

file: 600.12.4.9.12

**SHEET 10
LTPP TRAFFIC DATA**

**TRAFFIC VOLUME AND LOAD
ESTIMATE UPDATE-NO SITE COUNT**

*STATE ASSIGNED ID [117]
*STATE CODE [0 8]
*SHRP SECTION ID [0 2 0 0]

INTERSTATE 76, EB, MP 18.4

1. ANNUAL TRAFFIC ESTIMATES

*YEAR	ESTIMATED TOTAL VEHICLES AADT (TWO-WAY)	ESTIMATED TOTAL TRUCK AADT (TWO-WAY)	ESTIMATED TOTAL VEHICLES AADT LTPP LANE	*ESTIMATED TOTAL TRUCKS AADT LTPP LANE	*ESTIMATED ESAL'S/YR LTPP LANE (1000'S)
2006	22600	4770	10170	2147	2218

**2. METHOD FOR ESTIMATING TOTAL VEHICLE AADT
(TWO-WAY)**

- ☐ Growth factored last year's estimate. (6)
☒ Estimated based on volume counts at nearby locations.
(3)
☐ Used computerized network analyses. (4)
☐ Factored a single count taken this year at the LTPP site.
(1)
☐ Average multiple counts taken this year at the LTPP
site. (2)
☐ Average and factored multiple count taken this year at
the LTPP site. (5)
☐ Used flow maps. (7)
☐ Other: (8)

**3. METHOD FOR ESTIMATING TOTAL TRUCK AADT
(TWO-WAY)**

- ☐ Used system averages from counts taken this year. (6)
☒ Used count data from nearby sites. (3)
☐ Used count data from previous years at the LTPP site.
(7)
☐ Used system averages from previous years. (9)
☐ Used computerized network analyses. (4)
☐ Used a single count taken this year at the LTPP site. (5)
☐ Factored a single count taken this year at the LTPP site.
(4)
☐ Averaged multiple counts taken this year at the LTPP
site. (2)
☐ Other: (9)

**4. METHOD FOR ESTIMATING TOTAL VEHICLES
LTPP LANE AADT**

- ☒ System distribution factors. (2)
☐ Based on actual lane count data. (1)
☐ Other: (3)

***5. METHOD FOR ESTIMATING TOTAL TRUCKS,
LTPP LANE, AADT**

- ☒ System distribution factors. (2)
☐ Based on actual lane data count. (1)
☐ Other: (3)

***6. METHOD FOR ESTIMATING ESAL/YEAR
IN LTPP LANE**

- ☐ ESAL/Truck factor (1)
☒ ESAL/Vehicle class. (2) (No. of classes) 3
☐ ESAL/Axle(3) Sing Tand Tri
☐ Other: (4)

7. ESAL ESTIMATES - SOURCE OF DATA

- ☐ Weight data collected at LTPP site prior years. (2)
☐ Weight data from system averages this year. (3)
☐ Weight data from system averages prior years. (4)
☒ Weight data from historic W-4 Tables used. (5)
☐ Other: (6)

8. WEIGHT SCALE TYPE

- ☐ WIM scale. (1)
☐ Static scale used for enforcement. (2)
☒ Static scale not used for enforcement. (3)
☐ Other: (4)

NAME OF PREPARER: Elizabeth Stolz

PHONE # (303) 757-9495

DATE PREPARED: April 10, 2007

rev. March 12, 2001

ENTERED JUL 10 2007
ZSK

File: 802.12.4.9.12

SHEET 16 LTPP MONITORED TRAFFIC DATA SITE CALIBRATION SUMMARY	*STATE ASSIGNED ID [____] *STATE CODE [08] *SHRP SECTION ID [02 00]
--	---

SITE CALIBRATION INFORMATION

1. * DATE OF CALIBRATION (MONTH/DAY/YEAR) [06 / 28 / 2006]
2. * TYPE OF EQUIPMENT CALIBRATED ☒ WIM ☐ CLASSIFIER ☐ BOTH
3. * REASON FOR CALIBRATION

