor | 20 | 34 |
| Failed | 0 | 19 |

- Newly constructed road would have a PCI of 100, while a failed road would have a PCI of 20 or less.
- Critical pavements classified as those pavements with a PCI of 50 or less.

Weighted Average PCI

PCI



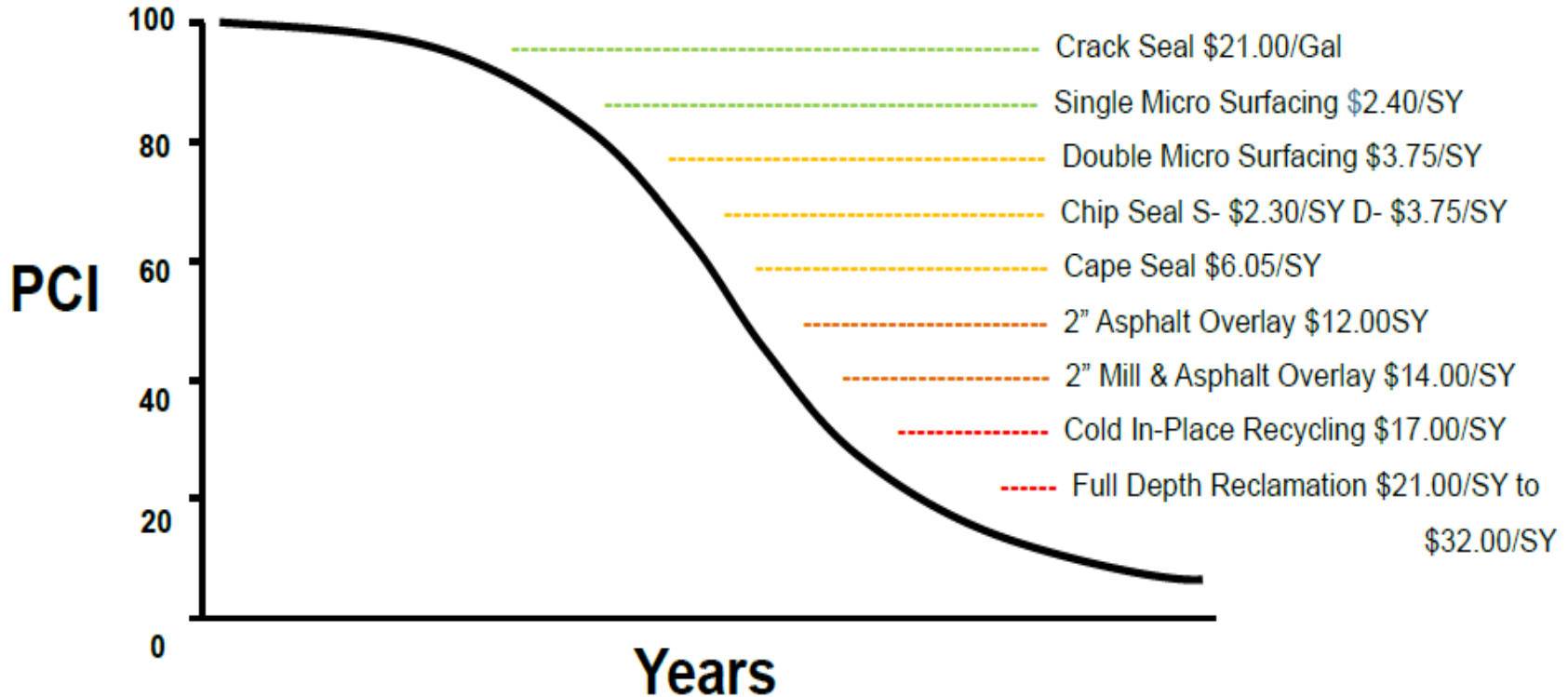
Pavement Management

- Retained services of Pavement Management Consultant
 - JG3 Pavement Management Simplified
- Developed a 3 year Pavement Management Plan

Pavement Management

- Traditional strategy – ‘worst first’ – major mill/resurface and reconstruction focus
 - Good pavements will deteriorate and will end up with more failing streets
- Pavement Preservation – combination of different treatment strategies to achieve a single goal of extending maintenance dollars and reducing user delay costs.

