

SHEET 10
LTPP TRAFFIC DATA

TRAFFIC VOLUME AND LOAD
ESTIMATE UPDATE-NO SITE COUNT

*STATE ASSIGNED ID [_____]
*STATE CODE [37]
*SHRP SECTION ID [5827]

1. ANNUAL TRAFFIC ESTIMATES

ENTERED APR 24 2003

*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)
<u>2000</u>	<u>12,383</u>	<u>2,102</u>	<u>4,827</u>	<u>927</u>	<u>158</u>

**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.

NAME OF PREPARER Michael H. Ashbrook

DATE PREPARED 2/27/01

PHONE 919-733-4796

rev. February 21, 2000

SHEET 12 LTPP TRAFFIC DATA CLASSIFICATION DATA TRANSMITTAL FORM	*STATE ASSIGNED ID	[_____]
	*STATE CODE	[<u>37</u>]
	*SHRP SECTION ID	[<u>5827</u>]

HIGHWAY RT. NO. (THIS COUNT) US 29

MILEPOST NO. OR LOCATION (THIS COUNT) 10.0

FILENAME C375827.GGA DISK ID _____

BEGINNING DATE 5/11/00 BEGINNING TIME 0000

ENDING DATE 6/30/00 ENDING TIME 2400

COUNT DURATION 51 [] HOURS [☒] DAYS [] MONTHS

VEHICLE CLASSIFICATION METHOD: FHWA ☒ 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 ☒ _____

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>7/26/00</u>	revised November 11, 1999

SHEET 12 LTPP TRAFFIC DATA CLASSIFICATION DATA TRANSMITTAL FORM	*STATE ASSIGNED ID	[_____]
	*STATE CODE	[<u>37</u>]
	*SHRP SECTION ID	[<u>5827</u>]

HIGHWAY RT. NO. (THIS COUNT) US 29

MILEPOST NO. OR LOCATION (THIS COUNT) 10.0

FILENAME C375827.I1A DISK ID _____

BEGINNING DATE 7/1/00 BEGINNING TIME 0000

ENDING DATE 9/3/00 ENDING TIME 2400

COUNT DURATION 65 [] HOURS [☒] DAYS [] MONTHS

VEHICLE CLASSIFICATION METHOD: FHWA ☒ 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 ☒

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>11/13/00</u>	revised November 11, 1999

SHEET 12 LTPP TRAFFIC DATA CLASSIFICATION DATA TRANSMITTAL FORM	*STATE ASSIGNED ID	[_____]
	*STATE CODE	[<u>37</u>]
	*SHRP SECTION ID	[<u>5827</u>]

HIGHWAY RT. NO. (THIS COUNT) US 29

MILEPOST NO. OR LOCATION (THIS COUNT) 10.0

FILENAME C375827.KKA DISK ID _____

BEGINNING DATE 9/21/00 BEGINNING TIME 0000

ENDING DATE 9/30/00 ENDING TIME 2400

COUNT DURATION 10 [] HOURS [☒] DAYS [] MONTHS

VEHICLE CLASSIFICATION METHOD: FHWA ☒ 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 ☒

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>11/13/00</u>	revised November 11, 1999

SHEET 12 LTPP TRAFFIC DATA CLASSIFICATION DATA TRANSMITTAL FORM	*STATE ASSIGNED ID	[_____]
	*STATE CODE	[<u>37</u>]
	*SHRP SECTION ID	[<u>5827</u>]

HIGHWAY RT. NO. (THIS COUNT) US 29

MILEPOST NO. OR LOCATION (THIS COUNT) 10.0

FILENAME C375827.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>2/27/01</u>	revised November 11, 1999

SHEET 13 LTPP TRAFFIC DATA VEHICLE WEIGHT DATA TRANSMITTAL FORM	STATE ASSIGNED ID [_____]
	*STATE CODE [37]
	*SHRP SECTION ID [5827]

HIGHWAY RT. NO. (THIS SESSION) _____ US 29

MILEPOST NO. OR LOCATION (THIS SESSION) _____ 10.0

FILENAME _____ W375827.H2A _____ DISK ID _____

BEGINNING DATE _____ 6/2/00 _____ BEGINNING TIME _____ 0000

ENDING DATE _____ 6/8/00 _____ 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 on 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 _____ 7/26/00 _____ revised February 21,2000

SHEET 13 LTPP TRAFFIC DATA VEHICLE WEIGHT DATA TRANSMITTAL FORM	*STATE ASSIGNED ID [_____]
	*STATE CODE [<u>37</u>]
	*SHRP SECTION ID [<u>5827</u>]