<input type="checkbox"/> REGULARLY SCHEDULED SITE VISIT <input type="checkbox"/> EQUIPMENT REPLACEMENT <input type="checkbox"/> DATA TRIGGERED SYSTEM REVISION <input checked="" type="checkbox"/> OTHER (SPECIFY) <u>LTPP Validation</u>	<input type="checkbox"/> RESEARCH <input type="checkbox"/> TRAINING <input type="checkbox"/> NEW EQUIPMENT INSTALLATION
--	---
4. * SENSORS INSTALLED IN LTPP LANE AT THIS SITE (CHECK ALL THAT APPLY):

<input type="checkbox"/> BARE ROUND PIEZO CERAMIC <input type="checkbox"/> CHANNELIZED ROUND PIEZO <input type="checkbox"/> CHANNELIZED FLAT PIEZO <input type="checkbox"/> OTHER (SPECIFY) _____	<input type="checkbox"/> BARE FLAT PIEZO <input type="checkbox"/> LOAD CELLS <input checked="" type="checkbox"/> INDUCTANCE LOOPS	<input checked="" type="checkbox"/> BENDING PLATES <input type="checkbox"/> QUARTZ PIEZO <input type="checkbox"/> CAPACITANCE PADS
--	---	--
5. EQUIPMENT MANUFACTURER _____ IRD/PAT Traffic _____

WIM SYSTEM CALIBRATION SPECIFICS**

6. **CALIBRATION TECHNIQUE USED:

<input type="checkbox"/> TRAFFIC STREAM -- <input type="checkbox"/> STATIC SCALE (Y/N) <input checked="" type="checkbox"/> TEST TRUCKS	<input type="checkbox"/> NUMBER OF TRUCKS COMPARED <input type="checkbox"/> NUMBER OF TEST TRUCKS USED
--	--

TYPE PER FHWA 13 BIN SYSTEM SUSPENSION: 1 - AIR; 2 - LEAF SPRING 3 - OTHER (DESCRIBE) _____	<table style="width: 100%; border: none;"> <tr> <th style="text-align: left;">TRUCK</th> <th style="text-align: left;">TYPE</th> <th style="text-align: left;">SUSPENSION</th> </tr> <tr> <td>1</td> <td>9</td> <td>1</td> </tr> <tr> <td>2</td> <td>9</td> <td>1</td> </tr> <tr> <td>3</td> <td></td> <td></td> </tr> </table>	TRUCK	TYPE	SUSPENSION	1	9	1	2	9	1	3		
TRUCK	TYPE	SUSPENSION											
1	9	1											
2	9	1											
3													
7. SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)

MEAN DIFFERENCE BETWEEN ---	
DYNAMIC AND STATIC GVW	STANDARD DEVIATION 1.8
DYNAMIC AND STATIC SINGLE AXLES	STANDARD DEVIATION 3.2
DYNAMIC AND STATIC DOUBLE AXLES	STANDARD DEVIATION 3.1
8. ☒ 3 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH) 50 - 60, 61 - 69, 70 + _____
10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) 3.675
11. ** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) N

IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE: _____

CLASSIFIER TEST SPECIFICS***

12.*** METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:
___ VIDEO x MANUAL ___ PARALLEL CLASSIFIERS

13. METHOD TO DETERMINE LENGTH OF COUNT ___ TIME x NUMBER OF TRUCKS

14. MEAN DIFFERENCE IN VOLUMES BY VEHICLES CLASSIFICATION:

*** FHWA CLASS 9	___ 0.0 ___	FHWA CLASS	___	___	___	___
*** FHWA CLASS 8	___	FHWA CLASS	___	___	___	___
		FHWA CLASS	___	___	___	___
		FHWA CLASS	___	___	___	___

*** PERCENT "UNCLASSIFIED" VEHICLES: ___ 0.0 ___

PERSON LEADING CALIBRATION EFFORT: <u>Dean J. Wolf, MACTEC Engineering & Consulting, Inc.</u>
CONTACT INFORMATION: <u>301-210-5105</u> rev. November 9, 1999

