





City of Temple City Pavement Management Program Update

Presented by:
Margot Yapp, PE
& Lisa K. Senn

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Collaboration. Commitment. Confidence.℠



Why do we need a Pavement Management Program?

A PMP Answers These Typical Questions

- What does City own/maintain in the street network?
- What condition is it in?
- What repairs are needed and when?
- How much is required to maintain? Or improve streets cost-effectively? Next year? Or in 10 years?
- What are impacts of different funding levels?



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Value of Street Network

Functional Class	Centerline Mileage	Lane Miles	Weight
Arterial			77
		78.7	54
...idential	19.7	39.4	47
Total	72.4	162.6	58

Asset value is $104.7 million!

*Alleys were inspected (PCI = 42) but not included in analysis

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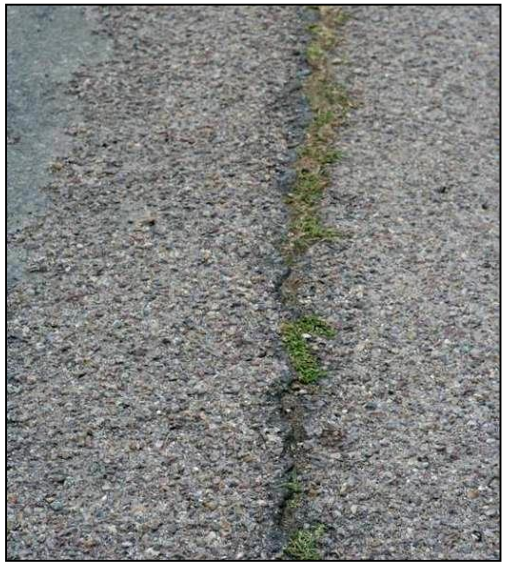
What Condition Is It In?

- Measures health of network
- Collect pavement distress data
- Asphalt concrete
- PCC



Typical Pavement Distresses

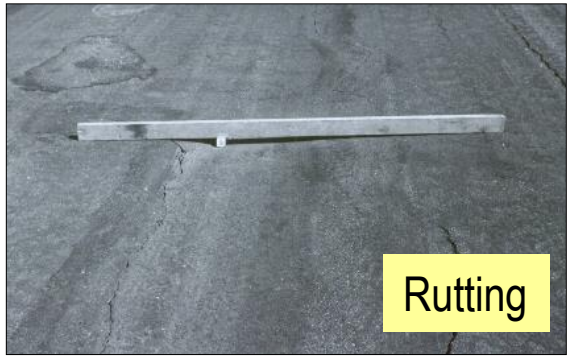


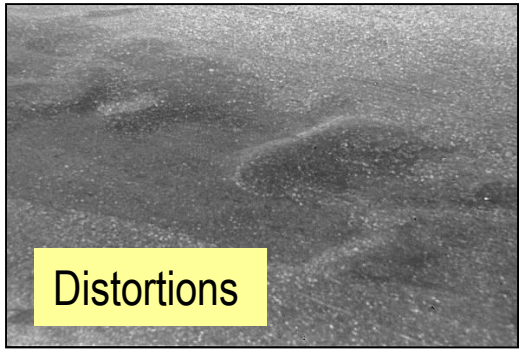


Longitudinal or transverse cracking







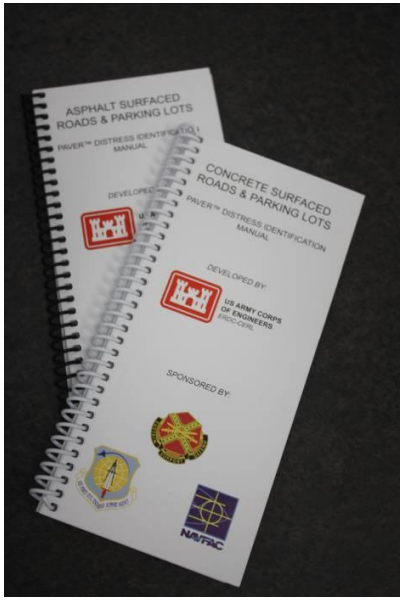




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How Are Distresses Measured?

- Inspection protocols as per ASTM D6433
- 10% sampling rate on each section
- Inspectors certified with both OCTA and MTC

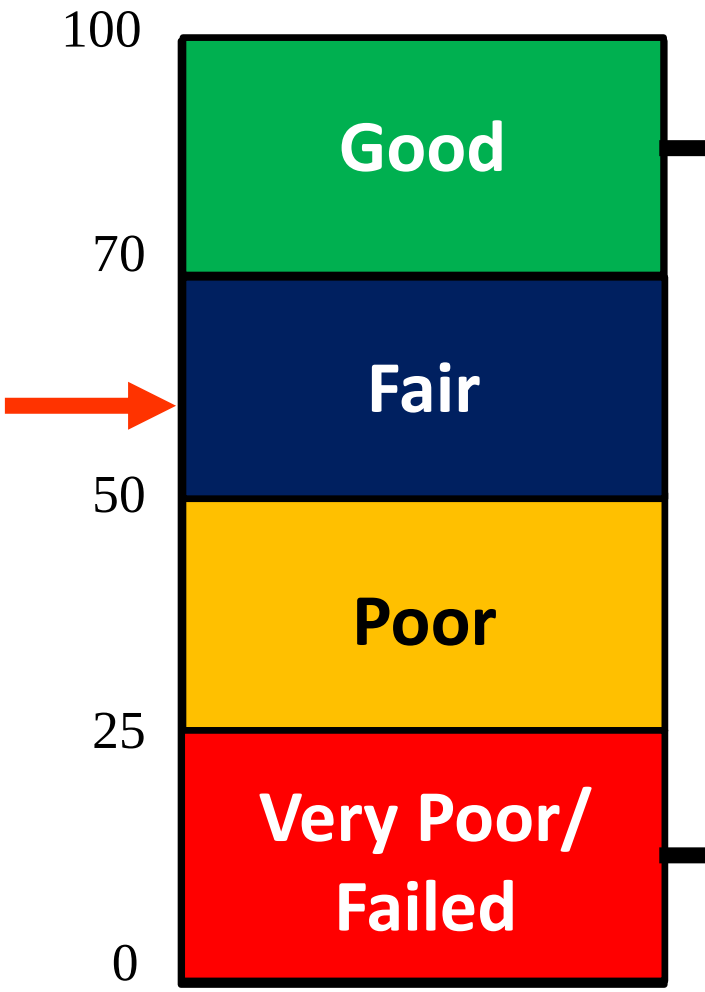




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What is Temple City's PCI?



Temple City is at 58





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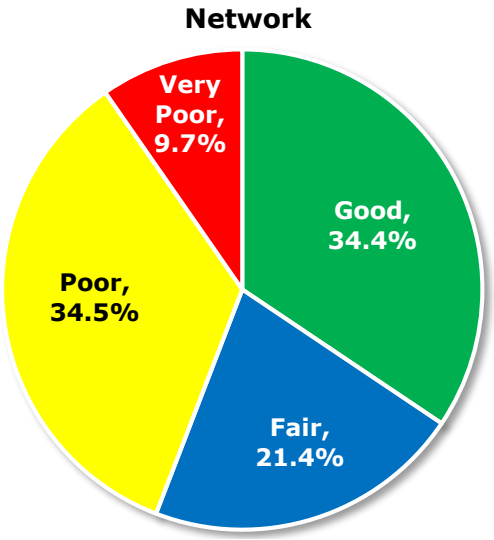

