Memorandum

U.S. Department
Of Transportation

**Federal Highway
Administration**

6300 Georgetown Pike
McLean, Virginia 22101

Subject: **ACTION**: LTPP Directive IMS-140
IMS Software Release Version 2008.07

Date: July 17, 2008

From: Jane Jiang
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

This directive authorizes implementation of the IMS software upgrade from version 2008.02 to 2008.07. Upgrade instructions are provided in Attachment 1. Please notify the FHWA and TSSC when the upgrade has been installed. Please ensure that all personnel involved with the IMS are aware of this amendment

Should you have any questions or would like to discuss this directive, please do not hesitate to contact me at 202-493-3149.

Attachments (5)

FHWA:HRDI-13:JJiang:mdeeney:493-3149:7/17/08
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LONG TERM PAVEMENT PERFORMANCE PROGRAM DIRECTIVE

For the Technical Direction of the LTPP Program

Program Area: IMS **Directive Number**: I-140

Date: July 7, 2008 **Supersedes**: I-139

Subject: IMS Software Release Version 2008.07

This directive authorizes implementation of the IMS software upgrade from version 2008.02 to 2008.07. Upgrade instructions are provided in Attachment 1. Please notify the FHWA and TSSC when the upgrade has been installed.

Software Change Notice 101, contained in the file, SCN_101.pdf, lists all of the changes made to the IMS software since the last software release. This notice shall be filed in the Operator's Log.

This software update includes new Freeze/Frost CP tables, data, and QC; updated CLM data and QC; updates to traffic QC; and updates to data in several Inventory and Administration tables. Other changes include additions to the CN Utilities and a batch procedure for updating layer numbers from the command line. See Attachment 2 for instructions for this new procedure and for creating the user and view needed to run ProQual. In addition, the TRAFFIC_OPEN_TIME field in several tables was modified to allow values greater than 99. Several records exist with the maximum value (99) and they should be reviewed. A list of these records has been included in Attachment 3.

The Software Change Notice lists these and other miscellaneous changes.

The software for Version 2008.07 is distributed in a master zip file - SoftwareRelease_200807.ZIP; and a separate zip file for each region - VR200807ExportsRegion#.zip - containing climate and frost data.

The following files are contained in the master file:

- VR2008_07.ZIP – A zip file with the batch file (VR2008_07.BAT) and scripts needed to make miscellaneous updates to the database and to run other related administrative commands. Refer to the table included in Attachment 1 for an alphabetic list and descriptions of the scripts called by this batch file.

- LTPP.ZIP - A zip file with all files to go in the LTPP area (and subdirectories) on the server.
- OracleVersions.ZIP – A zip file with listings of all Oracle files and versions loaded on the server at the central site. These are included for reference only.

Prepared by: TSSC

Approved by:

Aramis López
LTPP Team Leader

Attachment 1

Instructions to Apply VR 2008.07 Release

1. Create the subdirectory RELEASES\VR2008_07 (the directory RELEASES should already exist).

2. Copy and unzip the VR2008_07.zip file into the subdirectory created in step 1.

3. Copy and unzip the VR200807ExportsRegion#.zip file into the subdirectory created in step 1. The # sign represents the region number. For All regions, use 'A' for the region number.

4. Shutdown ORACLE in normal mode and backup Server.

5. Bring ORACLE up.

6. **Before applying the software release, verify that the SMP small index tablespace maxsize is at least 50M. If not, increase the tablespace maxsize by running the following script:**

```
Alter database datafile
'd:\ltpp_database\imsprod\tablespaces\smp_small_index_ts01.dbf'
autoextend on maxsize 50M;
```

7. **Also, verify that the SMP medium table tablespace maxsize is at least 100M. If not, increase the tablespace maxsize by running the following script:**

```
Alter database datafile
'd:\ltpp_database\imsprod\tablespaces\smp_medium_table_ts01.dbf'
autoextend on maxsize 100M;
```

8. From a DOS prompt in the RELEASES\VR2008_07 directory, type

   VR2008_07 *dbausername/dbapassword@instance #*

   where # is the number of your region (1, 2, 3, 4, A), to begin the software update. 'A' is for "All regions" and is a new option that FHWA will use. This batch file will export several tables that are updated by the release scripts. Be sure to review the exp_VR2008_07AlteredTables.log file to verify that the exports completed successfully. Keep the export file (VR2008_07AlteredTables.dmp) until you are satisfied that all changes were successful.

