

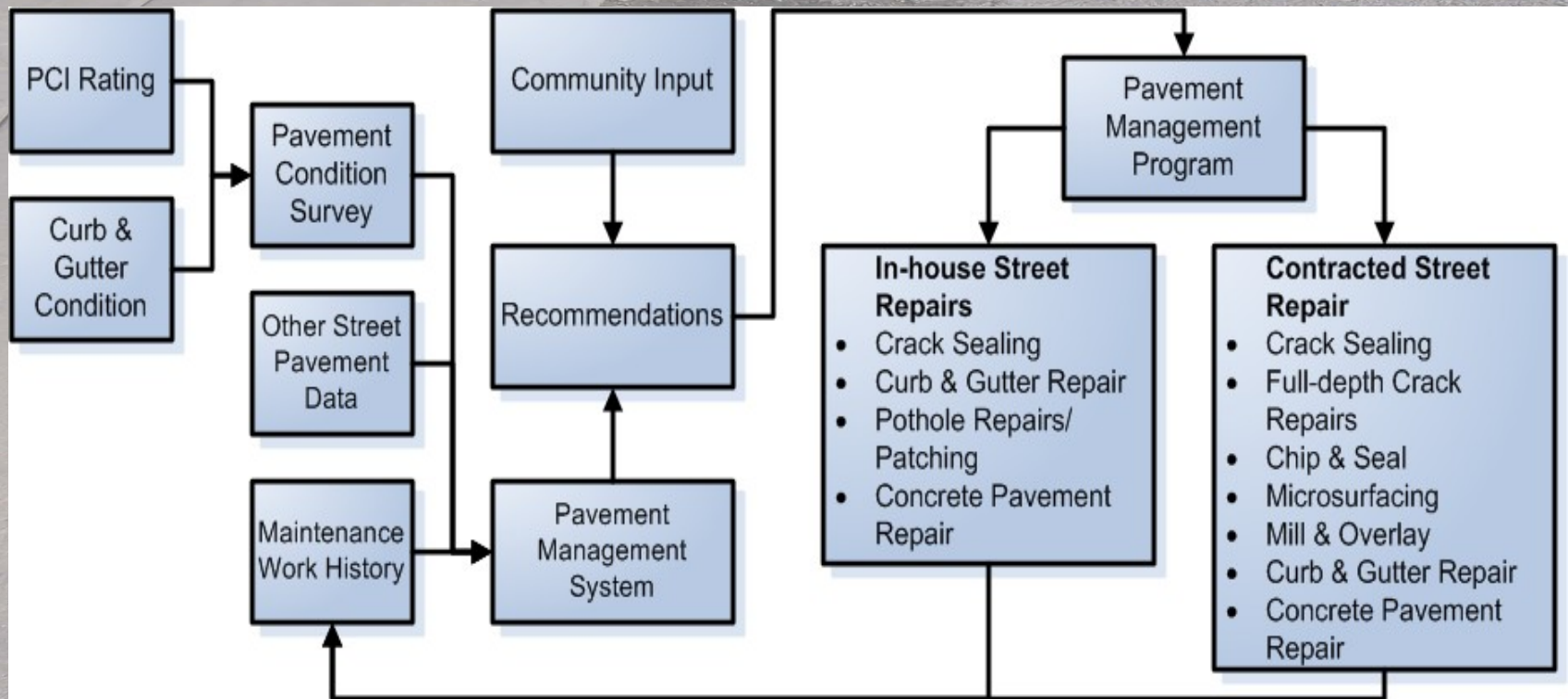
The background of the slide is a photograph of a cracked asphalt road surface. The cracks are irregular and run in various directions, some following the edges of the pavement slabs. The overall tone is a muted, greyish-brown.