PCI > 90

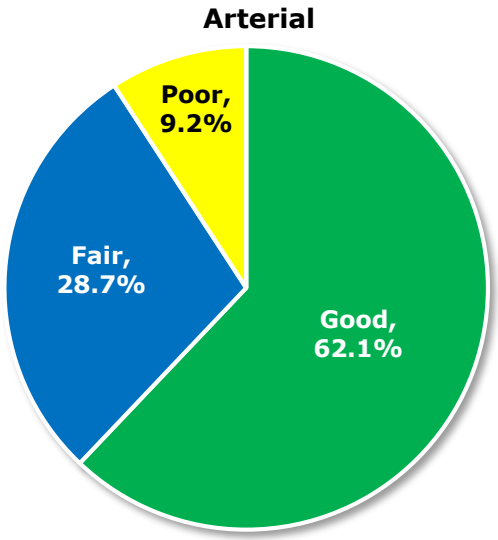

PCI = 70

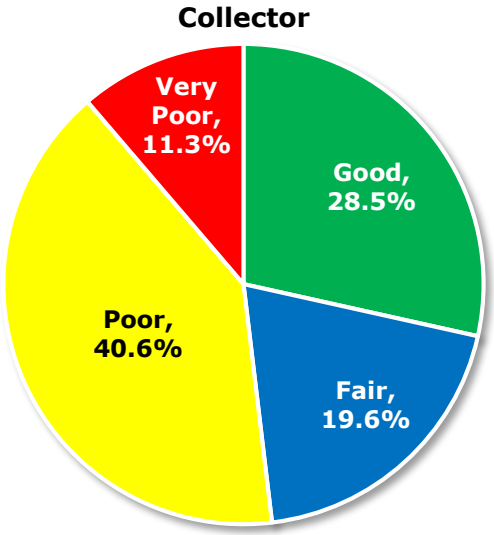

PCI = 43

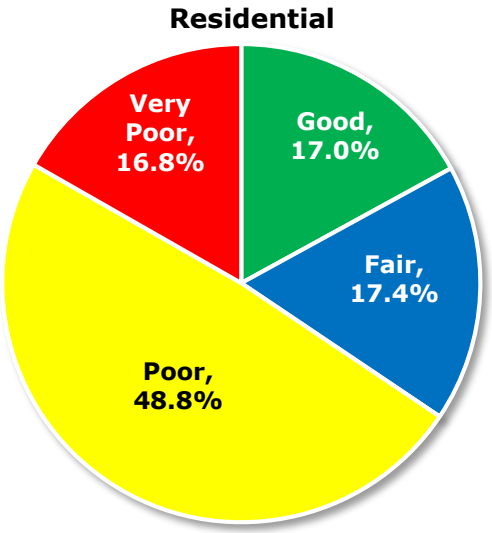

ACHD
PCI = 27

Arterials Are In Better Condition Than Collectors/Residentials

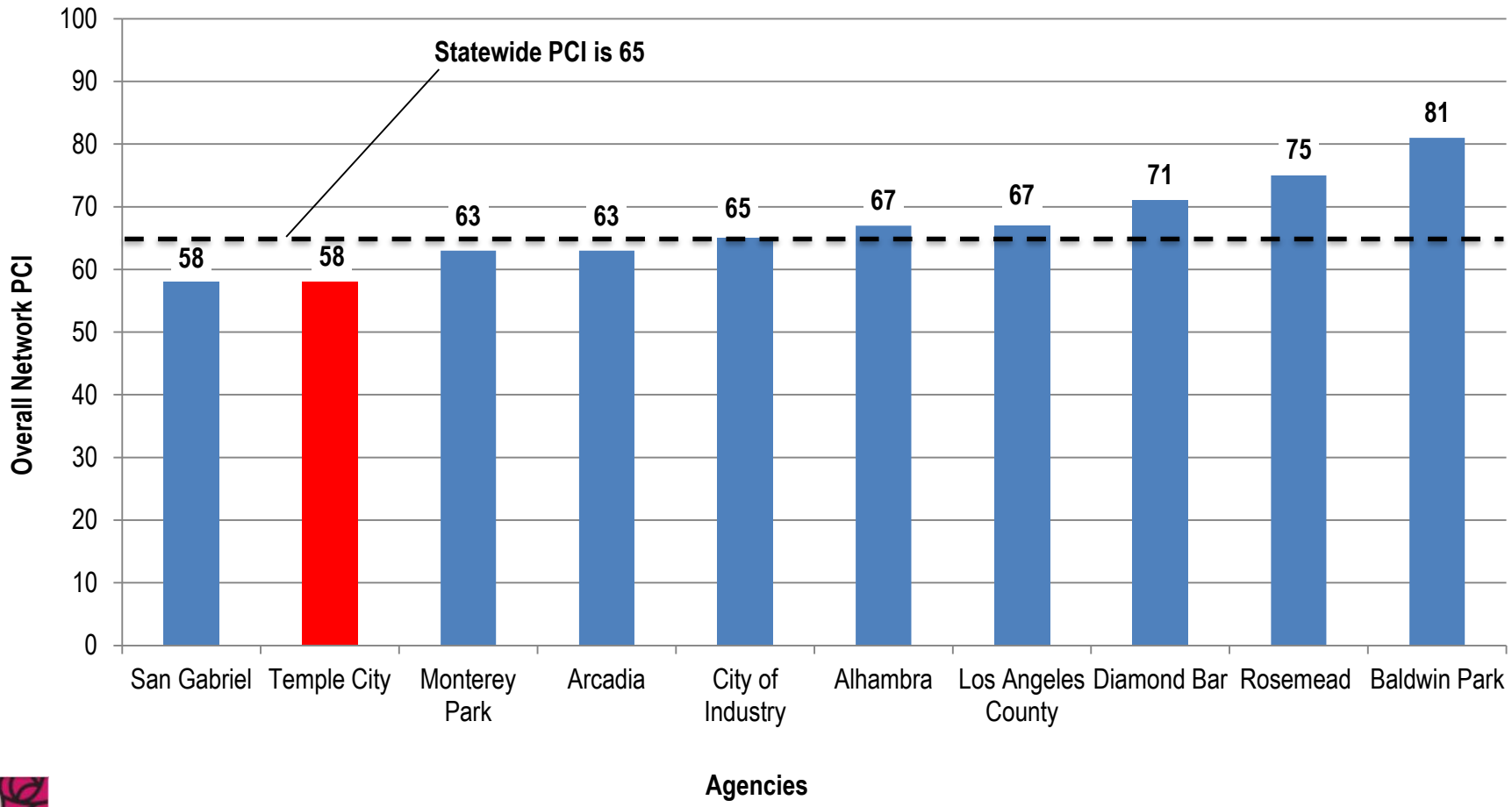








How do Other Cities Compare?



Information from the 2018 California Statewide Local Streets and Roads Needs Assessment.

How Do We Fix The Streets?

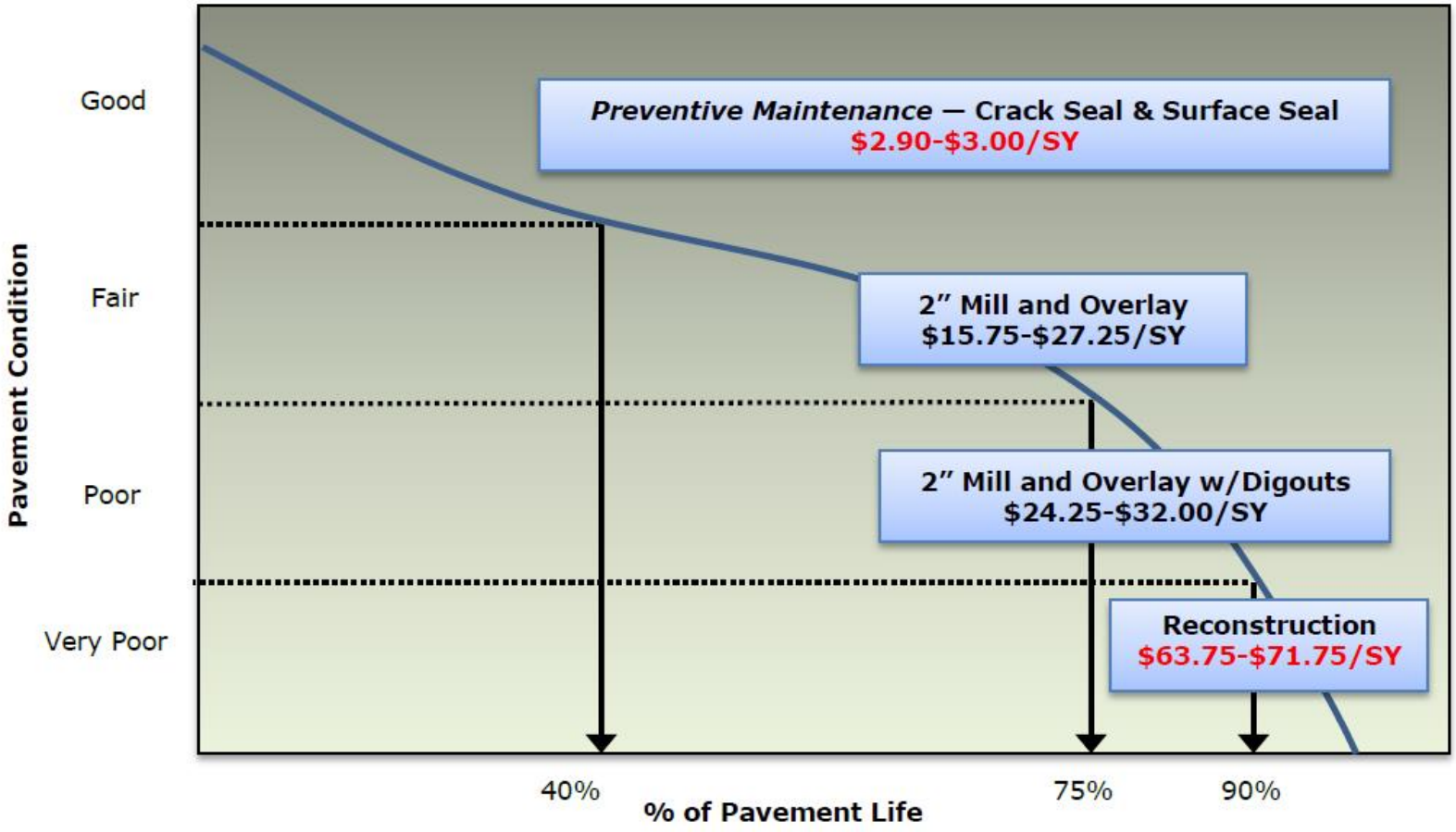
- Select appropriate treatment strategies
- Preventive maintenance
  - Slurry seals
- Rehabilitation/Restoration
  - Mill and overlay
  - Rubberized hot mix overlays
  - Cold in-place recycling
- Reconstruction
  - Full-depth reclamation


Slurry seal


Full depth reclamation

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The Right Treatment at the Right Time



*Does not include additional cost required for sidewalks, curb ramps, and other assets.

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How Much $$ Is Needed?

To improve conditions



$$



To maintain conditions

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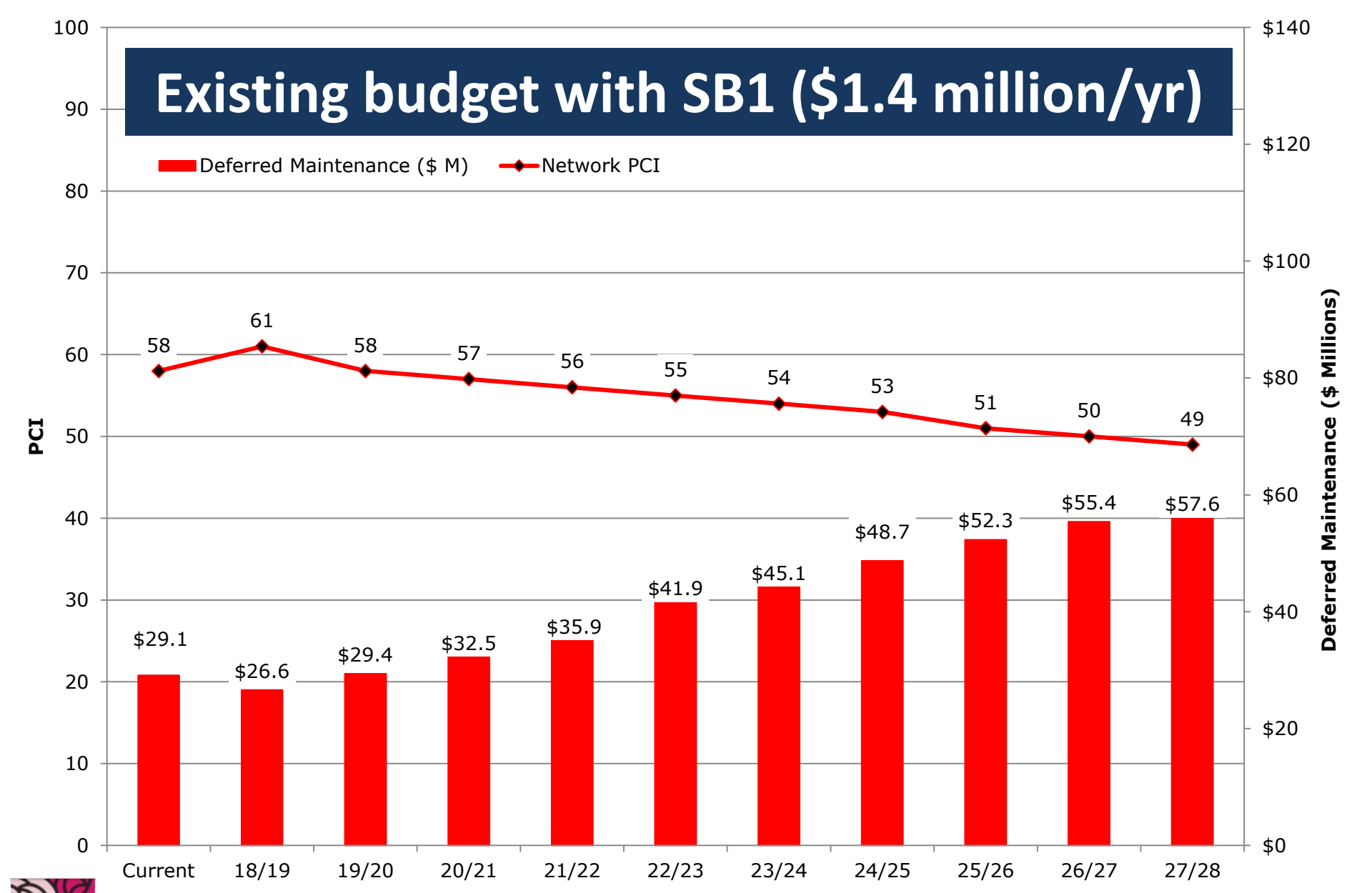
Funding Scenarios (10-Year)

- Existing Budget with SB 1 funding - $1.4 m/year
- Maintain PCI at 58 - $2.5 million per Year
- Improve PCI to 65 - $3.4 million per Year
- Improve PCI to 75 - $4.6 million per Year
- Improve PCI to 80 - $5.2 million per Year

