

Asphalt PASER

Modified for Michigan TAMC Data Collection

◆ Denotes Priority Distress

	Asphalt 10	Asphalt 9	Asphalt 8
Good	New construction (< 1 year old) No defects <u>Recent base improvement</u> <i>Possible Action:</i> <i>Proactive Preventative Maintenance (PPM)</i>	Like new condition (> 1 year old) No defects <u>Recent overlay with or without a crush and shape</u> <i>Possible Action:</i> <i>PPM</i>	◆ Transverse cracks: > 40' apart Cracks: tight (hairline) or sealed Longitudinal cracks: few, on joints <u>Recent seal coat or slurry seal (*see below)</u> <i>Possible Action:</i> <i>Crack seal or PPM</i>
	◆ Transverse cracks: 10'-40' apart Cracks: open < 1/4" Crack erosion: none or little Surface raveling: none or little Patches: none or few in excellent condition <u>First signs of wear</u> <i>Possible Action:</i> <i>Maintain with crack seal, fog seal</i>	◆ Transverse cracks: < 10' apart ◆ Block cracking: 6'-10' Blocks (large, stable) Cracks open 1/4" – 1/2" Surface raveling: slight Patches: few in good condition Polishing or flushing: slight, moderate <u>Sound structural condition</u> <i>Possible Action:</i> <i>Maintain with sealcoat</i>	◆ Block cracking: 1' – 5' blocks ◆ Longitudinal cracks: first signs, at edge ◆ Secondary cracks: first signs Cracks open > 1/2" Surface raveling: moderate Patching or wedging: good condition Polishing & flushing: extensive, severe <u>Sound structural condition</u> <i>Possible Action:</i> <i>Maintain with sealcoat or thin overlay</i>
Fair	◆ Block cracking: < 1' blocks ◆ Wheel-path cracking (longitudinal) ◆ Rutting: 1/2" - 1" deep Transverse cracks: slight erosion Longitudinal cracks: slight erosion Surface raveling: severe Patches: fair condition <u>First signs of structural weakening</u> <i>Possible Action:</i> <i>Structural overlay > 2"</i> <i>Underseal</i>	◆ Block cracking: severe (like alligator) ◆ Alligator cracking: initial, < 25% ◆ Rutting: 1"- 2" deep Transverse cracks: extensive erosion Longitudinal cracks: extensive erosion Patches: fair/poor condition Potholes: occasional <i>Possible Action:</i> <i>Structural overlay > 2"</i> <i>Patching & repair prior to an overlay</i> <i>Milling to extend overlay life</i>	◆ Alligator cracks: > 25% ◆ Rutting or distortion: > 2" Cracks: closely spaced, with erosion Patches: extensive, in poor condition Potholes: frequent <i>Possible Action:</i> <i>Reconstruction with base repair</i> <i>Crush and shape</i>
	◆ Block cracking: < 1' blocks ◆ Wheel-path cracking (longitudinal) ◆ Rutting: 1/2" - 1" deep Transverse cracks: slight erosion Longitudinal cracks: slight erosion Surface raveling: severe Patches: fair condition <u>First signs of structural weakening</u> <i>Possible Action:</i> <i>Structural overlay > 2"</i> <i>Underseal</i>	◆ Block cracking: severe (like alligator) ◆ Alligator cracking: initial, < 25% ◆ Rutting: 1"- 2" deep Transverse cracks: extensive erosion Longitudinal cracks: extensive erosion Patches: fair/poor condition Potholes: occasional <i>Possible Action:</i> <i>Structural overlay > 2"</i> <i>Patching & repair prior to an overlay</i> <i>Milling to extend overlay life</i>	◆ Alligator cracks: > 25% ◆ Rutting or distortion: > 2" Cracks: closely spaced, with erosion Patches: extensive, in poor condition Potholes: frequent <i>Possible Action:</i> <i>Reconstruction with base repair</i> <i>Crush and shape</i>
Poor	◆ Block cracking: < 1' blocks ◆ Wheel-path cracking (longitudinal) ◆ Rutting: 1/2" - 1" deep Transverse cracks: slight erosion Longitudinal cracks: slight erosion Surface raveling: severe Patches: fair condition <u>First signs of structural weakening</u> <i>Possible Action:</i> <i>Structural overlay > 2"</i> <i>Underseal</i>	◆ Block cracking: severe (like alligator) ◆ Alligator cracking: initial, < 25% ◆ Rutting: 1"- 2" deep Transverse cracks: extensive erosion Longitudinal cracks: extensive erosion Patches: fair/poor condition Potholes: occasional <i>Possible Action:</i> <i>Structural overlay > 2"</i> <i>Patching & repair prior to an overlay</i> <i>Milling to extend overlay life</i>	◆ Alligator cracks: > 25% ◆ Rutting or distortion: > 2" Cracks: closely spaced, with erosion Patches: extensive, in poor condition Potholes: frequent <i>Possible Action:</i> <i>Reconstruction with base repair</i> <i>Crush and shape</i>
	◆ Block cracking: < 1' blocks ◆ Wheel-path cracking (longitudinal) ◆ Rutting: 1/2" - 1" deep Transverse cracks: slight erosion Longitudinal cracks: slight erosion Surface raveling: severe Patches: fair condition <u>First signs of structural weakening</u> <i>Possible Action:</i> <i>Structural overlay > 2"</i> <i>Underseal</i>	◆ Block cracking: severe (like alligator) ◆ Alligator cracking: initial, < 25% ◆ Rutting: 1"- 2" deep Transverse cracks: extensive erosion Longitudinal cracks: extensive erosion Patches: fair/poor condition Potholes: occasional <i>Possible Action:</i> <i>Structural overlay > 2"</i> <i>Patching & repair prior to an overlay</i> <i>Milling to extend overlay life</i>	◆ Alligator cracks: > 25% ◆ Rutting or distortion: > 2" Cracks: closely spaced, with erosion Patches: extensive, in poor condition Potholes: frequent <i>Possible Action:</i> <i>Reconstruction with base repair</i> <i>Crush and shape</i>
			Asphalt 1 Like PASER 2 but with visible base and: Surface distress: severe with loss of integrity <i>Possible Action:</i> <i>Reconstruction with base repair</i>

