How to Present Pavement Management Data to Your City Council/County Commissioners

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NWPMA Conference
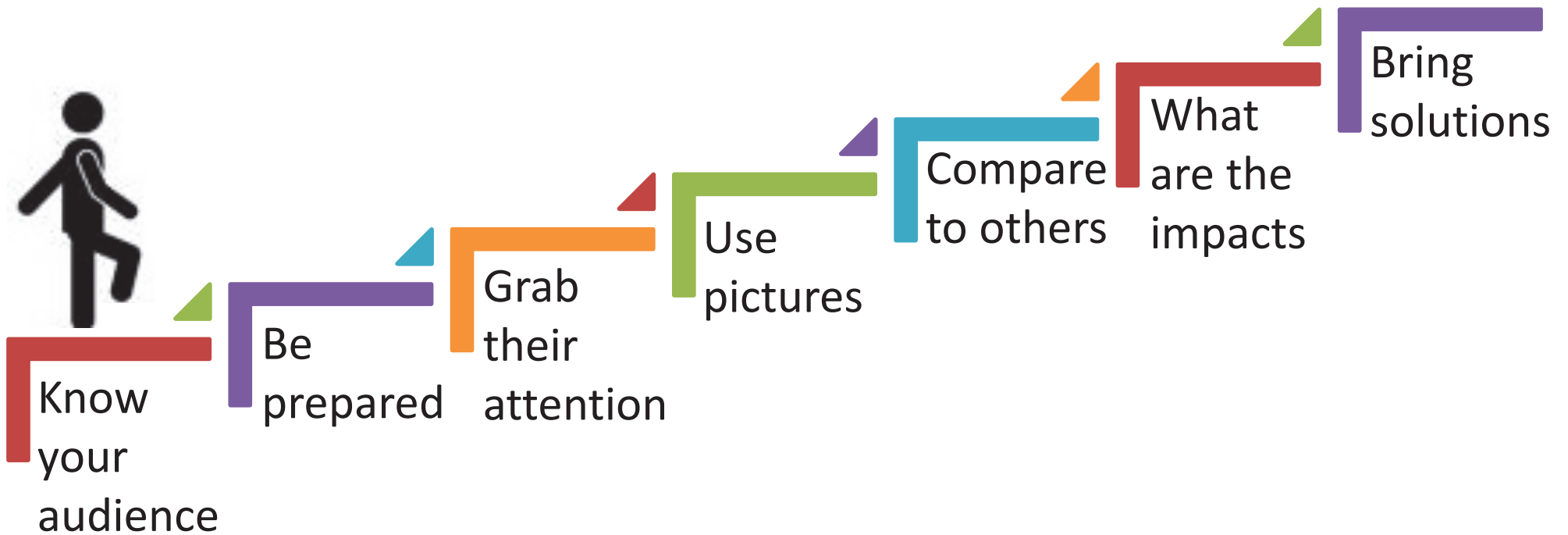October 22-25, 2019
Vancouver, WA

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Collaboration. Commitment. Confidence.℠

Warning!

Presentation previously provided at 2016 NWPMA Conference
(minimal changes)

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The "7 Step" Program

Know your audience

Be prepared

Grab their attention

Use pictures

Compare to others

What are the impacts

Bring solutions

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Step 1. Know Your Audience

Who?
- Council/City Manager/Director?
- Public?

What are their concerns?
- Complaints?
- Money?

Address their concerns
- Don't spend time discussing something they're not interested in

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For New Audiences or Those Needing a Refresher…

- What is pavement management?
- What is the makeup of the street network?
- What is pavement distress?
- What types of survey methods are used?
  - How is condition determined?
  - How are segments ranked/selected for treatment?
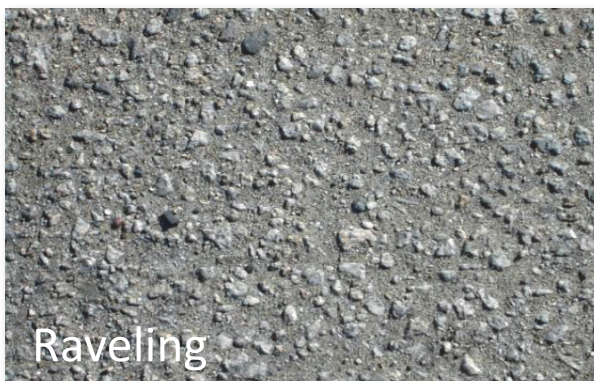- What treatments are used?
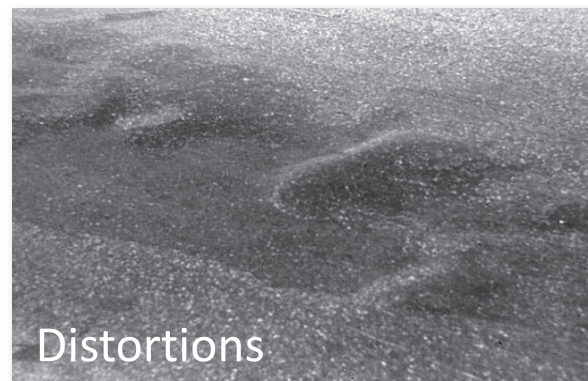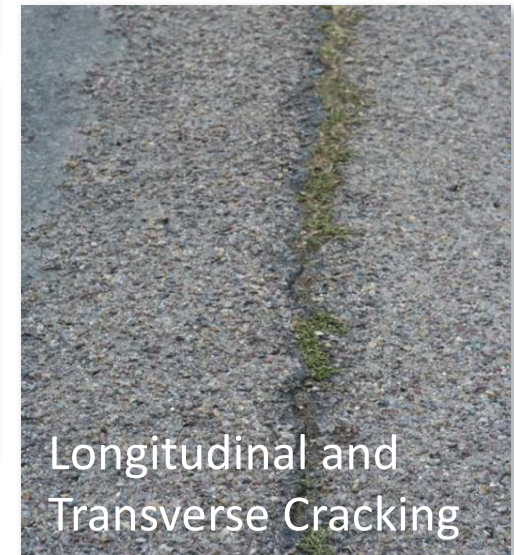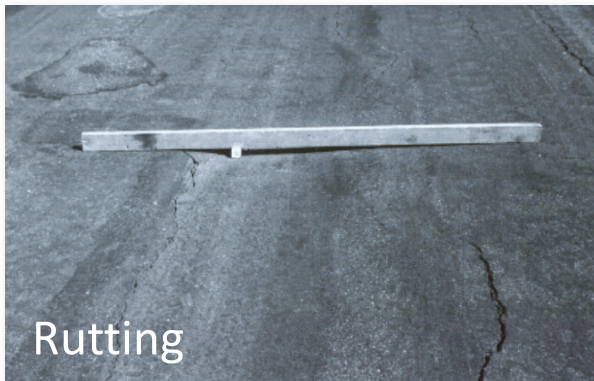- Others?