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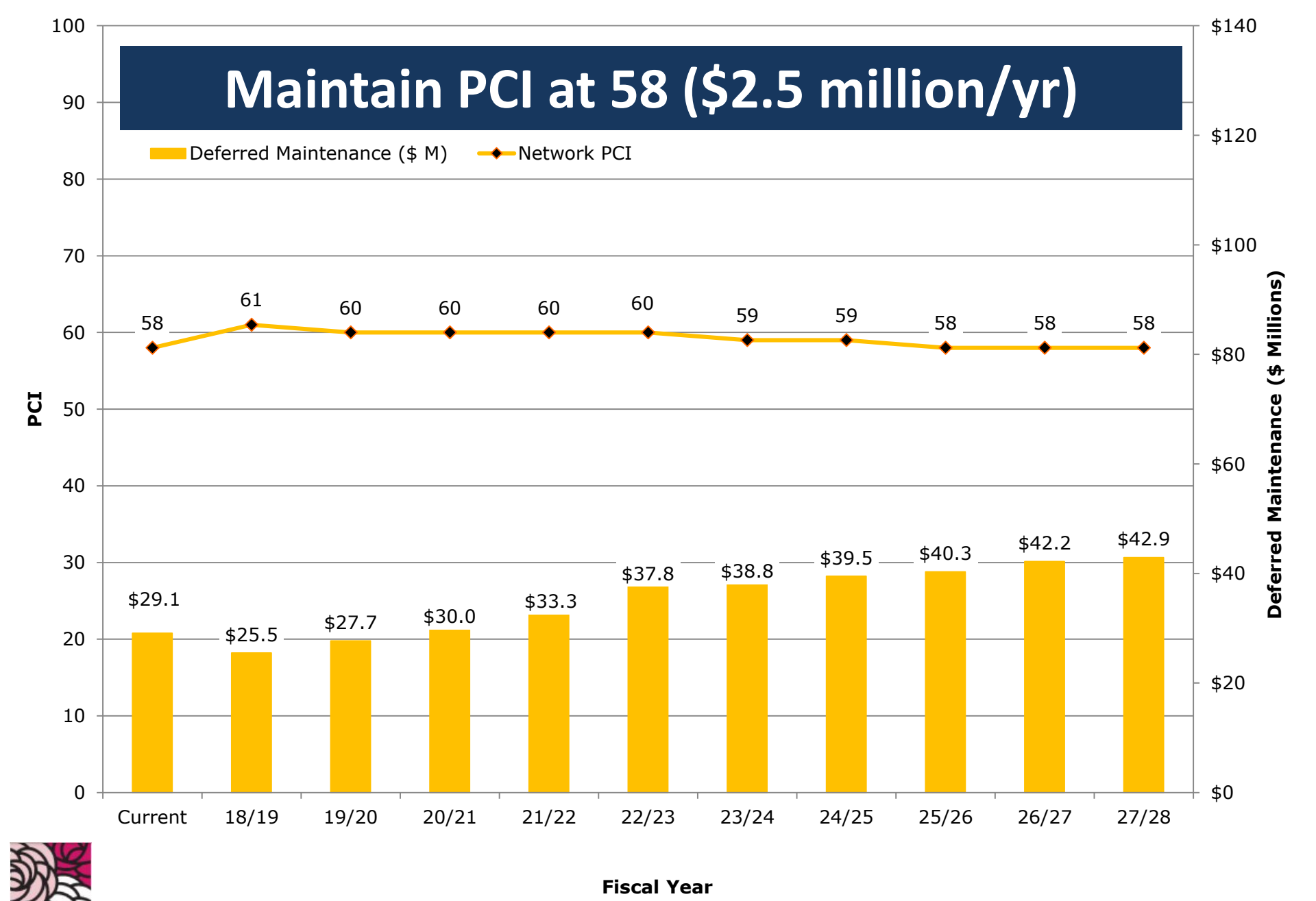
Existing budget with SB1 ($1.4 million/yr)



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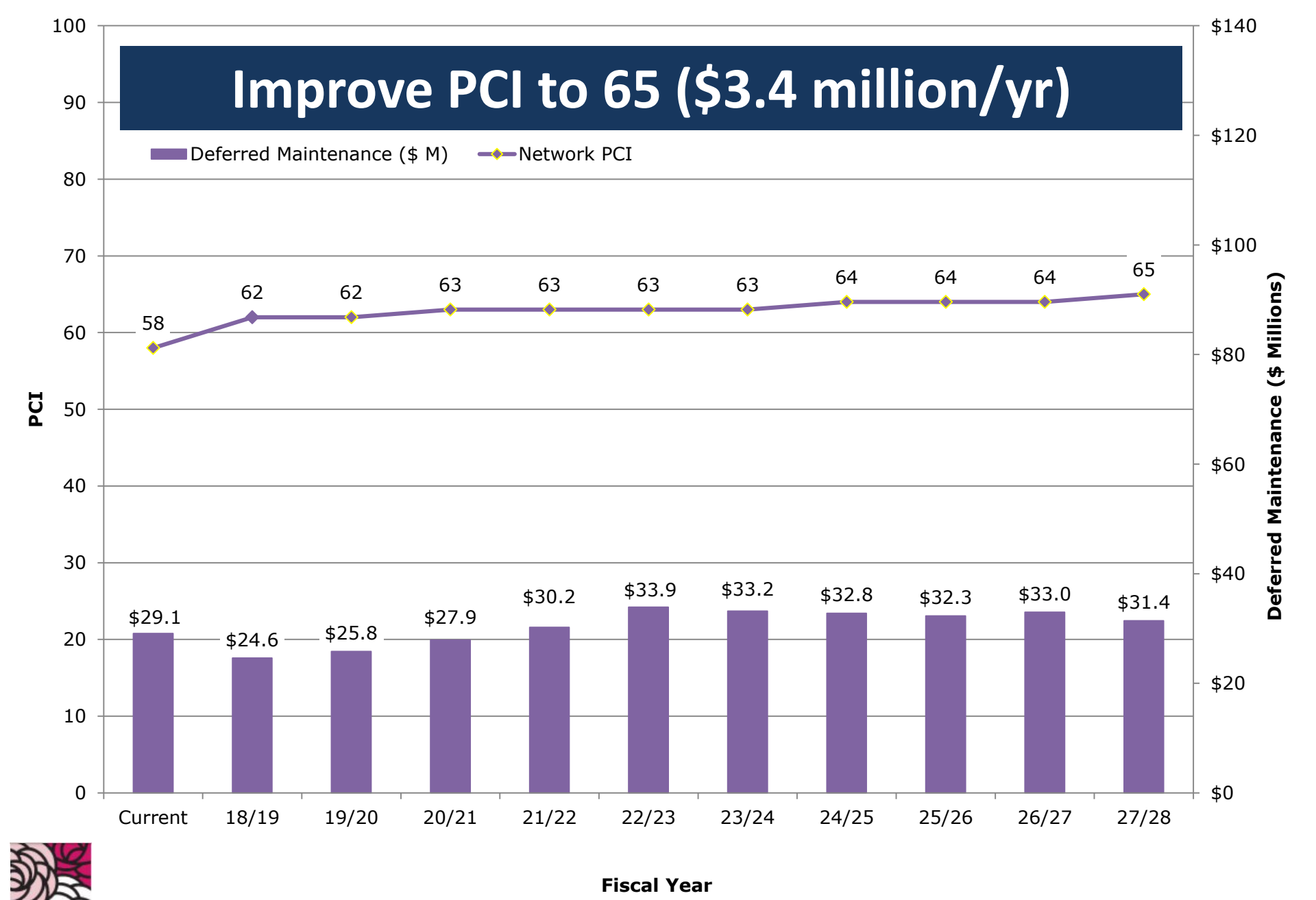
Maintain PCI at 58 ($2.5 million/yr)



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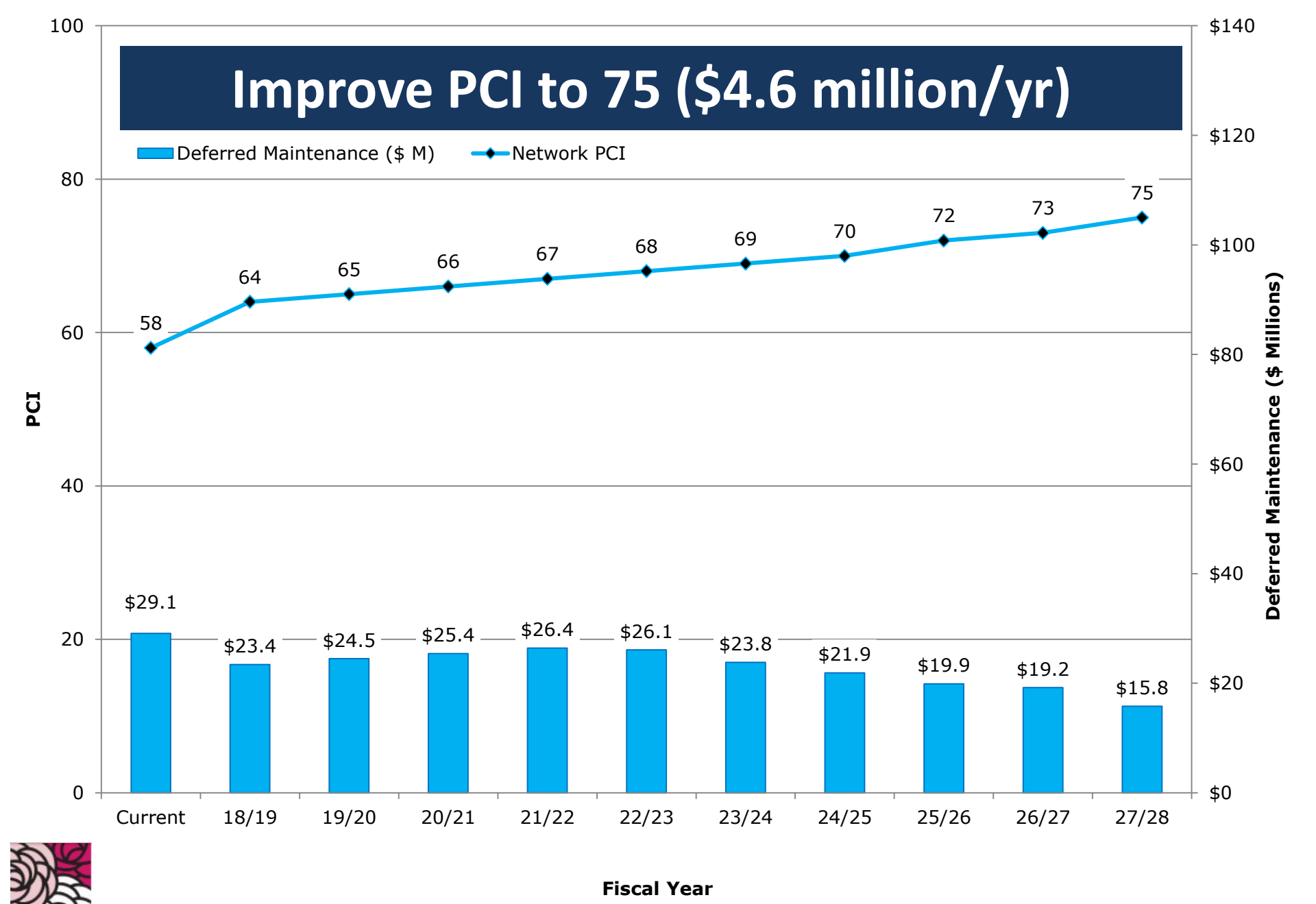
Improve PCI to 65 ($3.4 million/yr)



