

**SHEET 10**  
**LTPP TRAFFIC DATA**

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

\*STATE ASSIGNED ID [ ]

\*STATE CODE [ 37 ]

\*SHRP SECTION ID [ 3816 ]

**ENTERED APR 24 2003**

**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/YRLTPP LANE (1000'S)
2000	<del>23,589</del> 41299	<del>873</del> 2478	<del>13,400</del> 12742	<del>658</del> 682	<del>176</del> 174

**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) Used counts from the site.

**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: (10) \_\_\_\_\_

**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) \_\_\_\_\_
- ☐ 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) None.

**ENTERED JUN 05 2000**

NAME OF PREPARER Michael H. Ashbrook

DATE PREPARED 2/26/01

PHONE 919-733-4796

rev. February 21, 2000





<b>SHEET 12</b> <b>LTPP TRAFFIC DATA</b> <b>CLASSIFICATION DATA</b> <b>TRANSMITTAL FORM</b>	*STATE ASSIGNED ID	[ _____ ]
	*STATE CODE	[ <u>37</u> ]
	*SHRP SECTION ID	[ <u>3816</u> ]

HIGHWAY RT. NO. (THIS COUNT) NC 147

MILEPOST NO. OR LOCATION (THIS COUNT) .1 Mi. North of SR 1940

FILENAME C373816.L1A DISK ID \_\_\_\_\_

BEGINNING DATE 10/1/00 BEGINNING TIME 0000

ENDING DATE 12/31/00 ENDING TIME 2400

COUNT DURATION 92 [ ] HOURS [ X ] DAYS [ ] MONTHS

VEHICLE CLASSIFICATION METHOD: FHWA X OTHER \_\_\_\_\_

NAME OF AGENCY CLASSIFICATION SCHEME \_\_\_\_\_ NO. OF BINS: \_\_\_\_\_

NOTE: IF NOT PREVIOUSLY PROVIDED TO SHRP/LTPP, PLEASE ATTACH SHEET 6 DESCRIBING THE VEHICLE CLASSIFICATION CATEGORIES AND ALSO ATTACH SHEET 7 DESCRIBING HOW THE AGENCY WOULD CONVERT ITS CLASSIFICATION SCHEME TO THE FHWA 13 BIN SYSTEM.

TYPE OF AVC EQUIPMENT: PORTABLE \_\_\_\_\_ PERMANENT X

EQUIPMENT MAKE/MODEL# Peek ADR-3000

SENSOR TYPE Bare flat piezo.

ADJUSTMENT FACTORS FOR ESTIMATING AVERAGE ANNUAL VOLUMES BY CLASSIFICATION:

GENERAL FACTORS: \_\_\_\_\_

CLASS SPECIFIC FACTORS (PROVIDE BY CLASS OF CLASS GROUPS) \_\_\_\_\_

COMMENTS \_\_\_\_\_

FILL OUT ONE TRANSMITTAL SHEET FOR EACH DATA FILE SUBMITTED.

NAME OF PREPARER <u>Michael H. Ashbrook</u>	PHONE <u>919-733-4796</u>
DATE PREPARED <u>2/26/01</u>	revised November 11, 1999

<b>SHEET 13</b> <b>LTPP TRAFFIC DATA</b>  <b>VEHICLE WEIGHT DATA</b> <b>TRANSMITTAL FORM</b>	*STATE ASSIGNED ID	[         ]
	*STATE CODE	[ 37 ]
	*SHRP SECTION ID	[ 3816 ]

HIGHWAY RT. NO. (THIS SESSION) NC 147

MILEPOST NO. OR LOCATION (THIS SESSION) 5.95

FILENAME W373816.JAA DISK ID

BEGINNING DATE 8/11/00 BEGINNING TIME 0000

ENDING DATE 8/17/00 ENDING TIME 2400

COUNT DURATION 7 [   ] HOURS [ X ] DAYS [   ] MONTHS

WEIGHT SCALE TYPE: PORT. WIM  PERM. WIM X OTHER

EQUIPMENT MAKE/MODEL# Peek ADR-3000

SENSOR TYPE Bare Flat Piezo.