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What is a Pavement Mgmt. Program?

- A tool to help make cost-effective decisions
- Answers four main questions
  - What does agency own/maintain?
  - What condition is it in?
  - What repairs are needed and when?
  - How do we apply funding to maintain or improve streets cost-effectively?

Pavement Street Network

Functional Class	Centerline Miles	Lane Miles	% of the Paved Network (by Area)
Arterials	206	763	25%
Collectors	169	468	21%
Local Streets	828	1655	54%
Total	**1203**	**2886**	**100%**

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Pavement Distress Type

Alligator Cracking

Patching

Block Cracking

Rutting

Longitudinal and Transverse Cracking

Distortions

Raveling

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How is Distress Measured?

- Which type is used
  - No. of miles
  - Time to collect
- Survey protocols
- Use of GIS
- Others?

Automated

Walking

Windshield

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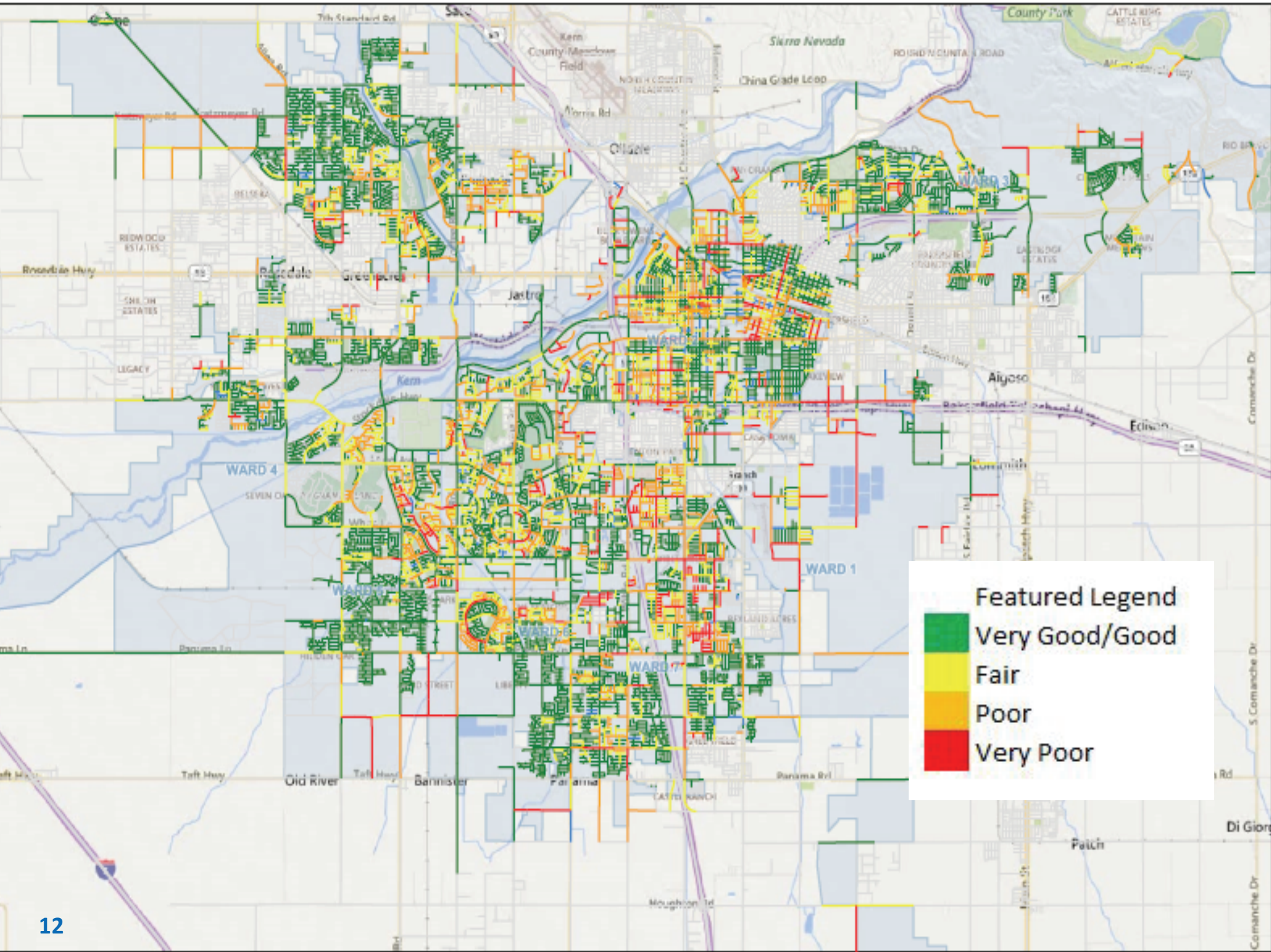# How is Condition Determined