   If the export is successful, the batch file will run the scripts listed alphabetically in Table 1, below. The batch file will also truncate the CLM tables in preparation for importing the updated CLM data.

9. The scripts create new tables and codes, update tables and data, and import Frost and CLM data. **Check carefully that all scripts completed successfully by reviewing the *.lis files (refer to list, below).** Ignore errors about dropping non-existent objects. In addition, **compare the import log files (FrostRegion#_imp.log, ClmOwsRegion#_imp.log, ClmVwsRegion#_imp.log) with the export log files (FrostRegion#_exp.log, ClmOwsRegion#_imp.log, ClmVwsRegion#_imp.log)** provided for your region to verify that all records were imported correctly.

10. Copy the LTPP.ZIP file into the LTPP subdirectory. Right-click on the filename and choose "Extract to Here" to unzip the file into the LTPP subdirectory. Answer "Yes to all" to overwrite existing files. Delete the LTPP.ZIP file.

11. The OracleVersions.zip file is included for reference only. Extract these files into the OracleVersions directory. It will create an OracleVersions\VR200807 subdirectory.

Table 1. Scripts run from the VR2008_07.bat file

Script and Output Filenames (.sql & .lis)	Description
CNUtilities	Updates CN utility to assign the correct PRE_RHB_CN in RHB_CAUSE_INFO table.
SPR3799UpdateINVTables	Updates data in INV_ID.ROUTE_SIGNING, INV_ID.FUNCTIONAL_ CLASS, and INV_GENERAL.NO_OF_LANES as directed.
SPR3800TrafficOpenTime	Changes SPS6_PCC_FULL_DEPTH.TRAFFIC_OPEN_TIME, SPS6_PCC_PART_DEPTH.TRAFFIC_OPEN_TIME, MNT_PCC_FULL_DEPTH.TRAFFIC_OPEN_TIME, and MNT_PCC_PART_DEPTH.TRAFFIC_OPEN_TIME from NUMBER(2,0) to NUMBER(4,0). Also updates LTPPDD.
SPR3801AlterSubdrainageTables	Changes RHB_SUBDRAINAGE.FILTER_PERMEABILITY, SPS6_SUBDRAINAGE.FILTER_PERMEABILITY, SPS7_SUBDRAINAGE.FILTER_PERMEABILITY, and SPS9_SUBDRAINAGE.FILTER_PERMEABILITY from NUMBER(4,2) to NUMBER(5,0). Also updates LTPPDD.
SPR3807UpdateINVShoulder	Updates the INV_SHOULDER table as directed.
SPR3810UpdateINVID	Updates INV_ID.DIRECTION_OF_TRAVEL as directed.
SPR3816UpdateSectionCoordinates	Updates SECTION_COORDINATES table as directed.
SPR3821UpdateLTPPDD	Updates LTPPDD, setting units to “mm” for CLM_VWS_PRECIP_DAILY.DAY_PRECIPITATION.
SPR3826CreateFrostTables	Creates new table, SMP_FROST_PRESENCE, and modifies SMP_FREEZE_STATE and SMP_FROST_PENETRATION tables. Also updates LTPPDD and CODES tables.
SPR3827UpdateLTPPDD	Replaces any occurrences of the word “letdown” with “lay down” in the DESCRIPTION field of the LTPPDD table.

