



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

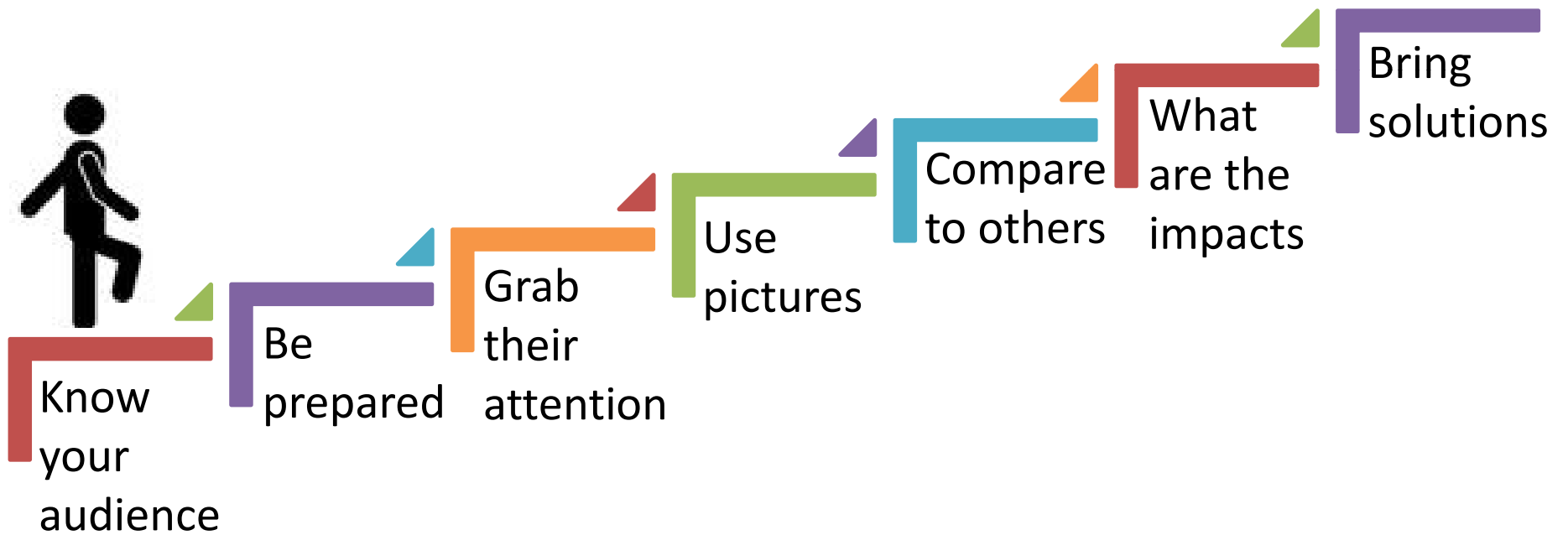
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Principal Engineer

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Portland, OR



Collaboration. Commitment. Confidence.™

# The “7 Step” Program



# 1. Know Your Audience

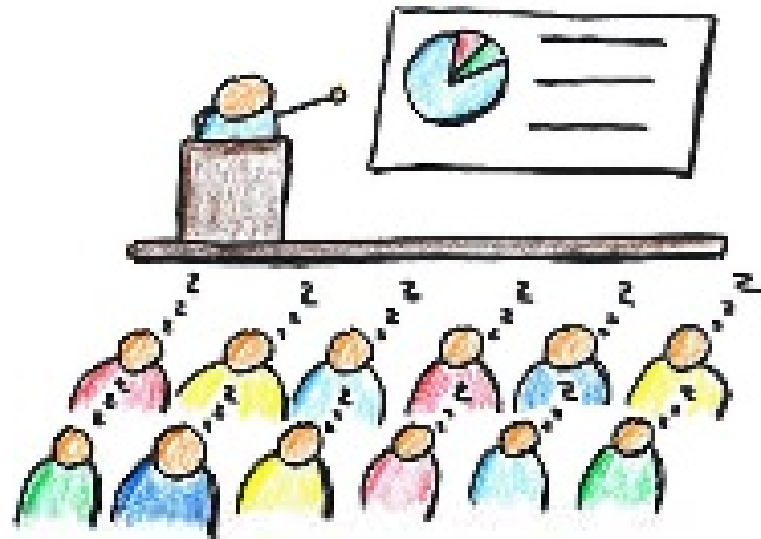
## Who?

- Council/City Manager/Director?
- Public?

## What are their concerns?

- Complaints?
- Money?

## Address their concerns



# Be Prepared to Inform Them on...

- 🌐 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?
- 🌐 What treatments are use?
- 🌐 Others?

# What is a Pavement Mgmt. Program?

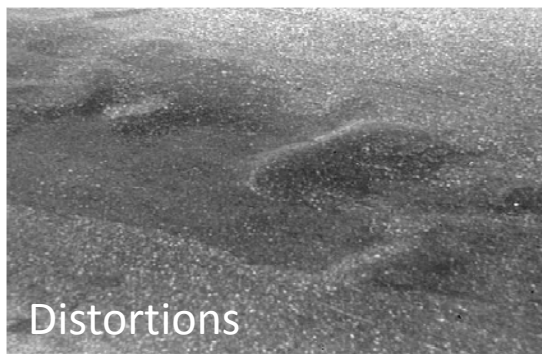
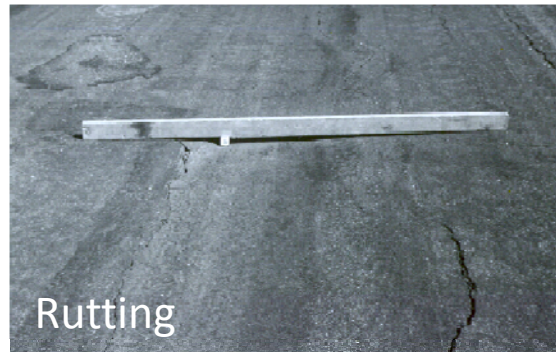
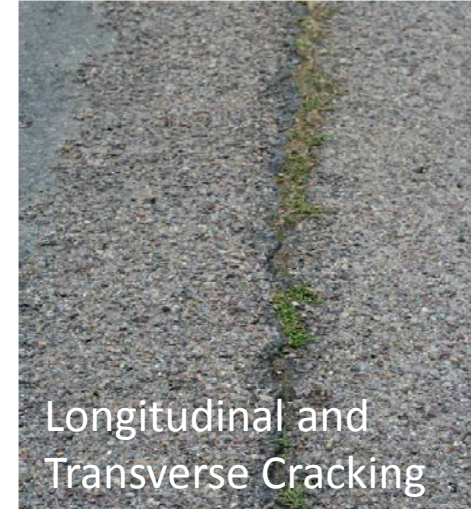
- ❖ A tool to help make cost-effective decisions
- ❖ Answers four main questions
  - What does agency own/maintain?
  - What condition is it in?
  - What repairs are needed and when?
  - How do we apply funding to maintain or improve streets cost-effectively?