PCI Values

PCI >90
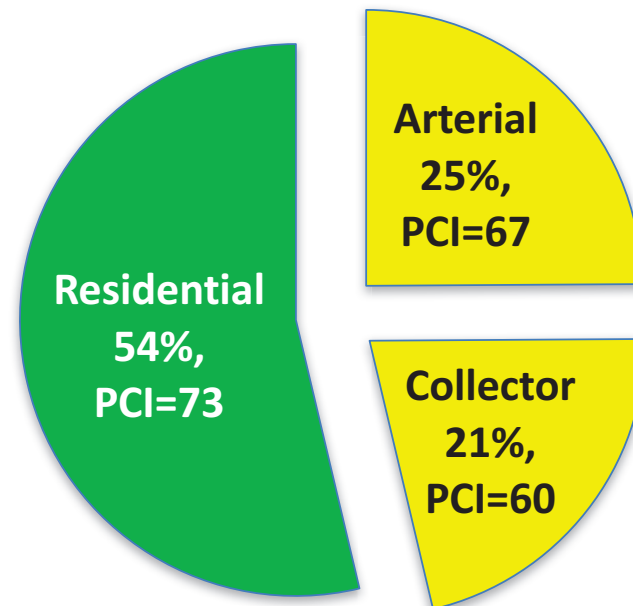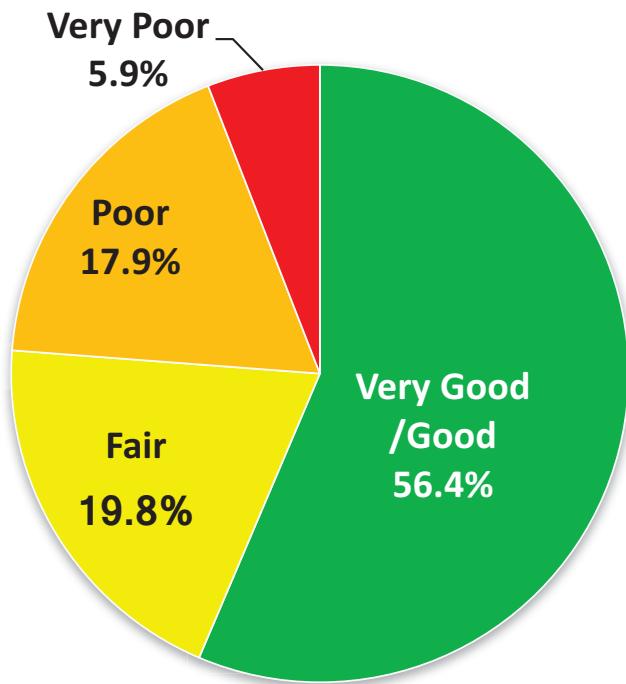
PCI = 75

PCI = 60

PCI = 45

PCI = 10

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Featured Legend
- Very Good/Good
- Fair
- Poor
- Very Poor

PCI Breakdown

- More than half are in good condition
- 24% are poor/very poor

- Residentials are in better condition

Pie chart 1 labels:
- Very Poor 5.9%
- Poor 17.9%
- Fair 19.8%
- Very Good /Good 56.4%

Legend:
- Very Good/Good (70-100)
- Fair (50-69)
- Poor (25-49)
- Very Poor (0-24)

Pie chart 2 labels:
- Arterial 25%, PCI=67
- Residential 54%, PCI=73
- Collector 21%, PCI=60

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Typical Treatments – Milling

Typical Treatments – Blade Patch

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Typical Treatments – Grind & Pave

Before

After

Typical Treatments - Reconstruct

Before

After

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Step 2. Be Prepared

- Spend 15 to 30 hours preparing for every hour of presentation
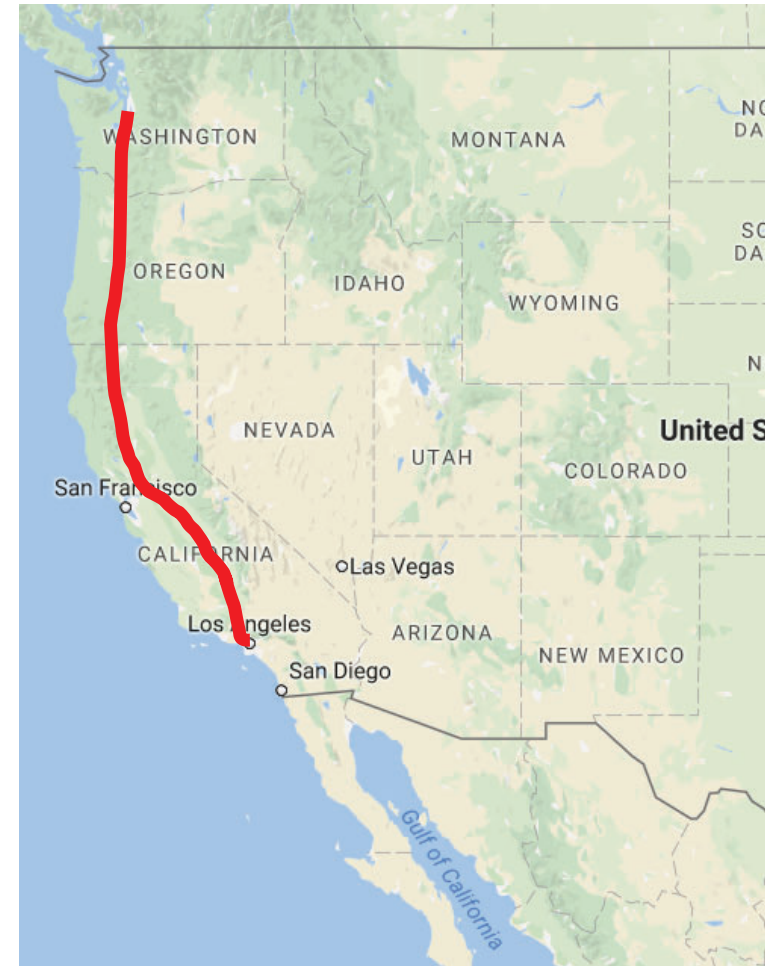- Anticipate questions
- Rehearse!