ENTERED OCT 04 2006

CLASSIFIER TEST SPECIFICS***

12.*** METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:
___ VIDEO x MANUAL ___ PARALLEL CLASSIFIERS

13. METHOD TO DETERMINE LENGTH OF COUNT ___ TIME x NUMBER OF TRUCKS

14. MEAN DIFFERENCE IN VOLUMES BY VEHICLES CLASSIFICATION:

*** FHWA CLASS 9 ___ 0.0 ___ FHWA CLASS ___ ___ ___ ___

*** FHWA CLASS 8 ___ ___ ___ FHWA CLASS ___ ___ ___ ___

 FHWA CLASS ___ ___ ___ ___

 FHWA CLASS ___ ___ ___ ___

*** PERCENT "UNCLASSIFIED" VEHICLES: ___ 0.0 ___

PERSON LEADING CALIBRATION EFFORT: <u>Dean J. Wolf, MACTEC Engineering & Consulting, Inc.</u>
CONTACT INFORMATION: <u>301-210-5105</u> rev. November 9, 1999

800.12.4.9.12

SHEET 16 LTPP MONITORED TRAFFIC DATA SITE CALIBRATION SUMMARY	*STATE ASSIGNED ID [_ _ _ _] *STATE CODE [_ 0 8 _] *SHRP SECTION ID [_ 0 2 _ 0 0 _]
--	---

SITE CALIBRATION INFORMATION

1. * DATE OF CALIBRATION (MONTH/DAY/YEAR) [_ 0 6 _ / _ 2 7 _ / _ 2 0 0 6 _]
2. * TYPE OF EQUIPMENT CALIBRATED 3 WIM CLASSIFIER X BOTH NY
12/15/06
3. * REASON FOR CALIBRATION
____ REGULARLY SCHEDULED SITE VISIT RESEARCH
____ EQUIPMENT REPLACEMENT TRAINING
____ DATA TRIGGERED SYSTEM REVISION NEW EQUIPMENT INSTALLATION
x OTHER (SPECIFY) LTPP Validation
4. * SENSORS INSTALLED IN LTPP LANE AT THIS SITE (CHECK ALL THAT APPLY):
____ BARE ROUND PIEZO CERAMIC BARE FLAT PIEZO x BENDING PLATES
____ CHANNELIZED ROUND PIEZO LOAD CELLS QUARTZ PIEZO
____ CHANNELIZED FLAT PIEZO x INDUCTANCE LOOPS CAPACITANCE PADS
____ OTHER (SPECIFY) _____
5. EQUIPMENT MANUFACTURER _____ IRD/PAT Traffic _____

WIM SYSTEM CALIBRATION SPECIFICS**

- 6.** CALIBRATION TECHNIQUE USED:
____ TRAFFIC STREAM -- ____ STATIC SCALE (Y/N) x TEST TRUCKS
____ NUMBER OF TRUCKS COMPARED 2 NUMBER OF TEST TRUCKS USED
____ 2 0 PASSES PER TRUCK
- | | TRUCK | TYPE | SUSPENSION |
|--------------------------------------|-------|----------|------------|
| TYPE PER FHWA 13 BIN SYSTEM | 1 | <u>9</u> | <u>1</u> |
| SUSPENSION: 1 - AIR; 2 - LEAF SPRING | 2 | <u>9</u> | <u>1</u> |
| 3 - OTHER (DESCRIBE) | 3 | _____ | _____ |
7. SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)
MEAN DIFFERENCE BETWEEN ---
DYNAMIC AND STATIC GVW 3.3 STANDARD DEVIATION 2.4
DYNAMIC AND STATIC SINGLE AXLES 3.1 STANDARD DEVIATION 2.8
DYNAMIC AND STATIC DOUBLE AXLES 3.3 STANDARD DEVIATION 3.2
8. 3 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH) 50 - 60, 61 - 69, 70 +
10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) 3 6 7 5
- 11.** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) N
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE: _____

