

SHEET 15 LTPP TRAFFIC DATA LOG OF CHANGES AT GPS TEST LOCATIONS WITH PERM. AVC OR WIM	*STATE ASSIGNED ID	[P09]
	*STATE CODE	[53]
	*SHRP SECTION ID	[3019]

File: 800.12.11.8.12
533019

LOCATION SR 82 TYPE EQUIP. Piezo (Class 1)

MP # 121.20 MODEL # IRD 1060

DATE OF CHANGE	TIME OF CHANGE	DESCRIPTION OF CHANGE	PERSON MAKING CHANGE	PHONE #	NEW EQUIP. SERIAL #
12/31/08		No Changes			
12/15/08		KENNEWICK -- Interstate 82 south of Kennewick between milepost 114 and milepost 132 is closed because of poor visibility due to gusting winds and blowing snow, according to the state department of transportation. -- jh			

File: 800.12.11.8.12
533019

<p align="center">SHEET 15 LTPP TRAFFIC DATA</p> <p align="center">LOG OF CHANGES AT GPS TEST LOCATIONS WITH PERM. AVC OR WIM</p>	<p>*STATE ASSIGNED ID [P09]</p> <p>*STATE CODE [53]</p> <p>*SHRP SECTION ID [3019]</p>
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LOCATION SR 82 TYPE EQUIP. Piezo (Class 1)

MP # 121.20 MODEL # IRD 1060

DATE OF CHANGE	TIME OF CHANGE	DESCRIPTION OF CHANGE	PERSON MAKING CHANGE	PHONE #	NEW EQUIP. SERIAL #
11/04/08		I-82 - Interstate 82 near Prosser to the Oregon State Line - The movement of mobile homes is restricted due to high winds. Due to the weather related nature of this restriction an estimated end time is not available. Updates will be provided as new information becomes available. (Tom)			
11/04/08		I-82 - Interstate 82 milepost 126 to milepost 121, nine miles south of Kennewick: Rolling slow downs will begin November 4th. Drivers will be restricted to one lane while the Bonneville Power Administration replaces transmission lines on two Interstate 82 crossings. The work at milepost 126 will be done on November 4th and the work at milepost 121 will be done on November 5th.			
11/05/08		was: busy signal (0746); now: no answer (1300); wind warning on travel alerts (Tom)			
11/13/08		Plymouth P09 Problem: Dial, no answer. Found no dial tone. Retrieved data. Contacted Verizon for repair. Data is posted to server. (HN) Note***: Hoang had call 11/14/08 from Verizon that line was repaired (Tom)	HN		

File: 800.12.11.8.17

<p align="center">SHEET 15 LTPP TRAFFIC DATA LOG OF CHANGES AT GPS TEST LOCATIONS WITH PERM. AVC OR WIM</p>	<p>*STATE ASSIGNED ID [P09] *STATE CODE [53] *SHRP SECTION ID [3019]</p>
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LOCATION SR 82 TYPE EQUIP. Piezo (Class 1)

MP # 121.20 MODEL # IRD 1060

DATE OF CHANGE	TIME OF CHANGE	DESCRIPTION OF CHANGE	PERSON MAKING CHANGE	PHONE #	NEW EQUIP. SERIAL #
7-22-08	(06:30 - 13:45)	Plymouth-P09 Calibrated site with truck. Copied log and parameter files. Calibration spreadsheets and sheet16s are in G:\WIM\TEMP\HOANG folder. (HN) Note***: file size increase on 7/22/08 due to calibration; no data while calibrating (Tom)	HN		

SHEET 16
LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

*STATE ASSIGNED ID [P09]
*STATE CODE [53]
*SHRP SECTION ID [EB Drive]

3019
enter

SITE CALIBRATION INFORMATION

1. * DATE OF CALIBRATION (MONTH/DAY/YEAR) [7 /22 /2008]

2. * TYPE OF EQUIPMENT CALIBRATED X WIM CLASSIFIER 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 X BARE FLAT PIEZO BENDING PLATES
 CHANNELIZED ROUND PIEZO LOAD CELLS QUARTZ PIEZO
 CHANNELIZED FLAT PIEZO X INDUCTANCE LOOPS CAPACITANCE PADS
 OTHER (SPECIFY) _____

5. EQUIPMENT MANUFACTURER: INTERNATIONAL ROAD DYNAMIC

WIM SYSTEM CALIBRATION SPECIFICS**

6. ** CALIBRATION TECHNIQUE USED:

TRAFFIC STREAM -- STATIC SCALE (Y/N) X TEST TRUCKS

1 NUMBER OF TRUCKS COMPARED

1 NUMBER OF TEST TRUCKS USED

TYPE PER FHWA 13 BIN SYSTEM

SUSPENSION: 1 - AIR; 2 - LEAF SPRING
3 - OTHER (DESCRIBE)

TRUCK	TYPE	PASSES PER TRUCK	SUSPENSION
1	Class 9	<u> </u>	<u> Air </u>
2	<u> </u>	<u> </u>	<u> </u>
3	<u> </u>	<u> </u>	<u> </u>

7. SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)

MEAN DIFFERENCE BETWEEN ---

DYNAMIC AND STATIC GVW	-5.09%	STANDARD DEVIATION	1.63%
DYNAMIC AND STATIC SINGLE AXLES	-6.67%	STANDARD DEVIATION	3.80%
DYNAMIC AND STATIC DOUBLE AXLES	-4.76%	STANDARD DEVIATION	2.69%

8. 1 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED

9. DEFINE THE SPEED RANGES USED (MPH) 56 mph

10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) Sensor #1= .2610, Sensor #2= .2114

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

IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE: Site is set to auto-calibrate every week.