BEFORE

AFTER

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Step 3. Grab Their Attention

- Our pavement network stretch's all the way to...
- It would take you 20 hours at 65 mph to drive...
- Our pavement network is worth $687M
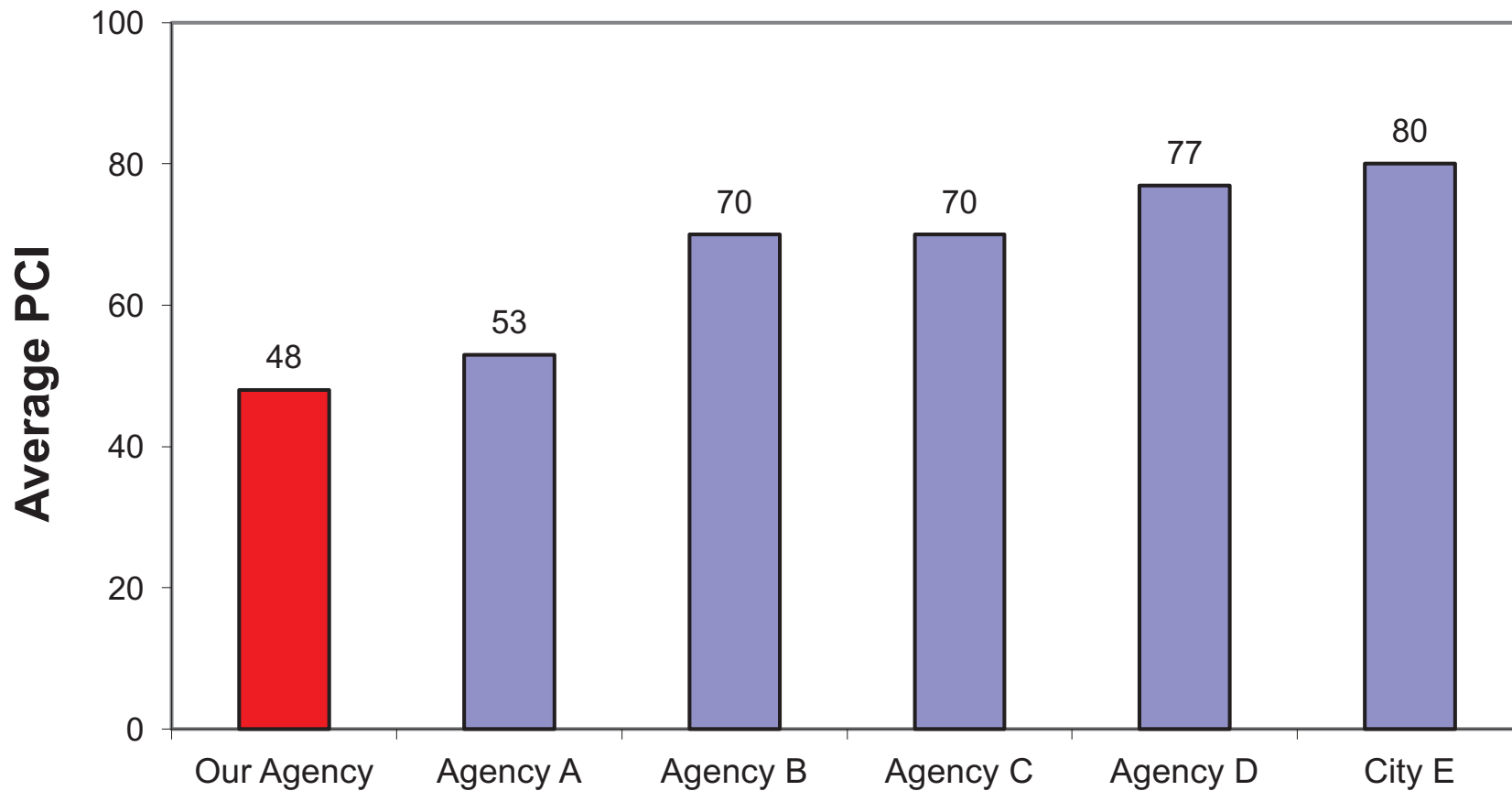- We spend $800K per year to maintain it
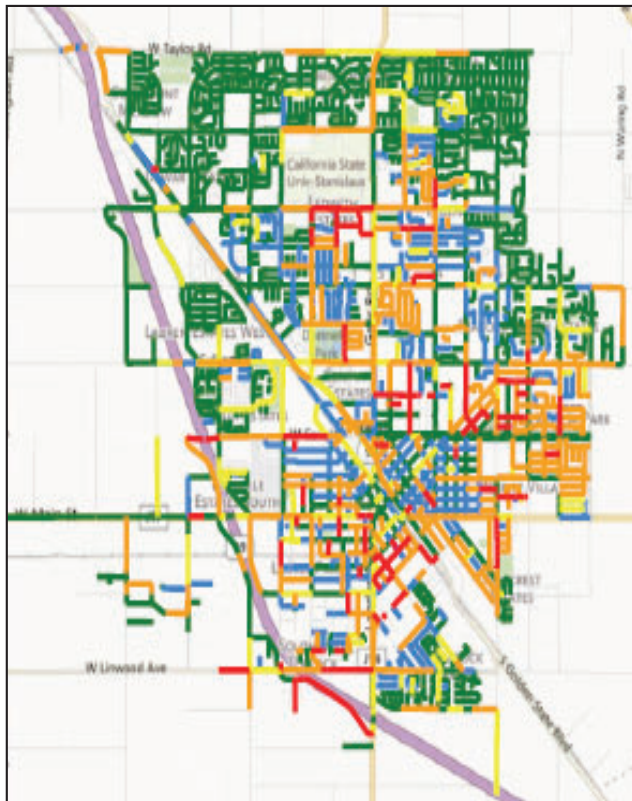

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Step 4. Use Pictures

The "good" …

Use Pictures (cont.)