# 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%
<b>Total</b>	<b>1203</b>	<b>2886</b>	<b>100%</b>

# Pavement Distress Type



# How is Distress Measured?

Which type is used

- No. of miles
- Time to collect

Survey protocols

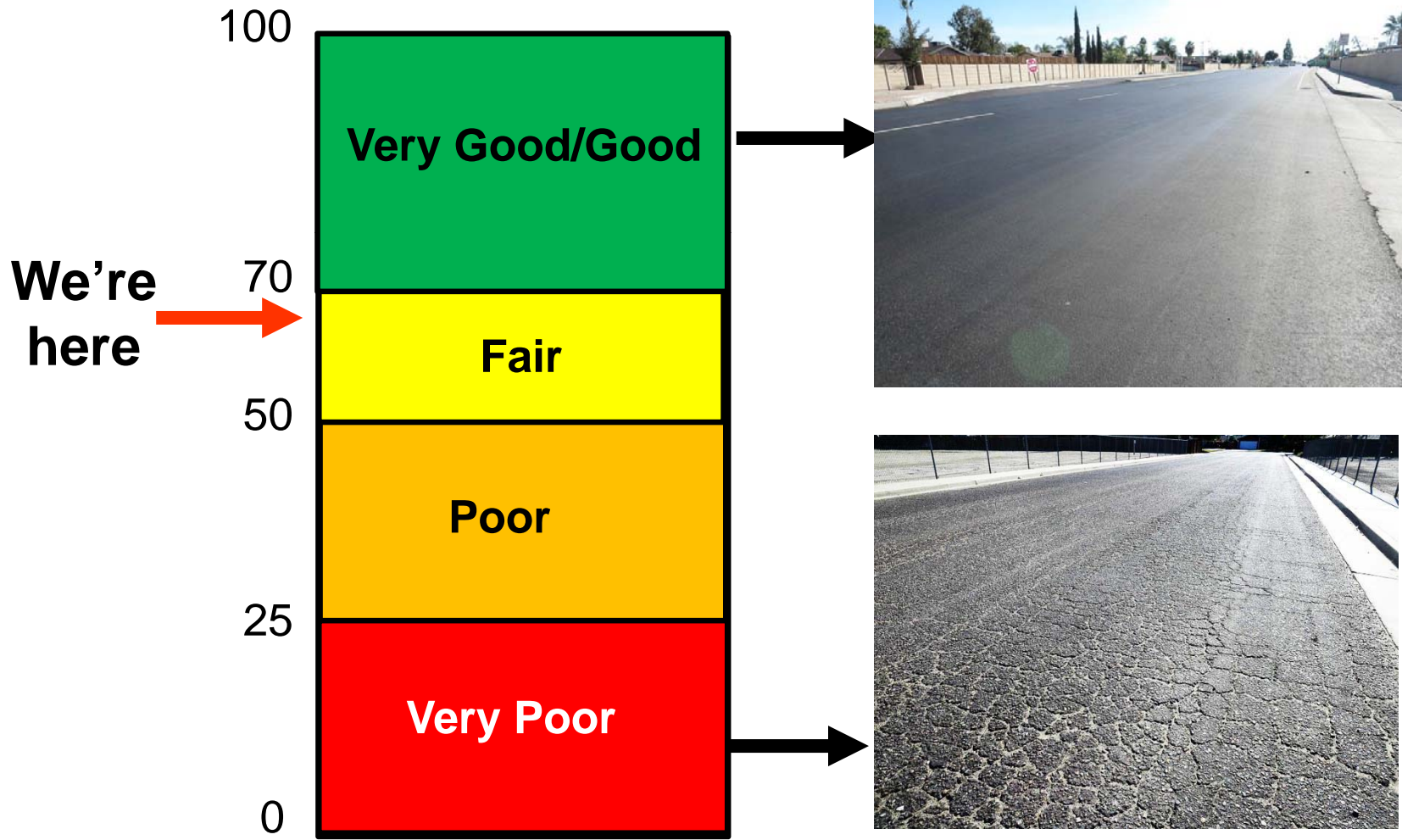
Use of GIS

Others?