HIGHWAY RT. NO. (THIS SESSION) US 29

MILEPOST NO. OR LOCATION (THIS SESSION) 10.0

FILENAME W375827.J1A DISK ID _____

BEGINNING DATE 8/1/00 BEGINNING TIME 0000

ENDING DATE 8/7/00 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 on 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 11/13/00 revised February 21,2000

SHEET 13 LTPP TRAFFIC DATA VEHICLE WEIGHT DATA TRANSMITTAL FORM	STATE ASSIGNED ID [_____]
	*STATE CODE [37]
	*SHRP SECTION ID [5827]

HIGHWAY RT. NO. (THIS SESSION) US 29

MILEPOST NO. OR LOCATION (THIS SESSION) 10.0

FILENAME W375827.NFA DISK ID _____

BEGINNING DATE 12/16/00 BEGINNING TIME 0000

ENDING DATE 12/22/00 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 on 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 2/27/01 revised February 21,2000

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

*STATE ASSIGNED ID []
 *STATE CODE [37]
 *SHRP SECTION ID [5827]

LOCATION MP# 10.0
 INSTALLATION DATE 5/11/00

SCANNED
 FEB 09 2000

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	ADR-3000	PEEK TRAFFIC , INC	10790-0004
Interface			
Modem	DC POWERED 14.4 BPS	MICRO-AIDE	10702-0047
Loop Amplifiers	SL58P		10790-0004
Other _____	SW58P		10112-0004
Sensor(s) / Platform(s)			
LTPP 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)			
Diagonal Sensor			
Offscale Sensor			
Right Platform			
Left Platform			
Other _____			
Software			
Complete Package	TDP VER. 3.32, TMG VER. 8.5, VISA WIM VER. 1.53		
Axle Spacing Algorithm Only			
Other _____			
Loops			
Upstream - Lane I	6'x6' 4 TURN INDUCTIVE LOOP		
Downstream - Lane I	6'x6' 4 TURN INDUCTIVE LOOP		
Upstream - Other Lanes			
Downstream - Other Lanes			

revised November
 11, 1999)

<div>SHEET 16</div> <div>LTPP MONITORED TRAFFIC DATA</div> <div>SITE CALIBRATION SUMMARY</div>	<div>*STATE ASSIGNED ID<div></div></div> <div>*STATE CODE<div>37</div></div> <div>*SHRP SECTION ID<div>5827</div></div>
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SITE CALIBRATION INFORMATION

1. *DATE OF CALIBRATION (MONTH/DAY/YEAR)

[6 / 1 / 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

☐ BENDING PLATES

☐ CHANNELIZED ROUND PIEZO

☐ LOAD CELLS

☐ QUARTZ PIEZO

☐ CHANNELIZED FLAT PIEZO

☐ INDUCTANCE LOOPS

☐ CAPACITANCE PADS

☐ OTHER (SPECIFY)

5. EQUIPMENT MANUFACTURER

PEEK TRAFFIC, INC

WIM SYSTEM CALIBRATION SPECIFICS**

6.** CALIBRATION TECHNIQUE USED:

☐ TRAFFIC STREAM

☐ STATIC SCALE (Y/N)

☒ TEST TRUCKS

NUMBER OF TRUCKS COMPARED

1

NUMBER OF TEST TRUCKS USED

5

PASSES PER TRUCK

TRUCKTYPE

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

1

13

STANDARD DEVIATION

4

92

DYNAMIC AND STATIC SINGLE AXLES

35

STANDARD DEVIATION

4

71

DYNAMIC AND STATIC DOUBLE AXLES

1

40

STANDARD DEVIATION

5

34

8.

1

 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED

9. DEFINE THE SPEED RANGES USED (MPH)

65

10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED)

1

 .

331

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

Y

IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE:

CLASS 2, FRONT AXLE AT 2,000LBS

CLASSIFIER TEST SPECIFICS***

12.*** METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:

☐ VIDEO

☒ MANUAL

☐ PARRALLEL CLASSIFIERS

1. METHOD TO DETERMINE LENGTH OF COUNT

☒ TIME

☐ NUMBER OF TRUCKS

14. MEAN DIFFERENCE IN VOLUMES BY VEHICLES CLASSIFICATION:

*** FHWA CLASS 9

.5%

FHWA CLASS

*** FHWA CLASS 8

1.0%

FHWA CLASS

FHWA CLASS

FHWA CLASS

*** PERCENT UNCLASSIFIED VEHICLES:

0

PERSON LEADING CALIBRATION EFFORT	Michael H. Ashbrook
CONTACT INFORMATION	phone: 919-733-4796
	rev. November 9, 1999