

PAVEMENT MANAGEMENT PROGRAM (PMP)

Understanding Pavement Condition Index (PCI)

Municipalities need a consistent way to measure pavement condition to communicate and track pavement conditions. The Pavement Condition Index (PCI) provides an objective, data-driven method for measuring pavement condition that can be used to prioritize roadway investments.

- During a pavement condition survey, each distress is
- ✓ identified by type (e.g., cracking, rutting, potholes),
 - ✓ assigned a severity level (low, medium, or high); and,
 - ✓ measured for quantity or extent.

SURVEY



PCI SCORING

Distress attributes are analyzed using industry-standard procedures to calculate the Pavement Condition Index (PCI) on a scale from 0 to 100, as shown.

Today's pavement condition surveys rely on sophisticated laser-based equipment, high-resolution cameras, and artificial intelligence to generate PCI ratings.

PCI	Rating Scale	Graphic Depiction
100	Good	
85	Satisfactory	
70	Fair	
55	Poor	
40	Very Poor	
25	Serious	
10	Failed	
0		

PCI scores are mapped in GIS, turning thousands of data points into a clear visual of roadway conditions.



MAPPING

IN ADDITION TO PCI, EEI ALSO EVALUATES:

- Surface Distress Index (SDI) – visible surface deterioration
- Roughness Index (RI) – ride quality and smoothness
- Structural Index (SI) – pavement structural capacity

TREATMENT

Some distresses indicate cosmetic or surface problems. Others suggest structural problems that may require rehabilitation or reconstruction. Engineers use distress data to determine whether preservation, rehabilitation, or reconstruction is the most cost-effective option.