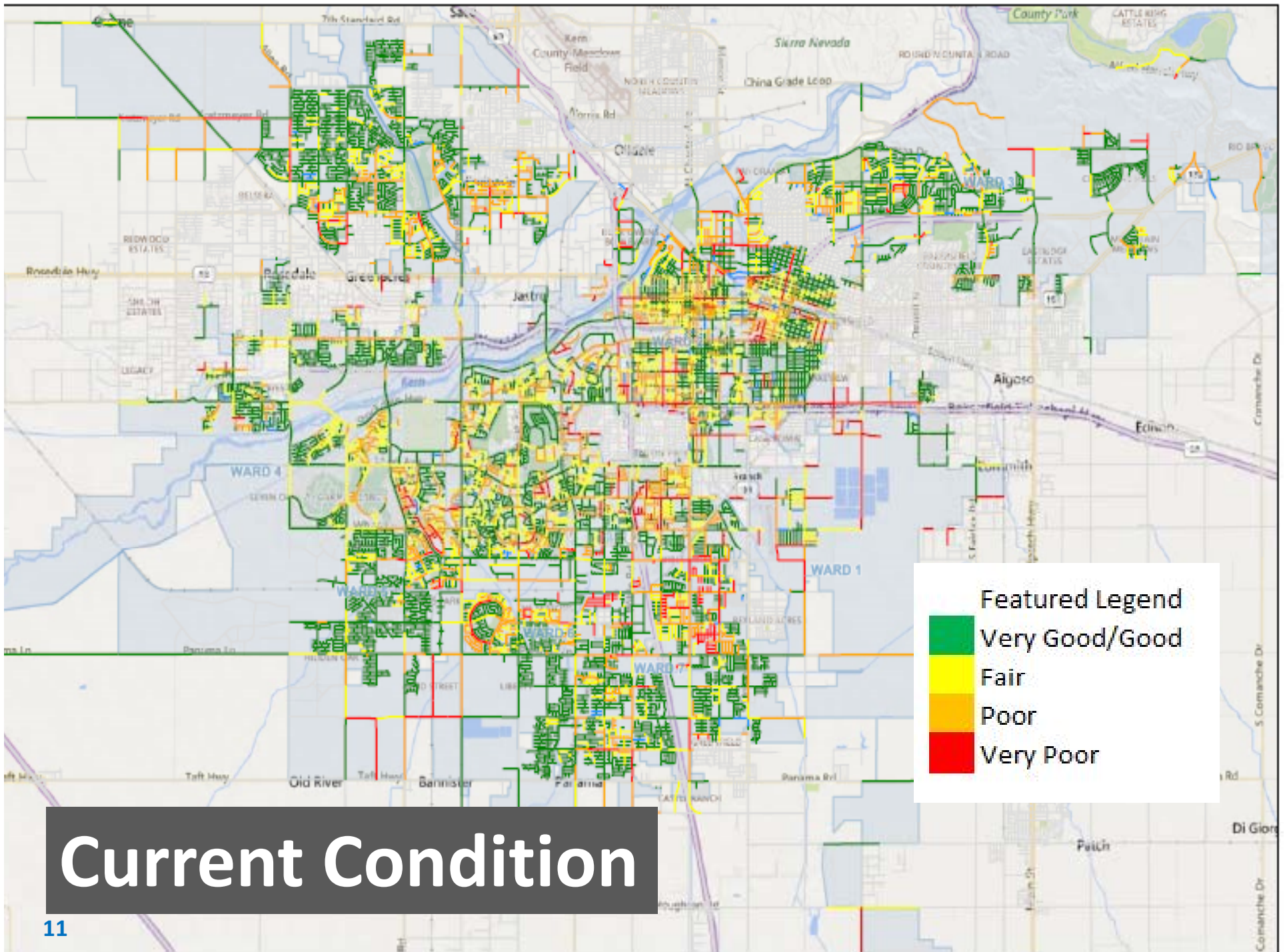


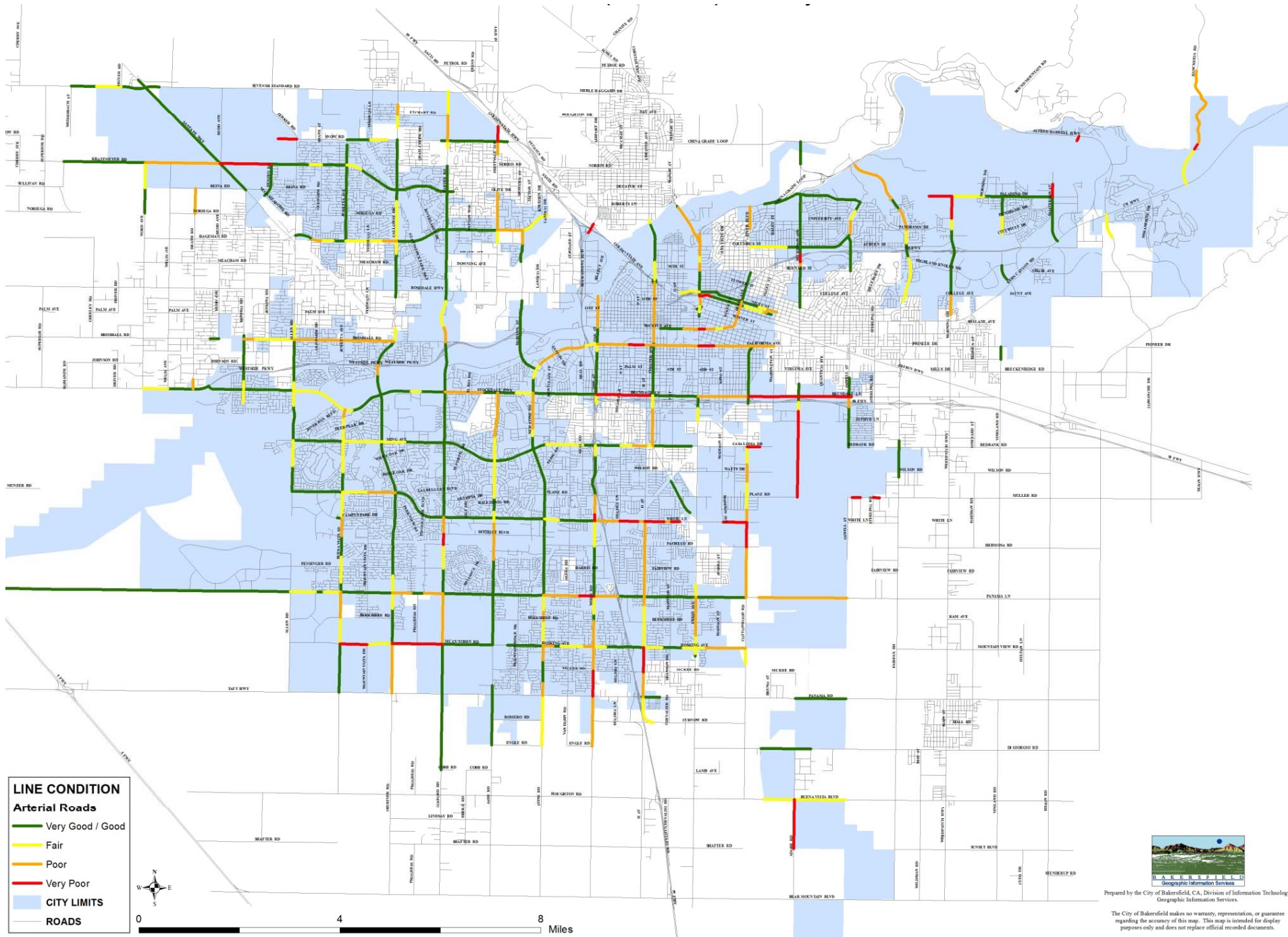
# How is Condition Determined



# PCI Values







**LINE CONDITION**  
**Arterial Roads**

- Very Good / Good
- Fair
- Poor
- Very Poor

CITY LIMITS

ROADS

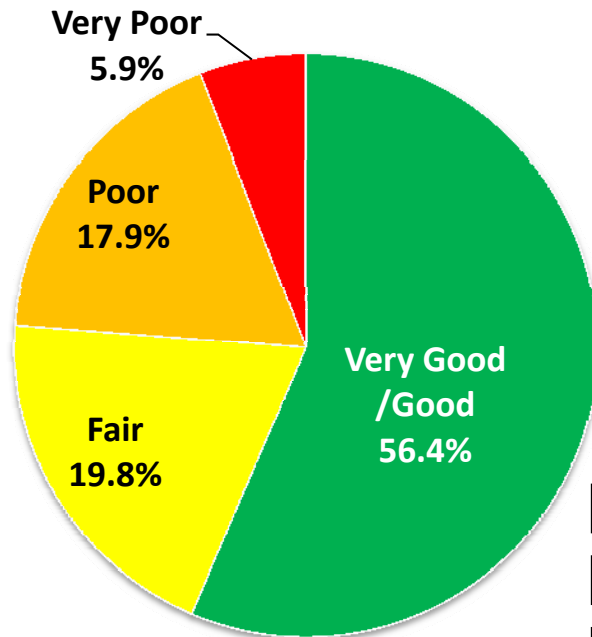


Prepared by the City of Bakersfield, CA, Division of Information Technology  
