

<b>SHEET 12</b> <b>LTPP TRAFFIC DATA</b> <b>CLASSIFICATION DATA</b> <b>TRANSMITTAL FORM</b>	*STATE ASSIGNED ID	[ 410 ]
	*STATE CODE	[ 42 ]
	*SHRP SECTION ID	[ 1597 ]

HIGHWAY RT. NO. (THIS COUNT): PA 49

MILEPOST NO. OR LOCATION (THIS COUNT): Segment 0530

FILENAME: C421597.IIH ✓ DISK ID: \_\_\_\_\_

BEGINNING DATE: 07/01/07 BEGINNING TIME: 12:00 AM

ENDING DATE: 09/30/07 ENDING TIME: 11:59 PM

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#: PAT DAW 190

SENSOR TYPE: PIEZO

ADJUSTMENT FACTORS FOR ESTIMATING AVERAGE ANNUAL VOLUMES BY CLASSIFICATION:

GENERAL FACTORS: ATR continuous counts used to develop seasonal adjustment factors which are applied to all 24 hour raw counts by month and by day of week.

CLASS SPECIFIC FACTORS (PROVIDE BY CLASS OF CLASS GROUPS): NA

COMMENTS:

FILL OUT ONE TRANSMITTAL SHEET FOR EACH DATA FILE SUBMITTED.

NAME OF PREPARER:	<u>Leslie McCoy</u>	PHONE: (717) 783-9972
DATE PREPARED:	<u>12/20/2007</u>	

<b>SHEET 13</b> <b>LTPP TRAFFIC DATA</b> <b>VEHICLE WEIGHT DATA</b> <b>TRANSMITTAL FORM</b>	*STATE ASSIGNED ID	[ 410 ]
	*STATE CODE	[ 42 ]
	*SHRP SECTION ID	[ 1597 ]

HIGHWAY RT. NO. (THIS SESSION): PA 49

MILEPOST NO. OR LOCATION (THIS SESSION): Segment 0530

FILENAME: W421597.11H ✓ DISK ID: \_\_\_\_\_

BEGINNING DATE: 07/01/07 BEGINNING TIME: 12:00 AM

ENDING DATE: 09/30/07 ENDING TIME: 11:59 PM

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

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

EQUIPMENT MAKE/MODEL#: PAT DAW 190

SENSOR TYPE: 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 \_\_\_\_\_

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: Test trucks - Spring and Fall

COMMENTS: Site calibrated in 4<sup>th</sup> quarter.

FILL OUT ONE TRANSMITTAL SHEET FOR EACH DATA FILE SUBMITTED.

NAME OF PREPARER:	<u>Leslie McCoy</u>	PHONE: (717) 783-9972
DATE PREPARED:	<u>12/20/2007</u>	

**SHEET 16**  
**LTPP MONITORED TRAFFIC DATA**  
**SITE CALIBRATION SUMMARY**

\*STATE ASSIGNED ID [ 410 ]  
\*STATE CODE [42]  
\*SHRP SECTION ID [ 1597 ]

SITE CALIBRATION INFORMATION

1. \* DATE OF CALIBRATION (MONTH/DAY/YEAR) [05/01/07]
2. \* TYPE OF EQUIPMENT CALIBRATED \_ WIM \_ CLASSIFIER \_X\_ BOTH
3. \* REASON FOR CALIBRATION  
\_X\_ REGULARLY SCHEDULED SITE VISIT \_\_\_\_\_ RESEARCH  
\_\_\_\_\_ EQUIPMENT REPLACEMENT \_\_\_\_\_ TRAINING  
\_\_\_\_\_ DATA TRIGGERED SYSTEM REVISION \_\_\_\_\_ NEW EQUIPMENT INSTALLATION  
\_\_\_\_\_ OTHER (SPECIFY) \_\_\_\_\_
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  
\_X\_ CHANNELIZED FLAT PIEZO \_\_\_\_\_X\_ INDUCTANCE LOOPS \_\_\_\_\_ CAPACITANCE PADS  
\_\_\_\_\_ OTHER (SPECIFY) \_\_\_\_\_
5. EQUIPMENT MANUFACTURER \_PAT\_ DAW 100

