



# Memorandum

U.S. Department  
of Transportation

6300 Georgetown Pike  
McLean, Virginia 22101

**Federal Highway  
Administration**

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Subject: **ACTION:** LTPP Directive TDP-27  
Release of LTPP Traffic Analysis Software version 1.1

Date: August 14, 2002

From: Larry Wisner  
Long Term Pavement Performance Team

Reply to  
Attn of: HRDI-13

To: Dr. Frank Meyer, PM - LTPP North Atlantic Regional Contract  
Mr. Tom Wilson, PM - LTPP North Central Regional Contract  
Mr. Mark Gardner, PM - LTPP Southern Regional Contract  
Dr. Sirous Alavi, PM - LTPP Western Regional Contract

Attached is LTPP Directive TDP-27 providing instructions on the installation of the LTPP Traffic Analysis software and the initiation of traffic analysis processing. The software was provided via email August 2, 2002. The manuals referenced were included on the referenced CD-ROM along with all of the work around materials to handle items not yet coded in the software.

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

Attachment

FHWA:HRDI-13:LWiser:mad:493-3079:8/14/02

File: c:\mdeaney\directives\tdp-27.doc

cc:

LAW PCS

LTPP Staff

Directive File

Official File

Chron

# LONG TERM PAVEMENT PERFORMANCE PROGRAM DIRECTIVE



*For the Technical Direction of the LTPP Program*



Program Area:	Traffic	Directive Number:	TDP-27
Date:	August 14, 2002	Supersedes:	TDP-26
Subject:	<b><i>Release of LTPP Traffic Analysis Software Version 1.1</i></b>		

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This directive discusses the update of the LTPP Traffic Analysis software and inclusion of data generated from information currently stored in the CTDB.

The installation instructions referencing the relevant associated software change notice is included as an attachment to this document for reference. All of the materials for installation are present on the CD-ROM labeled 'Traffic Software Materials - August 1, 2002, RSC Distribution.' They are located in the subdirectory v. 1.1 Software. The software update was distributed directly by the Technical Support Services Contractor. The installation of the database and analysis software to permit processing with the traffic data analysis software shall be completed by August 23, 2002.

This release contains a listing of all of the changes made to the software since the beta version was provided for testing and familiarization in the document Analysis Version 1.1. The majority of the changes were related to miscellaneous SPRs resolved during this period. Most notable were additional graph, population of the SITE\_EQUIPMENT\_INFO and TRAFFIC\_DD tables and TRF\_MONITOR\_LTPP\_LN processing for inclusion in the IMS.

The analysis software is supported by six volumes of documentation, four of which directly support the traffic user. They are:

- Traffic Analysis Software Volume 1 - Users' Guide
- LTPP Traffic Analysis Software Volume 2 - Functional Specifications with Appendices A and B
- LTPP Traffic Analysis Software Volume 3 - ORACLE Table Specifications with Appendices A through D
- LTPP Traffic Analysis Software Volume 5 - Specifications for Graphics with Appendices A through F.

These volumes dated between July 30 and August 1 are included on the CD-ROM in Analysis Specs as updates to previously provided versions. As requested by the users, all changes are color-coded. Volumes 2, 3 and 5 are purely reference, describing how the software is supposed to work, feel and the content of its tables and data. Volume 1 describes actual processing activities. As the software has yet to complete a full year's cycle of traffic data processing, the material on the composition of packets to be supplied to the agency remains as a guideline for consideration rather than as requirements for execution. In the volume dated August 1, 2002, this is section 3 - Agency Packets. Additionally, as a number of details remain to be formally implemented with respect to the SPS pooled fund project and associated data processing, Section 4 - SPS Pooled Fund remains under discussion and not an absolute requirement.

Prepared by: TSSC

Approved by:

Aramis López, Jr.  
LTPP Team Leader

# Instructions to Install Version 1.1 Release

1. Perform the selects below for verification of existence/nonexistence of data:

TRF\_MONITOR\_AADT, TRF\_MONITOR\_LTPP\_LN, and SITE\_EQUIPMENT\_INFO should currently be empty and do not require working tables to ensure no loss of data.