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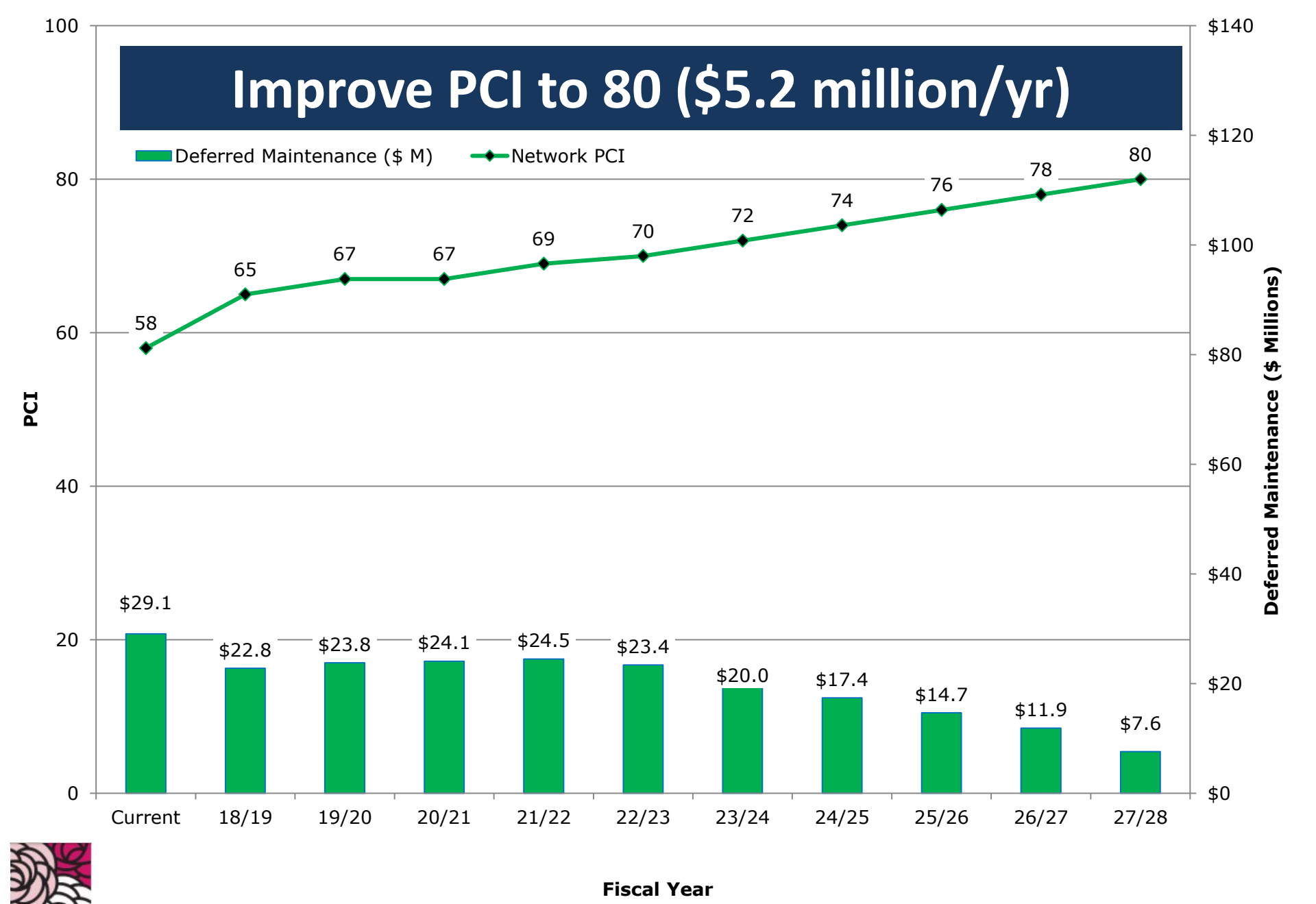
Improve PCI to 75 ($4.6 million/yr)



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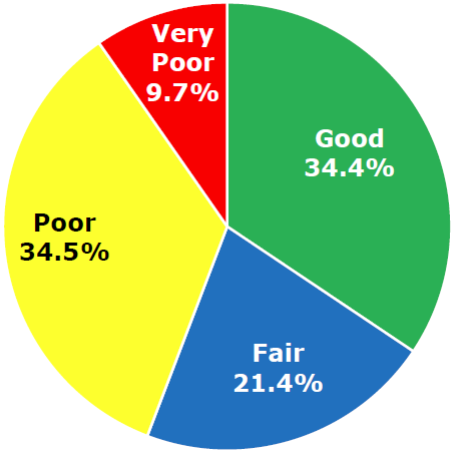
Improve PCI to 80 ($5.2 million/yr)

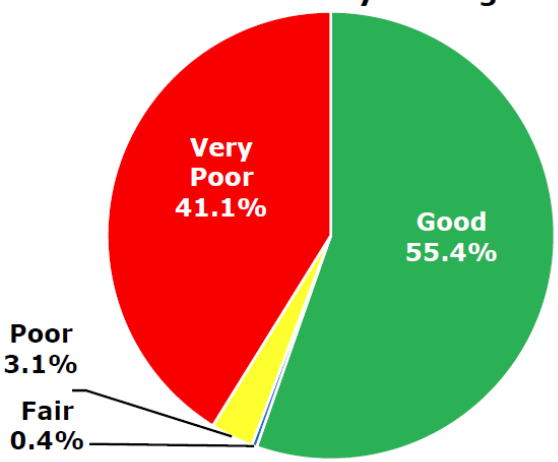


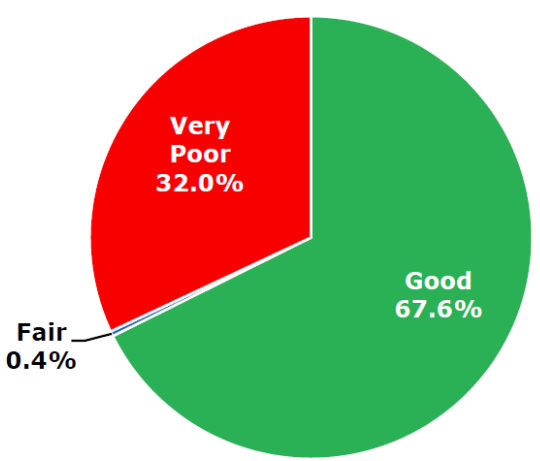
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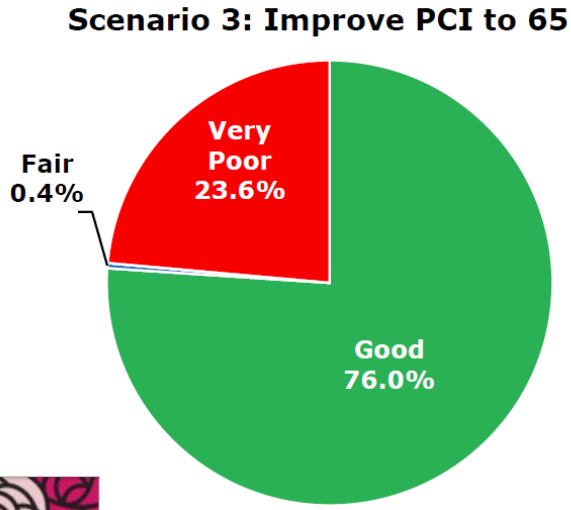
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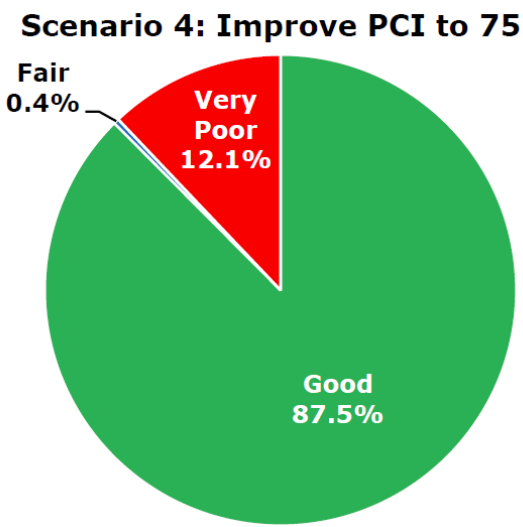
Pavement Condition for Scenarios 1-5