WIM SYSTEM CALIBRATION SPECIFICS\*\*

- 6.\*\* CALIBRATION TECHNIQUE USED:  
\_\_\_\_\_ TRAFFIC STREAM -- \_\_\_\_\_ STATIC SCALE (Y/N) \_\_\_\_\_X\_ TEST TRUCKS  
\_\_\_\_\_ NUMBER OF TRUCKS COMPARED \_\_\_\_\_1\_ NUMBER OF TEST TRUCKS USED  
\_\_\_\_\_7\_ PASSES PER TRUCK
- |                                      | TRUCK | TYPE  | SUSPENSION |
|--------------------------------------|-------|-------|------------|
| TYPE PER FHWA 13 BIN SYSTEM          | 1     | _____ | _____1_    |
| SUSPENSION: 1 - AIR; 2 - LEAF SPRING | 2     | _____ | _____      |
| 3 - OTHER (DESCRIBE)                 | 3     | _____ | _____      |
7. SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)  
MEAN DIFFERENCE BETWEEN --- See attached calibration form  
DYNAMIC AND STATIC GVW \_\_\_\_\_ STANDARD DEVIATION \_\_\_\_\_  
DYNAMIC AND STATIC SINGLE AXLES \_\_\_\_\_ STANDARD DEVIATION \_\_\_\_\_  
DYNAMIC AND STATIC DOUBLE AXLES \_\_\_\_\_ STANDARD DEVIATION \_\_\_\_\_
8. \_\_\_\_\_ NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH) \_\_\_\_\_  
See attached calibration form
10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) Not known
- 11.\*\* IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) \_N\_  
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE: \_\_\_\_\_

CLASSIFIER TEST SPECIFICS\*\*\*

\* 6

12.\*\*\* METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:  
\_\_\_ VIDEO      X   MANUAL    \_\_\_ PARALLEL CLASSIFIERS

13. METHOD TO DETERMINE LENGTH OF COUNT    \_\_\_ TIME    \_\_\_ NUMBER OF TRUCKS

14. MEAN DIFFERENCE IN VOLUMES BY VEHICLES CLASSIFICATION:  
\*\*\* FHWA CLASS 9    \_\_\_    \_\_\_    \_\_\_    FHWA CLASS    \_\_\_    \_\_\_    \_\_\_    \_\_\_  
\*\*\* FHWA CLASS 8    \_\_\_    \_\_\_    \_\_\_    FHWA CLASS    \_\_\_    \_\_\_    \_\_\_    \_\_\_  
   FHWA CLASS    \_\_\_    \_\_\_    \_\_\_    \_\_\_  
   FHWA CLASS    \_\_\_    \_\_\_    \_\_\_    \_\_\_

\*\*\* PERCENT "UNCLASSIFIED" VEHICLES:    \_\_\_    \_\_\_    .    \_\_\_

PERSON LEADING CALIBRATION EFFORT: <u>Todd Rottet</u>
CONTACT INFORMATION: <u>Todd Rottet 717-787-4574</u>
rev. November 9, 1999

\*\*\* See .PDF file named "410 Nelson Calibration 05-01-07"

**SHEET 16**  
**LTPP MONITORED TRAFFIC DATA**  
**SITE CALIBRATION SUMMARY**

\*STATE ASSIGNED ID [ 410 ]  
\*STATE CODE [ 42 ]  
\*SHRP SECTION ID [ 1597 ]

SITE CALIBRATION INFORMATION

1. \* DATE OF CALIBRATION (MONTH/DAY/YEAR) [05/01/07]
2. \* TYPE OF EQUIPMENT CALIBRATED    WIM    CLASSIFIER   X   BOTH
3. \* REASON FOR CALIBRATION  
  X   REGULARLY SCHEDULED SITE VISIT        RESEARCH  
       EQUIPMENT REPLACEMENT        TRAINING  
       DATA TRIGGERED SYSTEM REVISION        NEW EQUIPMENT INSTALLATION  
       OTHER (SPECIFY) \_\_\_\_\_
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  
  X   CHANNELIZED FLAT PIEZO   X   INDUCTANCE LOOPS        CAPACITANCE PADS  
       OTHER (SPECIFY) \_\_\_\_\_
5. EQUIPMENT MANUFACTURER   PAT   DAW 100