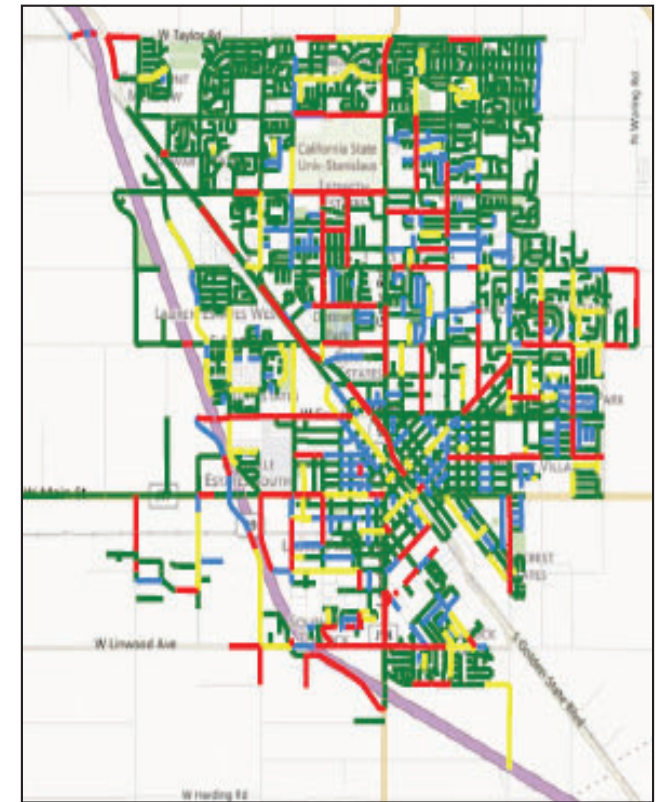... and the "bad"

Step 5. Compare to Others
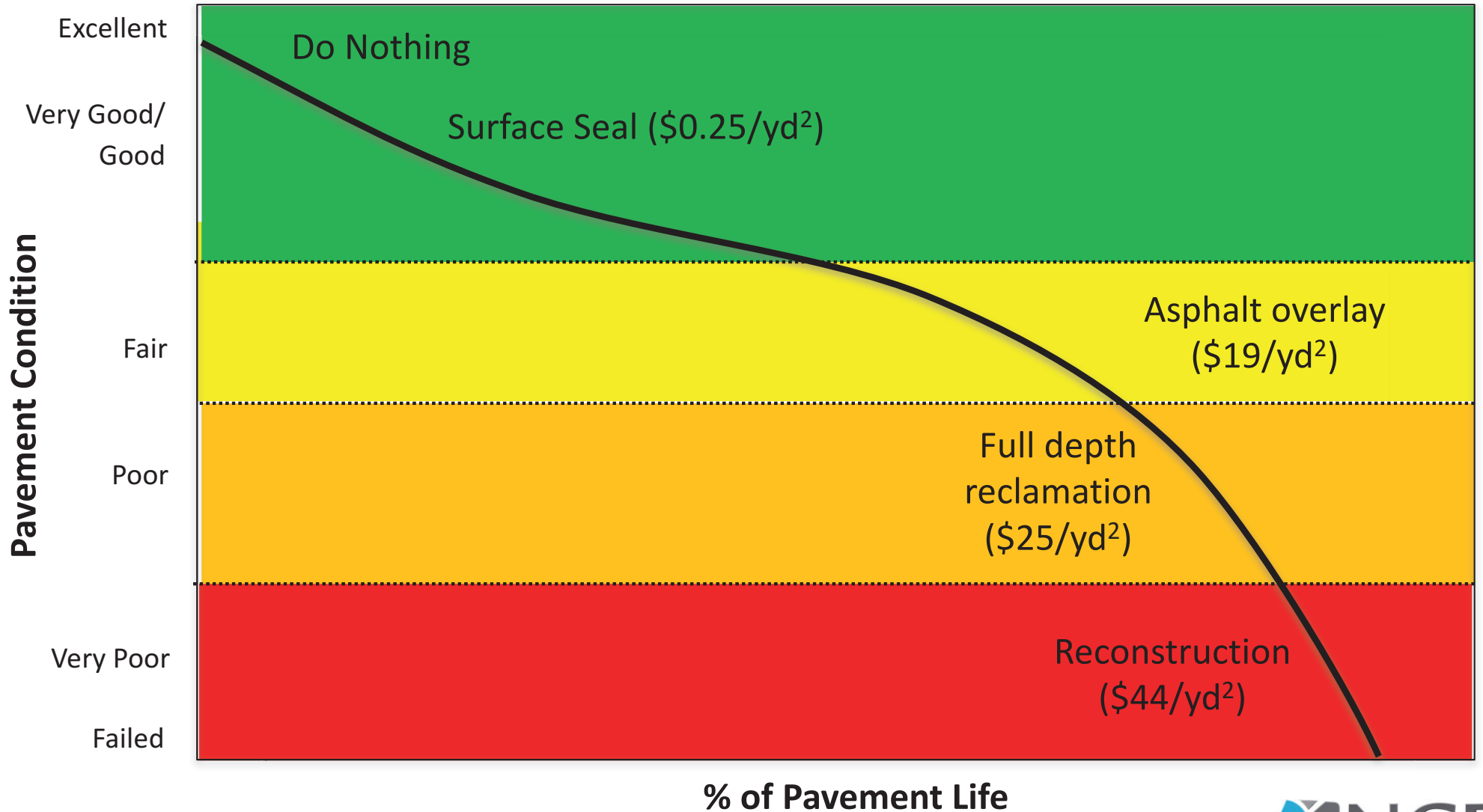
Step 6. What are the Impacts

Current condition

20 years @ current funding level
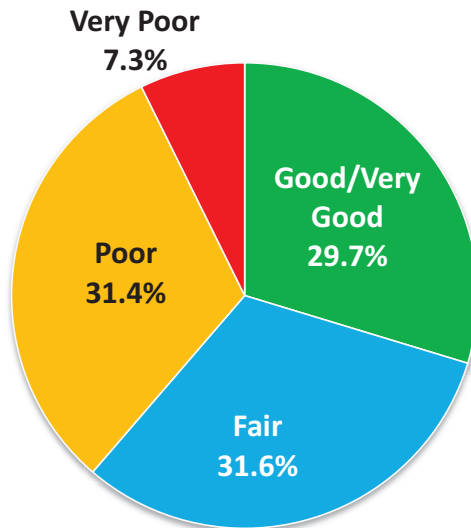
20 years with funding increase