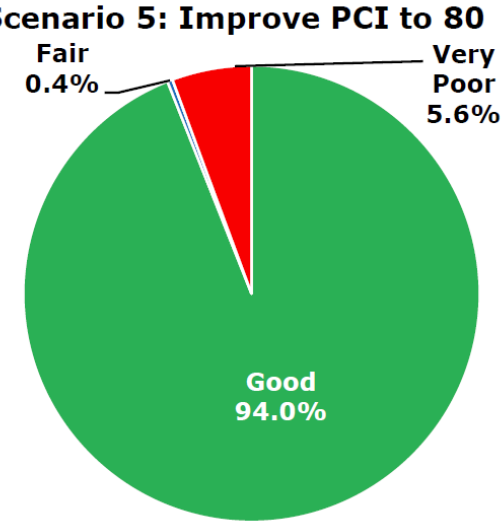








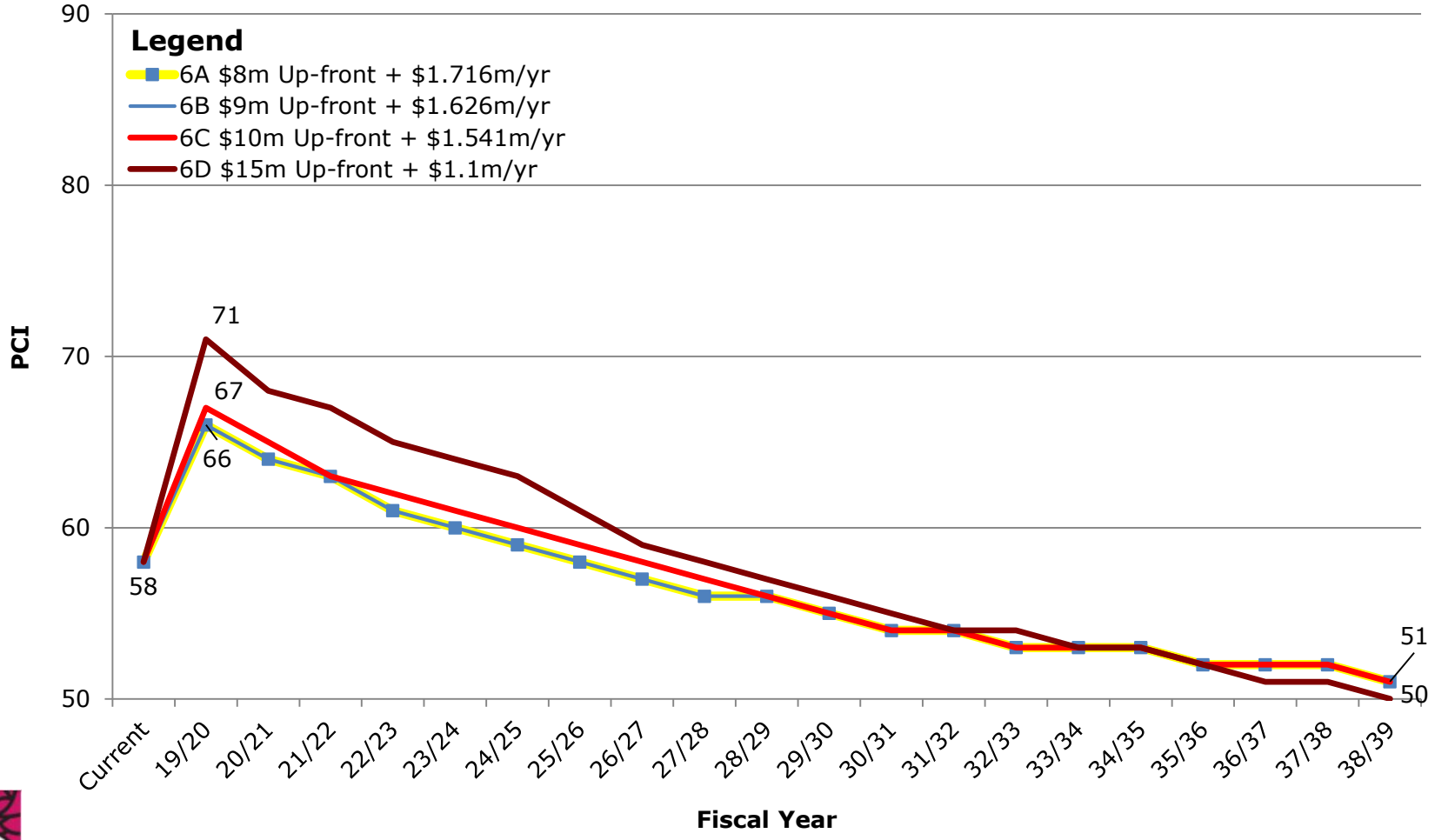




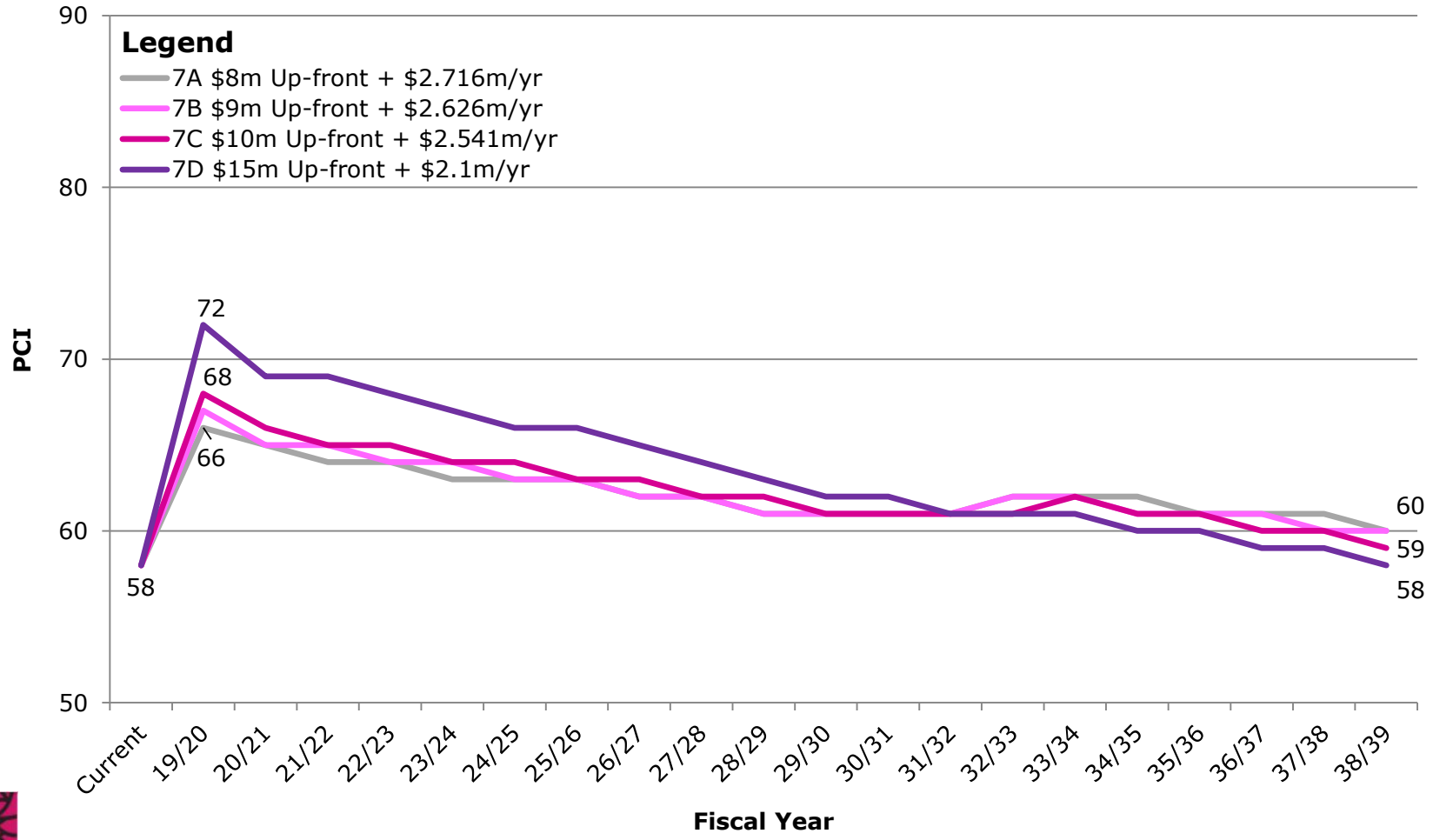
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Scenarios 6A-6D: $100/Parcel



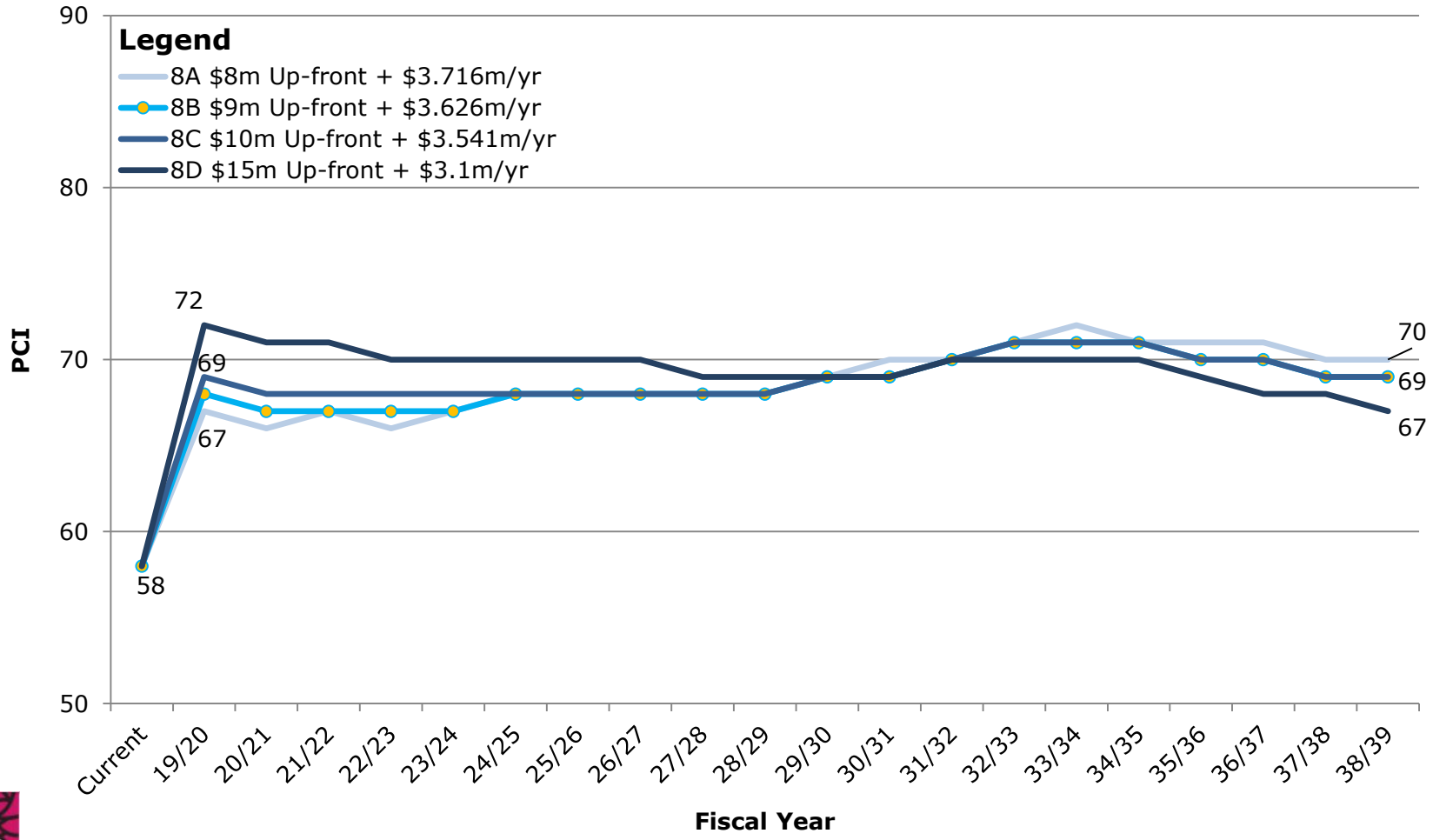
Scenarios 7A-7D: $200/Parcel



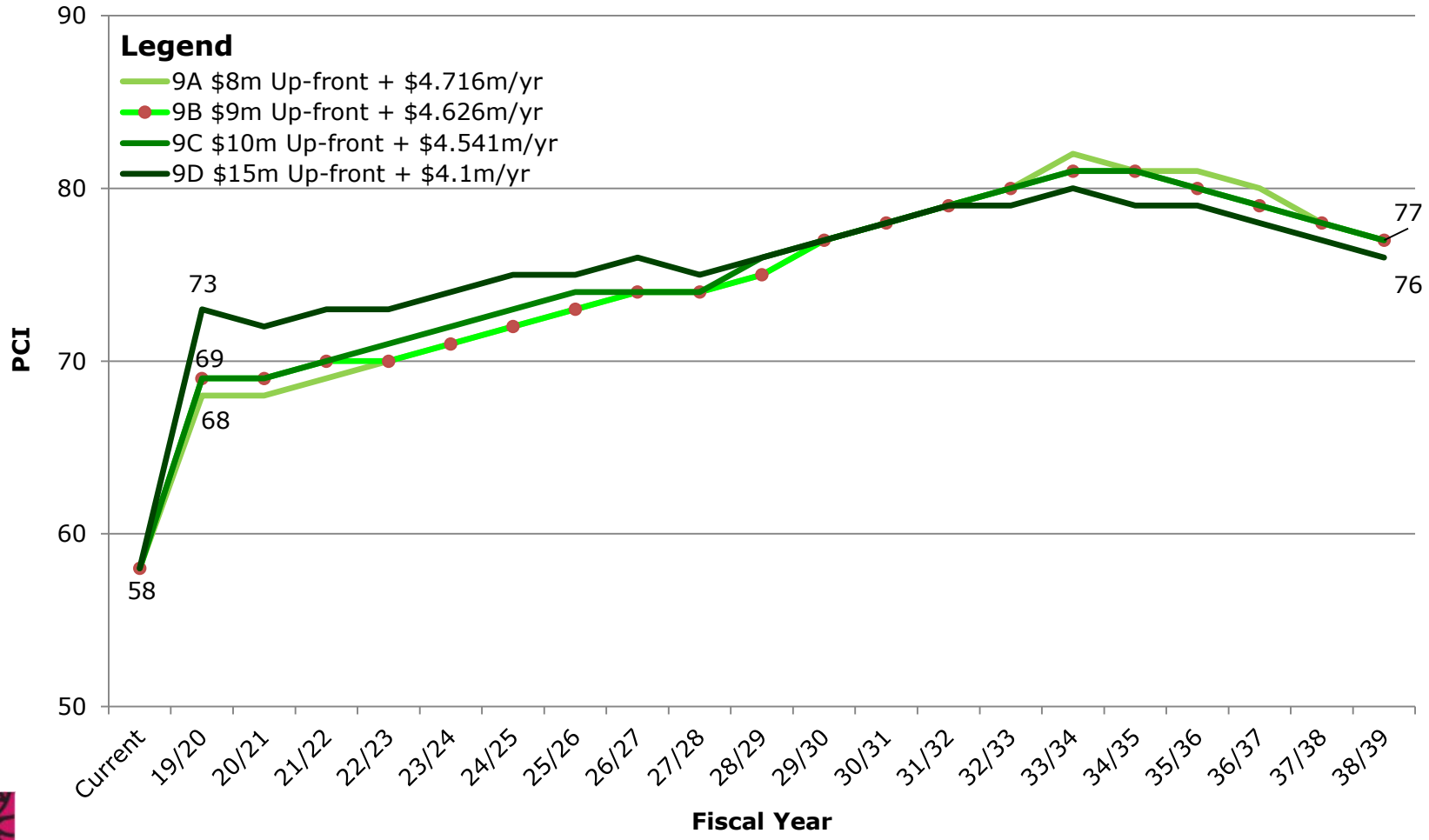
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Scenarios 8A-8D: $300/Parcel