Attachment 2

Instructions for Using New Layer Update Command Procedure

The UpdateLayerNumber.bat file has been included in this release to simplify the process of updating layer numbers throughout the LTPP database. Due to constraints on tables related to the TST_L05B table, the LAYMANT program doesn't work from the RIMS application unless these constraints are disabled first. Scripts to disable and re-enable these constraints have also been included in this release. To use the new procedure, follow these instructions:

1. Open a DOS command window and set to the ltpp\bin directory
2. Type "UpdateLayerNumber" at the command prompt
3. The procedure will prompt the user for each of the necessary parameters including:
    a. connect string
    b. U/D (Update/Delete) flag
    c. state_code
    d. shrp_id
    e. old layer number
    f. new layer number
    g. module to be updated or % for all
4. The procedure will echo all of the parameters to the screen and ask for verification that the parameters are correct
5. The procedure will then run the DisableL05bFkConstraints.sql to disable the L05B constraints. The output will be sent to the screen
6. The procedure will call the Laymant.exe program and will pass all parameters to it
7. When the Laymant program has identified all of the changes, the user will be prompted to commit the changes. If the user responds with 'n', no changes will be made to the database
8. The procedure will then run the EnableL05bFkConstraints.sql to enable the L05B constraints. The output will be sent to the screen
9. The user should review the laymant.err file to get a list of tables that are updated

Instructions for Creating PROQUAL USER

The script required to create the Proqual user has been included with this software release. If you haven't created this user or you need to recreate it, use this script and follow these steps:

1. Run the script, SPR3804CreateProqualUser.sql, from the DBA account
2. The script will create a user called "proqual_user" with the password "user4proqual". It will also grant the user a few privileges (SELECT_ONLY on the LTPPDBA tables, and CREATE VIEW)
3. The script will then create the view of MON_PROFILE_MASTER that is needed to run ProQual. The view was generated with a generic value of "999.99" in the MAY_OUTPUT field. The password for the new user is generic, since it doesn't allow any changes to the database.
4. When running ProQual, connect with proqual_user/user4proqual@imsprod.

Attachment 3

SPS6_PCC_FULL_DEPTH

SHRP	STATE_CODE	CONSTRUCTION_NO	TRAFFIC_OPEN_TIME
0606	46	2	99
0661	46	2	99
A601	5	2	99
A602	5	2	99
A605	5	2	99

5 rows selected.

SPS6_PCC_PART_DEPTH

SHRP	STATE_CODE	CONSTRUCTION_NO	TRAFFIC_OPEN_TIME
A602	5	2	99
A605	5	2	99

2 rows selected.

MNT_PCC_FULL_DEPTH

SHRP	STATE_CODE	CONSTRUCTION_NO	TRAFFIC_OPEN_TIME
1682	50	1	99

1 row selected.

MNT_PCC_PART_DEPTH

SHRP	STATE_CODE	CONSTRUCTION_NO	TRAFFIC_OPEN_TIME
A601	5	6	99
A602	5	5	99
A605	5	5	99

3 rows selected.

Software Change Notice 101

REG #	SAIC #	Program Name	Referred To	Date Rec	Date Comp

Administrative

M-3821 **3821** **LTPPDD Table** **5/8/2008** **5/20/2008**

Description

Add value of "mm" to the units field for CLM_VWS_PRECIP_DAILY.DAY_PRECIPITATION in the LTPPDD table.

Resolution

Created SPR3821UpdateLTPPDD to update units to "mm" for CLM_VWS_PRECIP_DAILY.DAY_PRECIPITATION in LTPPDD table.

M-3827 **3827** **LTPPDD Table** **6/19/2008** **6/24/2008**

Description

In the description of the fields named like LAYDOWN_TEMP*, the word letdown is used instead of lay down. This problem exists in several tables since the PMA_CONSTRUCTION table is repeated in the SPS# and RHB modules. Change letdown to lay down in all occurrences in the LTPPDD.

Resolution

Created SPR3827UpdateLTPPDD to update occurrences of "letdown" to "lay down" within the descriptions of pertinent fields in LTPPDD table.

