Appendix D
Pavement Distress Survey Forms

# ASPHALT AND COMPOSITE PAVEMENT DISTRESS SURVEY FORM

**Surveyor(s):**

**Location (route/road, milepost):**

**Survey Date:**

**Direction:**

**Temperature:**

**Survey Sample Length:**

<table>
<thead>
<tr>
<th>Distress Category</th>
<th>Distress Type</th>
<th>Rating Criteria and Severity Level Descriptions</th>
<th>Severity Level</th>
</tr>
</thead>
</table>
| **Surface Distress** | Raveling/Weathering | Extent: Specify % of surface area affected at each severity level  
Low: Loss of fine aggregate  
Med: Loss of fine aggregate and some coarse aggregate  
High: Loss of coarse aggregate | Low | Medium | High |
| **Bleeding/Flushing** | | Extent: Specify % of surface area affected for all severity levels combined | | | |
| **Polishing** | | Extent: Specify % of surface area affected for all severity levels combined | | | |
| **Water Bleeding/Pumping** | | Extent: Specify % of surface area affected for all severity levels combined | | | |
| **Deformation Distress** | Rutting | Extent: Specify % of total wheelpath length affected at each severity level  
Low: ≥0.0625 and <0.1875 in average depth  
Med: ≥0.1875 and ≤0.375 in average depth  
High: >0.375 in average depth | | | |
| **Corrugations and Shoving** | | Extent: Specify % of surface area affected at each severity level  
Low: <0.25 in average depth  
Med: ≥0.25 and ≤1 in average depth  
High: >1 in average depth | | | |
| **Bumps/Sags** | | Extent: Specify number of bumps/sags at each severity level  
Low: <0.25 in average depth  
Med: ≥0.25 and ≤1 in average depth  
High: >1 in average depth | | | |
| **Patch/Patch Deterioration** | | Extent: Specify % of surface area affected at each severity level  
Low: Minor or no distress in patches  
Med: Moderately distressed patches  
High: Severely distressed patches | | | |
| **Potholes** | | Extent: Specify % of surface area affected at each severity level  
Low: Depth < 1 in  
Med: Depth ≥ 1 in and ≤ 2 in  
High: Depth > 2 in | | | |
| **Cracking Distress** | Fatigue Cracking (Alligator Cracking, Longitudinal Wheelpath Cracking, and Slippage Cracking) | Extent: Specify % of surface area affected at each severity level  
Low: Area of cracks with no or only a few interconnection, cracks not spalled or sealed, no pumping  
Med: Interconnected cracks forming complete pattern, cracks may be slightly spalled and/or sealed, no pumping  
High: Interconnected cracks forming complete pattern, cracks moderately to severely spalled, loose or missing pieces, cracks may be sealed, pumping possible | | | |
| **Block Cracking** | | Extent: Specify % of surface area affected at each severity level  
Low: Cracks with average width < 0.25 in or sealed cracks with sealant in good condition  
Med: Cracks with average width between 0.25 and 0.75 in, or cracks with average width < 0.75 in and accompanied by adjacent low-severity cracks  
High: Cracks with average width > 0.75 in, or cracks with average width < 0.75 in and accompanied by adjacent moderate to high-severity cracks | | | |
| **Transverse Thermal Cracking** | | Extent: Specify number of cracks for each severity level  
Low: Same as block cracking (above)  
Med: Same as block cracking (above)  
High: Same as block cracking (above) | | | |
| **Longitudinal Non-Wheelpath Cracking and Edge Cracking** | | Extent: Specify % of pavement length affected at each severity level  
Low: Same as block cracking (above)  
Med: Same as block cracking (above)  
High: Same as block cracking (above) | | | |

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1 For composite pavement, transverse joint reflection cracking.