 Geographic Information Services

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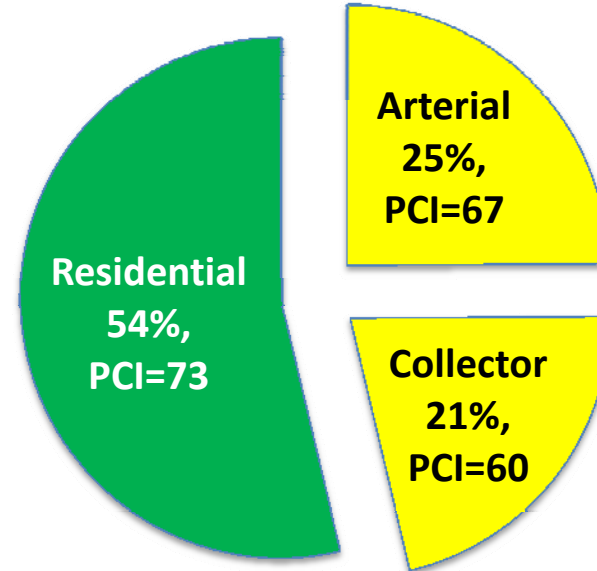
# PCI Breakdown

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

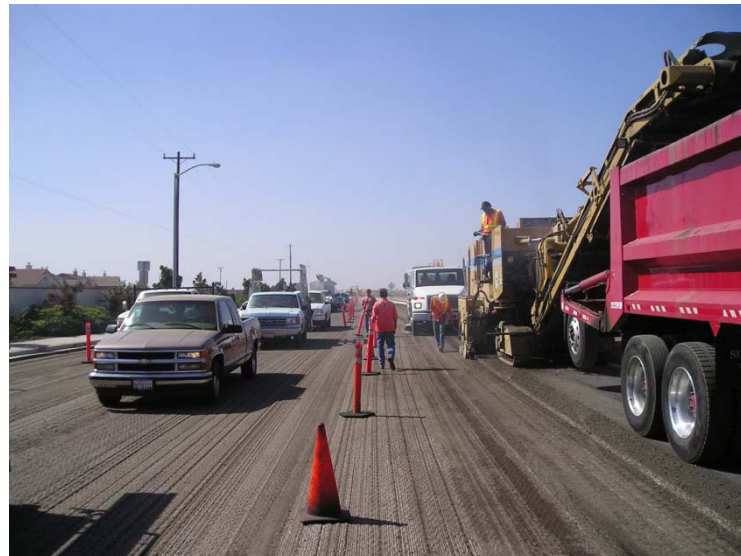


- Very Good/Good (70-100)
- Fair (50-69)
- Poor (25-49)
- Very Poor (0-24)

