Memorandum

U.S. Department
Of Transportation

6300 Georgetown Pike
McLean, Virginia 22101

**Federal Highway
Administration**

Subject: **ACTION**: LTPP Directive TDP-51
Release of LTPP Traffic Analysis Software Version 1.7.3

Date: November 18, 2009

From: Deborah Walker
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 TDP-51. This
directive discusses the executable and data updates made to the LTPP Traffic Analysis Software
(LTAS) since the release of version 1.7.2. It also includes instructions for synchronizing the
regional databases with Standard Data Release 24 (see Attachment 3). LTAS installation
instructions are included in Attachment 1. Installation of the updated software shall be completed
by Wednesday, November 25, 2009 and full implementation of version 1.7.3 shall begin
Monday, November 30, 2009.

Please ensure that all personnel involved with the Traffic 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 me at 202-493-3068.

Attachments (4)

FHWA:HRDI-13:DWalker:mad:493-3068:11/18/09
File: c:/mdeeney/directive/traffic/tdp51dir.doc
cc:
Jonathan Groeger
Debbie Walker
Directive Binder
LTPP Team
Official file
Chron

LONG-TERM PAVEMENT PERFORMANCE PROGRAM DIRECTIVE

For the Technical Direction of the LTPP Program

Program Area:	Traffic	**Directive Number:**	TDP-51
Date:	November 18, 2009	**Supersedes:**	TDP-50
Subject:	*Release of LTPP Traffic Analysis Software Version 1.7.3*		

Purpose
The purpose of this directive is to authorize the release of version 1.7.3 of the LTPP Traffic Analysis Software (LTAS) for the LTPP Regional Support Contractors (RSCs) to begin using. Installation of the updated software shall be completed by Wednesday November 25, 2009 and full implementation of version 1.7.3 shall begin Monday, November 30, 2009. This directive discusses the executable and data updates made to LTAS since the release of version 1.7.2.

Changes
This release addresses several Software Performance Reports (SPRs) to further enhance the functionality of LTAS (see Attachment 2). In addition, editorial changes were made to some administrative tables to address data issues with the SPS pooled-fund locations. Also, the steps for synchronizing the regional databases with Standard Data Release 24 are included as Attachment 3 in this directive.

Distribution and Installation of Updated Software
The updated software is posted on the LTPP file transfer protocol (FTP) site in the LTAS_1_7_3 folder for download until Wednesday November 25, 2009. Copies of the software needed after this date must be requested through the LTPP Customer Support Service Center at ltppinfo@fhwa.dot.gov.

The table, "Installing LTAS Version 1.7.3" in Attachment 1 lists the steps for installing the new release of the traffic analysis software. The installation information is also included with the software distribution.
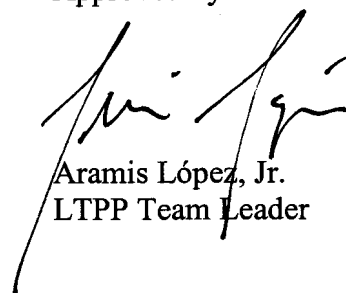
Manual Revisions
As a result of addressing the SPRs listed in this directive, minor changes were made to *Volume 1 – Users' Guide* to reflect editorial changes and the functionality of LTAS. Appendices A-F in *Volume 2 – Graphics* were updated for style consistency and to provide more examples per graph type to improve the appendices' functionality as references and instructional tools. Lastly, *Volume 3 – Overview* and its Appendices A-C were updated to reflect the changes that were made in developing the LTAS database for Standard Data Release 24. Revisions of Volumes 1, 2, and 3 are posted on the LTPP FTP site until Wednesday November 25, 2009. Copies needed after this date must be requested through the LTPP Customer Support Service Center at ltppinfo@fhwa.dot.gov.

Questions or Issues
Questions concerning this directive should be addressed to the FHWA LTPP program office. If there are problems implementing this directive, please submit a SPR according to the guidelines in TDP-40.

Prepared by: FHWA/TSSC   Approved by:

                                        Aramis López, Jr.
                                        LTPP Team Leader

ATTACHMENT 1
Installation Instructions

The following table lists the steps for installing version 1.7.3 of the LTPP Traffic Analysis
Software (LTAS).