# Pavement Management Program & 2006 Contracted Street Repair Project

Steven M. Lashley, P.E.  
Public Works Engineering



# Pavement Management Program





# Examples of Typical Contracted Street Repair Activities

- Crack Sealing
- Full-Depth Crack Repair
- Chip and Seal
- Microsurfacing
- Milling and Overlay
- Curb and Gutter Repair
- Concrete Pavement Repair



# Contracted Maintenance Criteria – Decision Factors

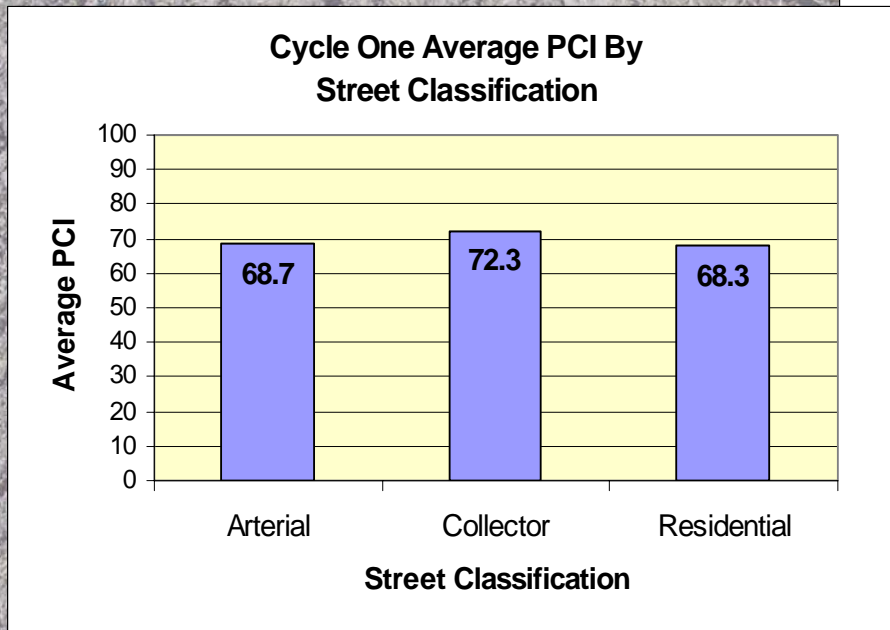
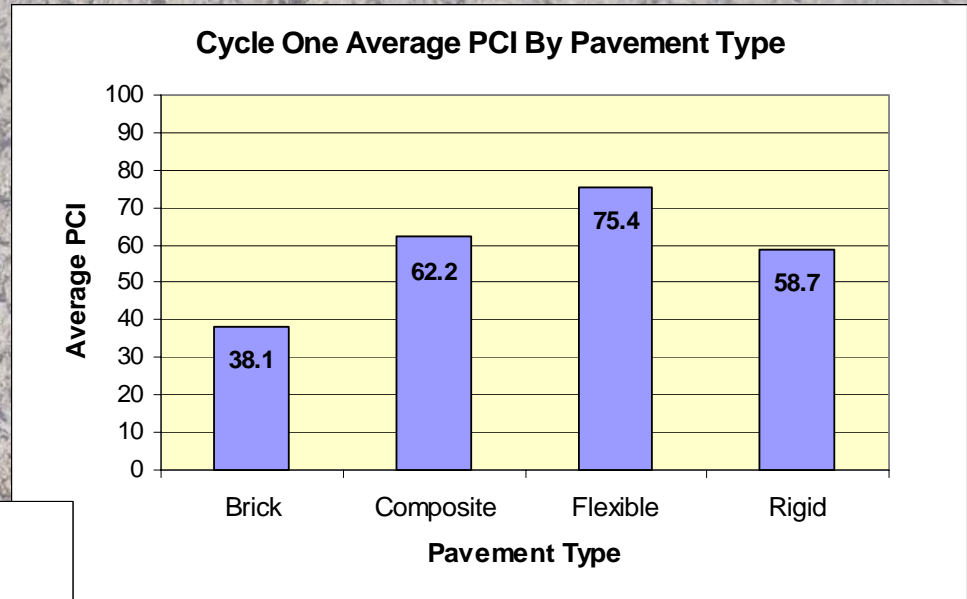
- Physical Roadway Condition – Utilizing the Pavement Condition Index (PCI)
- Street Classifications –Arterial, Collector, and Residential Streets
- On-going Maintenance Problems – Maintenance Work History
- Community Input
- Area Impact and Cost-Benefit