- Residentials are in better condition



# Typical Treatments - Milling



# Typical Treatments – Blade Patch



# Typical Treatments – Grind & Pave

Before



After





# Typical Treatments - Reconstruct

Before

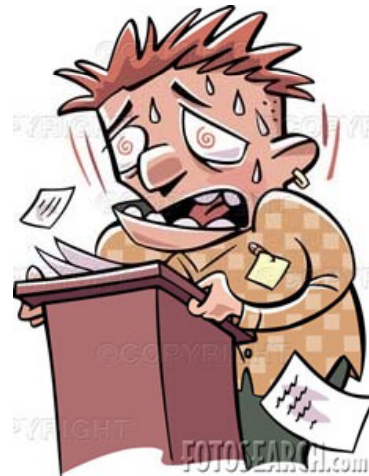


After



## 2. Be Prepared

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



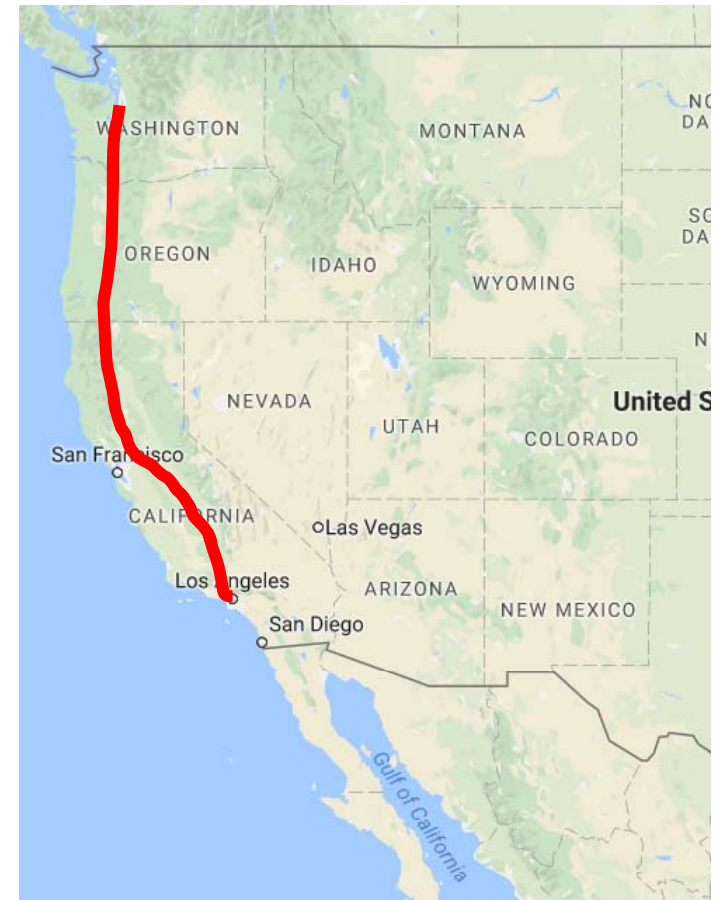
**BEFORE**



**AFTER**

# 3. Grab Their Attention

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



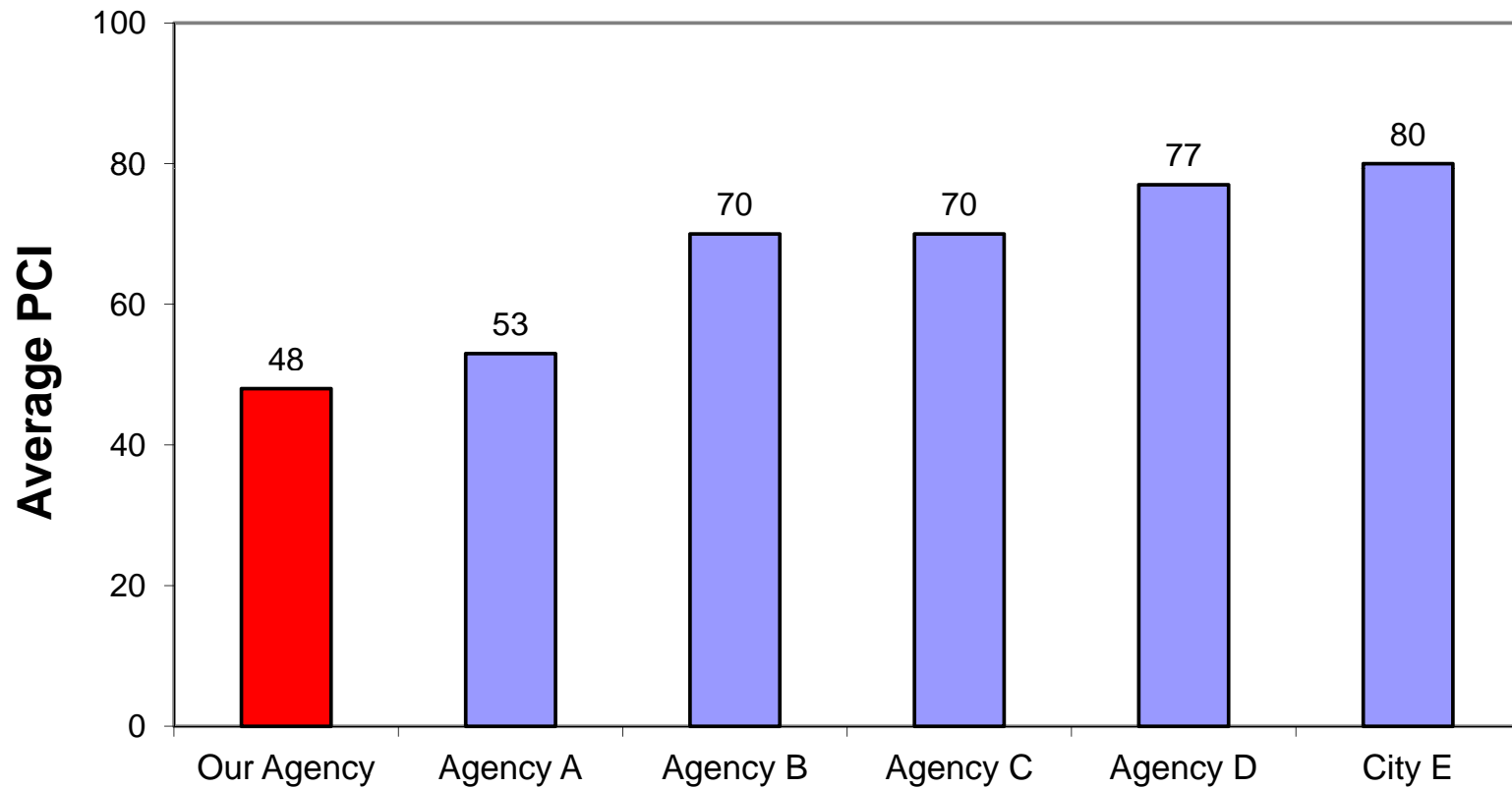
## 4. Use Pictures



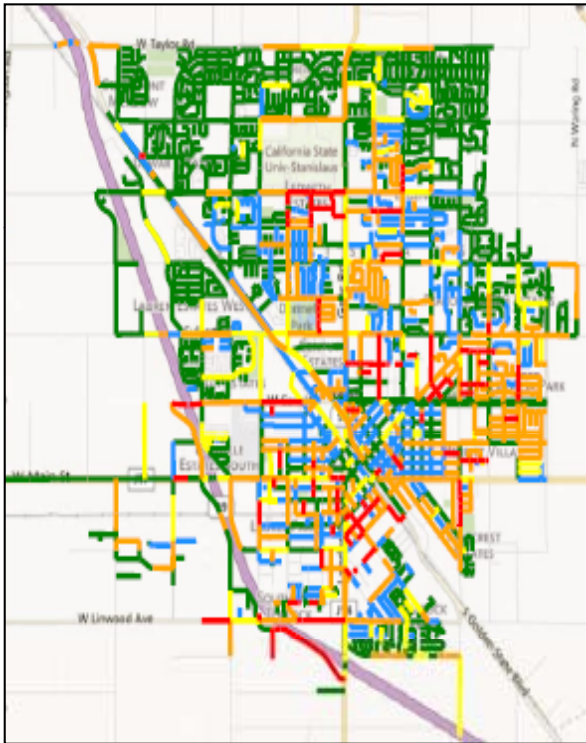
## 4. Use Pictures (cont.)



