# Asphalt

## Collecting PASER Data

Priority Distress

\$ Suggested Maintenance

#### 7 Good

- Longitudinal crack on paving joint < ¼"</li>
- ✓ Transverse cracks 10'- 40' apart
- Transverse cracks < ¼" First signs of wear Little or no crack erosion Little or no crack raveling Few if any patches in good cond.

< 25% alligator cracking (first signs)</p>

Moderate rutting more than <sup>1</sup>/<sub>2</sub>" - 2" deep

Severe block cracking (see "Block Cracking")

Longitudinal & transverse cracks with extensive crack erosion

Isolated desiccation cracks (see "Asphalt PASER Q&A")

Patching and repair prior to a major overlay

Milling would extend overlay performance

\$ Crack Seal

3 Poor

\$

\$

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#### 10 Excellent

New construction; < 1 year old or Rehab. w/ base improvement No visible defects Only a "10" for 1 year

\$ None

#### 6 Good

- Longitudinal cracks <sup>1</sup>/<sub>4</sub> <sup>1</sup>/<sub>2</sub>"
- ✓ Transverse cracks ¼" − ½"
- Transverse cracks < 10' apart</li>
- First sign of block cracking; blocks are large and stable (see "Block Cracking")
  Slight to moderate polishing or flushing
  No patches or few in good cond.

Slight raveling

\$ Sealcoat or Microsurfacing

9 Excellent

Like new condition Recent non structural overlay > 1 year old No defects

\$ None

#### 5 Fair

- ✓ Longitudinal cracks >1/2"
- ✓ Transverse cracks ><sup>1</sup>/<sub>2</sub>"
- Secondary cracks w/raveling
- Moderate block cracking (see "Block Cracking")
  Structural condition is sound Patching/wedging in good condition
  Moderate raveling
  Extensive to severe flushing & polishing
  - \$ Sealcoat or Thin Overlay

#### 2 Very Poor

- > 25% alligator cracking
- Severe rutting or distortion > 2" Extensive cracking with erosion Extensive desiccation cracks (see "Asphalt PASER Q&A")

Frequent potholes Extensive patches in poor condition

Reconstruction with base repair

\$ Crush and shape possible

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Asphalt PASER Q & A

Occasional potholes

Patches in fair/poor condition.

Structural overlay >2 inches

#### Asphalt Rutting

**Q.** How do I detect rutting as shallow as ½??

A. Rutting is difficult to detect from a moving vehicle. Plow scarring and signs of standing water are the most obvious visual cues. Looking out the side window at the opposite lane can also help with an initial assessment. The only way to get a truly accurate measurement is with a straight edge and tape measure.

#### Percentage of Alligator Cracking

- Q. PASER manual uses percent of surface. How does that work?
- **A.** Each lane is 50 percent. Each wheel path is 25 percent. If only one wheel path, consider it less than 25 percent.

#### Rehabilitation: Difference Between a 10 and a 9

**Q.** How do I know if a rehab is a 10 or a 9?

**A.** Repairs that involve improvement or replacement of the base are structural improvement, rate a 10. For repairs that do not improve the base (overlay, mill and overlay) rate a 9.

#### Desiccation Cracking: Not in the PASER Manual

- Q. How should I rate desiccation cracks?
- A. Desiccation cracks are a severe structural distress. Rate as PASER 2 if isolated. Rate as PASER 1 if extensive. Refer to the desiccation crack supplement for a more detailed discussion and explanation.

## Block Cracking (Alternative Approach)

- **PASER 6, First Signs of Block Cracking:** Look for the short longitudinal crack (not the centerline paving joint) that joins two transverse cracks, yielding two longitudinal blocks.
- **PASER 5, Moderate Block Cracking:** Look for the short transverse cracks that join the longitudinal crack in PASER 6 to either the pavement edge or the centerline joint.
- PASER 4, Extensive Block Cracking: Look for continued subdivision of the blocks in PASER 5, yielding blocks measuring less than 3 ft. on a side.
- PASER 3, Severe Block Cracking: Look for continued subdivision of the blocks in PASER 4, yielding blocks measuring less than 1 ft. on a side.

#### General PASER Q & A

## Rate Distress, Not Ride

- Q. Pavement is cracked, but it rides smoothly. Should I rate it higher?A. NO. Rate surface distress, not ride quality. Be especially aware of cracks
- in the wheelpath, they are hard to see and they don't affect the ride.

#### Influence of Road Ownership on Rating

- **Q**. Does importance of the road influence the rating? For example, should state highways be rated using a different standard than a county road?
- **A**. NO. Roads are rated the same regardless of their use or ownership.

#### Distress Under a Repair

- **Q.** I know that a surface repair was applied improperly and will degrade rapidly, should I lower the rating even though the surface looks fine now?
- **A.** NO. Rate the current surface condition. Rate what you see, not what distresses you think might appear in the future. The distress will become visible in the next couple years, you will rate accordingly then.

#### Anticipated Repairs

Q. I know a road is scheduled for maintenance or reconstruction next month, should I rate it higher because I know the work will be done?

A. NO. Rate the current surface condition as it exists. If construction is in progress (work is active), go ahead and rate the new surface. Construction barrels stored on the side of the road is <u>not</u> construction in progress. Once construction is finished, you can upgrade the rating.

#### Different Condition In Different Lanes

- **Q.** One lane is in much better condition than the other. What should I do?
- A. Rate the lane with the worst condition; that lane defines the condition
- liability, which will drive any repair decision.

#### Paved Shoulders

- **Q.** Should I consider the condition of a paved shoulder in the rating?
- A. NO. Disregard the shoulder. Rate only the drivable pavement, edge line to edge line. Record the condition of the shoulder as a memo or note.

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## 8 Very Good

- Transverse cracks > 40' apart
- All cracks tight (hairline) Recent seal coat or slurry seal Few longitudinal cracks on joints
  - \$ Little or No Maintenance

## 4 Fair

- Longitudinal cracking in the wheel paths
- ✓ Rutting ½" or less
- Extensive block cracking (see "Block Cracking")
  First signs of structural weakening
  Severe surface raveling
  Multiple longitudinal & transverse cracks with slight crack erosion
  Patching in fair condition
  - \$ Structural Overlay > 2 inches

### 1 Failed

Complete loss of surface integrity Extensive surface distress