Performance and Cost
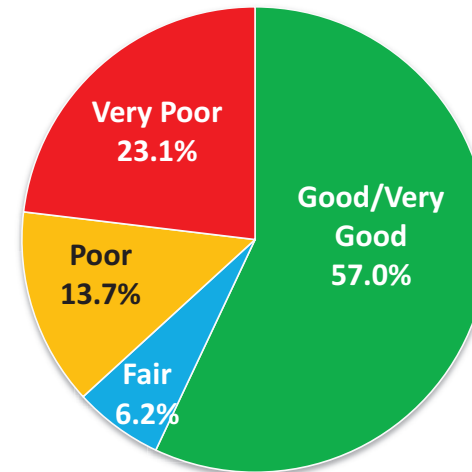
Examples of Presenting Impacts

Condition	Budget Scenario			
	Current Condition	Maintain PCI at 57	Improve PCI to 70	Maintain Existing Budget
Good/Very Good	29.7	57.0	76.9	1.7
Fair	31.6	6.2	8.9	6.2
Poor	31.4	13.7	9.0	14.1
Very Poor	7.3	23.1	5.2	78.0
Budget (annual)	$150k	$230k	$180k	$175k

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Examples (continued)

Current Condition (2015)

Very Poor 7.3%
Good/Very Good 29.7%
Poor 31.4%
Fair 31.6%

2034 Condition (Maintain PCI at 57)

Very Poor 23.1%
Good/Very Good 57.0%
Poor 13.7%
Fair 6.2%

2034 Condition (Improve PCI to 70)

Very Poor 5.2%
Poor 9.0%
Fair 8.9%
Good/Very Good 76.9%
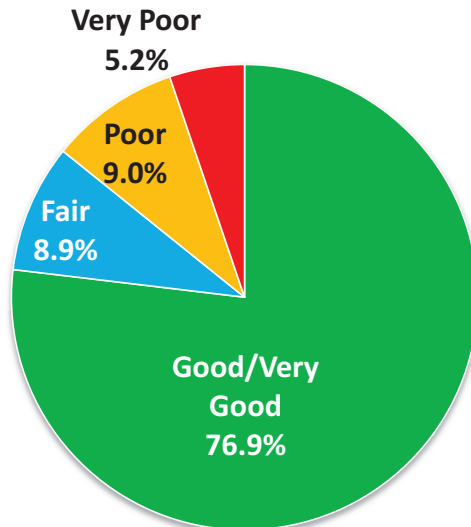
2034 Condition (Existing Budget $150K/Yr)

