



Appendix D
Pavement Distress Survey Forms

*Tools and Tactics for Roadway Pavement Preservation: An
Implementation Guide to Preserving
High-Traffic-Volume Roadways*

ASPHALT AND COMPOSITE PAVEMENT DISTRESS SURVEY FORM

Surveyor(s): _____ Survey Date: _____ Temperature: _____
 Location (route/road, milepost): _____ Direction: _____ Survey Sample Length: _____

Distress Category	Distress Type	Rating Criteria and Severity Level Descriptions	Severity Level		
			Low	Medium	High
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			
	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 ¹	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 ²	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)			

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

Surveyor(s): _____ Survey Date: _____ Temperature: _____
 Location (route/road, milepost): _____ Direction: _____ Survey Sample Length: _____

Distress Category	Distress Type	Rating Criteria and Severity Level Descriptions	Severity Level		
			Low	Medium	High
Surface Distress	Polishing	Extent: Specify % of surface area affected for all severity levels combined			
	Map Cracking and Scaling (excl. alkali-aggregate distress)	Extent: Specify % of surface area affected for all severity levels combined			
	"D" Cracking	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			
	Popouts	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			
Joint Distress	Joint Seal Damage	Extent: Specify % of total joint length with damage Low: $\geq 1\%$ and $< 10\%$ of joint length Med: $\geq 10\%$ and $\leq 50\%$ of joint length High: $> 50\%$ of joint length			
	Joint Spalling	Extent: Specify % of total joint length with damage Low: Spalls < 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 > 6 in wide with material loss or broken into 2+ pieces or contains patch material			
Cracking Distress	Corner Breaks	Extent: Specify % of slabs affected at each severity level Low: $< 10\%$ 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 < 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			
	Fatigue Cracking (Transverse Cracking and Longitudinal Cracking)	Extent: Specify % of slabs affected at each severity level Low: Cracks with average width < 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 > 0.25 in, or with spalling > 3 mm wide, or with faulting > 0.125 in			
Deformation Distress	Joint/Crack Faulting	Extent: Specify % of slabs 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			
	Patch/Patch Deterioration	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 > 0.25 in			
	Punchouts	Extent: Specify % of surface area affected at each severity level Low: Longitudinal and transverse cracks tight and may have spalling < 3 in or faulting < 0.25 in with no loss of material and no patching Med: Spalling ≥ 3 in and < 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			
	Blowups/Buckling	Extent: Specify % of surface area affected for all severity levels combined			

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

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