

Pavement Condition Index Q&A

WHAT IS A PAVEMENT CONDITION INDEX?

A Pavement Condition Index (PCI) is a numerical value (0-100) given to a street which rates the surface condition of the pavement.

HOW IS PCI MEASURED?

The City uses an inertial profiler, a device attached to a vehicle, to measure ride quality smoothness and roughness of a street. Staff will also evaluate, inspect and observe pavement condition.

WHAT DOES PCI MEASURE?

PCI measures two conditions:

- type, extent and severity of pavement surface distresses
- smoothness and ride comfort of the road

HOW IS PCI RATED?

PCI rating:

- 86-100: Good (no work needed)
- 71-85: Satisfactory (overlay)
- 51-70: Fair (mill/overlay)
- 31-50: Poor (mill/overlay, reconstruction)
- 0-30: Very Poor (reconstruction)

WHAT IS A ROAD DEFECT?

Defects include:

- raveling
- flushing
- rutting
- cracking
- spalling
- faulting

• upheaval

HOW IS PCI USED?

PCI is used to:

- identify immediate maintenance needs
- monitor pavement condition over time
- develop a preventative maintenance strategy
- evaluate pavement materials and future construction projects

As a rule of thumb, the higher the PCI, the better condition of the road. Using PCI can help identify trigger points for preventative maintenance to stop road deterioration to the point it needs expensive rehabilitation.



Examples of Pavement Condition

CONCRETE DISTRESS:



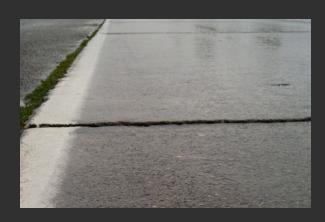
Cracking

-broken pavement



Upheaval

- pavement pushed upward



Faulting

 difference in pavement elevation across a joint



Spalling

 loss of pavement material from the surface downward

ASPHALT DISTRESS:



Cracking

- broken pavement



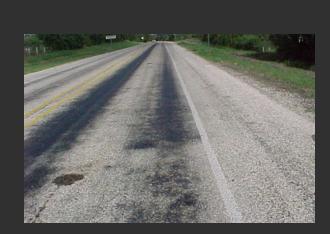
Raveling

- loss of pavement



Rutting

- grooves in pavement



Flushing

- excess asphalt on the surface