# Condition - City of Lawrence Streets

**Overall \*PCI = 69.0**

**\*Note that condition of Curb and Gutter does not impact the PCI value of the survey**



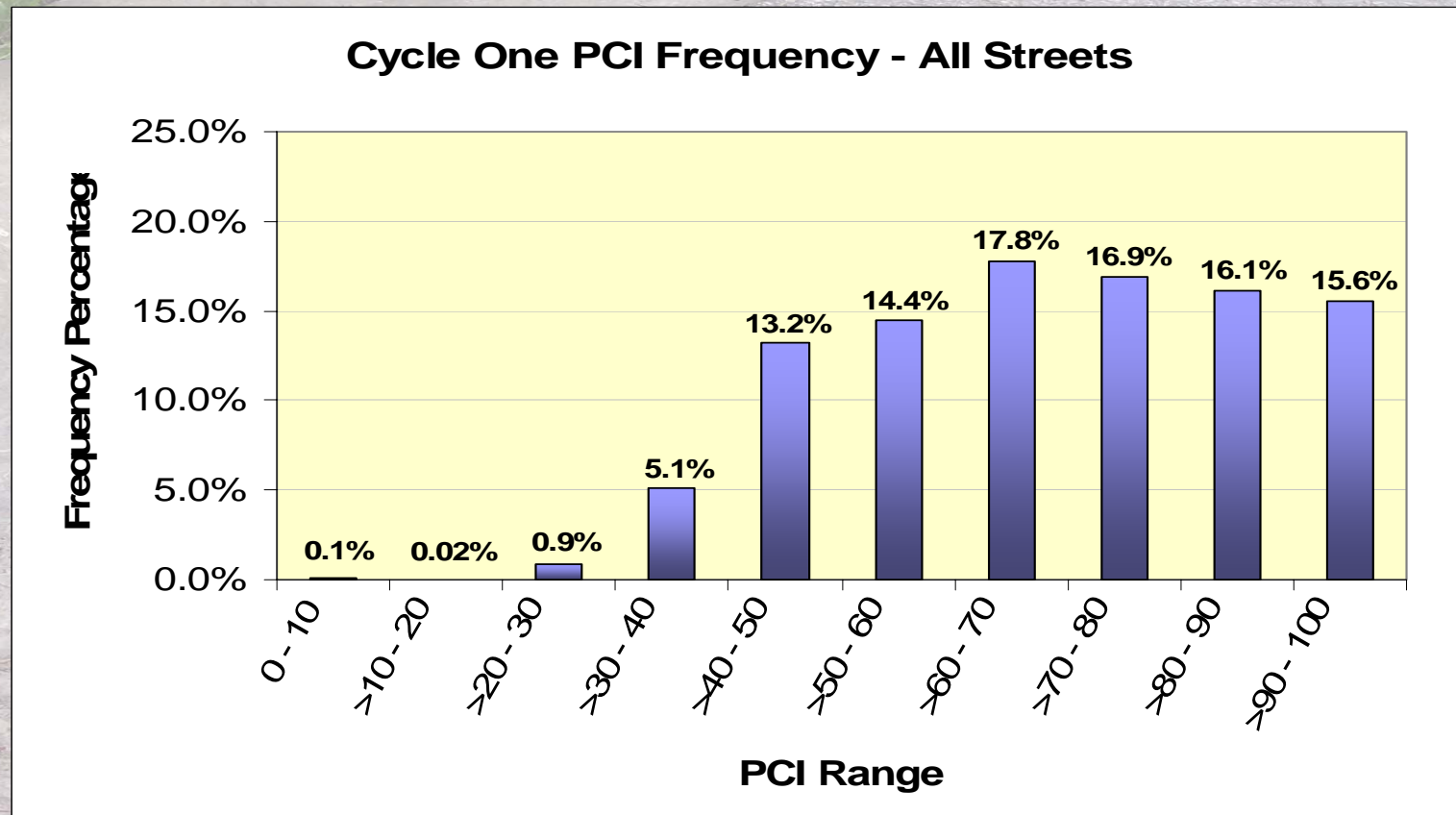
**Cycle One Survey includes 299 Miles of Streets (1922 Segments) Rated:**

