

SHEET 10 LTPP TRAFFIC DATA TRAFFIC VOLUME AND LOAD ESTIMATE UPDATE-NO SITE COUNT	*STATE ASSIGNED ID	[]
	*STATE CODE	[12]
	*SHRP SECTION ID	[0500]

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 TRUCK AADT LTPP LANE	*ESTIMATED ESAL'S/YR LTPP LANE (1000'S)
2006				310	36

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 average 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: (10)

4. METHOD FOR ESTIMATEING 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 count data. (1)
☒ Other: (3) Projected from available data

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

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

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 systemaverages 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	Dan YE	PHONE #	512-977-1845
DATE PREPARED	2/16/2009	REV.	February 21, 2000

ENTERED FEB 20 2009 J P M
ENTERED APR 08 2009 J P M

RECEIVED JAN 19 2007

<p align="center">SHEET 16</p> <p align="center">LTPP MONITORED TRAFFIC DATA</p> <p align="center">SITE CALIBRATION SUMMARY</p>	<p>*STATE ASSIGNED ID [_9_9_2_1_] </p> <p>*STATE CODE [_1_2_] </p> <p>*SHRP SECTION ID [_0_5_0_0_] </p>
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SITE CALIBRATION INFORMATION

1. * DATE OF CALIBRATION (MONTH/DAY/YEAR) [0 9 / 1 3 / 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) __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 | 9 | 1 |
| SUSPENSION: 1 - AIR; 2 - LEAF SPRING | 2 | 5 | 2 |
| 3 - OTHER (DESCRIBE) | 3 | | |
7. SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)
- MEAN DIFFERENCE BETWEEN ---
- | | | | |
|---------------------------------|----------|--------------------|-----------|
| DYNAMIC AND STATIC GVW | _____0.0 | STANDARD DEVIATION | ___3.8___ |
| DYNAMIC AND STATIC SINGLE AXLES | _____0.8 | STANDARD DEVIATION | ___4.4___ |
| DYNAMIC AND STATIC DOUBLE AXLES | _____0.6 | STANDARD DEVIATION | ___3.7___ |
8. ____3____ NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH) _____35, _45, _55_____
10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) ____8_1_0____
- 11.** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) _N_
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE: _____

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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 _x_ TIME ___ NUMBER OF TRUCKS
14. MEAN DIFFERENCE IN VOLUMES BY VEHICLES CLASSIFICATION:
*** FHWA CLASS 9 0 FHWA CLASS _____
*** FHWA CLASS 8 0 FHWA CLASS _____
 FHWA CLASS _____
 FHWA CLASS _____
*** PERCENT "UNCLASSIFIED" VEHICLES: 0.0

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

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DUPLICATE

SHEET 16
LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

*STATE ASSIGNED ID [9 9 2 1]
*STATE CODE [1 2]
*SHRP SECTION ID [0 5 0 0]

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☐ 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):
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☐ 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
TYPE PER FHWA 13 BIN SYSTEM
1 9 1
SUSPENSION: 1 - AIR; 2 - LEAF SPRING 2 5 2
3 - OTHER (DESCRIBE) 3 _____
7. SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)
MEAN DIFFERENCE BETWEEN ---
DYNAMIC AND STATIC GVW 0.0 STANDARD DEVIATION 3.8
DYNAMIC AND STATIC SINGLE AXLES 0.8 STANDARD DEVIATION 4.4
DYNAMIC AND STATIC DOUBLE AXLES 0.6 STANDARD DEVIATION 3.7
8. 3 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH) 35, 45, 55
10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) 8 1 0
- 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 __x_ TIME ___ NUMBER OF TRUCKS
14. MEAN DIFFERENCE IN VOLUMES BY VEHICLES CLASSIFICATION:
*** FHWA CLASS 9 ___ 0 ___ FHWA CLASS ___ ___ ___
*** FHWA CLASS 8 ___ 0 ___ FHWA CLASS ___ ___ ___
 FHWA CLASS ___ ___ ___
 FHWA CLASS ___ ___ ___
*** PERCENT "UNCLASSIFIED" VEHICLES: ___ 0 . 0 ___

PERSON LEADING CALIBRATION EFFORT: __Dean J. Wolf, __MACTEC E&C__
CONTACT INFORMATION: __301-210-5105__ rev. November 9, 1999

DUPLICATE

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LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