ENTERED OCT 04 2006

PERSON LEADING CALIBRATION EFFORT: Dean J. Wolf, MACTEC Engineering & Consulting, Inc.
CONTACT INFORMATION: 301-210-5105 rev. November 9, 1999

File: 800.12.4.8.12
080200

SHEET 16 LTPP MONITORED TRAFFIC DATA SITE CALIBRATION SUMMARY	*STATE ASSIGNED ID [_ _ _ _] *STATE CODE [_ 0 8 _] *SHRP SECTION ID [_ 0 2 _ 0 0 _]
--	---

SITE CALIBRATION INFORMATION

1. * DATE OF CALIBRATION (MONTH/DAY/YEAR) [_ 0 6 _ / _ 2 7 _ / _ 2 0 0 6 _]
2. * TYPE OF EQUIPMENT CALIBRATED ☒ WIM ☐ CLASSIFIER ☐ BOTH
3. * REASON FOR CALIBRATION
☐ REGULARLY SCHEDULED SITE VISIT ☐ RESEARCH
☐ EQUIPMENT REPLACEMENT ☐ TRAINING
☐ DATA TRIGGERED SYSTEM REVISION ☐ NEW EQUIPMENT INSTALLATION
☒ OTHER (SPECIFY) LTPP Validation
4. * SENSORS INSTALLED IN LTPP LANE AT THIS SITE (CHECK ALL THAT APPLY):
☐ BARE ROUND PIEZO CERAMIC ☐ BARE FLAT PIEZO ☒ BENDING PLATES
☐ CHANNELIZED ROUND PIEZO ☐ LOAD CELLS ☐ QUARTZ PIEZO
☐ CHANNELIZED FLAT PIEZO ☒ INDUCTANCE LOOPS ☐ CAPACITANCE PADS
☐ OTHER (SPECIFY) _____
5. EQUIPMENT MANUFACTURER _____ IRD/PAT Traffic _____

WIM SYSTEM CALIBRATION SPECIFICS**

- 6.**CALIBRATION TECHNIQUE USED:
☐ TRAFFIC STREAM -- ☐ STATIC SCALE (Y/N) ☒ TEST TRUCKS

☐ NUMBER OF TRUCKS COMPARED ☐ 2 NUMBER OF TEST TRUCKS USED

☐ 2 0 PASSES PER TRUCK

TRUCK	TYPE	SUSPENSION
1	9	1
2	9	1
3		

TYPE PER FHWA 13 BIN SYSTEM
SUSPENSION: 1 - AIR; 2 - LEAF SPRING
3 - OTHER (DESCRIBE)
7. SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)
MEAN DIFFERENCE BETWEEN ---
DYNAMIC AND STATIC GVW ☐ 3.3 STANDARD DEVIATION ☐ 2.4
DYNAMIC AND STATIC SINGLE AXLES ☐ 3.1 STANDARD DEVIATION ☐ 2.8
DYNAMIC AND STATIC DOUBLE AXLES ☐ 3.3 STANDARD DEVIATION ☐ 3.2
8. ☒ 3 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH) ☐ 50 - 60, ☐ 61 - 69, ☐ 70 + _____
10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) ☐ 3 6 7 5
- 11.** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) ☐ N
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE: _____

CLASSIFIER TEST SPECIFICS***

12.*** METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:
___ VIDEO x MANUAL ___ PARALLEL CLASSIFIERS

13. METHOD TO DETERMINE LENGTH OF COUNT ___ TIME x NUMBER OF TRUCKS

14. MEAN DIFFERENCE IN VOLUMES BY VEHICLES CLASSIFICATION:

*** FHWA CLASS 9 ___ 0.0 ___ FHWA CLASS ___ ___

*** FHWA CLASS 8 ___ FHWA CLASS ___ ___

FHWA CLASS ___ ___

FHWA CLASS ___ ___

*** PERCENT "UNCLASSIFIED" VEHICLES: ___ 0.0 ___

PERSON LEADING CALIBRATION EFFORT: _Dean J. Wolf, MACTEC Engineering & Consulting, Inc._____
CONTACT INFORMATION: _301-210-5105_____ rev. November 9, 1999