- 2.9 miles Brick, 116.2 miles Composite, 163.4 miles Flexible, & 16.7 miles Concrete**
- OR 49.8 miles Arterial, 43.8 miles Collector, & 205.6 miles Residential**

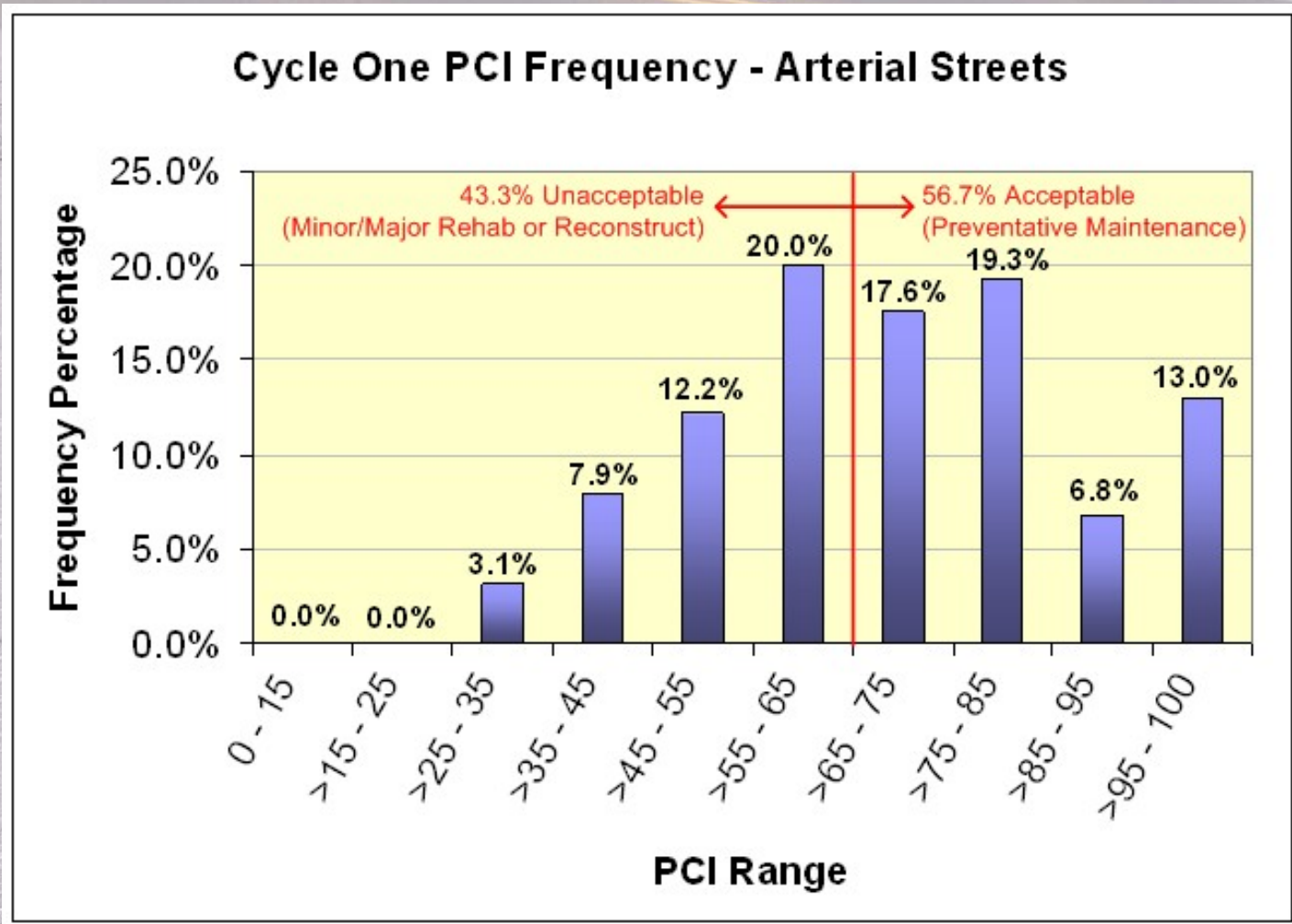


# PCI Frequency Distribution – Cycle One

- 31.5% of City streets have been identified as “unacceptable” and represent the “backlog” that need rehabilitation or reconstruction efforts
- 68.5% of City streets need preventative maintenance