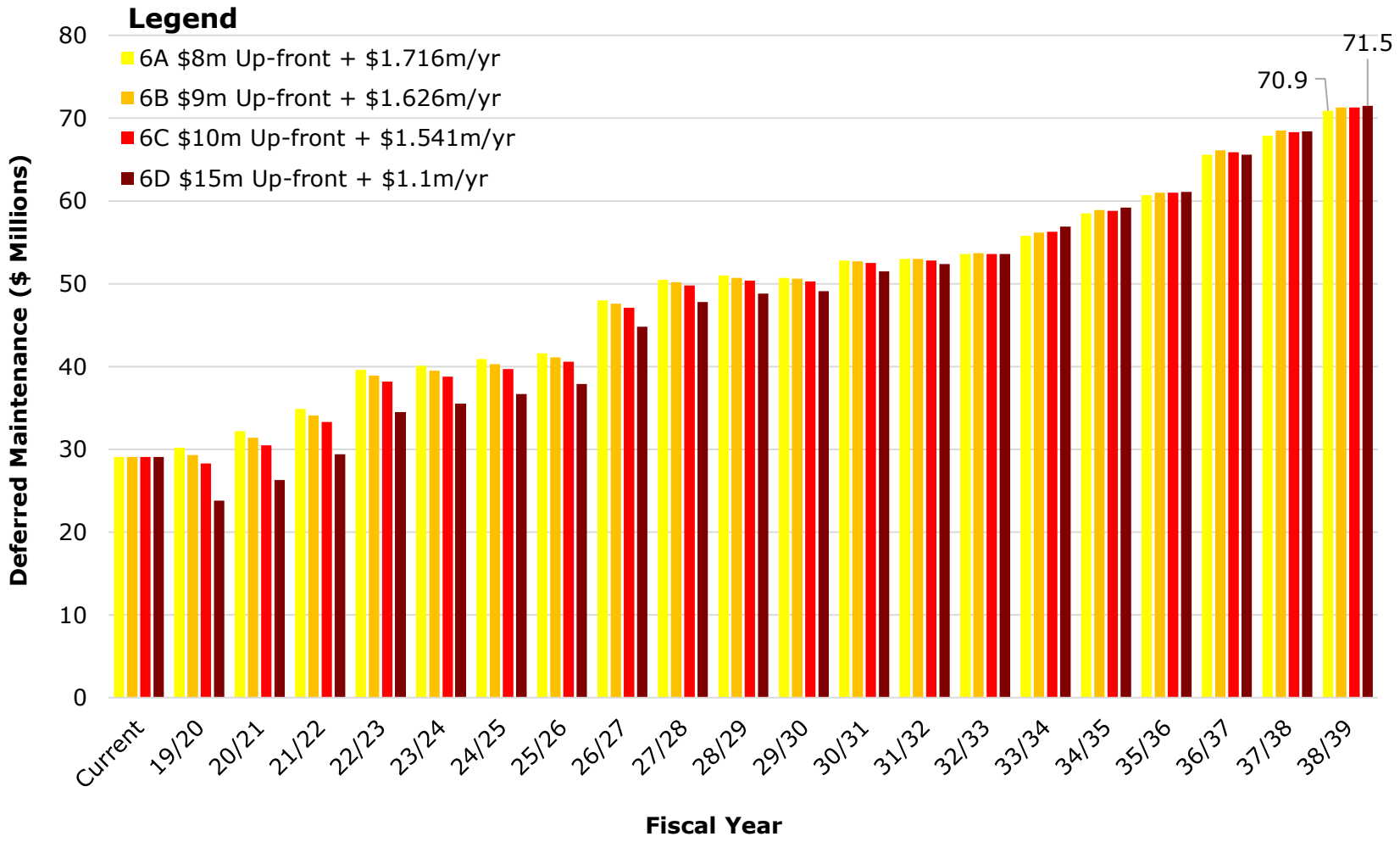
Scenarios 9A-9D: $400/Parcel



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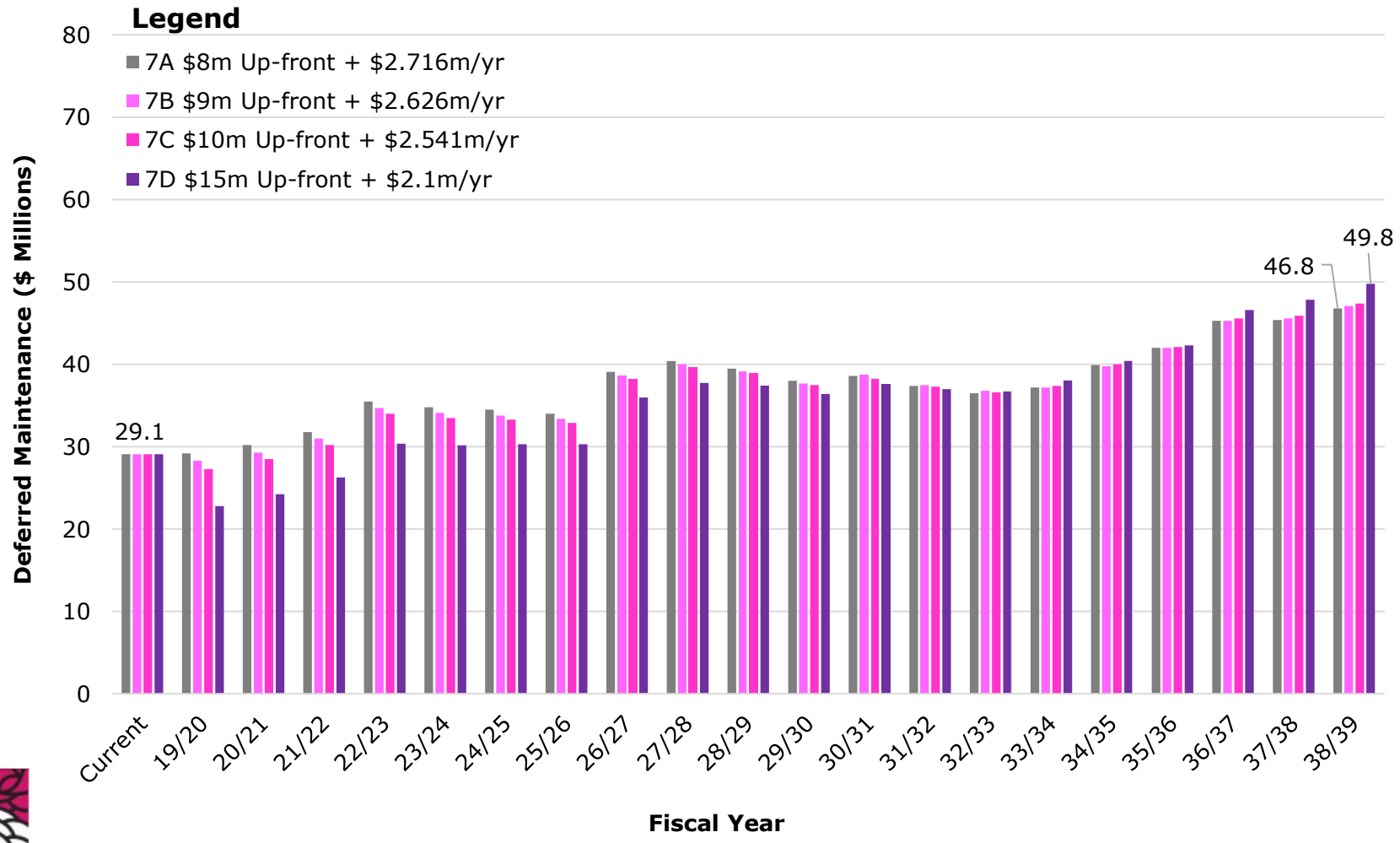
Scenarios 6A-6D: $100/Parcel