*STATE ASSIGNED ID [9 9 2 1]
*STATE CODE [1 2]
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3. * REASON FOR CALIBRATION
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☐ EQUIPMENT REPLACEMENT ☐ TRAINING
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☒ OTHER (SPECIFY) LTPP Validation
4. * SENSORS INSTALLED IN LTPP LANE AT THIS SITE (CHECK ALL THAT APPLY):
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☐ 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
TYPE PER FHWA 13 BIN SYSTEM
SUSPENSION: 1 - AIR; 2 - LEAF SPRING
3 - OTHER (DESCRIBE)

TRUCK	TYPE	SUSPENSION
1	9	1
2	5	2
3		

7. SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)

MEAN DIFFERENCE BETWEEN ---
DYNAMIC AND STATIC GVW ☐ - 4.4 STANDARD DEVIATION ☐ 3.7
DYNAMIC AND STATIC SINGLE AXLES ☐ - 3.2 STANDARD DEVIATION ☐ 6.0
DYNAMIC AND STATIC DOUBLE AXLES ☐ - 4.6 STANDARD DEVIATION ☐ 3.3

8. ☐ 3 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED

9. DEFINE THE SPEED RANGES USED (MPH) ☐ 35, ☐ 45, ☐ 55

10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) ☐ 8 1 0

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 _x_ TIME ___ NUMBER OF TRUCKS
14. MEAN DIFFERENCE IN VOLUMES BY VEHICLES CLASSIFICATION:
*** FHWA CLASS 9 0 FHWA CLASS
*** FHWA CLASS 8 0 FHWA CLASS
 FHWA CLASS
 FHWA CLASS
*** PERCENT "UNCLASSIFIED" VEHICLES: 0.0

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

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- * DATE OF CALIBRATION (MONTH/DAY/YEAR) [0 9 / 1 3 / 2 0 0 6] use date of 9/12/2006 for database entry.
- * TYPE OF EQUIPMENT CALIBRATED x WIM CLASSIFIER BOTH
- * REASON FOR CALIBRATION
 REGULARLY SCHEDULED SITE VISIT RESEARCH
 EQUIPMENT REPLACEMENT TRAINING
 DATA TRIGGERED SYSTEM REVISION NEW EQUIPMENT INSTALLATION
 x OTHER (SPECIFY) LTPP Validation
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 BARE ROUND PIEZO CERAMIC BARE FLAT PIEZO BENDING PLATES
 CHANNELIZED ROUND PIEZO LOAD CELLS x QUARTZ PIEZO
 CHANNELIZED FLAT PIEZO x INDUCTANCE LOOPS CAPACITANCE PADS
 OTHER (SPECIFY)
- 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> 5 </u>	<u> 2 </u>
3 - OTHER (DESCRIBE)	3	<u> </u>	<u> </u>

7. SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)

MEAN DIFFERENCE BETWEEN --

DYNAMIC AND STATIC GVW	<u> </u> - <u> 4.4 </u>	STANDARD DEVIATION	<u> 3.7 </u>
DYNAMIC AND STATIC SINGLE AXLES	<u> </u> - <u> 3.2 </u>	STANDARD DEVIATION	<u> 6.0 </u>
DYNAMIC AND STATIC DOUBLE AXLES	<u> </u> - <u> 4.6 </u>	STANDARD DEVIATION	<u> 3.3 </u>

8. 3 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED

9. DEFINE THE SPEED RANGES USED (MPH) 35 , 45 , 55

10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) 8 1 0

11.** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) N

IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE:

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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 _x_ TIME ____ NUMBER OF TRUCKS
14. MEAN DIFFERENCE IN VOLUMES BY VEHICLES CLASSIFICATION:
- | | | | | | | |
|------------------|-------------|------------|------|------|------|------|
| *** FHWA CLASS 9 | ____ 0 ____ | FHWA CLASS | ____ | ____ | ____ | ____ |
| *** FHWA CLASS 8 | ____ 0 ____ | FHWA CLASS | ____ | ____ | ____ | ____ |
| | | FHWA CLASS | ____ | ____ | ____ | ____ |
| | | FHWA CLASS | ____ | ____ | ____ | ____ |
- *** PERCENT "UNCLASSIFIED" VEHICLES: 0 . 0

PERSON LEADING CALIBRATION EFFORT: Dean J. Wolf, MACTEC E&C
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