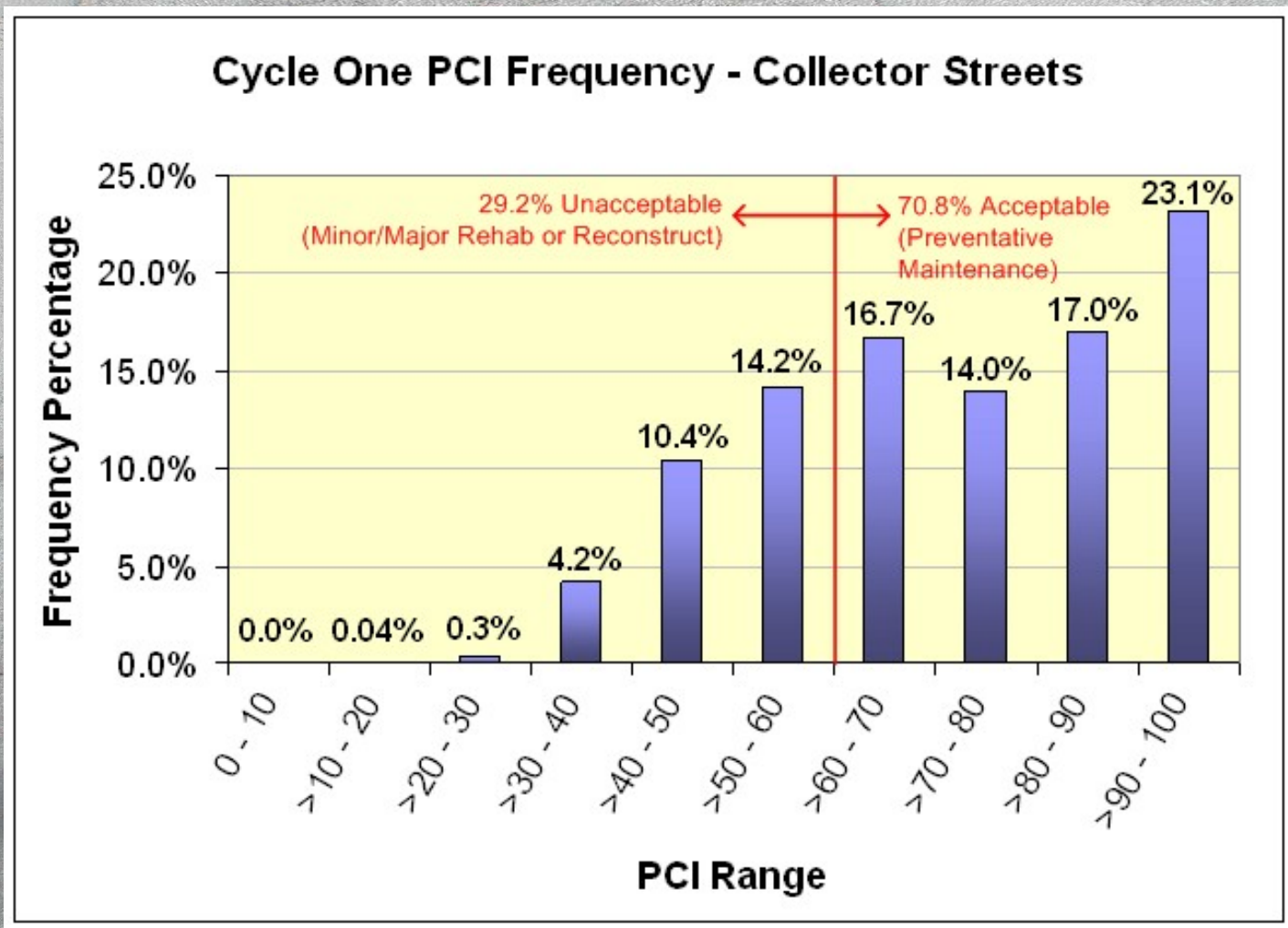


# PCI Frequency Distribution – Cycle One Arterials



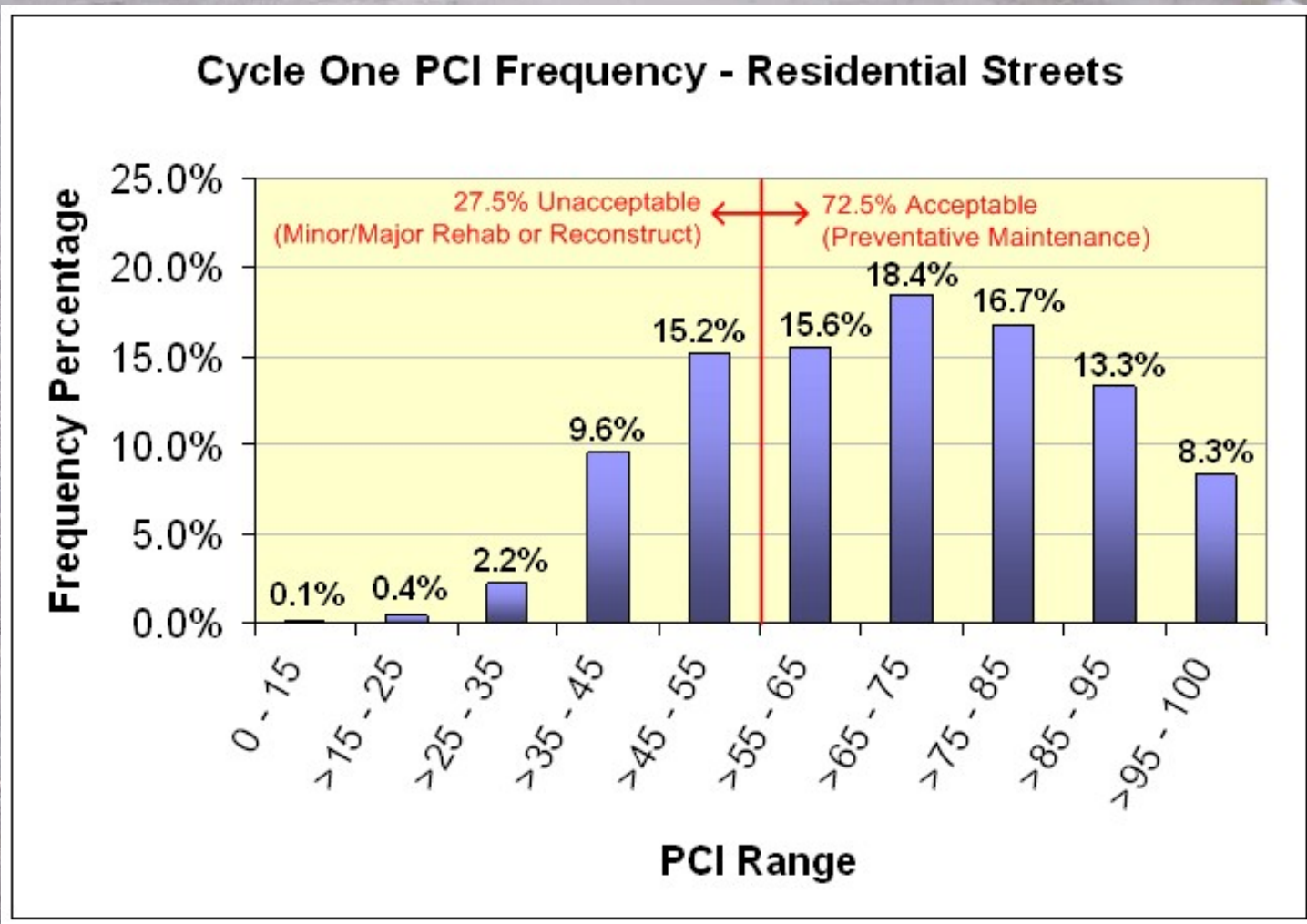


# PCI Frequency Distribution – Cycle One Collectors





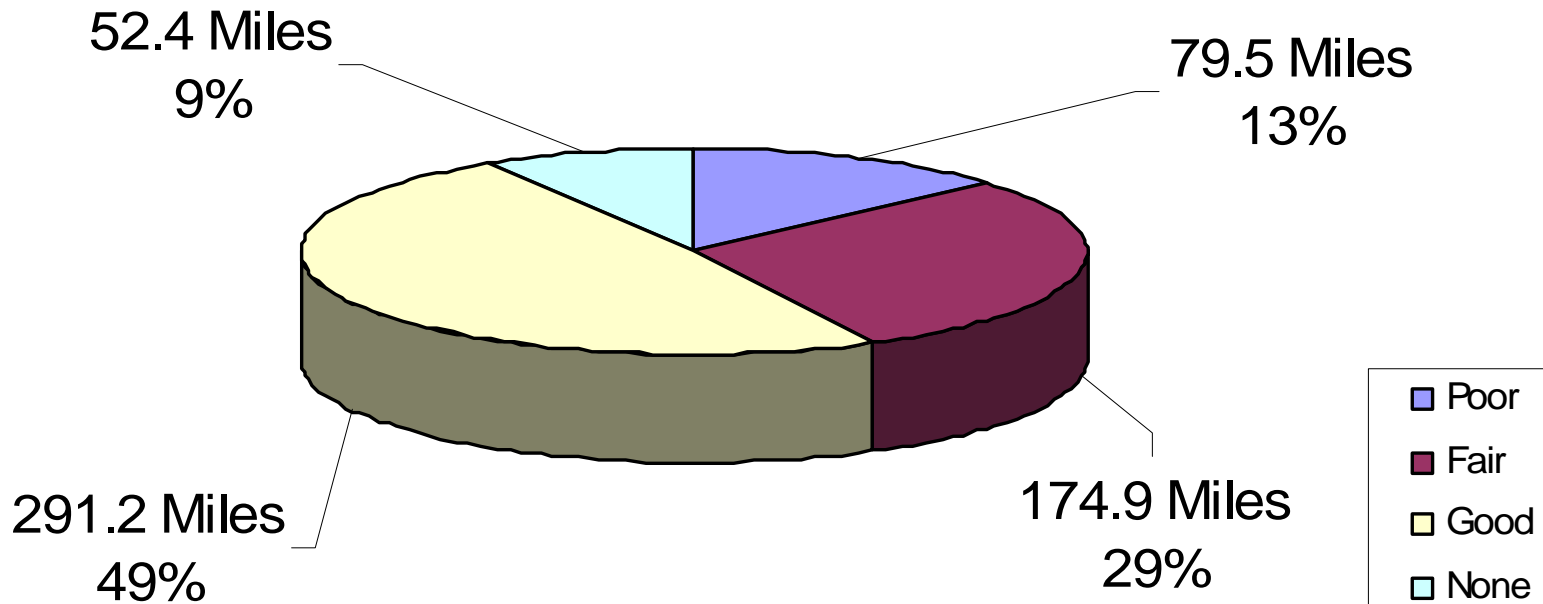
# PCI Frequency Distribution – Cycle One Residentials





# Curb and Gutter Condition

**Cycle One Condition of Curb and Gutter**





# Pavement Management Program (PMP) Goals

- Analyze gathered pavement condition data and report recommendations on maintenance of streets based on the specific maintenance need.
- Apply the correct pavement treatment at the right time to establish a cost-effective program.
- Incorporate more Pavement Preservation strategies and efforts by “keeping the good pavements in good condition”.
- Overall, provide and maintain a safe and efficient street network by implementing these tactics.