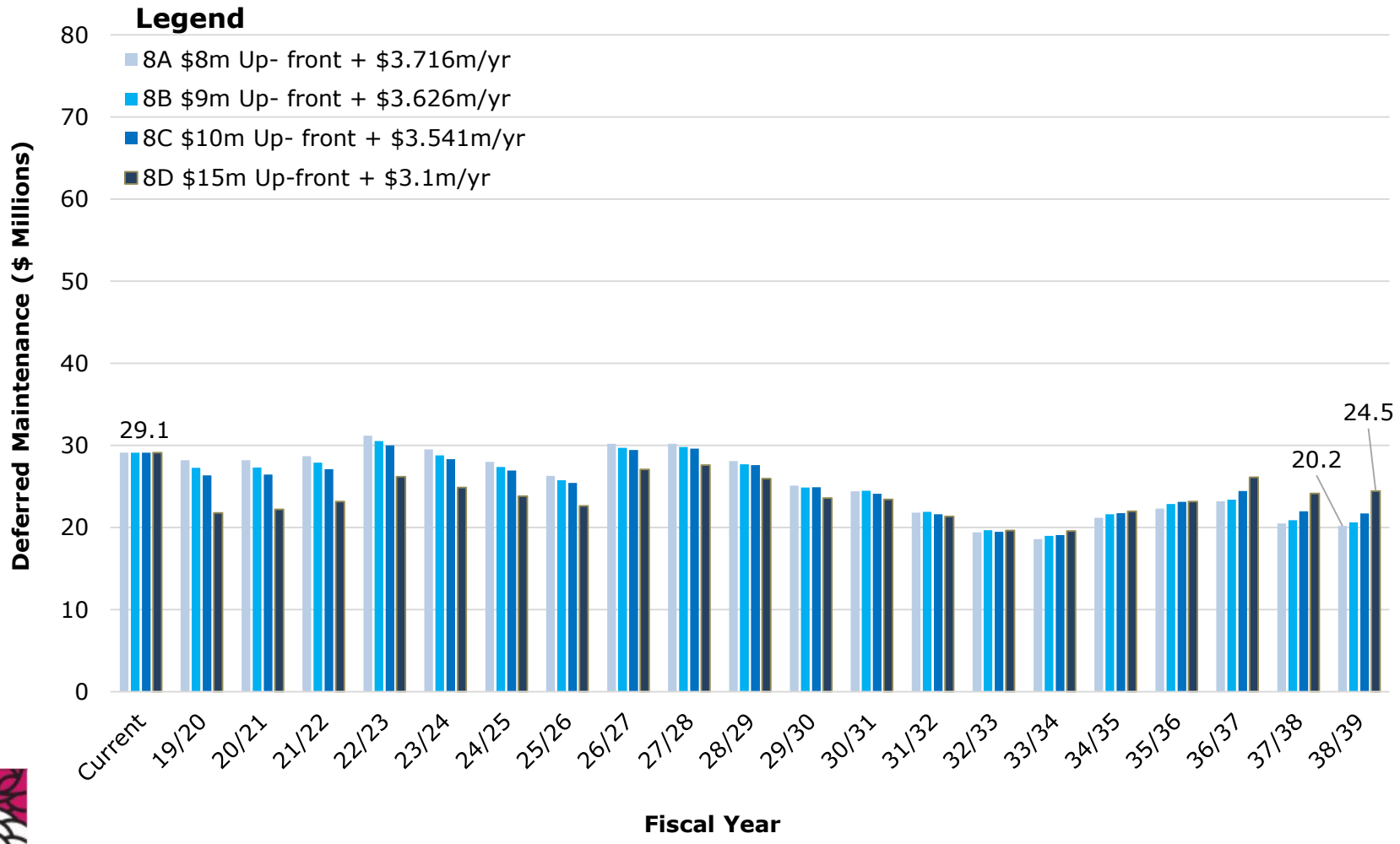
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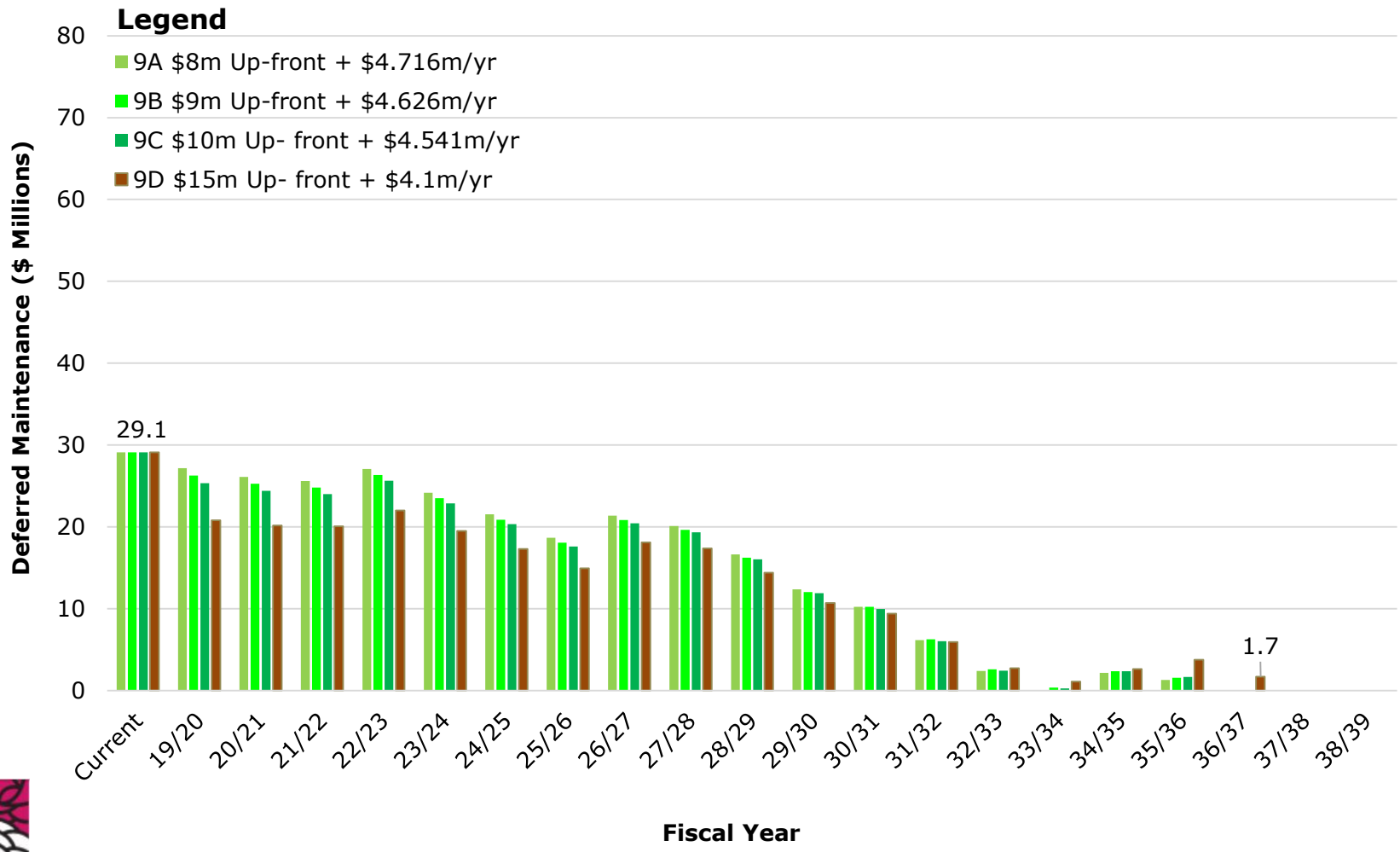
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Scenarios 8A-8D: $300/Parcel



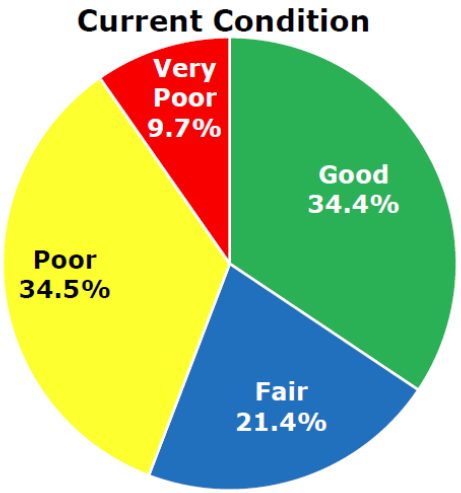
Scenarios 9A-9D: $400/Parcel

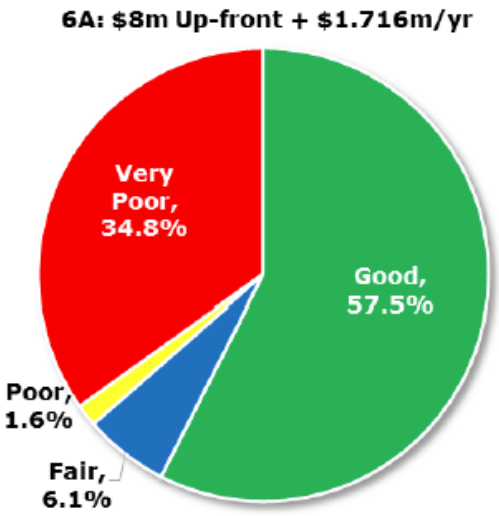


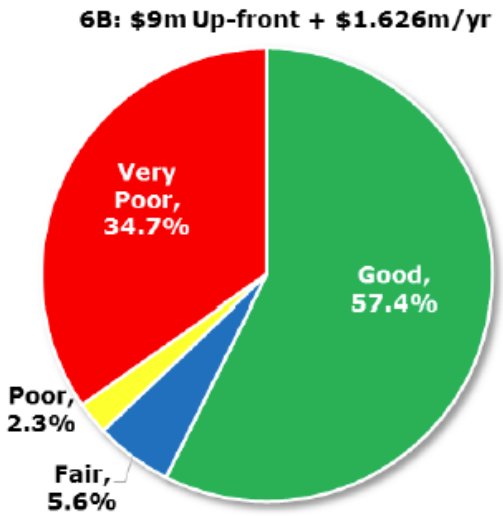
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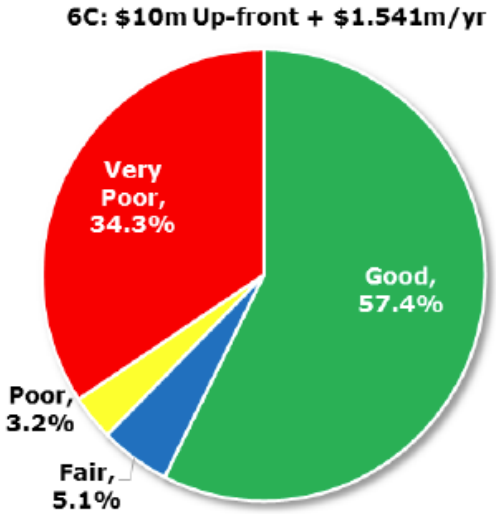
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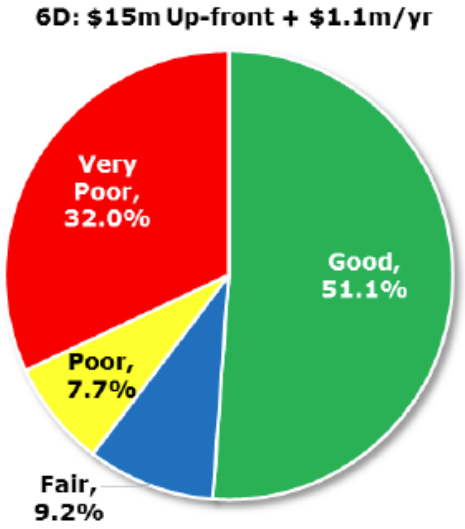
Condition for Scenarios 6A-6D after 20 Years







