



Memorandum

U.S. Department
Of Transportation

6300 Georgetown Pike
McLean, Virginia 22101

**Federal Highway
Administration**

Subject: **ACTION**: LTPP Directive GO-47
Pavement Performance Monitoring Guidelines

Date: April 19, 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 the Long-Term Pavement Performance (LTPP) Program Directive GO-47: Pavement Performance Monitoring Guidelines, which provides guidelines for the collection of pavement performance data. This directive supersedes GO-38. The regions should utilize these guidelines to maximize pavement performance data collection within their budget. The regions shall prepare and submit a 3-month schedule upon receipt of this directive unless they have submitted one with the quarterly report due in April 2010. Please ensure that all personnel involved 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.

Attachments (1)

FHWA:HRDI-13:JSpringer:mdeeney:493-3144:4/19/10

File: c:/mdeeney/directive/go/GO-47dir.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: General Operations

Directive Number: GO-47

Date: April 15, 2010

Supersedes: GO-38

Subject: Pavement Performance Monitoring Guidelines

Introduction

This directive contains pavement performance monitoring guidelines intended to optimize use of available LTPP program resources.

Pavement Performance Monitoring Plan and Schedule

LTPP Regional Support Contractors (RSC) shall develop a 3-month performance monitoring plan and schedule for active test sections in their region and it shall be included in the region's quarterly report. The monitoring schedule shall be posted on the RSC web page in accordance with FHWA contractual requirements and shall be updated every 2 weeks as needed. Updates are required when significant changes are made to the schedule. The plan shall be developed following the guidelines and considerations contained in this directive.

Pavement Performance Plan and Schedule Guidelines

The following considerations, priorities, and factors shall be taken into account when developing pavement performance plans and schedules.

- Highest priority should be assigned to test sections scheduled for a construction event which will cover the test section surface. As a minimum, pre-construction monitoring on these sections shall consist of manual distress survey and longitudinal profile measurements. While deflection measurements should be considered for all test sections going out-of-study, there may be situations where these measurements are cost prohibitive or not warranted based on engineering judgment.
- Project sites included in the LTPP SPS Traffic Data Collection Pooled Fund study should be given higher priority for more frequent longitudinal profile measurements and manual distress surveys.
- Test sections in poor condition and suspect to receive a terminal reconstruction event in the near future should be given priority over test sections still in good condition, based on RSC engineering judgment and history knowledge with participating highway agencies.

Directive GO-47: Pavement Performance Monitoring Guidelines

- When possible, manual distress surveys and longitudinal profile measurements should be scheduled within four months of each other.
- Consideration shall be given to scheduling longitudinal profile measurements at a different time of the year from previous measurements. This is a prime consideration in frost regions where these measurements tend not to be performed in the winter due to practical budget considerations. It is suggested logistical plans be established so that economical “winter” longitudinal profile measurements on SPS-1 and SPS-2 projects are practical.
- Test sections which were previously included in the LTPP Seasonal Monitoring Program shall be considered for more frequent longitudinal profile and deflection measurements based on their contribution to pavement engineering advancement in the judgment of the RSC.

Without consideration to available budget and test sections scheduled for preconstruction monitoring, the following are *desired* measurement frequencies:

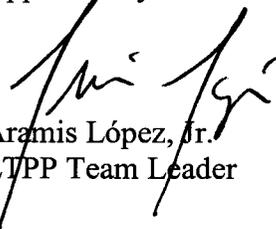
- Annual longitudinal profile measurements on all test sections.
- Annual distress measurements on test sections in the GPS-1, GPS-2, GPS-3, SPS-1, SPS-2 and SPS-8 experiments.
- Distress measurements every two years performed within four months of longitudinal profile measurements on other active test sections.
- Deflection measurements on all test sections every three years.

Maximum monitoring frequency interval starting with the issuance of this directive:

- Two year interval between measurements for both longitudinal profile measurements and manual distress surveys on SPS-1 and SPS-2 project sites and project locations included in the SPS Traffic Pooled Fund Study.
- Three year interval between longitudinal profile and manual distress surveys on SPS-8 sites.
- Three year interval of longitudinal profile measurements on all other test sections.
- Four year interval for manual distress surveys on all other test sections.
- Five year interval between deflection measurements.

Prepared by: TSSC

Approved by:


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LTPP Team Leader