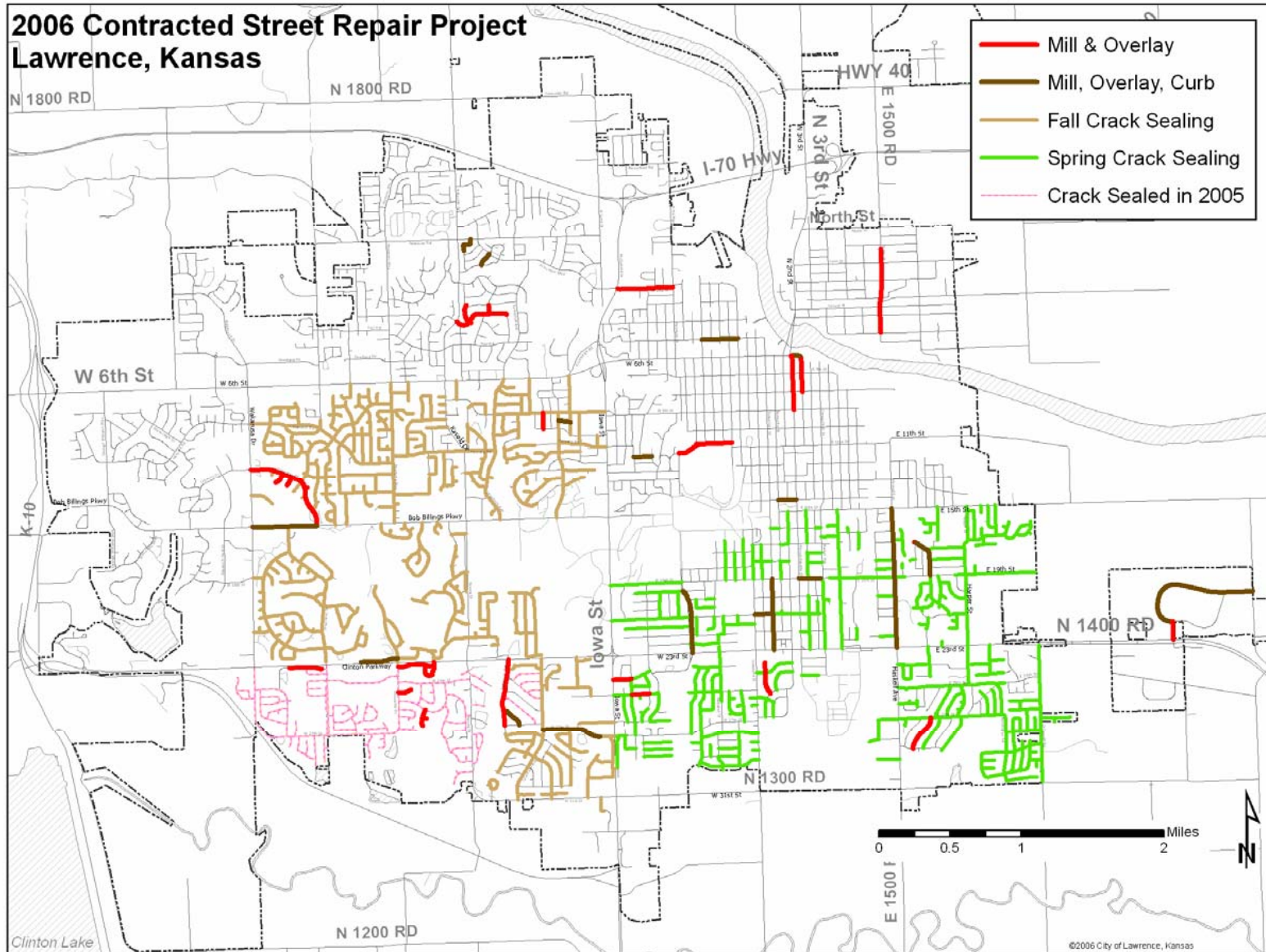


# 2006 Contracted Street Repair Program Recommendations

- Total Program Funding Available = \$4,115,000
- Total Construction Cost Estimate = \$3,900,000
  - Crack Sealing = \$500,000
  - Milling and Overlay = \$1,100,000
  - Milling, Overlay, Pavement Replacement, and Curb Repair = \$2,300,000
- Reserve for Contingency = \$215,000



# 2006 Proposed Maintenance Locations





# Contracted Street Repair Budget

- 2005 - \$3,100,000
- 2006 - \$4,100,000
- Based on Cycle One analysis of street deterioration:
  - 2007 - \$6,500,000 (\$500,000 in crack sealing)
  - 2008 - \$6,000,000
  - 2009 - \$6,000,000