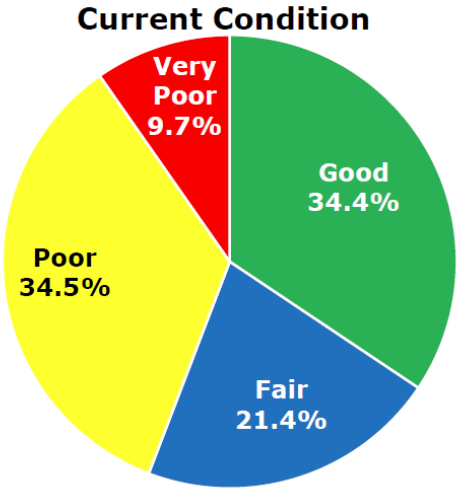


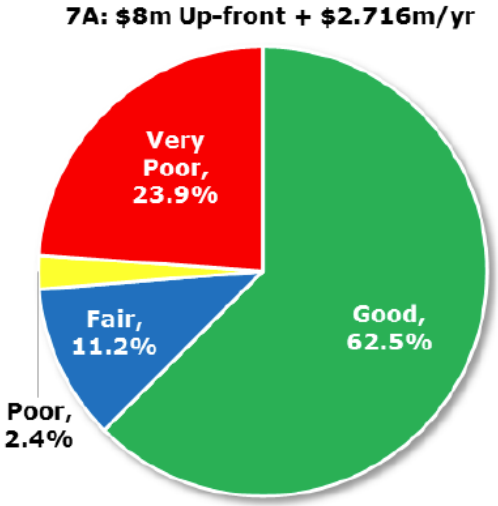


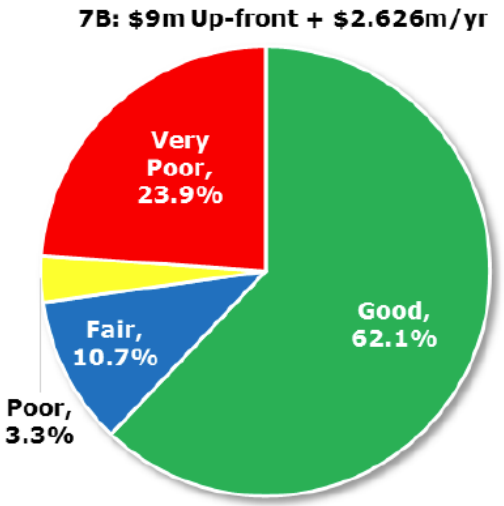
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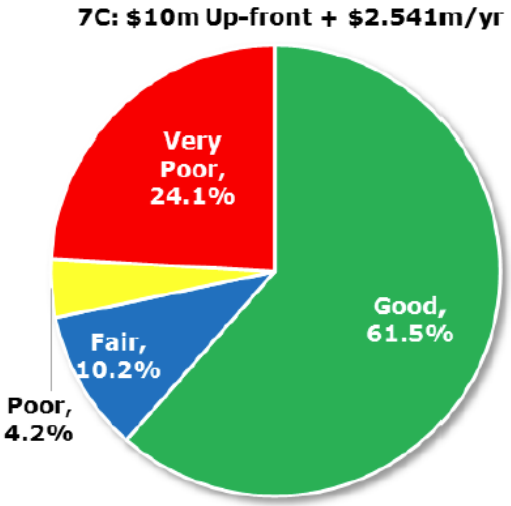
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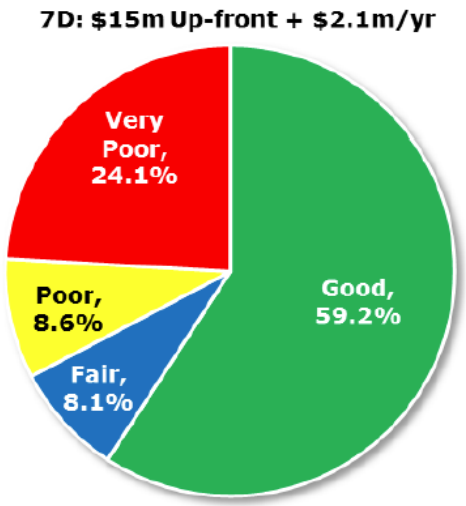
Condition for Scenarios 7A-7D after 20 Years







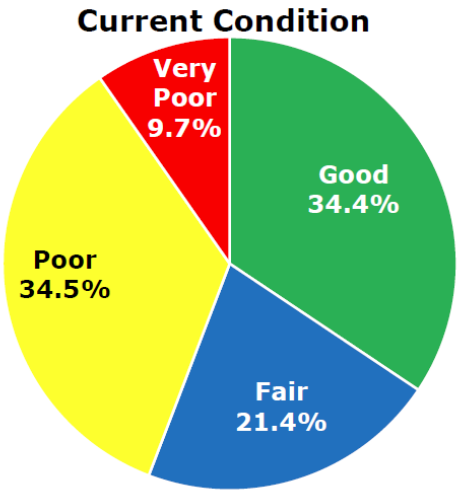


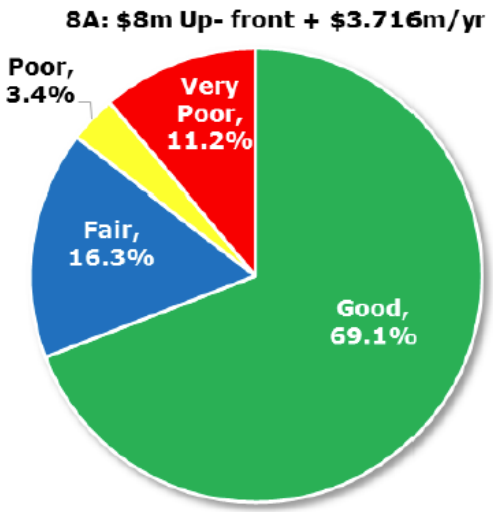


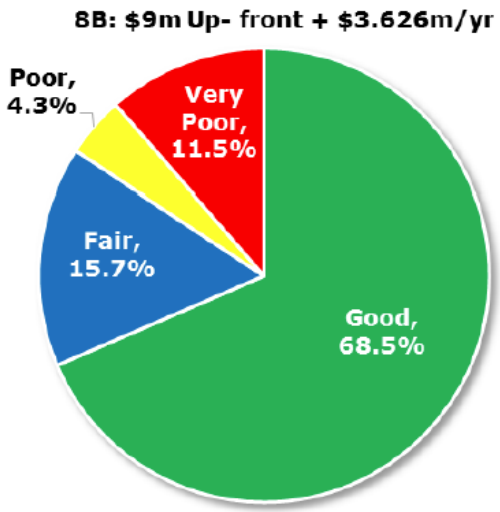
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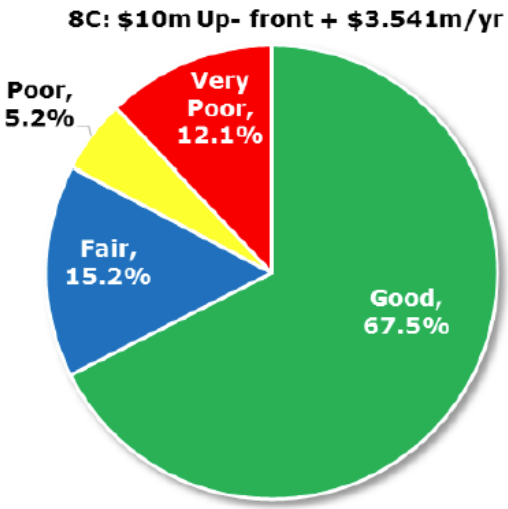
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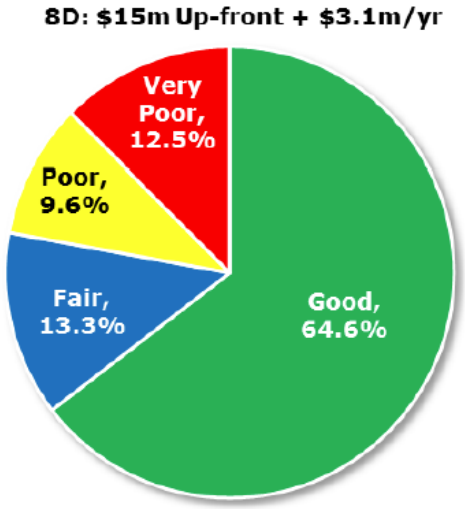
Condition for Scenarios 8A-8D after 20 Years







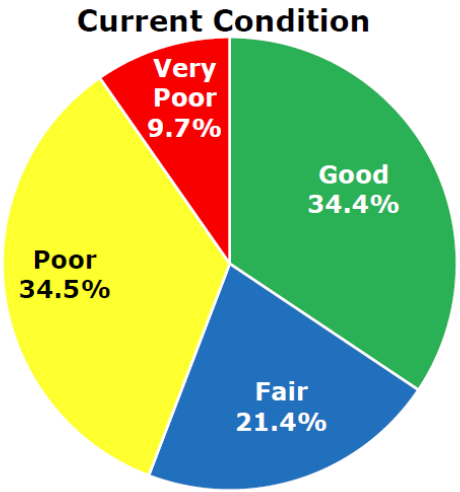


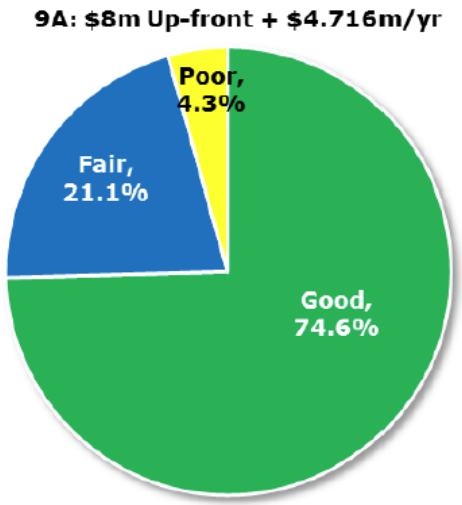


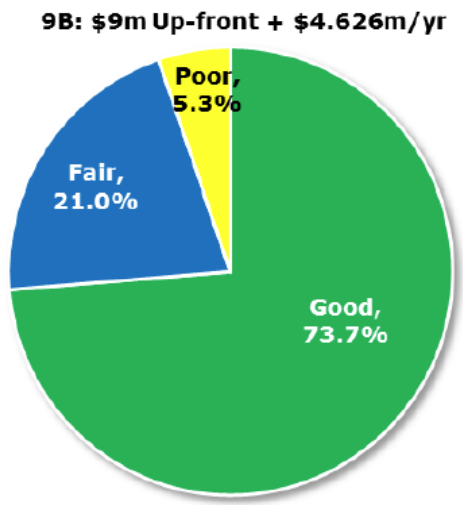
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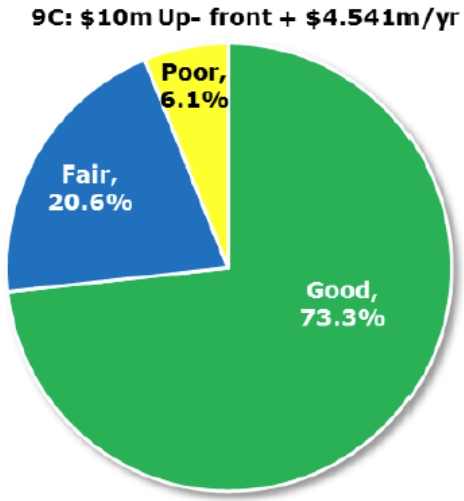
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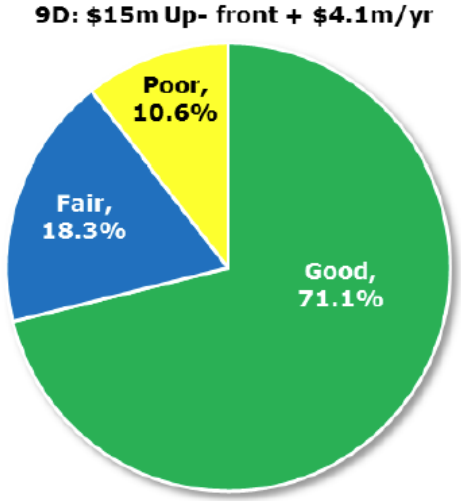
Condition for Scenarios 9A-9D after 20 Years











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Conclusions

- Street network is significant public investment valued at approx. $104.7 million
- Streets are in “Fair” condition (PCI=58)
- Existing budget ($1.4 million per year) is not sufficient
  - Pavement will deteriorate to PCI 47 in 10 years
  - Deferred maintenance will grow to $57.6 million
- $200/parcel tax = maintain condition
- $300 & $400/parcel tax = improve condition

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Policy Considerations

- Comply with policies for:
  - Sustainable communities
  - Local economy
- Ensure acceptable quality of life for residents, visitors & businesses
  - Smoother rides
  - Lower maintenance cost for vehicles
  - Home value changes with pavement conditions
- Ensure taxpayer's investment in transportation infrastructure is protected

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Questions?



Margot Yapp, PE
Myapp@ncenet.com

Lisa K. Senn
LSenn@ncenet.com
714.848.8897

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