WIM SYSTEM CALIBRATION SPECIFICS\*\*

- 6.\*\* CALIBRATION TECHNIQUE USED:  
       TRAFFIC STREAM --        STATIC SCALE (Y/N)   X   TEST TRUCKS  
       NUMBER OF TRUCKS COMPARED   1   NUMBER OF TEST TRUCKS USED  
         7   PASSES PER TRUCK
- | TRUCK | TYPE          | SUSPENSION    |
|-------|---------------|---------------|
| 1     | <u>  9  </u>  | <u>  1  </u>  |
| 2     | <u>      </u> | <u>      </u> |
| 3     | <u>      </u> | <u>      </u> |
- 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 --- See attached calibration form  
DYNAMIC AND STATIC GVW   2.9   STANDARD DEVIATION   3.6    
DYNAMIC AND STATIC SINGLE AXLES   -5.1   STANDARD DEVIATION   6.4    
DYNAMIC AND STATIC DOUBLE AXLES   4.8   STANDARD DEVIATION   5.5
8.   5   NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH)   51, 52, 54, 55, 56    
See attached calibration form
10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) Not known
- 11.\*\* IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N)   N    
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE: \_\_\_\_\_

CLASSIFIER TEST SPECIFICS\*\*\*

ENTERED MAY 27 2006

AT

<p align="center"><b>SHEET 16</b> <b>LTPP TRAFFIC DATA</b> <b>SITE CALIBRATION SUMMARY</b></p>	*STATE ASSIGNED ID	[ 410 ]
	*STATE CODE	[ 42 ]
	*SHRP SECTION ID	[ 1597 ]

SITE CALIBRATION INFORMATION

- DATE OF CALIBRATION (MONTH/DAY/YEAR) [10/16/07]
- TYPE OF EQUIPMENT CALIBRATED ☐ WIM ☐ CLASSIFIER ☒ BOTH
- REASON FOR CALIBRATION  
☒ REGULARLY SCHEDULED SITE VISIT ☐ RESEARCH  
☐ EQUIPMENT REPLACEMENT ☐ TRAINING  
☐ DATA TRIGGERED SYSTEM REVISION ☐ NEW EQUIPMENT INSTALLATION  
☐ OTHER (SPECIFY) \_\_\_\_\_
- 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) \_\_\_\_\_
- EQUIPMENT MANUFACTURER PAT DAW 190

WIM SYSTEM CALIBRATION SPECIFICS

See calibration file

- CALIBRATION TECHNIQUE USED:  
☐ TRAFFIC STREAM ☐ STATIC SCALE (Y/N) ☒ TEST TRUCKS  
☐ NUMBER OF TRUCKS COMPARED ☐ 1 NUMBER OF TEST TRUCKS USED  
☐ 9 PASSES PER TRUCK

TYPE PER FHWA 13 BIN SYSTEM	TRUCK	TYPE	SUSPENSION
SUSPENSION: 1 - AIR; 2 - LEAF SPRING	1	<u>9</u>	<u>1</u>
3 - OTHER (DESCRIBE)	2	_____	_____
	3	_____	_____

- SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT): See calibration file  
 MEAN DIFFERENCE BETWEEN ---  
 DYNAMIC AND STATIC GVW 2.7 STANDARD DEVIATION 4.62  
 DYNAMIC AND STATIC SINGLE AXLES 10.8 STANDARD DEVIATION 11.38  
 DYNAMIC AND STATIC DOUBLE AXLES 0.9 STANDARD DEVIATION 7.55

NAME OF PREPARER: Leslie McCoy PHONE: (717) 787-2187

DATE PREPARED: 03/20/2008

8. NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED: 5 See calibration file
9. DEFINE THE SPEED RANGES USED (MPH): 50 to 54 See calibration file
10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) Not known
11. IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) N  
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE: \_\_\_\_\_

CLASSIFIER TEST SPECIFICS

See calibration file

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 CLASSES: \_\_\_\_\_  
PERCENT "UNCLASSIFIED" VEHICLES: \_\_\_\_\_

**File References:**

**410.Nelson.Tioga Calibration Fall 2007.pdf**

**410.Nelson.Tioga Electrical Readings Fall 2007.pdf**

SCANNED

7 5 10 2008

2 6 10 2008

NAME OF PREPARER:

Leslie McCoy

PHONE: (717) 787-2187

DATE PREPARED:

03/20/2008

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