2 For composite pavement, longitudinal joint reflection cracking.

Drainage Condition Notes (e.g., edge drains, ditches, inlets, pavement and shoulder cross-slopes)

Material-Related Distress Notes (e.g., asphalt stripping)
## Concrete Pavement Distress Survey Form

<table>
<thead>
<tr>
<th>Surveyor(s):</th>
<th>Location (route/road, milepost):</th>
<th>Survey Date:</th>
<th>Temperature:</th>
<th>Direction:</th>
<th>Survey Sample Length:</th>
</tr>
</thead>
</table>

### Ratings Criteria and Severity Level Descriptions

<table>
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<tr>
<th>Distress Category</th>
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<th>Severity Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface District</td>
<td>Polishing</td>
<td>Extent: Specify % of surface area affected for all severity levels combined.</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Map Cracking and Scaling (excl. alkali-aggregate distress)</td>
<td>Extent: Specify % of surface area affected for all severity levels combined.</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>“D” Cracking</td>
<td>Extent: Specify % of surface area affected at each severity level Low: Tight cracks, with no loose or missing pieces and no patching Med: Cracks well defined, with some small pieces loose or missing High: Well developed cracks, with significant amount of loose or missing pieces and possible patching</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Popouts</td>
<td>Extent: Specify % of surface area affected for all severity levels combined.</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Water Bleeding/Pumping</td>
<td>Extent: Specify % of surface area affected for all severity levels combined.</td>
<td>Low</td>
</tr>
<tr>
<td>Joint District</td>
<td>Joint Seal Damage</td>
<td>Extent: Specify % of total joint length with damage Low: ≤1% and &lt;10% of joint length Med: ≥1% and ≤50% of joint length High: &gt;50% of joint length</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Joint Spalling</td>
<td>Extent: Specify % of total joint length with damage Low: Spalls &lt;3 in wide, with material loss, or spalls with no material loss Med: Spalls between 3 and 6 in wide, with material loss High: Spalls &gt;6 in wide with material loss or broken into 2+ pieces or contains patch material</td>
<td>Low</td>
</tr>
<tr>
<td>Cracking District</td>
<td>Corner Breaks</td>
<td>Extent: Specify % of slabs affected at each severity level Low: &lt;10% spalling and no measurable faulting along crack, corner piece not broken into pieces and has no loss of material Med: Low-severity spalling over more than 10% of crack length, or faulting &lt;0.5 in, and corner piece not broken into pieces High: Moderate- to high-severity spalling over more than 10% of crack length, or faulting ≥0.5 in, or corner piece broken into pieces or contains patch material</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Fatigue Cracking (Transverse Cracking and Longitudinal Cracking)</td>
<td>Extent: Specify % of slabs affected at each severity level Low: Cracks with average width &lt;0.125 in and no spalling or measurable faulting, or well-sealed cracks Med: Cracks with average width between 0.125 and 0.25 in, or with spalling ≤3 mm wide, or with faulting ≤0.125 in High: Cracks with average width &gt;0.25 in, or with spalling &gt;3 mm wide, or with faulting &gt;0.125 in</td>
<td>Low</td>
</tr>
<tr>
<td>Deformation District</td>
<td>Joint/Crack Faulting</td>
<td>Extent: Specify % of slabs affected at each severity level Low: ≤0.0625 and &lt;0.1875 in average depth Med: ≥0.1875 and ≤0.375 in average depth High: &gt;0.375 in average depth</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Patch/Patch Deterioration</td>
<td>Extent: Specify % of surface area affected at each severity level Low: Minor or no distress in patches, and no measurable faulting or settlement Med: Moderately distressed patches, or faulting or settlement up to 0.25 in High: Severely distressed patches, or faulting or settlement &gt;0.25 in</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Punchouts</td>
<td>Extent: Specify % of surface area affected at each severity level Low: Longitudinal and transverse cracks tight and may have spalling &lt;3 in or faulting &lt;0.25 in with no loss of material and no patching Med: Spalling ≥3 in and &lt;6 in or faulting ≥0.25 in and ≤0.5 in High: Spalling ≥6 in, or concrete within punchout is punched down by ≥0.5 in or is loose and moves under traffic or is broken into two or more pieces or contains patch material</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Blowups/Buckling</td>
<td>Extent: Specify % of surface area affected for all severity levels combined.</td>
<td>Low</td>
</tr>
</tbody>
</table>

Drainage Condition Notes (e.g., edge drains, ditches, inlets, pavement and shoulder cross-slopes)

Material-Related Distress Notes (e.g., alkali-aggregate distress)