## Asphalt PASER

**Asphalt PASER**

**Modified for Michigan TAMC Data Collection**

* Denotes Priority Distress

<table>
<thead>
<tr>
<th>Asphalt 10</th>
<th>Asphalt 9</th>
<th>Asphalt 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>New construction (&lt; 1 year old)</td>
<td>Like new condition (&gt; 1 year old)</td>
<td>Transverse cracks: &gt; 40' apart</td>
</tr>
<tr>
<td>No defects</td>
<td>No defects</td>
<td>Cracks: tight (hairline) or sealed</td>
</tr>
<tr>
<td>Recent base improvement</td>
<td>Recent overlay with or without</td>
<td>Longitudinal cracks: few, on joints</td>
</tr>
<tr>
<td>Possible Action: Proactive Preventative Maintenance (PPM)</td>
<td>a crush and shape</td>
<td>Recent seal coat or slurry seal (*see below)</td>
</tr>
<tr>
<td></td>
<td>Possible Action: PPM</td>
<td>Possible Action: Crack seal or PPM</td>
</tr>
</tbody>
</table>

### Asphalt 7

<table>
<thead>
<tr>
<th>Fair</th>
<th>Fair</th>
<th>Fair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transverse cracks: 10'-40' apart</td>
<td>Transverse cracks: &lt; 10' apart</td>
<td>Block cracking: 1’ – 5’ blocks</td>
</tr>
<tr>
<td>Crack erosion: none or little</td>
<td>Block cracking: 6'-10' Blocks (large, stable)</td>
<td>Longitudinal cracks: first signs, at edge</td>
</tr>
<tr>
<td>Surface raveling: none or little</td>
<td>Cracks open ¼” – ½”</td>
<td>Secondary cracks: first signs</td>
</tr>
<tr>
<td>Patches: none or few in excellent condition</td>
<td>Surface raveling: slight</td>
<td>Cracks open &gt; ½”</td>
</tr>
<tr>
<td>First signs of wear</td>
<td>Patches: few in good condition</td>
<td>Surface raveling: moderate</td>
</tr>
<tr>
<td>Possible Action: Maintain with crack seal, fog seal</td>
<td>Polishing or flushing: slight, moderate</td>
<td>Patching or wedging: good condition</td>
</tr>
<tr>
<td></td>
<td>Sound structural condition</td>
<td>Polishing or flushing: extensive, severe</td>
</tr>
<tr>
<td></td>
<td>Possible Action: Maintain with sealcoat</td>
<td>Sound structural condition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Possible Action: Maintain with sealcoat or thin overlay</td>
</tr>
</tbody>
</table>

### Asphalt 6

<table>
<thead>
<tr>
<th>Poor</th>
<th>Poor</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block cracking: &lt; 1’ blocks</td>
<td>Block cracking: severe (like alligator)</td>
<td>Alligator cracks: &gt; 25%</td>
</tr>
<tr>
<td>Wheel-path cracking (longitudinal)</td>
<td>Alligator cracking: initial, &lt; 25%</td>
<td>Rutting or distortion: &gt; 2”</td>
</tr>
<tr>
<td>Rutting: ½” - 1” deep</td>
<td>Rutting: 1”- 2” deep</td>
<td>Cracks: closely spaced, with erosion</td>
</tr>
<tr>
<td>Transverse cracks: slight erosion</td>
<td>Transverse cracks: extensive erosion</td>
<td>Patches: extensive, in poor condition</td>
</tr>
<tr>
<td>Longitudinal cracks: slight erosion</td>
<td>Longitudinal cracks: extensive erosion</td>
<td>Potholes: frequent</td>
</tr>
<tr>
<td>Surface raveling: severe</td>
<td>Patches: fair/poor condition</td>
<td>Possible Action: Reconstruction with base repair</td>
</tr>
<tr>
<td>Patches: fair condition</td>
<td>Potholes: occasional</td>
<td>Crush and shape</td>
</tr>
<tr>
<td>First signs of structural weakening</td>
<td>Possible Action: Structural overlay &gt; 2”</td>
<td>Possible Action: Recreation with base repair</td>
</tr>
<tr>
<td>Possible Action: Structural overlay &gt; 2”</td>
<td>Patching &amp; repair prior to an overlay</td>
<td></td>
</tr>
<tr>
<td>Underseal</td>
<td>Milling to extend overlay life</td>
<td></td>
</tr>
</tbody>
</table>

### Asphalt 5

<table>
<thead>
<tr>
<th>Poor</th>
<th>Poor</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block cracking: 1’ – 5’ blocks</td>
<td>Block cracking: first signs, at edge</td>
<td>Alligator cracks: &gt; 25%</td>
</tr>
<tr>
<td>Longitudinal cracks: first signs</td>
<td>Secondary cracks: first signs</td>
<td>Rutting or distortion: &gt; 2”</td>
</tr>
<tr>
<td>Longitudinal cracks: first signs</td>
<td>Cracks open &gt; ½”</td>
<td>Cracks: closely spaced, with erosion</td>
</tr>
<tr>
<td>Surface raveling: moderate</td>
<td>Surface raveling: moderate</td>
<td>Patches: extensive, in poor condition</td>
</tr>
<tr>
<td>Patching or wedging: good condition</td>
<td>Polishing or flushing: extensive, severe</td>
<td>Potholes: frequent</td>
</tr>
<tr>
<td>Polishing or flushing: extensive, severe</td>
<td>Sound structural condition</td>
<td>Possible Action: Reconstruction with base repair</td>
</tr>
<tr>
<td>Sound structural condition</td>
<td>Possible Action: Maintain with sealcoat</td>
<td>Crush and shape</td>
</tr>
</tbody>
</table>

### General Rating Tips

**Rate surface distress, not ride quality.** Be aware of cracks in the wheel path; they can be hard to see and do not affect the ride.