VEHICLE CLASSIFICATION METHOD:  
7-card FHWA 13 bin in cols. 18-19  7-card FHWA 13 bin in cols. 22-23   
7-card 6 digit Truck Weight study  W-card X OTHER 7-card FHWA 13 bin Cols. 20-21

NAME OF AGENCY CLASSIFICATION SCHEME:  NO. OF BINS   
NOTE: IF NOT PREVIOUSLY PROVIDED TO SHRP/LTPP, PLEASE ATTACH SHEET 6 DESCRIBING THE  
VEHICLE CLASSIFICATION CATEGORIES AND ALSO ATTACH SHEET 7 DESCRIBING HOW THE  
AGENCY WOULD CONVERT ITS CLASSIFICATION SCHEME TO THE FHWA 13 CLASS SYSTEM.

METHOD OF CALIBRATION AND FREQUENCY: Self calibration factor adjusted hourly on predominate  
Vehicle class at the site.

COMMENTS Automatic calibration capabilities.

FILL OUT ONE TRANSMITTAL SHEET FOR EACH DATA FILE SUBMITTED.  
NAME OF PREPARER Michael H. Ashbrook PHONE 919-733-4796  
DATE PREPARED  revised February 21,2000

<b>SHEET 13</b> <b>LTPP TRAFFIC DATA</b>  <b>VEHICLE WEIGHT DATA</b> <b>TRANSMITTAL FORM</b>	*STATE ASSIGNED ID [ _____ ]
	*STATE CODE [ <u>37</u> ]
	*SHRP SECTION ID [ <u>3816</u> ]

HIGHWAY RT. NO. (THIS SESSION) NC 147

MILEPOST NO. OR LOCATION (THIS SESSION) .1 Mi. North of SR 1940

FILENAME W373816.NFA DISK ID \_\_\_\_\_

BEGINNING DATE 12/16/00 BEGINNING TIME 0000

ENDING DATE 12/22/00 ENDING TIME 2400

COUNT DURATION 7 [ ] HOURS [ ☒ ] DAYS [ ] MONTHS

WEIGHT SCALE TYPE: PORT. WIM \_\_\_\_\_ PERM. WIM X OTHER \_\_\_\_\_

EQUIPMENT MAKE/MODEL# Peek ADR-3000

SENSOR TYPE Bare flat piezo

VEHICLE CLASSIFICATION METHOD:  
 7-card FHWA 13 bin in cols. 18-19 \_\_\_\_\_ 7-card FHWA 13 bin in cols. 22-23 \_\_\_\_\_  
 7-card 6 digit Truck Weight study \_\_\_\_\_ W-card X OTHER 7-card FHWA 13 bin cols. 20-21

NAME OF AGENCY CLASSIFICATION SCHEME: \_\_\_\_\_ NO. OF BINS \_\_\_\_\_  
 NOTE: IF NOT PREVIOUSLY PROVIDED TO SHRP/LTPP, PLEASE ATTACH SHEET 6 DESCRIBING THE  
 VEHICLE CLASSIFICATION CATEGORIES AND ALSO ATTACH SHEET 7 DESCRIBING HOW THE  
 AGENCY WOULD CONVERT ITS CLASSIFICATION SCHEME TO THE FHWA 13 CLASS SYSTEM.

METHOD OF CALIBRATION AND FREQUENCY: Self calibration factor adjusted hourly on predominate  
Vehicle class at the site.

COMMENTS Automatic calibration capabilities

FILL OUT ONE TRANSMITTAL SHEET FOR EACH DATA FILE SUBMITTED.

NAME OF PREPARER <u>Michael H. Ashbrook</u>	PHONE <u>919-733-4796</u>
DATE PREPARED <u>2/26/01</u>	revised February 21,2000

**SHEET 14  
LTPP TRAFFIC DATA  
EQUIPMENT INSTALLATION  
LOG**

\*STATE ASSIGNED ID [       ]  
 \*STATE CODE [ 37 ]  
 \*SHRP SECTION ID [ 3816 ]

LOCATION NC 147, .1 Mi. N. of SR 1940  
 INSTALLATION DATE 8/2/00

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	ADR-3000	PEEK TRAFFIC	11554-0005
Interface			
Modem	DC POWERED 14.4 BPS	MICRO-AIDE	11776-0004
Loop Amplifiers	SL58P	PEEK TRAFFIC	11554-0005
Power <u>PIEZO BOARD</u>	SW58P	PEEK TRAFFIC	11687-0002
Sensor(s) / Platform(s)			
PP Lane Sensor	BARE FLAT PIEZO	MSI	
Sensor Next Adjacent Lane (1)	BARE FLAT PIEZO	MSI	
Sensor Next Adjacent Lane (2)			
Sensor Next Adjacent Lane (3)			
Angular Sensor			
Scale Sensor			
Light Platform			
IR Platform			
Power <u>                    </u>			
Software			
Complete Package	TDP VER. 3.32, TMG VER. 8.5, VTRIS 5.0		
Le Spacing Algorithm Only			
Power <u>                    </u>			
Loops			
Stream - Lane I	6'X6' 4 TURN INDUCTIVE LOOP		
Downstream - Lane I			
Stream - Other Lanes	6'X6' 4 TURN INDUCTIVE LOOP		
Downstream - Other Lanes			

revised November 11, 1999)