Cost of Maintenance

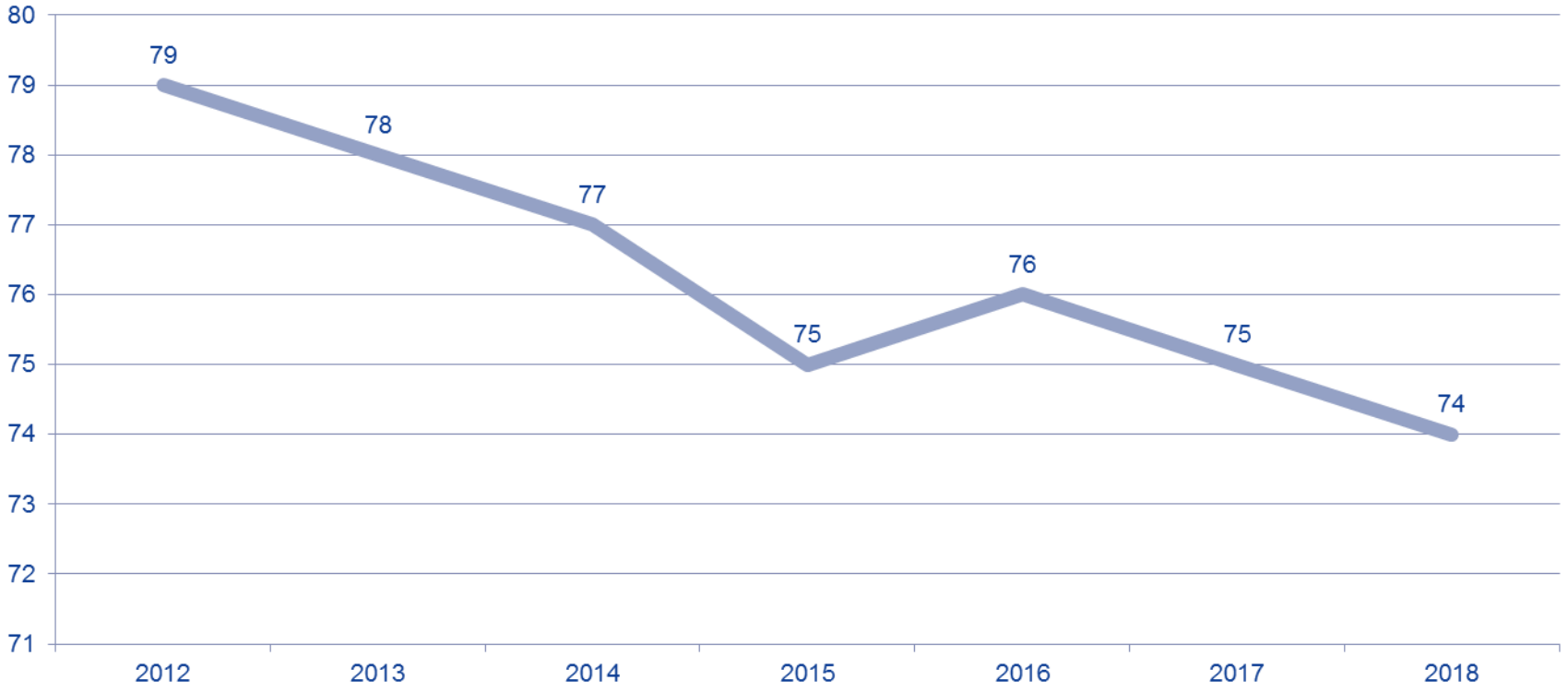


* All pricing is estimated and varies on size and location of the project.

* CIR & FDR would need to be surfaced with an Asphalt Overlay which is not figured into the price of either.