1 range is used. 11,660 pounds steer axle weigh is the target.

ENTERED
1-16-12

CLASSIFIER TEST SPECIFICS***

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

CONTACT INFORMATION:

rev. November 9, 1999

SHEET 16
LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

*STATE ASSIGNED ID [P09]
*STATE CODE [53]
*SHRP SECTION ID [EB Pass]

3019

SITE CALIBRATION INFORMATION

do not enter

1. * DATE OF CALIBRATION (MONTH/DAY/YEAR) [7 /22 /2008]
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) _____
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: INTERNATIONAL ROAD DYNAMIC

WIM SYSTEM CALIBRATION SPECIFICS**

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

☐ 1 NUMBER OF TRUCKS COMPARED ☐ 1 NUMBER OF TEST TRUCKS USED

TYPE PER FHWA 13 BIN SYSTEM
SUSPENSION: 1 - AIR; 2 - LEAF SPRING
3 - OTHER (DESCRIBE)
- | TRUCK | TYPE | PASSES PER TRUCK | SUSPENSION |
|-------|---------|------------------|------------|
| 1 | Class 9 | | Air |
| 2 | | | |
| 3 | | | |
7. SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)
MEAN DIFFERENCE BETWEEN ---
DYNAMIC AND STATIC GVW -5.94% STANDARD DEVIATION 2.74%
DYNAMIC AND STATIC SINGLE AXLES -8.46% STANDARD DEVIATION 1.84%
DYNAMIC AND STATIC DOUBLE AXLES -5.49% STANDARD DEVIATION 3.23%
8. ☐ 1 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH) ☐ 57 mph _____
10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) Sensor #1= .3975, Sensor #2= .3347
11. ** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) ☒ Yes
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE: Site is set to auto-calibrate every week.
1 range is used. 11,660 pounds steer axle weigh is the target.

CLASSIFIER TEST SPECIFICS***

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

CONTACT INFORMATION:

rev. November 9, 1999

SHEET 16
LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

*STATE ASSIGNED ID [P09]
*STATE CODE [53]
*SHRP SECTION ID [WB Drive] 3019

SITE CALIBRATION INFORMATION

Do not enter

1. * DATE OF CALIBRATION (MONTH/DAY/YEAR) [7/22/2008]
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) _____
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: INTERNATIONAL ROAD DYNAMIC

WIM SYSTEM CALIBRATION SPECIFICS**

6. ** CALIBRATION TECHNIQUE USED:
☐ TRAFFIC STREAM -- ☐ STATIC SCALE (Y/N) ☒ TEST TRUCKS
- ☐ 1 NUMBER OF TRUCKS COMPARED ☐ 1 NUMBER OF TEST TRUCKS USED
- | TYPE PER FHWA 13 BIN SYSTEM
SUSPENSION: 1 - AIR; 2 - LEAF SPRING
3 - OTHER (DESCRIBE) | PASSES PER TRUCK | | |
|---|------------------|---------|------------|
| | TRUCK | TYPE | SUSPENSION |
| | 1 | Class 9 | Air |
| | 2 | | |
| | 3 | | |
7. SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)
MEAN DIFFERENCE BETWEEN ---
- | | | STANDARD DEVIATION | |
|---------------------------------|---------|--------------------|-------|
| DYNAMIC AND STATIC GVW | -8.95% | | 0.88% |
| DYNAMIC AND STATIC SINGLE AXLES | -11.34% | | 1.89% |
| DYNAMIC AND STATIC DOUBLE AXLES | -8.50% | | 1.22% |
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) Sensor #1= .3126, Sensor #2= .3159
11. ** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) ☒ Yes
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE: Site is set to auto-calibrate every week.
1 range is used. 11,660 pounds steer axle weigh is the target.

CLASSIFIER TEST SPECIFICS***

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

CONTACT INFORMATION:

rev. November 9, 1999

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LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

*STATE ASSIGNED ID [P09]
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Do not enter

SITE CALIBRATION INFORMATION

1. * DATE OF CALIBRATION (MONTH/DAY/YEAR) [7 /22 /2008]
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) _____
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: INTERNATIONAL ROAD DYNAMIC

WIM SYSTEM CALIBRATION SPECIFICS**

6. ** CALIBRATION TECHNIQUE USED:
☐ TRAFFIC STREAM -- ☐ STATIC SCALE (Y/N) ☒ TEST TRUCKS
- ☐ 1 NUMBER OF TRUCKS COMPARED ☐ 1 NUMBER OF TEST TRUCKS USED
- | TYPE PER FHWA 13 BIN SYSTEM
SUSPENSION: 1 - AIR; 2 - LEAF SPRING
3 - OTHER (DESCRIBE) | PASSES PER TRUCK | |
|---|------------------|---------|
| | TRUCK | TYPE |
| | 1 | Class 9 |
| | 2 | |
| | 3 | |
7. SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)
MEAN DIFFERENCE BETWEEN ---
- | | | STANDARD DEVIATION | |
|---------------------------------|--------|--------------------|--|
| DYNAMIC AND STATIC GVW | -1.44% | 2.93% | |
| DYNAMIC AND STATIC SINGLE AXLES | -4.72% | 10.51% | |
| DYNAMIC AND STATIC DOUBLE AXLES | -0.85% | 4.62% | |
8. ☐ 1 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH) ☐ 54 mph _____
10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) Sensor #1= .2798, Sensor #2= .2732
11. ** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) ☒ Yes
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE: Site is set to auto-calibrate every week.
1 range is used. 11,440 pounds steer axle weigh is the target.

CLASSIFIER TEST SPECIFICS***

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

CONTACT INFORMATION:

rev. November 9, 1999