Good/Very Good 1.7%
Fair 6.2%
Poor 14.1%
Very Poor 78.0%
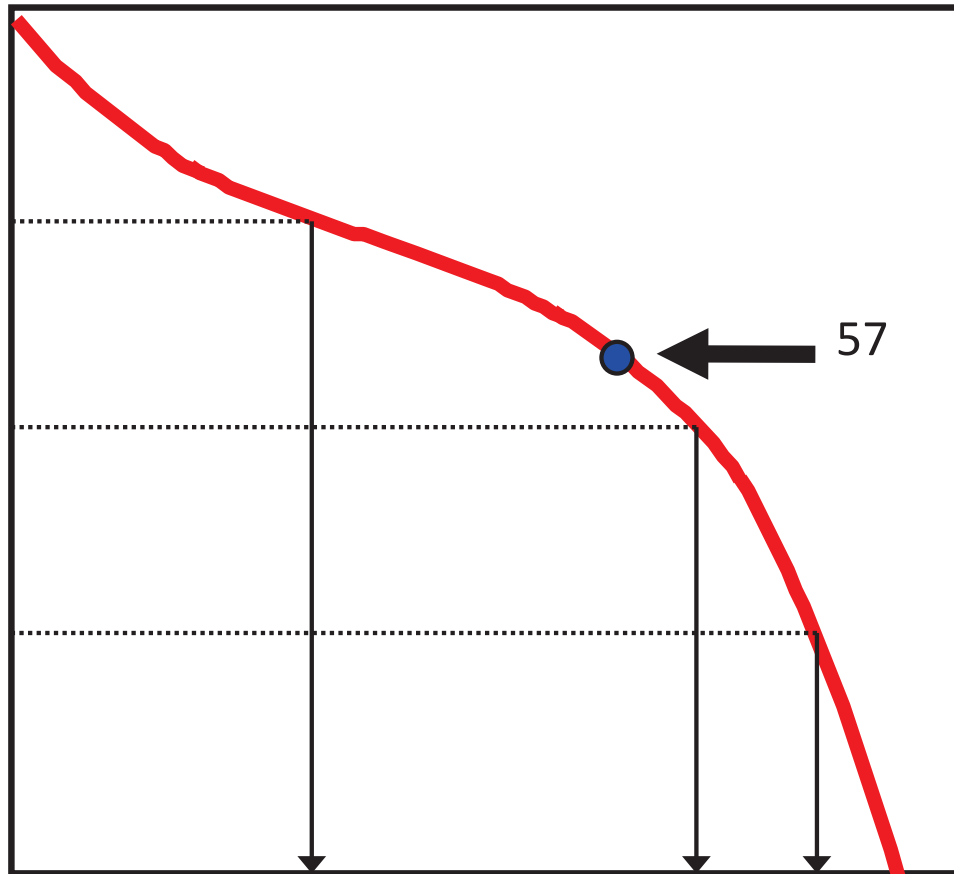
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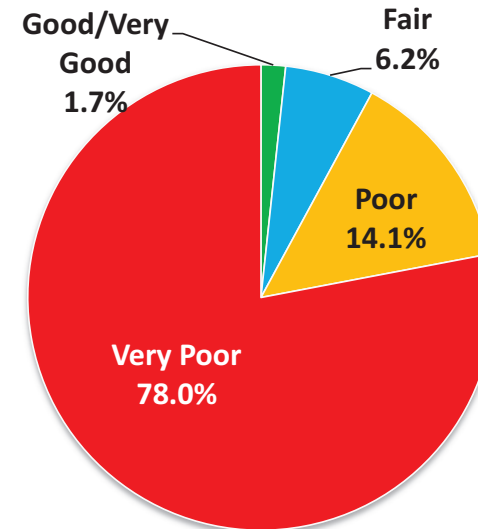
Examples (continued)
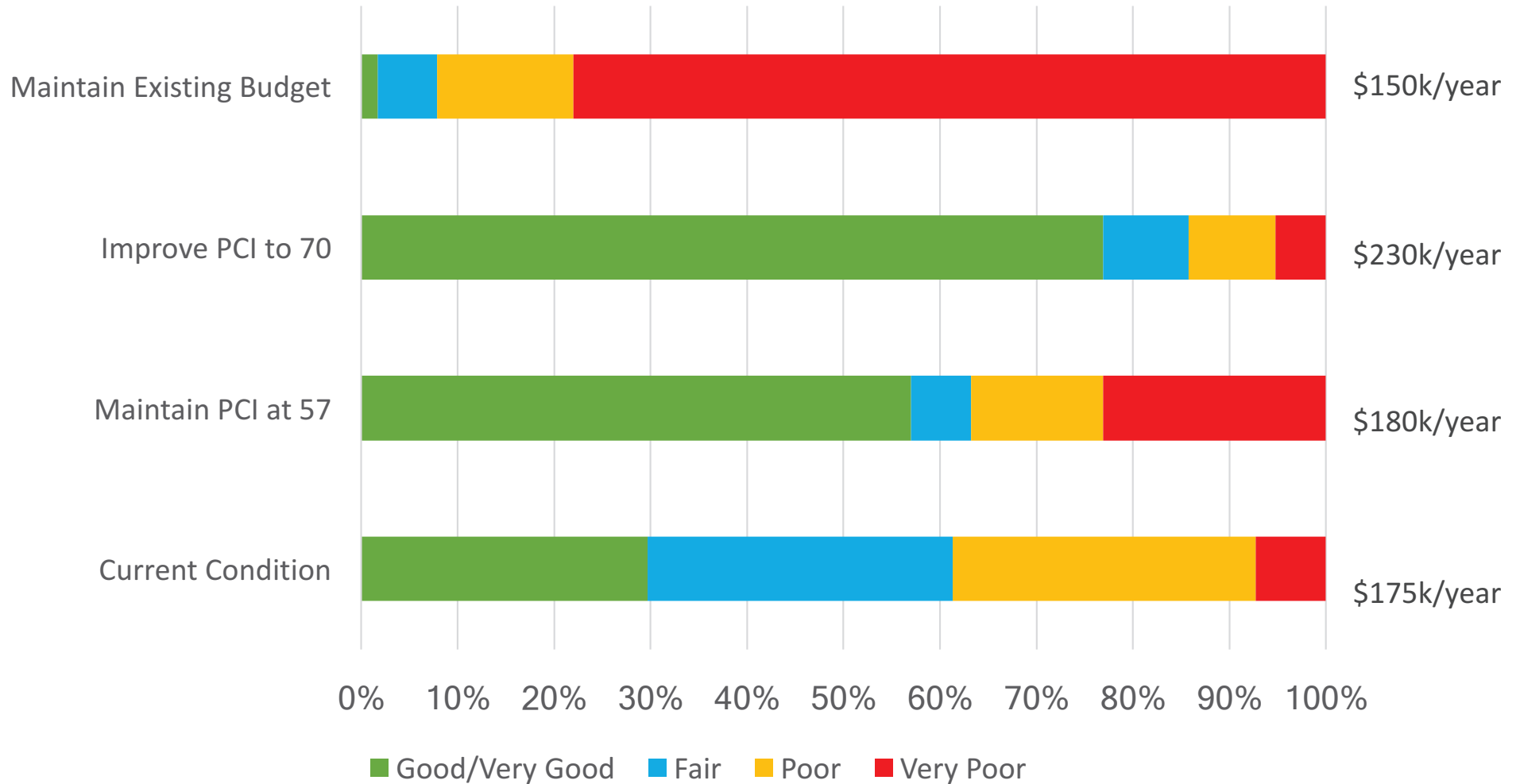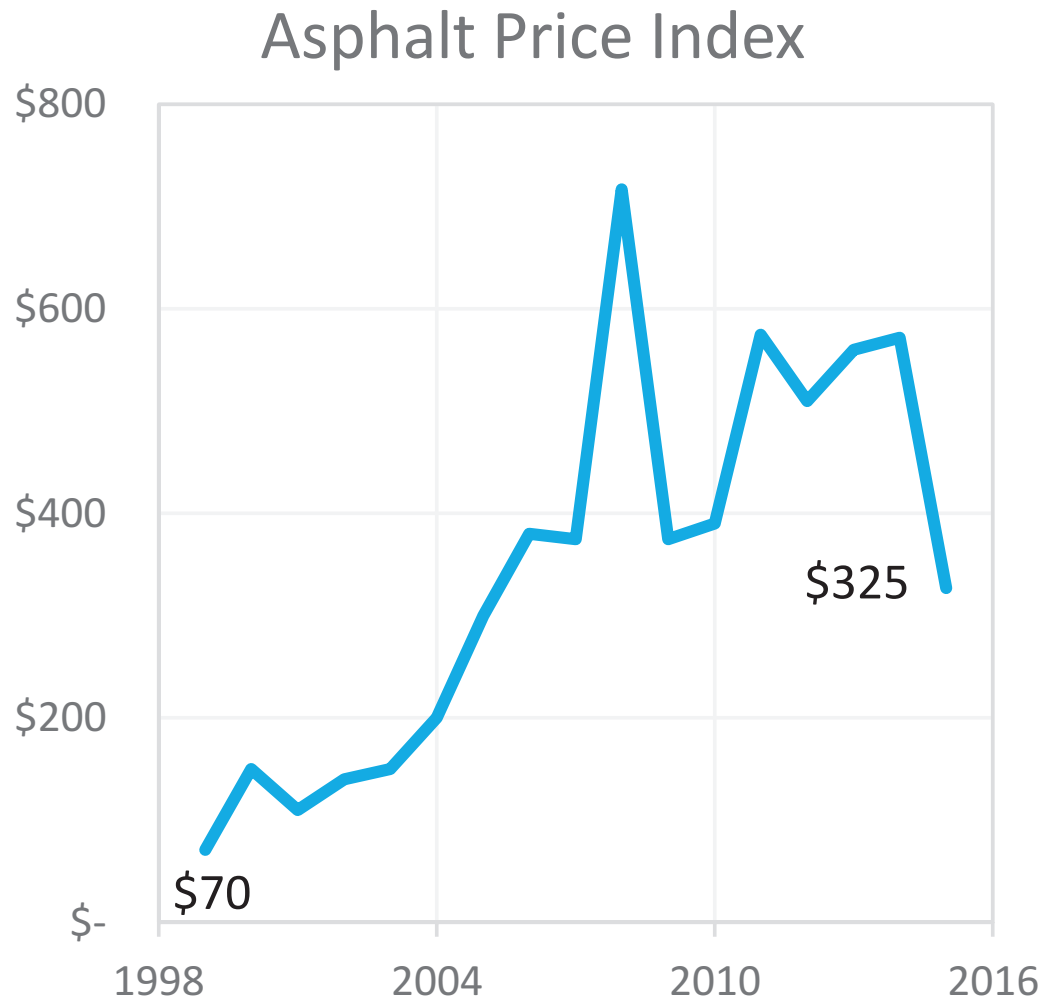
Examples (continued)
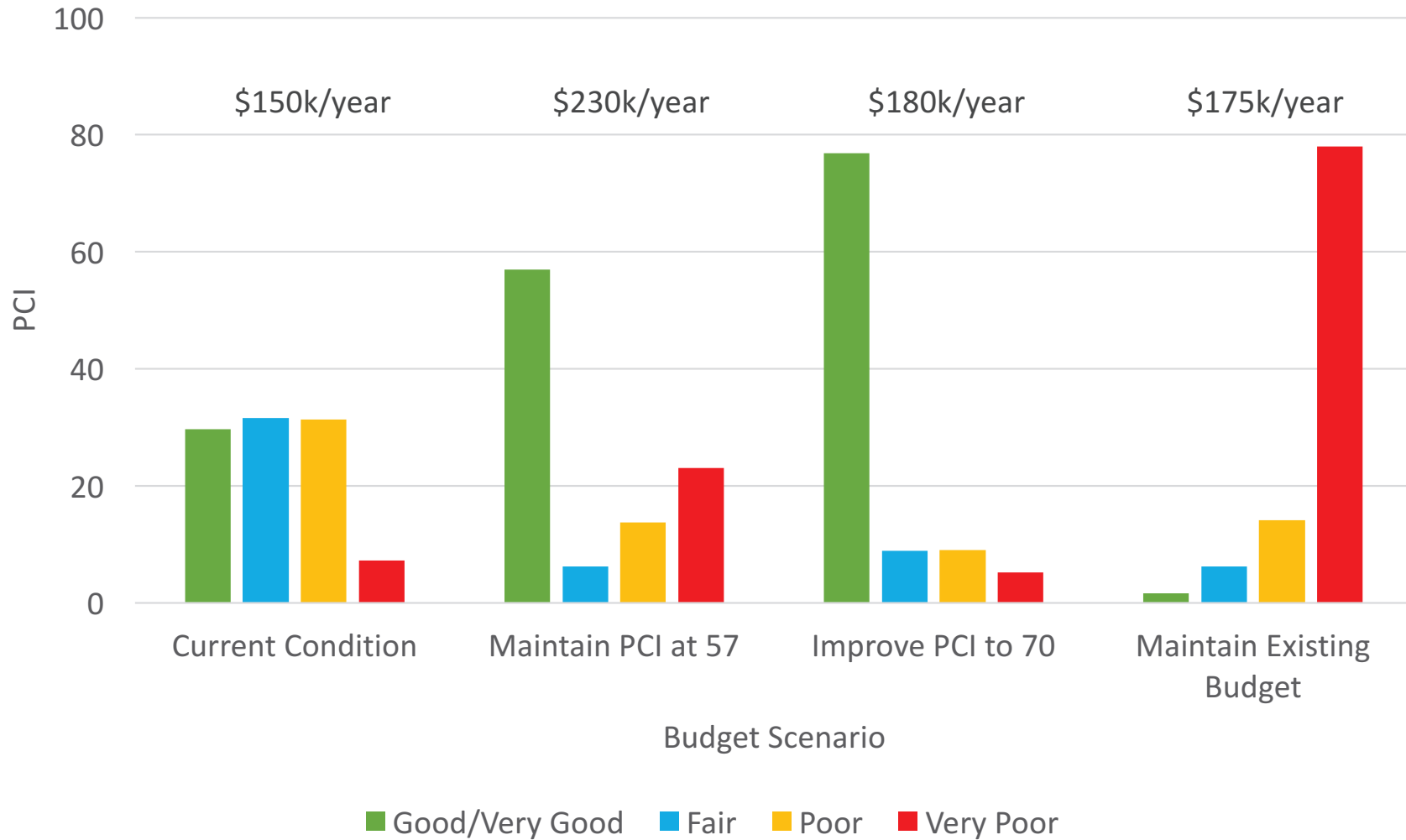
How Did We Get Here?

- Pavements are deteriorating rapidly
  - Agency condition
  - Steep part of deterioration curve

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How Did We Get Here?

Asphalt Price Index

- Asphalt prices have increased almost five-fold since 1999
- Funding has not kept up

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Step 7. Bring Solutions

- **Council**
  - Funding mechanisms
  - Grants/fees/taxes
- **Stretch the dollar**
  - More cost-effective treatments
  - New materials
  - New treatments

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Summary (cont.)

- Agency A has a substantial investment in streets valued at $560M
- Current street network PCI = 67
- Existing budget will see steep decline:
  - To PCI = 61 in 5 years
  - To PCI = 33 in 20 years

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Summary (cont.)

- Maintain street network

- Pavement management will allow selection of cost-effective prioritized approach to street repair

- Continue efficient use of budgeted funds to effectively maintain street network investment

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Questions?

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