Installing LTAS Version 1.7.3	
Step	**Action**
1	Create a temporary directory.
2	Unzip the Analysis_1_7_3.zip file in the temporary directory created in Step 1.
3	Replace the analysis.exe on the server using the updated analysis.exe located in the zip file Analysis_1_7_3.zip.

ATTACHMENT 2
List of Changes

Software Functionality – Analysis.exe

SPRs Addressed:

♦ *SPR 3690T.* Corrected the end date value setting in the TRAFFIC_PROCESS_LOG table when the field is null, empty, or not set for 31-DEC-50. However, if the maximum date can be determined from the file in the TRAFFIC_PROCESS_LOG table, then the date from the file should be used.

♦ *SPR 3852T.* Implemented Level D and Level E QC checks on the daily volume (DD_VOL) table.

♦ *SPR 3853T and 3856T.* Added processing in the Agency and SPS, 4-card vs. 7-card, Yearly, and Year-By-Date graphs to prevent invalid dates for a month from causing the graph not to display. An example of an invalid date is September 31 which may exist in a daily table with a record_status of D, indicating that the day field is invalid.

♦ *SPR 3867T.* Corrected the population of field NUM_DAY_OCCURRENCES in monthly tables MM_CT, MM_GVW and MM_AX when daily data is summarized to monthly data.

♦ *SPR 3876T.* Corrected SPS Comp QC code.

♦ *SPR 3877T.* Updated the counter for the sensor pick list on the Site Equipment Info screen.

ATTACHMENT 3
Instructions for Synchronizing LTPP Regional Databases with SDR 24

The following table lists the steps for synchronizing the regional LTAS databases with the LTAS database included in SDR 24.

_	Updating Regional LTAS Database to Match SDR 24 LTAS Database
Step	**Action**
1	Create a temporary directory.
2	Unzip the LTAS_Update_SDR.zip file in the temporary directory created in Step 1.

3	Replace the content of TRAFFIC_DD as TRFDBA.
	
	    a. Truncate the TRAFFIC_DD table (in SQL Worksheet)
	        truncate table TRAFFIC_DD;
	        commit;
	    b. Import the content of TRAFFIC_DD_1_7_3.dmp (from the Command prompt)
	        Imp TRFDBA/dbapwd@TRFPROD file=traffic_dd_1_7_3.dmp full = y ignore = y
	        log=imp_traffic_dd_1_7_3.log

4	Update the comments on selected tables as TRFDBA.
	
	    a. Open SQL Worksheet
	    b. Copy the script TABLE_COMMENT_UPDATE.sql to the worksheet
	    c. Run the script

5	Modify SHRP_INFO to reflect the data quality for SPS WIM Pooled-Fund locations using LTAS. MS Access table with selected fields from SHRP_INFO for SPS WIM Pooled-Fund locations is included in SHRP_INFO_SPSWIM_SDR24 in SDR24_update_1_7_3.
	
	    a. Modify regional copy of SHRP_INFO by adding records as necessary to reflect either the installation or initial validation date, and at a minimum a Data Availability code of 9 – Continuous WIM meeting the ASTM Standard. Information is also provided in other fields including ID6.
	    b. Rerun the Administrative QC to verify dates are continuous, non-overlapping. Update END_DATE of the last record to 31-DEC-2050 if the record fails Level D check.

6	Modify SITE_EQUIPMENT_INFO to reflect the equipment installed at SPS WIM Pooled-Fund locations using LTAS. MS Access table with selected fields from SITE_EQUIPMENT_INFO for SPS WIM Pooled-Fund locations is included in SITE_EQUIP_INFO_SPSWIM_SDR24 in SDR24_update_1_7_3.
	
	    a. Modify regional copy of SITE_EQUIPMENT_INFO by adding or updating records as necessary to reflect the current WIM equipment. The information provided was taken from the Phase I contractor's reports (Performance Evaluation and Calibration Report). However, if the actual installation date can be retrieved from the Phase II contractor's reports (Installation and Calibration Report), it should be used instead.
	    b. Rerun the Administrative QC.