Execute the following for verification:

```
SELECT COUNT(*) FROM TRF_MONITOR_AADT;
SELECT COUNT(*) FROM TRF_MONITOR_LTPP_LN;
SELECT COUNT(*) FROM SITE_EQUIPMENT_INFO;
SELECT COUNT(*) FROM SITE_FACTOR_INFO;
```

To correct ERR\_WT and ESAL\_PER\_VEH some temporary tables are created and populated with the contents of the existing tables. For verification that all data is retained the following commands should be executed before and after script execution.

The counts should be equal.

```
SELECT COUNT(*) FROM ERR_WT;
SELECT COUNT(*) FROM ESAL_PER_VEH;
```

2. Execute the script to update tables structures:  
Traffic\_Tables\_Update\_1\_1.sql
  1. Corrects fields in ERR\_WT
  2. Corrects feilds in ESAL\_PER\_VEH
  3. Corrects fields in TRF\_MONITOR\_AADT and TRF\_MONITOR\_LTPP\_LN
  4. Corrects fields in SITE\_EQUIPMENT\_INFO
  5. Adds new working tables for ESAL calculations
  6. Adds a new working table for reporting use.
3. If the Traffic\_Tables\_Update\_1\_1.sql executes without errors:  
Verify the counts in the updated tables.  
Delete the temp tables using the following:

```
DROP TABLE err_wt_hold;
DROP TABLE esal_per_veh_hold;
```
4. Update codes in the database using: Traffic\_Codes\_Update\_1\_1.sql
5. The following tables are being updated using dmp files:  
TRAFFIC\_DD - data dictionary  
SITE\_EQUIPMENT\_INFO  
SITE\_FACTOR\_INFO  

Before populating these tables, ensure data does not exist. If data exists in SITE\_EQUIPMENT\_INFO or SITE\_FACTOR\_INFO determine if the data needs to be retained. It is expected that these tables will be empty.

TRAFFIC\_DD should be a total replacement.

```
SELECT COUNT(*) FROM SITE_EQUIPMENT_INFO;
SELECT COUNT(*) FROM SITE_FACTOR_INFO;
```

If data needs to be retain, save it to a dmp file for reloading and delete all contents.

```
DELETE FROM traffic_dd;
DELETE FROM site_equipment_info;
DELETE FROM site_factor_info;
COMMIT;
```

6. Populate the traffic data dictionary table:

```
imp trfdbba/dbapassword@trfprod file=traffic_dd.dmp tables=(*) commit=y
ignore=y grants=n
```

7. In the site\_equip.zip are the following dmp files:

```
na_site_equip.dmp
nc_site_equip.dmp
s_site_equip.dmp
w_site_equip.dmp
site_equip.dmp
```

Site\_equip.dmp contains a load for all the regions for site\_equipment\_info and site\_factor\_info, however 0 rows are populated in site\_factor\_info. Currently site\_factor\_info is expected to contain zero rows.

Select the dmp file that is appropriate for the region and populate the site\_equipment\_info table replacing the region.dmp in the statement

with the one for the region:

```
imp trfdbba/dbapassword@trfprod file=region.dmp tables=(*) commit=y
ignore=y grants=n
```

Example for western region:

```
imp trfdbba/dbapassword@trfprod file=w_site_equip.dmp tables=(*) commit=y
ignore=y grants=n
```

8. Replace the analysis.exe on the server with the updated analysis.exe located

in the same directory as this file.

9. Changes to the software contained in:

Analysis Software Version 1 1.doc

10. In the old\_filetrkr.zip are the following dmp files:

```
na_old_filetrkr.dmp
nc_old_filetrkr.dmp
s_old_filetrkr.dmp
w_old_filetrkr.dmp
```

XX\_old\_filetrkr .dmp contains the information for all sites and data types in present in the CTDB as of the last CTDB upload with a Level 3 file containing LTPP lane data. The appropriate regional version should be copied and retained for future instructions on loading the information into the database.

11. In the olddata.zip are the following dmp files:

```
na_old_data.dmp
nc_old_data.dmp
s_old_data.dmp
w_old_data.dmp
```

XX\_old\_data.dmp contains the information for DD\_VOL, DD\_CL\_CT, DD\_WT\_CT, and DD\_AX for all data that had a level 3 file in the CTDB as of the last CTDB upload that included LTPP lane information. The appropriate regional version should be copied and retained for future instructions on loading the information into the database.