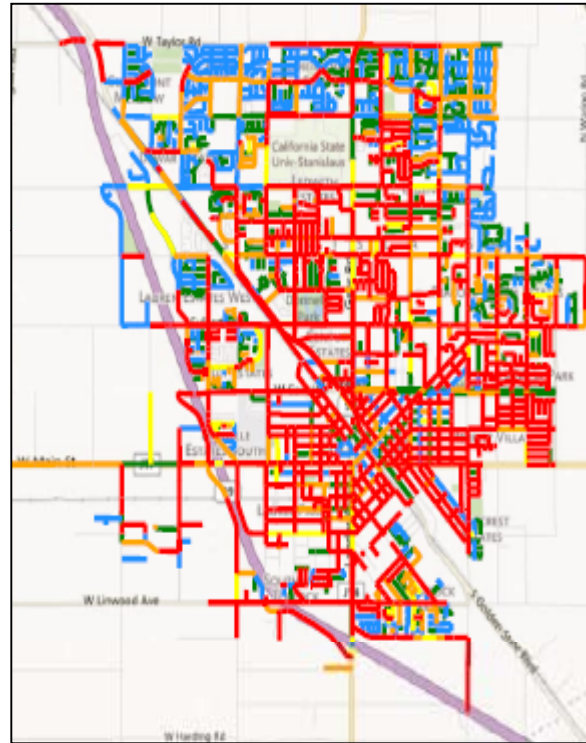
# 5. Compare to Other Cities



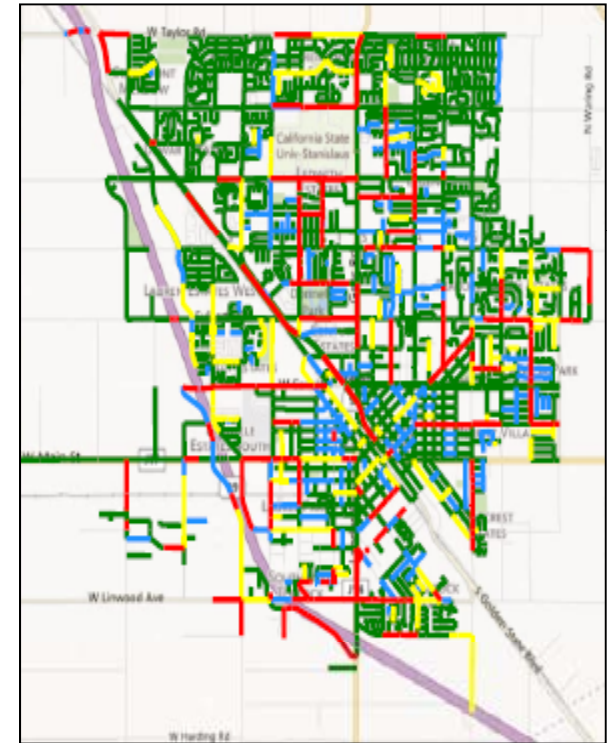
# 6. What are the Impacts



Current condition

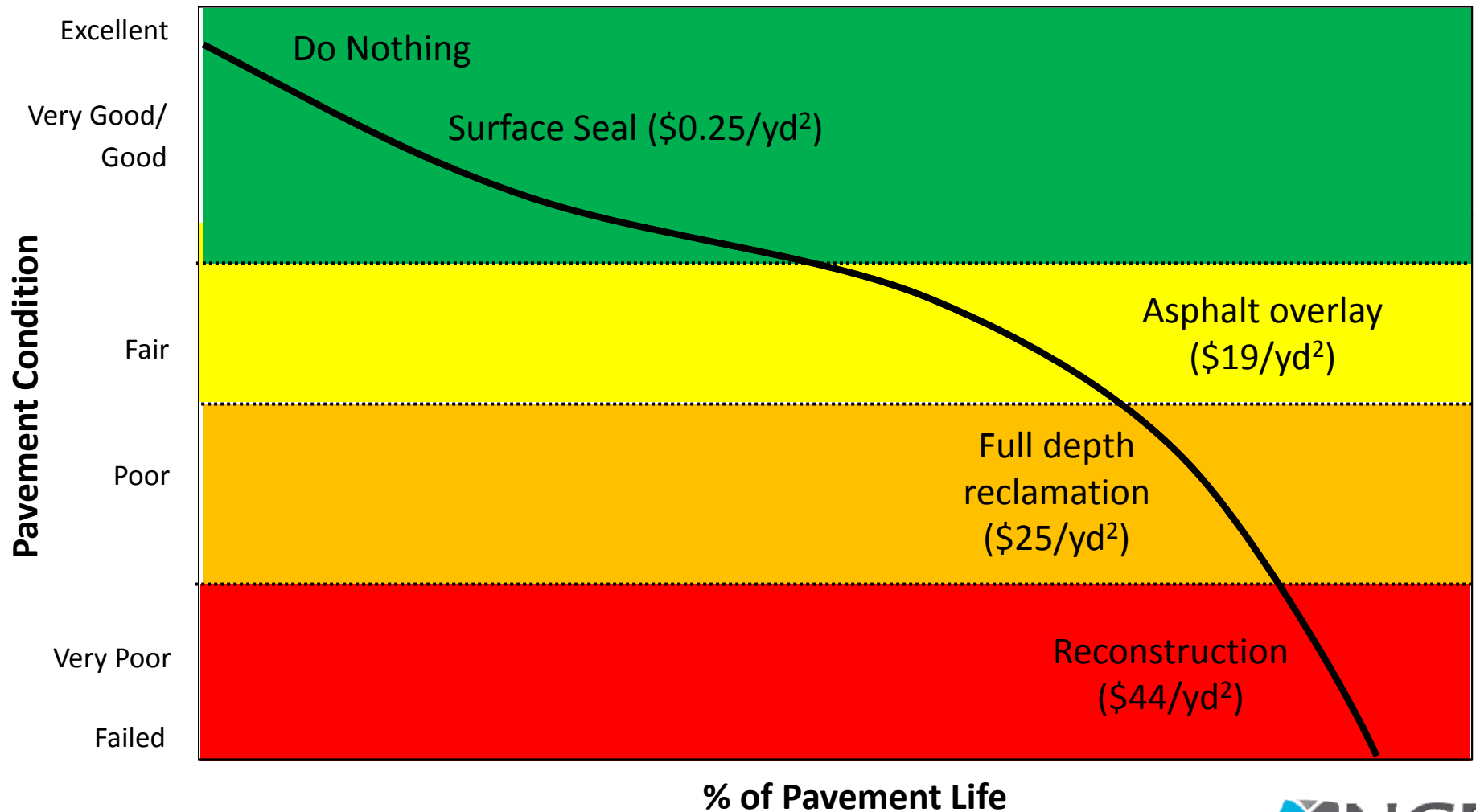


20 years @ current funding level



20 years with funding increase

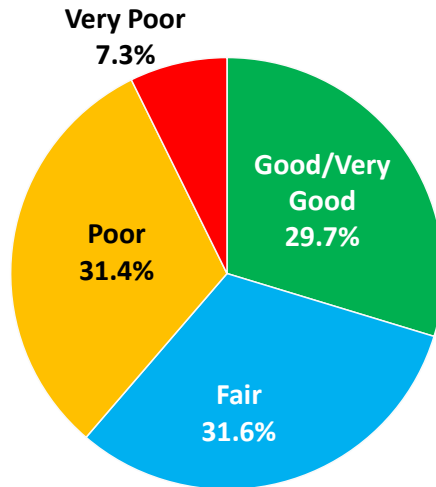
# Performance and Cost



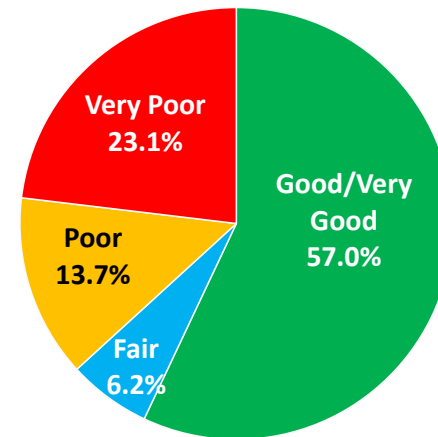


# Funding Scenario Impacts

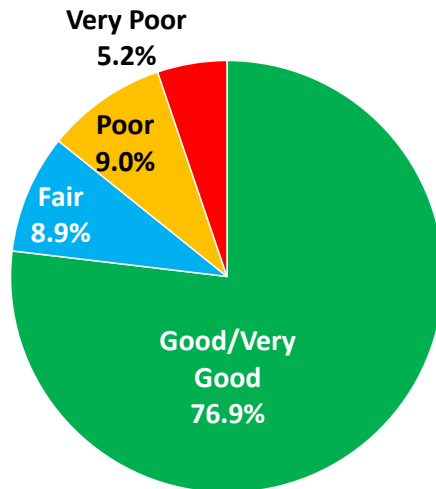
