



U.S. Department
of Transportation

**Federal Highway
Administration**

Memorandum

6300 Georgetown Pike
McLean, Virginia 22101

Subject: **ACTION**: LTPP Directive D-67
*Errata—Distress Identification Manual
for the Long-Term Pavement Performance Program*
Publication No. FHWA-HRT-13-092 Revised May 2014

Date: July 17, 2019

From: Jack Springer
Long-Term Infrastructure Performance Team

Reply to
Attn of: HRDI-30

To: Mr. Gabe Cimini, PM - LTPP Data Collection Contract

Attached is the Long-Term Pavement Performance (LTPP) Program Directive D-67. This directive is to document the changes made to the *Distress Identification Manual for the Long-Term Pavement Performance Program*, FHWA-HRT-13-092 in identifying spalling of joints on rigid pavements and sealant on transverse cracks for rigid and flexible pavements.

Please ensure that all personnel involved with the distress data collection for the LTPP program are aware of this new directive. Should you have any questions or would like to discuss this directive, please do not hesitate to contact Larry Wiser via email at larry.wiser@dot.gov (202) 493-3079.

Attachments (2)

FHWA:HRDI-30 L. Wiser:jeh:202-493-3079:07/17/19

File: M:\LTPP Directives\DISTRESS\D-67

cc:

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Directive Binder

LTPP Team

Official file

LONG-TERM PAVEMENT PERFORMANCE PROGRAM DIRECTIVE



For the Technical Direction of the LTPP Program



Program Area:	Distress	Directive Number:	D-67
Date:	July 17, 2019	Supersedes:	N/A
Subject:	<i>Errata–Distress Identification Manual for the Long-Term Pavement Performance Program Publication No. FHWA-HRT-13-092 Revised May 2014</i>		

The Long-Term Pavement Performance (LTPP) program performed a review of how spalling of joints on rigid pavements and sealant on transverse cracks for rigid and flexible pavements are identified. The changes that resulted from this review are documented in the attached errata to the *Distress Identification Manual for the Long-Term Pavement Performance Program*, FHWA-HRT-13-092.

The LTPP data collection contractor shall immediately implement these changes to the program's pavement distress data collection protocols.

Prepared by: FHWA/TSSC

Approved by:

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Long-Term Infrastructure Performance
Team Leader (HRDI-30)



U.S. Department of Transportation
Federal Highway Administration

Errata

Date: July 17, 2019

Issuing Office: Federal Highway Administration—Office of Research,
Development, and Technology: Infrastructure R&D

Address: Turner-Fairbank Highway Research Center, 6300 Georgetown
Pike, McLean, VA 22101

Name of Document: *Distress Identification Manual for the Long-Term Pavement
Performance Program*

FHWA Publication No.: FHWA-HRT-13-092

The following changes were made to the document after publication on the Federal Highway Administration website:

Location	Incorrect Values	Corrected Values
Page 13	Revision to How to Measure	<p>Record the number and length (in meters) of transverse cracks at each severity level. Rate the entire transverse crack at the highest severity level present for at least 10 percent of the total length of the crack.</p> <p>Also record length (in meters) of transverse cracks with sealant in good condition at each severity level.</p> <p>Note: The length recorded is the total length of the well-sealed crack and is assigned to the severity level of the crack. The length of the well-sealed crack is the total length of the crack as long as the sealant is present in good condition for at least 90 percent of the crack.</p> <p>If the transverse crack extends through an area of fatigue cracking, the length of the crack within the fatigue area is not counted. The crack is treated as a single transverse crack but at a</p>



