



U.S. Department
Of Transportation

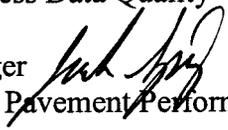
**Federal Highway
Administration**

Memorandum

6300 Georgetown Pike
McLean, Virginia 22101

Subject: **ACTION:** LTPP Directive D-49
LTPP Distress Data Quality – Accreditation of Distress Raters

Date: October 1, 2009

From: Jack Springer 
Long Term Pavement Performance Team

Reply to
Attn of: HRDI-13

To: Dr. Frank Meyer, PM - LTPP North Atlantic Regional Contract
Dr. Frank Meyer, PM - LTPP North Central Regional Contract
Mr. Mark Gardner, PM - LTPP Southern Regional Contract
Mr. Kevin Senn, PM - LTPP Western Regional Contract

Attached is Long Term Pavement Performance (LTPP) Program Directive D-49, which revises guidelines for accreditation of LTPP distress raters to include an annual requirement for attendance at a distress accreditation workshop. This requirement is retroactive to the January 29, 2009, workshop. The minimum criteria for qualification and the minimum activity level required for an accredited rater has also been modified.

Please make this directive and attachments available to all personnel involved in distress data collection and processing.

If you have any questions concerning this transmittal, please do not hesitate to call me at (202) 493-3144.

Attachments (2)

FHWA:HRDI-13:BBellinger:mdeeney:493-3156:9/28/09

File: c:/mdeeney/directive/distress/D-49dir.doc

cc:

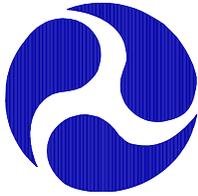
Jonathan Groeger

Directive Binder

LTPP Team

Official file

Chron



LONG TERM PAVEMENT PERFORMANCE PROGRAM DIRECTIVE

For the Technical Direction of the LTPP Program

Program Area: Monitoring

Directive Number: D-49

Date: October 1, 2009

Supersedes: D-46

Subject: LTPP Distress Data Quality – Accreditation of Distress Raters

Distress is an extremely important element in LTPP data collection. Studies of the quality and repeatability of manually collected distress data indicate better quality data are acquired by raters who are called on to perform surveys frequently. Knowledge of procedures in the Distress Identification Manual for the Long-Term Pavement Performance Program, FHWA-RD-03-031 (DIM), is critical; however, this must be reinforced through frequent application. The following sections detail specific guidelines intended to improve distress data quality.

Training

The Regional Support Contractor (RSC) is responsible for collecting distress data of the highest quality. To fulfill that responsibility, the RSC must train the designated staff to a high level of competence in the knowledge and procedures contained in the DIM. A combination of classroom and field training activities should be provided on an ongoing basis to maintain the competence of the distress raters.

Initial Rater Accreditation

Pavement distress surveys for the LTPP program must be performed by experienced personnel who have successfully completed the distress rater accreditation workshop and who also regularly perform distress surveys. The accreditation workshop is intended for trained, experienced personnel; those with experience in distress data collection and demonstrated familiarity with the DIM as determined by the RSC. For personnel attending the accreditation workshop for the first time, the following **minimum** criteria are established:

- high school education or equivalent
- 20/20 vision or vision corrected to 20/20
- training and familiarization in the DIM at the RSC
- assisting an accredited rater in performing distress data collection for asphalt and jointed concrete pavement (a minimum of two sections for each)

Candidates for accreditation will be required to certify that they meet the **minimum** criteria (see attached form) before attendance at an accreditation workshop.

In lieu of attendance at an accreditation workshop, a rater, can achieve accreditation or re-accreditation by an on-site examination conducted by the LTPP headquarters distress coordinator. This on-site examination would consist of a pre-test, successful rating of four test sections, one of which must be a jointed concrete section, and the successful completion of the final exam. Raters receiving accreditation through on-site examination must attend the next scheduled accreditation workshop to maintain their qualification.

Maintaining Qualification

In order to remain **qualified** as a LTPP Distress Rater, a rater must regularly perform surveys on both AC and PCC test sections following accreditation. Office reviewers must also perform a number of surveys each year in order to remain qualified to properly assess the quality of the surveys. The minimum level of distress survey activity should consider the normal duties assigned the individual. The guidelines for personnel collecting manual distress data for entry in the IMS are:

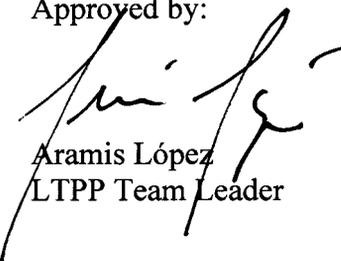
- **Designated field personnel:** should be expected to perform at least 20 surveys in a year, ideally evenly distributed throughout that time period. For new raters: the first 10 surveys should be conducted with direct supervision by a qualified rater.
- **Office reviewers:** must remain proficient in distress identification procedures. They should perform a minimum of 10 surveys at any time during that year.
- All distress raters and office reviewers shall successfully complete an accreditation workshop **annually**. This requirement is retroactive to the January 29, 2009, distress workshop.

Data Quality

The RSC is charged with the responsibility for quality control and quality assurance of the manual distress data. The training, accreditation, and minimum activity levels required for raters and reviewers are all intended to reduce data variability. Office reviewers cannot visit each test section to verify the surveys submitted by their staff. As a consequence, they must rely on the body of information collected in prior surveys of the test section in order to make judgments on data quality for a newly submitted survey. The best information available is the time-series data provided by a compilation of all prior surveys and any information on construction activities, which may have occurred. Therefore, in the data handling plans for manual distress surveys, the RSC shall include a time series data review for each survey using the DiVA software as a key element in the office review process.

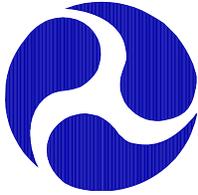
Prepared by: LTPP HQ

Approved by:



Aramis López
LTPP Team Leader

Attachment (1)



**LONG TERM PAVEMENT PERFORMANCE
Distress Rater Qualifications Certification**

I certify that I meet the **minimum** criteria established in LTPP Directive D-49 to perform distress surveys on LTPP test sections as specified below:

- high school education or equivalent
- 20/20 vision or vision corrected to 20/20
- training and familiarization in the DIM at the RSC
- assisting an accredited rater in performing distress data collection for asphalt and jointed concrete pavement (a minimum of two sections for each)

Rater Name Print

Rater Name Signature

Date