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

Modified for Michigan TAMC Data Collection

◆ Denotes Priority Distress

Good	Concrete 10	Concrete 9	Concrete 8
	<p>New construction (< 1 year old) No defects <u>Recent reconstruction</u></p> <p><i>Possible Action:</i> <i>None</i></p>	<p>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 <u>Recent concrete overlay</u></p> <p><i>Possible Action:</i> <i>None</i></p>	<p>◆ 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 <i>Possible Action:</i> <i>Little to no maintenance</i></p>
Fair	Concrete 7	Concrete 6	Concrete 5
	<p>◆ 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 <i>Possible Action:</i> <i>Seal open joints</i> <i>Spot repair surface defects</i></p>	<p>◆ Transverse joints: open ¼” ◆ Longitudinal joints: open ¼” ◆ Transverse & meander cracks: open ¼” Cracks: at corners – several, well-sealed/tight Shallow reinforcement: cracking – first signs Scaling: < 25% surface <i>Possible Action:</i> <i>Seal open joints and cracks</i> <i>Overlay surface scaling areas</i></p>	<p>◆ 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 <i>Possible Action:</i> <i>Some partial depth joint repairs or patching may be needed</i></p>
Poor	Concrete 4	Concrete 3	Concrete 2
	<p>◆ 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 <i>Possible Action:</i> <i>Some full depth repairs</i> <i>Asphalt overlay or extensive surface texturing of surface scaling</i></p>	<p>◆ Joint, transverse, and meander cracks: open 1” on most slabs severely spalled ◆ Joint/crack faulting: up to 1” ◆ D-cracking: evident Patches: extensive, fair to poor condition <i>Possible Action:</i> <i>Extensive full depth repairs</i> <i>Some full slab replacements</i></p>	<p>Joints: failed Settlement/heaves: extensive, severe Spalling (of slab cracks): extensive, severe Patches: extensive, failed condition <i>Possible Action:</i> <i>Recycle or rebuild pavement</i></p>
			Concrete 1
			<p>Pavement integrity: total loss Potholes: extensive <u>Restricted speeds</u> <i>Possible Action:</i> <i>Total reconstruction</i></p>

Contact Information

Roadsoft & LDC Technical Support: 906-487-2102

TAMC Help Desk: 517-335-3741

CSS-TAMC@michigan.gov

TAMC Website: michigan.gov/tamc

Framework Issues:

517-335-3741, ask for the TAMC Help Desk

PASER Data Submission via the CSS IRT Website

<https://milogintp.michigan.gov>



Michigan
Transportation Asset
Management Council



©2023 Center for Technology & Training
Prepared by: Center for Technology & Training—Michigan Technological University
on behalf of the Michigan Transportation Asset Management Council