Climatic

M-3822 **3822** **CLM Data** **5/1/2008** **6/25/2008**

Description

New CLM data submitted to be loaded into the Central database. The data will be QC'd and results sent to MACTEC for review.

Resolution

Updated scripts and QC programs. Loaded the new data into the imsprod tables. Ran OWS QC. Generated VWS records. Ran VWS QC.

M-3824 **3824** **ClmOwsQC** **5/16/2008** **5/30/2008**

Description

Please check standard deviation calculations in ClmOwsQC.

Resolution

The CLM_OWS_TEMP_DAILY standard deviation checks loaded the number(3,1) column into an integer.The variable holding the result was changed to a float and the check was changed from equal to 0 to less than epsilon.

S-3575 **3575** **CLMVWSQC.exe & CLMOWSQC.exe** **MACTEC** **1/13/2005** **5/20/2008**

Description

Resolution

REG #	SAIC #	Program Name	Referred To	Date Rec	Date Comp
Consolidate tables checked in CLM_QC.exe into CLMVWSQC.exe.			Moved checks for the CLM_OWS_LOCATION, CLM_SITE_VWS_LINK, CLM_VWS_OWS_LINK, tables from the obsolete CLM_QC program into ClmOwsQC and ClmVwsQC.		
S-3597	**3597**	**ClmOwsQC.exe**		**4/22/2005**	**6/2/2008**
Description			**Resolution**		
Update CLM QC program to implement changes approved during climate data update in Dec 04/Jan 05 (Data Release 19.0). These changes include: 1. Do not require the field CLM_OWS_PRECIP_DAILY.DAY_SNOWFALL 2. Require only one or the other of CLM_OWS_WIND_DAILY. (mean_day_wind_spd or max_day_wind_spd) 3. Do not perform level D temperature checks on CLM_OWS_TEMP_DAILY			Removed day_snowfall from level C check. Only set error on Wind Speed if both are null. Removed three Temperature checks from Level D CLM_OWS_TEMP_DAILY.		
S-3605	**3605**	**CLM Calculation Scripts**	**MACTEC**	**5/3/2005**	**6/5/2008**
Description			**Resolution**		
I found several cases where the MEAN_WIND_SPD was greater than the MAX_WIND_SPD and I suspected it was because the nearest weather station only had the mean value and a further weather station only had a max. If you look at the attached file, you will see that this is the situation for some of the records. For some of the cases, there is a low max from the nearest weather station and the further weather station has a mean and a max value recorded. If the mean from the further station is higher than the max from the nearer station, you get values that fail this check. This indicates to me that the means and maxes are not comparable in many records and we may need to come up with a different way of calculating these values. My suggestion would be to take the values from the nearest weather station and be done with it.			Per Travis - this should go away if we only use max where there is also a mean for that station. However, after reviewing this solution, it was decided not to proceed, as about 35% of the data will be lost. The records that have the MEAN greater than the MAX will simply fail QC.		
S-3823	**3823**	**ClmVwsQC.exe**		**5/22/2008**	**5/23/2008**
Description			**Resolution**		
Update leap year routine to include all leap years for QC checks based on number of days.			Modified QC DATA CHECKS LEVELD.H to add years divisible by 400 to IsLeapYear() to fix problems with the year 2000. Searched for dependencies of this routine. Only ClmVwsQC.exe was found. ClmVwsQC was re-linked with the corrected library.		

REG #	SAIC #	Program Name	Referred To	Date Rec	Date Comp

CN Assign

M-3794 **3794** **CN_Assign** **1/10/2008** **7/2/2008**

Description

In RHB_CAUSE_INFO, there is a field called PRE_RHB_CN, which is supposed to indicate the CN prior to the Rehab activity that placed a section out of study. This field should be updated like any other CN field, using PRE_RHB_CN_DATE as the date field. As far as I can tell however, the field is not being updated, and with the rash of new CN creation activity, many of the CN values are no longer valid. So, if can, we should add this to the current CN assignment program. The name of the field not being CONSTRUCTION_NO seems like it could create problems, so if using our current program is not an option, let me know what you come up with as a solution.

