



U.S. Department
of Transportation

**Federal Highway
Administration**

Memorandum

6300 Georgetown Pike
McLean, Virginia 22101-2296

Subject: ACTION: LTPP Directive P-46
Diurnal Collection of Longitudinal Profile Data
at SPS-2 Project Sites

Date: July 8, 2013

From: Larry Wiser *Larry J. Wiser*
Highway Research Engineer

Reply to
Attn of: HRDI-30

To: Mr. Frank Meyer, LTPP North Atlantic Regional Contract
and LTPP North Central Regional Contract
Mr. Kevin Senn, LTPP Western Regional Contract
Mr. Tim Martin, LTPP Southern Regional Contract

Attached is LTPP Directive P-46, Diurnal Collection of Longitudinal Profile Data at SPS-2 Project Sites. It should be transmitted to all appropriate personnel as soon as possible.

If you have any questions concerning this transmittal, please do not hesitate to call me at (202) 493-3079.

Attachment (1)

FHWA:HRDI-30:LWiser:mad:493-3079:7/08/13
File: mdeeney/directives/P-46.doc
cc:
LTPP Staff
J. Groeger, TSSC
Directive File
Official File (190.20)
Chron

LONG TERM PAVEMENT PERFORMANCE PROGRAM DIRECTIVE



For the Technical Direction of the LTPP Program



Program Area:	Monitoring	Directive Number:	P-46
Date:	July 4, 2013	Supersedes:	N/A
Subject:	Diurnal Collection of Longitudinal Profile Data at SPS-2 Project Sites		

The LTPP Regional Support Contractors (RSC) shall perform the following profile measurements on all currently active SPS-2 project sites. The measurements shall be performed in accordance with the following guidelines.

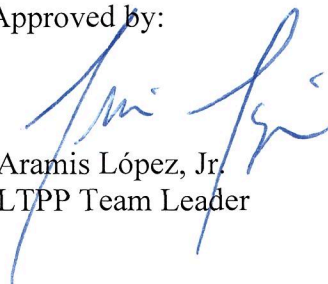
- The objective is to perform three repeat sets of measurements, either on the same day or on two consecutive days within the following time windows:
 - Maximum negative gradient window: 5–7 am.
 - Neutral temperature gradient windows: 9–11 am or 7–9 pm.
 - Maximum positive gradient window: 1–3 pm.
- Flexibility is allowed in obtaining the desired number of profile measurements during each time window on consecutive days. The following are examples potential testing scenarios.
 - Arrive at staging area day before testing. On day of testing perform the required number of measurements between the hours of: 5-7 am, 9–11 am, and 1-3 pm.
 - Arrive at the test location after 11 am. Perform the 1-3 pm, and 7-9 pm measurements sets on the first day. On the second day perform the 5-7 am measurement data set.
 - Arrive at the test location after 4 pm and perform the 7-9 pm measurements on the first day. On the second day perform the 5-7 am and 1-3 pm measurements.
- The number of measurement passes during each time period depends on the time it takes to perform measurements on the SPS-2 test sections located on the site and return to the start point within each 2 hour time window. A minimum of 2 measurement passes which do not contain obvious equipment measurement errors is required. Three or more measurements passes within each time window are desired. LTPP rules concerning variability between measurement passes are not applicable to these data sets within each measurement time window or overall on the test day. The overarching quality check on these data sets is related to equipment measurement problems and errors which are judged to result in suspect research quality data identified by the LTPP RSC.

- If two acceptable repeat measurements at each of the three time windows on a SPS-2 test site are not achieved, then repeated measurements on subsequent days shall be performed until 2 sets of acceptable profile measurements are obtained within each of the three time windows within a consecutive 24 hour time period.
- It is preferred that these measurements be performed during the months of May, June, July, and August.
- The SMP profile data file naming convention contained in section 2.2.7.3 of Version 4.1 of the LTPP Manual for Profile Measurements and Processing should be used for these measurements.
- These measurements from all active test sections on SPS-2 project sites shall be completed and the resulting data shall have completed processing in the LTPP pavement performance database in time for the 2014 public data extraction tentatively scheduled for early August 2014.

Question concerning this directive should be addressed to the FHWA LTPP Team representative responsible for profiler activities.

Prepared by: TSSC

Approved by:



Aramis López, Jr.
LTPP Team Leader