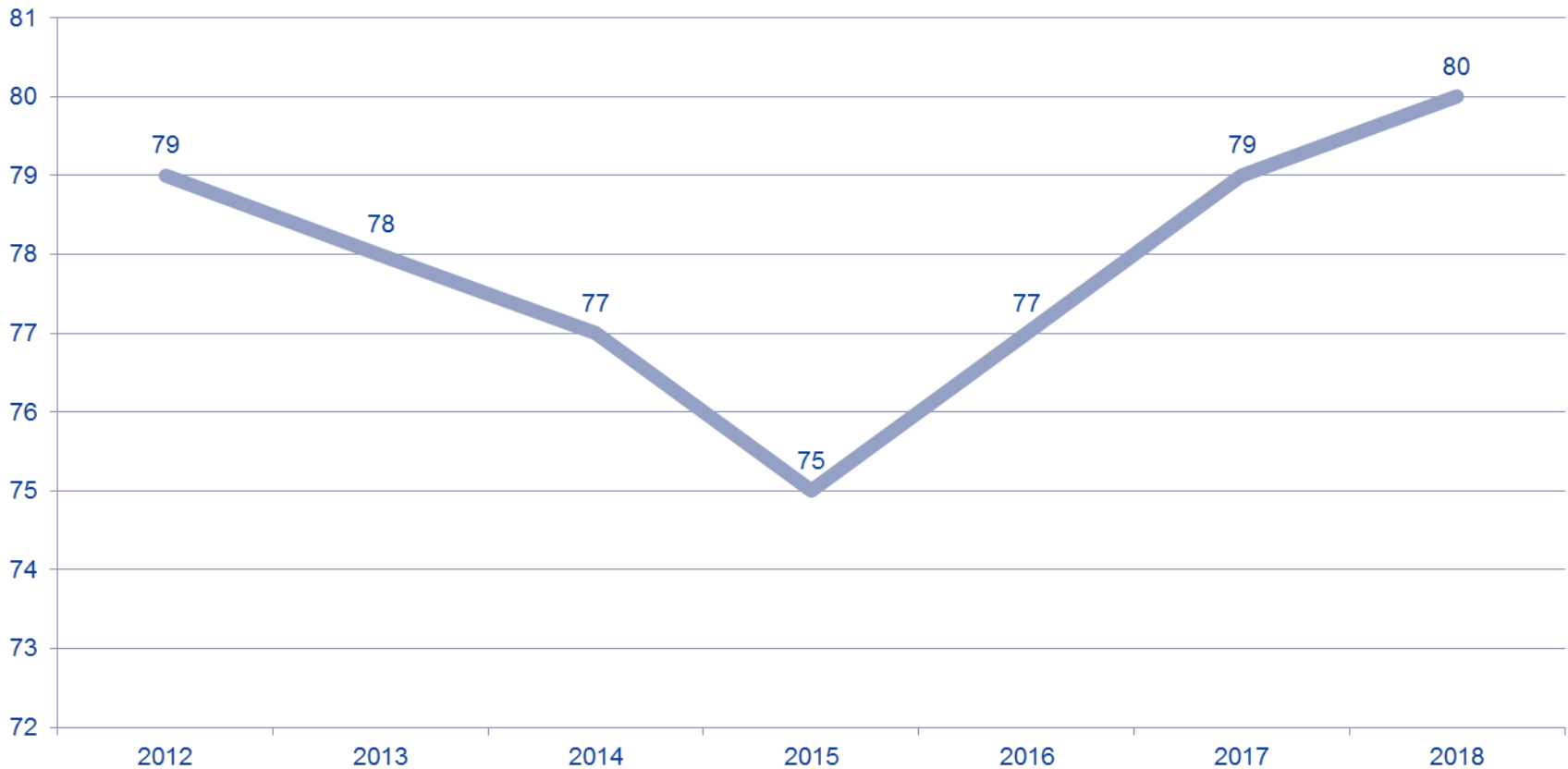
Traditional Strategy

Weighted Annual Network Average PCI



Preservation Strategy

Weighted Annual Network Average PCI

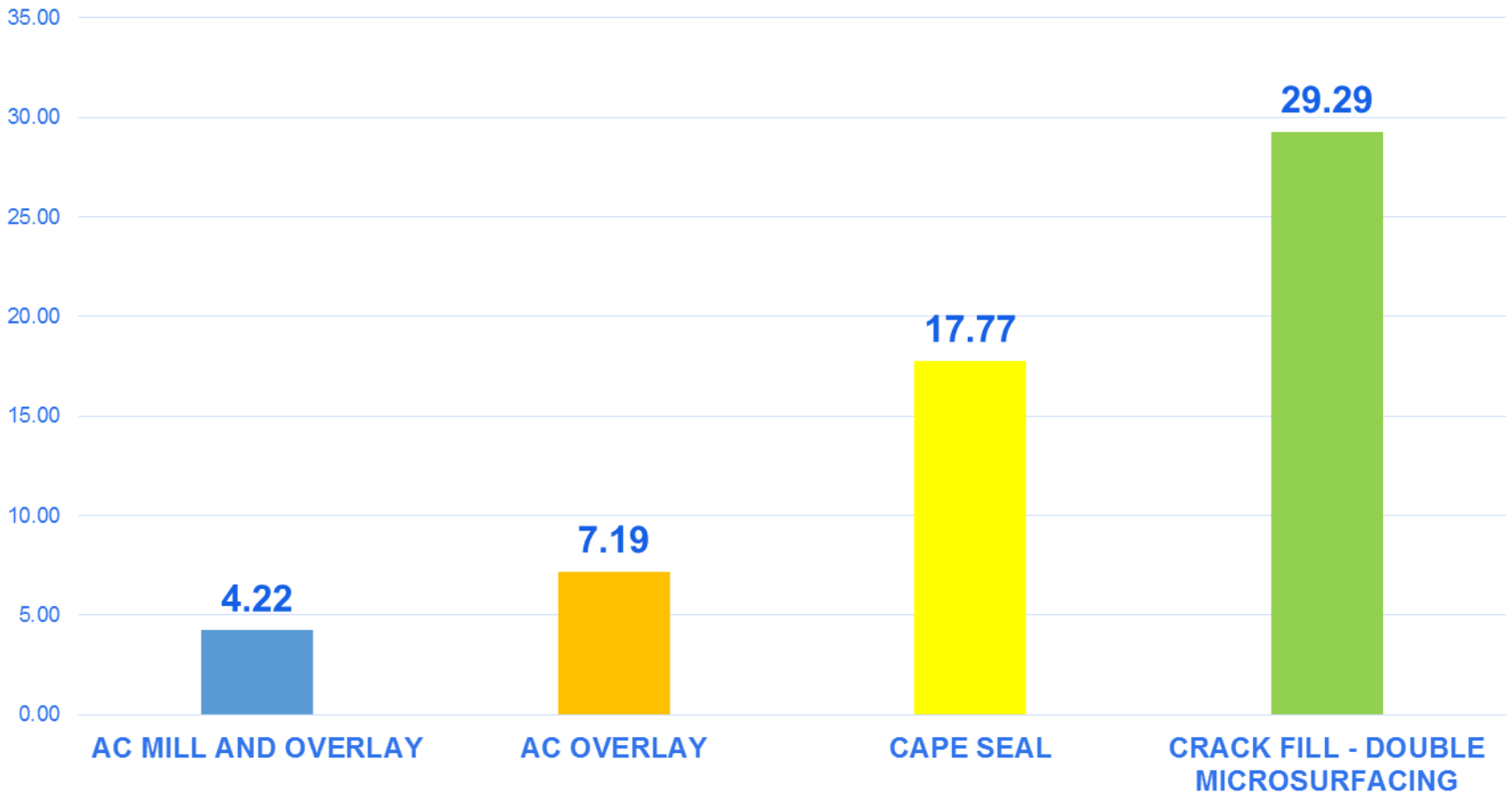


The Three Year Plan

- Network condition optimization approach - goal of maintaining the network at a PCI of at least 80.
- Split annual budget amount approximately 40/60 between traditional and preservation methods.
- 40% toward critical pavements – in-house
- 60% towards maintaining good pavements – contract work

3 Year Plan

3 YEAR PLAN - CENTERLINE MILES COMPLETED BY PROJECT TYPE



Microsurfacing – PCI 68 - 81

- *Treatment technique that effectively fills light cracks and voids while restoring surface texture and extending the life of the pavement.*



Cape Seal - PCI 50 - 68

- 2 part pavement preservation strategy that begins with a chip and seal process and finishes with a microsurfacing on top to seal the surface on fair to good condition roads, correcting certain distresses while restoring surface texture and extending the life of the pavement.

Network Summary

| ZONE | AREA | Sections | Lane Miles | Centerline Miles | % NETWORK |
|--------------|-------------------|--------------|------------|------------------|-------------|
| NE | 10,449,667 | 898 | 198 | 83 | 21% |
| NW | 27,739,374 | 2432 | 525 | 221 | 57% |
| SE | 4,176,953 | 445 | 79 | 34 | 9% |
| SW | 6,845,591 | 492 | 130 | 51 | 13% |
| | | | | | |
| TOTAL | 49,211,585 | 4,267 | 932 | 389 | 100% |

Zone Summary – 3 yr plan

| ZONE | SECTIONS | TOTAL MILES | % NETWORK |
|--------------|-------------|-------------|-------------|
| NW | 2432 | 221 | 56.8% |
| NE | 8898 | 83 | 21.3% |
| SW | 492 | 51 | 13.1% |
| SE | 445 | 34 | 8.7% |
| | | | |
| TOTAL | 4267 | 389 | 100% |

Year One Contract Work

- Brentwood Company
 - ~17.44 centerline miles
 - Crack Seal/Micro-surfacing
 - Cape Seal
 - \$1,810,530.58

Questions?