Ideally, we would get these out for the next release, but realistically, anytime before the next upload should do the trick.

Resolution

Added code to CN Utilities program to update the PRE_RHB_CN in RHB_CAUSE_INFO, as needed, based on DATE_RHB_SCHEDULED in RHB_CAUSE_INFO and CONSTRUCTION_NO in EXPERIMENT_SECTION.

Data

3-3807 **3807** **Data Correction for INV Table** **3/14/2008** **3/26/2008**

Description

The SPS_8 DAOFR requires an edit to the INV_SHOULDER table to update thicknesses as directed by MACTEC per 3/14/08 email from T. Thomopson.

Resolution

SPR3807UpdateINVShoulder.sql created to update the thicknesses as directed.

M-3799 **3799** **Data Corrections for INV Tables** **2/26/2008** **3/26/2008**

Description

Update INV_ID table for several sections, changing ROUTE_SIGNING from 1 to 4 and changing FUNCTIONAL_CLASS from 2 to 1 or 1 to 2, according to the attached table. Update the INV_GENERAL table changing NUMBER_OF_LANES from 1 to 2 for sections 88_1645, 88_1646, and 85_1808.

Resolution

SPR3799UpdateINVTables.sql created to update fields in INV_ID and INV_GENERAL tables as requested.

M-3810 **3810** **Data Correction for INV Table** **3/19/2008** **3/26/2008**

Description

Resolution

REG #	SAIC #	Program Name	Referred To	Date Rec	Date Comp
Change DIRECTION_OF_TRAVEL in INV_ID for test section 08_6013 to 1.			SPR3810UpdateINVID.sql created to update DIRECTION_OF_TRAVEL from 2 to 1 for test section 08_6013.		

M-3816 **3816** **Data Changes for SECTION_COORDINATES** **4/17/2008** **5/13/2008**

Description

We have one change and one new record for SECTION COORDINATES.

For 531501, the coordinates should be changed to 47.59937 and -119.60488, and COORDINATE_DETERMINATION to 2.

For 047079, we need to add a new record with the following properties:

STATE_CODE = 4
SHRP_ID = 7079
LATITUDE = 33.60228
LONGITUDE = -112.25339
MEASUREMENT_ACCURACY = null
DATUM = 1
DATUM_OTHER = null
COORDINATE_DETERMINATION = 2

Resolution

Created SPRUpdateSectionCoordinates.sql to update the 531501 record as instructed and add the 047079 record in the SECTION_COORDINATES table.

Database Administration

3-906 **3806** **LAYMANT** **3/11/2008** **3/11/2008**

Description

Unable to use the LAYMANT program for updating layer numbers in the TST module due to foreign key constraint violation.

Resolution

Provided region with scripts to disable and enable the foreign key constraints between the TST tables and TST_L05B. The constraints must be disabled before running the LAYMANT program, and re-enabled when the LAYMANT program is complete. Scripts: DisableL05bFkConstraints.sql, EnableL05bFkConstraints.sql.

Also created batch file to update layer number from command prompt - UpdateLayerNumber.bat.

REG #	SAIC #	Program Name	Referred To	Date Rec	Date Comp

Longitudinal Profile

1-3804 **3804** **MON_PROFILE_MASTER** **3/5/2008** **3/19/2008**

Description

Proqual doesn't work without the MAY_OUTPUT field in the MON_PROFILE_MASTER table. Create a new user called PROQUAL_USER with a view of the MON_PROFILE_MASTER table with the MAY_OUTPUT field back in.

Resolution

The new view and user work well for Proqual.