**Current Condition (2015)**



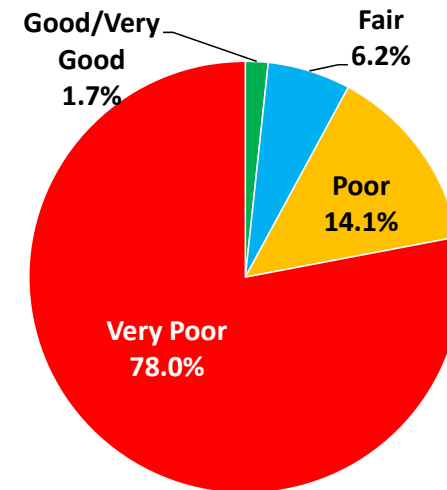
**2034 Condition (Maintain PCI at 57)**



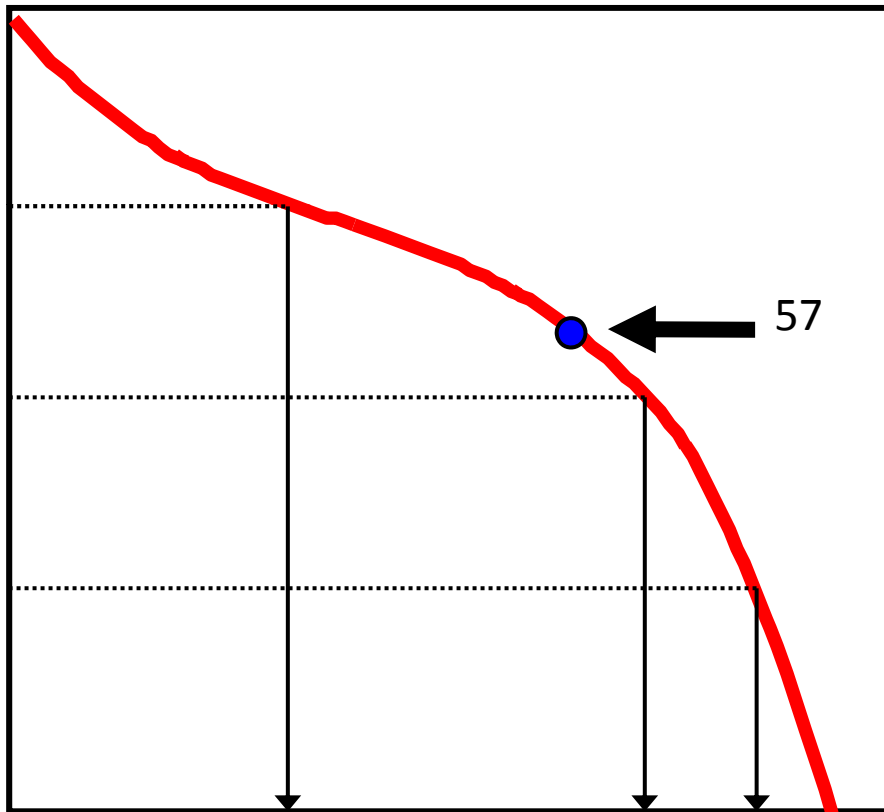
**2034 Condition (Improve PCI to 70)**



**2034 Condition (Existing Budget \$150K/Yr)**

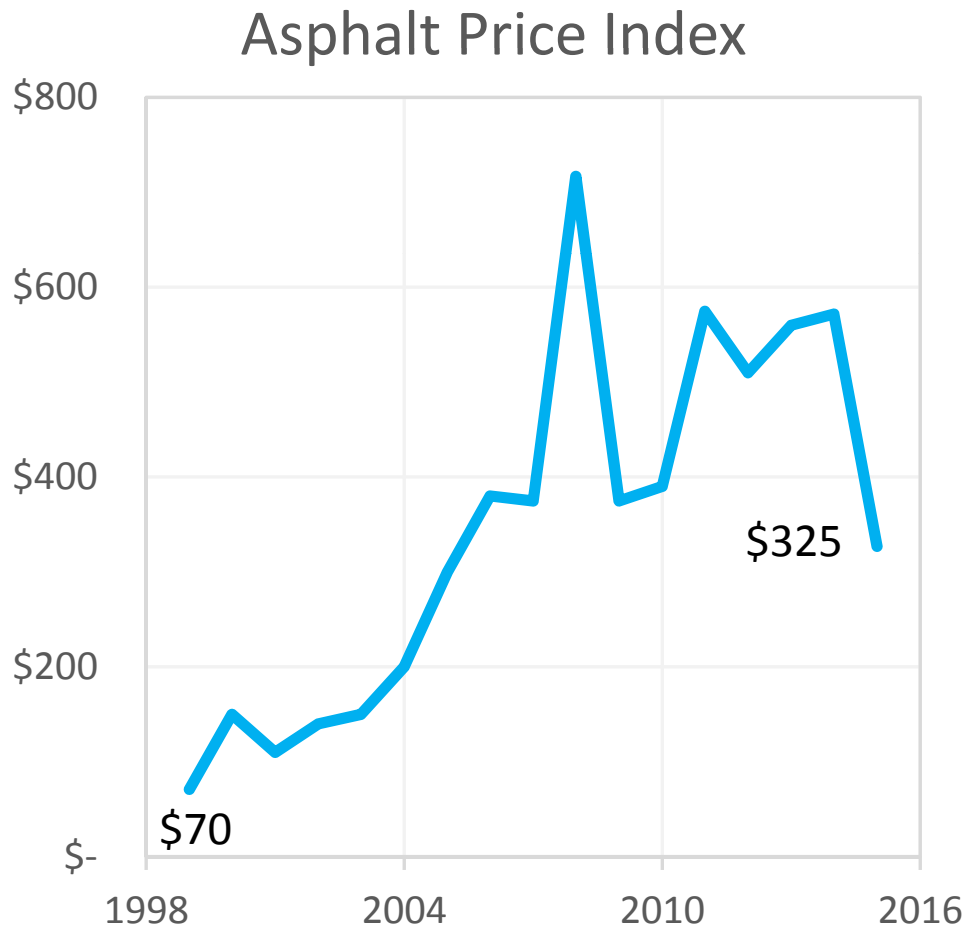


# How Did We Get Here?



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

# How Did We Get Here?



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

# 7. Bring Solutions

## ... to Council

- Funding mechanisms
- Grants/fees/taxes

## Stretch the dollar

- More cost-effective treatments
- New materials
- New treatments

# Summary (cont.)

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

# 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

# Questions?



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