Memorandum

U.S. Department
Of Transportation

6300 Georgetown Pike
McLean, Virginia 22101

**Federal Highway
Administration**

Subject: **ACTION**: LTPP Directive D-47
Reviewing and Correcting PADIAS Data

Date: June 18, 2007

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 the Long Term Pavement Performance (LTPP) Program Directive D-47. This directive addresses the issue of resolving anomalies in the photographic distress survey (PADIAS42) data. Please ensure that all personnel involved with the distress data are aware of this new directive.

Should you have any questions or would like to discuss this directive, please do not hesitate to contact me at 202-493-3144.
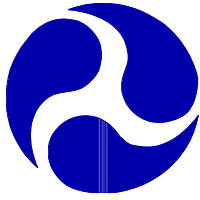
Attachment (1)

FHWA:HRDI-13:BBellinger:mdeeney:493-3156:6/18/07
File: c:/mdeeney/directive/distress/D-47dir.doc
cc:
Gonzalo Rada
Directive Binder
LTPP Team
Official file
Chron

Program Area: Monitoring   **Directive Number**: D-47

Date: June 18, 2007   **Supersedes**: N/A

Subject: Reviewing and Correcting PADIAS Data

There are known anomalies in the photographic distress survey (PADIAS42) data. Possible causes of these anomalies are poor film quality (e.g., scratches on the film), inexperienced raters, and the very procedures that were used to collect the data. It is imperative that these data be reviewed and that anomalous data be corrected or removed from the database before the expiration of the SAFETEA-LU highway legislation on September 30, 2009.

At the present time, LTPP does not have the capability or resources to re-interpret questionable photographic distress surveys. Reviews must depend on prior and subsequent manual distress surveys (MDS), photographs and a review of PADIAS42 digital images and maps where available. Accordingly, the following procedure for correcting or removing anomalous PADIAS42 data shall be followed:

1. A data element substantially (greater than 25%) outside the expected data variability, as reflected in the current version of DiVA, is considered an anomaly. If the number of anomalies identified within a given PADIAS42 survey is:

    a. More than two (2), the survey in question should be considered for removal from the database.

    b. Only one or two, the anomalous data elements in question should be set set to null. In some cases, it may be possible to correct the PADIAS42 data. Examples would include wheelpath versus non-wheelpath longitudinal cracking, re-determining length of transverse cracks on AC sections and removing distresses reported in error such as traffic loop saw cuts, marks or grooves on the pavement or distresses not reflected in any other surveys of the section, before and after the date of the suspect survey.

2. The RSCs should review PADIAS42 surveys identified that have these anomalies and make resolution recommendations to LTPP headquarters based on their findings.

3. Before any changes are made to PADIAS42 data, LTPP headquarters approval is required.

4. Actions taken to correct PADIAS42 data should be briefly summarized in the OTHER field in tables **MON_DIS_PADIAS42_AC**, **MON_DIS_PADIAS42_JPCC** or **MON_DIS_PADIAS42_CRCP**. This summary information should be included as part of the SQL statement used to change the data base. AIMS PADIAS42 data summaries, where available, should be annotated with changes made to the data.

5. LTPP headquarters approval is required for any SQLs used to change or remove PADIAS42 data from the LTPP database. Re-use of previously approved SQLs, with the STATE_CODE, SHRP_ID or SURVEY_DATE changed is permissible.

6. After necessary approvals, the RSCs will apply the approved SQL to make changes or remove anomalous PADIAS42 survey data identified.

7. Anomalous PADIAS42 surveys that are removed from the database will be considered for possible re-interpretation at a future date. Anomalous PADIAS42 surveys that cannot be corrected due to time or budget constraints should be removed from the database and will be considered for possible re-interpretation at a future date. The RSCs will keep a log of all PADIAS42 surveys that are removed from the database.

This procedure applies to all PADIAS data reviews performed by LTPP Headquarters, the TSSC and the RSCs.

Prepared by: LTPP Headquarters   Approved by:

Aramis López
LTPP Team Leader