Manual Distress

M-3818 **3818** **Distress Tables** **4/24/2008** **4/25/2008**

Description

Remove the SURVEY_WIDTH fields from the MON_DIS tables, which were added to these tables per SPR3763. Also reverse changes to the QC programs, DIS_QC.pc, DISPAD42.pc, and DISPAD10.pc. Reverse the changes to the forms MOND_07B.fmb, MOND_04B.fmb, and MOND_01B.fmb.

Resolution

Script SPR3818DeleteSurveyWidth.sql was created to remove the SURVEY_WIDTH fields from the MON_DIS tables. The forms have been updated. QC is being tested.

Update: 6/9/08 - Per Gary Elkins, we will NOT be sending this script to the regions. The SURVEY_WIDTH will NOT be removed. We do not need to resend the old versions of the QC programs.

P46

M-3805 **3805** **P46 Data Entry Form** **3/6/2008** **3/12/2008**

Description

Regions need to be able to enter dates from fall of 1991 (pilot sections) and they also need to enter test for bulk sample numbers.

Resolution

Updated form. Sent to MACTEC for testing on 3/6/08. Distributed to regions on 3/12/08.

REG #	SAIC #	Program Name	Referred To	Date Rec	Date Comp

RIMS

3-902 **3801** **RIMS** **MACTEC** **2/27/2008** **5/1/2008**

Description

RIMS data Entry Screen 28 for SPS 6 (Construction Data) allows a maximum of 2 digits to be entered into the field 'FILTER_PERMEABILITY'. Cannot enter values greater than 99 hours for this field.

Resolution

Created SPR3801AlterSubdrainageTables.sql to alter FILTER_PERMEABILITY field from number(4,2) to number(5,0) in RHB_SUBDRAINAGE, SPS6_SUBDRAINAGE, SPS7_SUBDRAINAGE, and SPS9_SUBDRAINAGE tables. Changed RHB_57.fmb, SPS6_28.fmb, SPS7_28.fmb, and SPS9_SUBDRAINAGE.fmb to accommodate larger FILTER_PERMEABILITY field on RIMS Data Entry Screens. Checking QC programs. Changed SPS7_BC.PC, SPS9_BC.PC, SPS9_D.PC. Corrected existing bug in RHB_D.PC and RHB_E.PC.

3-903 **3802** **RIMS** **MACTEC** **2/27/2008** **3/13/2008**

Description

RIMS data Entry Screen 10 for SPS 1 (Construction Data) allows a maximum of 1 roller type to be entered into the field 'Roller' in the Compaction Data section. Cannot enter more than one type of Roller for this field.

Resolution

Closed per Travis Thompson. No further TSSC action is necessary.

3-904 **3803** **RIMS** **MACTEC** **2/27/2008** **3/13/2008**

Description

RIMS data Entry Screen 12 for SPS 9 (Construction Data) allows a minimum of one decimal to be entered into the field 'TACK_COAT_RATE'. Cannot enter values lesser than 0.1 such as 0.09 for this field.

Resolution

Closed per Travis Thompson. No TSSC action is necessary.

3-905 **3800** **RIMS** **MACTEC** **2/27/2008** **6/26/2008**

Description

RIMS data Entry Screen 23 for SPS 6 (Construction Data) allows a maximum of 2 digits to be entered into the field 'TRAFFIC_OPEN_TIME'. Cannot enter values greater than 99 hours for this field.

Resolution

Created SPR3800TrafficOpenTime.sql to alter TRAFFIC_OPEN_TIME field from number(2,0) to number(4,0) in SPS6_PCC_FULL_DEPTH, SPS6_PCC_PART_DEPTH, MNT_PCC_FULL_DEPTH, and MNT_PCC_PART_DEPTH tables. Changed sps6_20.fmb, sps6_12.fmb, mnt_13.fmb and mnt_7.fmb to accommodate larger TRAFFIC_OPEN_TIME field on RIMS Data Entry Screens. Changed QC programs, sps6_d.pc and mnt_qc.pc to accommodate larger field. Update QC Manual.