Location	Incorrect Values	Corrected Values
		<p>reduced length. Transverse saw cuts on a “saw and seal” treated AC test section are rated as transverse cracks.</p> <p>Cracks less than 0.3 m in length are not recorded.</p>
Page 39	Revision to How to Measure	<p>Record the length in meters of longitudinal cracking at each severity level. Also record the length in meters of longitudinal cracking with sealant in good condition at each severity level. Sealant is not considered to be in good condition unless at least 1 m of continuous sealant in good condition is present. In cases where a crack is less than 1 m long, the sealant must be present and in good condition over the entire length of the crack.</p>
Page 41	Revision to How to Measure	<p>Record the number and length of transverse cracks at each severity level. Rate the total length of the transverse crack at the highest level present for at least 10 percent of the length of the crack.</p> <p>Also record the length of the transverse cracking at each severity level with sealant in good condition. The length of the well-sealed crack is the total length of the crack as long as the sealant is present in good condition for at least 90 percent of the crack. The total length of the well-sealed crack is assigned to the severity level of the crack.</p>
Page 45	Revision to Description	<p>Breaking, chipping, or fraying of slab edges within 0.3 m from the face of the longitudinal joint. Cracking that intersects the joint at least once and stays within 0.3 m of the joint is also categorized as spalling.</p>
Page 45	Revision to How to Measure	<p>Record length in meters of longitudinal joint affected at each severity level. Only record that have a length of 0.1 m or more. If a crack is within 0.3 m of a joint, it should only be</p>



Location	Incorrect Values	Corrected Values
		<p>considered a spall if it intersects the joint face at one or both ends of the crack. If a crack is within 0.3 m of the joint and does not intersect the joint, then rate as a crack. Spalls that have been repaired by completely removing all broken pieces and replacing them with patching material (rigid or flexible) should be rated as a patch. If the boundaries of the spall are visible, then also rate as a high severity spall. Note: all patches meeting size criteria are rated as patches.</p>
Page 46	Revision to Description	<p>Breaking, chipping, or fraying of slab edges within 0.3 m from the face of the transverse joint. Cracking that intersects the joint at least once and stays within 0.3 m of the joint is also categorized as spalling.</p>
Page 46	Revision to How to Measure	<p>Record number of affected transverse joints at each severity level. A joint is affected only if the total length of spalling is 10 percent or more of the length of the joint. Rate the entire transverse joint at the highest severity level present for at least 10 percent of the total length of the spalling.</p> <p>Record length in meters of the spalled portion of the joint at the assigned severity level for the joint. If a crack is within 0.3 m of a joint, it should only be considered a spall if it intersects the joint face at one or both ends of the crack. If a crack is within 0.3 m of the joint and does not intersect the joint, then rate as a crack. Spalls that have been repaired by completely removing all broken pieces and replacing them with patching material (rigid or flexible) should be rated as a patch. If the boundaries of the spall are visible, then also rate as a high severity spall. Note: All patches meeting size criteria are rated as patches.</p> <p>Spalling is identified as a joint distress. In slab replacement patches, the spall should not impact</p>



Location	Incorrect Values	Corrected Values
		the severity level of the slab replacement patch. Continue to rate the spall within the slab replacement as a spall. If the patch is less than a full slab replacement, the spall will not be rated as a separate distress but will be used to identify the severity level of the patch.
Page 57	Add Note to How to Measure	Note: Spalling is identified as a joint distress. In slab replacement patches, the spall should not impact the severity level of the slab replacement patch. Continue to rate the spall within the slab replacement as a spall. If the patch is less than a full slab replacement, the spall will not be rated as a separate distress but will be used to identify the severity level of the patch.
Page 80	Revision to Description	Breaking, chipping, or fraying of slab edges within 0.3 m from the face of the longitudinal joint. Cracking that intersects the joint at least once and stays within 0.3 m of the joint is also categorized as spalling.
Page 80	Revision to How to Measure	Record length in meters of longitudinal joint affected at each severity level. Only record that have a length of 0.1 m or more. If a crack is within 0.3 m of a joint, it should only be considered a spall if it intersects the joint face at one or both ends of the crack. If a crack is within 0.3 m of the joint and does not intersect the joint, then rate as a crack. Spalls that have been repaired by completely removing all broken pieces and replacing them with patching material (rigid or flexible) should be rated as a patch. If the boundaries of the spall are visible, then also rate as a high severity spall. Note: all patches meeting size criteria are rated as patches.