SHEET 16  
LTPP MONITORED TRAFFIC DATA  
SITE CALIBRATION SUMMARY

\*STATE ASSIGNED ID [ ]  
\*STATE CODE [ 37 ]  
\*SHRP SECTION ID [ 3816 ]

SITE CALIBRATION INFORMATION

1. \*DATE OF CALIBRATION (MONTH/DAY/YEAR) [ 8 / 9 / 00 ] ✓
2. \*TYPE OF EQUIPMENT CALIBRATED \_\_\_\_\_ WIM \_\_\_\_\_ CLASSIFIER ☒ BOTH
3. \*REASON FOR CALIBRATION  
\_\_\_\_ REGULARLY SCHEDULED SITE VISIT  
\_\_\_\_ EQUIPMENT REPLACEMENT  
\_\_\_\_ DATA TRIGGERED SYSTEM REVISION  
\_\_\_\_ RESEARCH  
\_\_\_\_ TRAINING  
☒ NEW EQUIPMENT INSTALLATION
- ENTERED JUN 14 2002
4. \*SENSORS INSTALLED IN LTPP LANE AT THIS SITE (CHECK ALL THAT APPLY):  
\_\_\_\_ BARE ROUND PIEZO CERAMIC ☒ BARE FLAT PIEZO  
\_\_\_\_ CHANNELIZED ROUND PIEZO \_\_\_\_\_ LOAD CELLS  
\_\_\_\_ CHANNELIZED FLAT PIEZO \_\_\_\_\_ INDUCTANCE LOOPS  
\_\_\_\_ OTHER (SPECIFY) \_\_\_\_\_  
\_\_\_\_ BENDING PLATES  
\_\_\_\_ QUARTZ PIEZO  
\_\_\_\_ CAPACITANCE PADS
5. EQUIPMENT MANUFACTURER Peck Traffic

WIM SYSTEM CALIBRATION SPECIFICS\*\*

- 6.\*\* CALIBRATION TECHNIQUE USED:  
\_\_\_\_ TRAFFIC STREAM \_\_\_\_\_ STATIC SCALE (Y/N) ☒ TEST TRUCKS  
\_\_\_\_ NUMBER OF TRUCKS COMPARED \_\_\_\_\_ NUMBER OF TEST TRUCKS USED  
\_\_\_\_ 5 PASSES PER TRUCK
- | TRUCK | TYPE | SUSPENSION |
|-------|------|------------|
| 1     | 9    | 2          |
| 2     |      |            |
| 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 0 . 58  
DYNAMIC AND STATIC SINGLE AXLES 5 . 83  
DYNAMIC AND STATIC DOUBLE AXLES 1 . 59  
STANDARD DEVIATION 3 . 0  
STANDARD DEVIATION 5 . 0  
STANDARD DEVIATION 3 . 16
8. 1 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH) 55 mph
10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) 1 . 10

- 11.\*\* IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) YES  
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE: Lane 1: Class 2, Axle 1, Expected wt 1,930 lb  
Lane 2: Class 2, Axle 1, Expected wt 2,380 lb

CLASSIFIER TEST SPECIFICS\*\*\*

- 12.\*\*\* METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:  
\_\_\_\_ VIDEO ☒ MANUAL \_\_\_\_\_ PARRALLEL CLASSIFIERS
13. METHOD TO DETERMINE LENGTH OF COUNT 4 hrs TIME \_\_\_\_\_ NUMBER OF TRUCKS
14. MEAN DIFFERENCE IN VOLUMES BY VEHICLES CLASSIFICATION:  
\*\*\* FHWA CLASS 9 0 FHWA CLASS \_\_\_\_\_  
\*\*\* FHWA CLASS 8 1.5 FHWA CLASS \_\_\_\_\_  
FHWA CLASS \_\_\_\_\_  
FHWA CLASS \_\_\_\_\_  
FHWA CLASS \_\_\_\_\_  
\*\*\* PERCENT UNCLASSIFIED VEHICLES: 0