REG #	SAIC #	Program Name	Referred To	Date Rec	Date Comp

Seasonal Monitoring Program

M-3826 **3826** **Frost CP Tables** **4/2/2008** **6/25/2008**

Description

This memorandum contains changes to two existing SMP tables – SMP_FREEZE_STATE and SMP_FROST_PENETRATION, and adds one new table – SMP_FROST_PRESENCE. These tables contain information on the freeze state at a given depth over time, as well as the frozen state of the soil on a given day For the tables that currently exist in the database, the data to be added represents a complete replacement, so new tables are not necessary.

Both SMP_FREEZE_STATE and SMP_FROST_PENETRATION will need changes from their current form. The specifications included in the following pages represent the tables as they should exist after the changes.

Additionally, new QC and CODES are provided as necessary. No entry screen or filter program is required.

Resolution

Created/recreated the SMP Frost tables and changed SMP_C, SMP_D, and SMP_E to include the new QC. Also, changed codes as specified.

SPR3826CreateFrostTables.sql is in the VR2008.04 directory. The data, CTL files, and specification document is under "Specification Documents/ Frost".

M-3829 **3829** **Frost QC** **6/30/2008** **7/2/2008**

Description

The QC checks for Frost need to be changed. The FREEZE_STATE will have 2 checks; one checks that the resistivity measurements have matching records and the other checks that the temperature has matching records where the SOURCE field indicates it should. Renumber the existing checks, where needed.

Resolution

Changed SMP_FROST_STATE-E-102 per 06/30/2008 specifications.

REG #	SAIC #	Program Name	Referred To	Date Rec	Date Comp

Traffic

1-140 **3813** **TRF_QC** **4/3/2008** **4/3/2008**

Description

Level E check requires that, for the TRF_CALIBRATION_WIM table, "If WIM_CALIB_TECHNIQUE=2, WIM_CALIB_PASS_PER_TRUCK >=20".

All Sheet 16s (most filled up by the Pooled Fund Phase I contractor, MACTEC) have failed this check.

The error message "E-102, Too few passes per truck" is given even though the number under item 6 on these sheets is 20 or 21 per truck.

Two trucks were used during the Calibration process, the QC may be taking the number in item 6 and dividing by the number of trucks thus failing the >=20 requirement.

We changed the number in item 6 on sheet 16 from 20 to 50 for the 100100 site, calibrated on 08/07/07 (screen capture attached). After running the QC the data was successfully sitting at level E.

Resolution

This QC check changed in 2005. It now has to have >= 40 passes. Refer to new version of the QC Manual on the Data Release disks sent out with Release 22.

1-141 **3819** **TRF_QC** **MACTEC** **4/29/2008** **7/2/2008**

Description

Item 14 on attached Sheet 16 has a negative value for "MEAN DIFFERENCE IN VOLUMES BY VEHICLES CLASSIFICATION" for Class 9's.

The QC check only accepts a range from 0 to 5. Thus a "-2" for FHWA Class 9 fails the check and this record is sitting at level "C".

The range should be adjusted to accept values from -5 to +5.

Resolution

Removed level C check and updated level D range checks for this field.

1-142 **3820** **TRF_QC.EXE** **MACTEC** **4/29/2008** **7/2/2008**

Description

SPS 8 section 370800 had a "N/A" value for Item 14 on Sheet 16 "FHWA CLASS 8"

Resolution

Removed level C check and updated level D range checks for this field. In addition, Barbara asked that we update check TRF_CALIBRATION_WIM.

REG #	SAIC #	Program Name	Referred To	Date Rec	Date Comp
			DYNAMIC_STAT_%_DIFF-E-102 and change the text of the error message for TRF_CALIBRATION_WIM. DYNAMIC_STAT_%_DIFF-E-101.		
		We cannot enter a value of "N/A". When this field is left blank the record fails and the data is sitting at level "A".			
		The QC check only accepts a range from 0 to 5.			
		When no Class 8"s are observed a value other than '0' should be allowed to be input to show that there are no Class 8's.			