**Disregard the shoulder.** Rate only the driveable pavement, edge line to edge line.

**Do not ignore reflective cracks.** Rate by assessing the type of crack (e.g. transverse, longitudinal, alligator).

**Rate the current surface condition.** If construction is in progress (i.e., work is active) but you are driving on the old surface, rate the new surface. Some barrels by the roadside is not construction in progress.

**Rate the lane with the worst condition** when lanes have differing conditions. For variable surface types, rate the worst lane and select it as the Surface Subtype.

**Rate what you see,** not what distresses you think might happen in the future.

**Rate roads with the same scrutiny** regardless of their use, ownership, or functional class.

**Rutting** often has visual cues like plow scars. Get out and measure using a straight edge and tape measure. Use caution! Rutting measurement changes are detailed in the TAMC Data Collection Training Manual’s “Michigan-specific Asphalt Road Rating Guide” section, page 7.

**Composite Pavement** consists of a concrete pavement overlaid with asphalt; rate it based on the uppermost surface (e.g. asphalt); and note the Surface Subtype as composite. A repaired concrete pavement’s highest rating is a 9. While it may have had concrete joint repairs, no other defects can be present and the condition is “like new”. Note, this is not likely to occur.

**Sealcoat pavements** are sealcoat over gravel whereas sealcoat treatment is sealcoat applied over asphalt. See pages 6-7 of the TAMC Data Collection Manual for rating sealcoat pavements. *With proactive sealcoat treatments, do not downgrade an asphalt PASER 9 or 10 (no defects) to an asphalt PASER 8 because of the treatment. Rate it based on the distresses that are visible (see TAMC Data Collection Training Manual’s “Proactive Sealcoat Treatments on Asphalt PASER 9” section, page 8).*
# Concrete PASER

**Concrete 10**

- **Good**
  - New construction (< 1 year old)
  - No defects
  - Recent reconstruction

  **Possible Action:** None

**Concrete 9**

- **Like new (> 1 year old)**
  - Joint rehabilitation: recent, only if no other defects are present
  - Map cracks: slight
  - Pop outs: few
  - Surface wear: light, in wheel path

  **Recent concrete overlay**

  **Possible Action:** None

**Concrete 8**

- **Fair**
  - Joint sealant: partial loss
  - Joints: good condition
  - Transverse cracks: none
  - Meander cracks: isolated, well-sealed/tight
  - Cracks: at manholes – isolated, well-sealed/tight
  - Map cracks: minor
  - Scaling: slight (first signs)
  - Pop outs: minor
  - Surface wear: light

  **Possible Action:** Little to no maintenance

**Concrete 7**

- **Transverse joints: open ¼”**
- **Longitudinal joints: open ⅛”**
- **Joint/crack faulting: up to ¼”**

**Concrete 6**

- **Joint/crack spalling: first signs**
  - Joint/crack faulting: up to ¼”
  - Cracks: at corners – multiple, with broken pieces
  - Shallow reinforcement: spalling
  - Scaling: 25% to 50% surface
  - Polishing: 25% to 50% surface

**Concrete 5**

- **Joint/crack spalling: open 1” on several slabs**
  - Joint/crack faulting: up to ½”
  - Transverse or meander cracks: multiple
  - Cracks: at corners – missing pieces or patches
  - Pavement blowups
  - Spalling: > 50% surface
  - Map cracks: > 50% surface
  - Scaling: > 50% surface
  - Polishing: > 50% surface

  **Possible Action:** Seal open joints and cracks
  - Overlay surface scaling areas

- **Concrete 4**
  - **Fair**
    - Full-depth repairs: excellent condition
    - Transverse cracks: isolated
    - Joints: some open
    - Cracks: at manholes – some
    - Settlement/heaves: isolated
    - Scaling: minor
    - Pop outs: could be extensive but sound

  **Possible Action:** Seal open joints
  - Spot repair surface defects

- **Concrete 3**
  - **Poor**
    - Joint/crack spalling: open 1” on most slabs severely spalled
    - Joint/crack faulting: up to 1”
    - D-cracking: evident
    - Patches: extensive, fair to poor condition

  **Possible Action:**
  - Extensive full depth repairs
  - Some full slab replacements

- **Concrete 2**
  - **Poor**
    - Joints failed
    - Settlement/heaves: extensive, severe
    - Spalling (of slab cracks): extensive, severe
    - Patches: extensive, failed condition

  **Possible Action:**
  - Recycle or rebuild pavement

- **Concrete 1**
  - **Poor**
    - Pavement integrity: total loss
    - Potholes: extensive
    - Restricted speeds

  **Possible Action:**
  - Total reconstruction

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**Contact Information**

**Roadsoft & LDC Technical Support:** 906-487-2102

**TAMC Help Desk:** 517-335-3741

**CSS-TAMC@michigan.gov**

**TAMC Website:** michigan.gov/tamc

**PASER Data Submission via the CSS IRT Website**

[https://milogintp.michigan.gov](https://milogintp.michigan.gov)

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