

<p align="center">SHEET 15</p> <p align="center">LTPP TRAFFIC DATA</p> <p align="center">LOG OF CHANGES AT GPS TEST LOCATIONS WITH PERM. AVC OR WIM</p>	*STATE ASSIGNED ID	[P10]
	*STATE CODE	[53]
	*SHRP SECTION ID	[1005]

LOCATION SR 90 TYPE EQUIP. Piezo (Class 1)

MP # 218.3 MODEL # IRD 1060

[illegible]

SHEET 16 LTPP MONITORED TRAFFIC DATA SITE CALIBRATION SUMMARY	*STATE ASSIGNED ID	[P10 lane #1]
	*STATE CODE	[<u>53</u>]
	*SHRP SECTION ID	[<u>1 0 0 5</u>]

SITE CALIBRATION INFORMATION

1. * DATE OF CALIBRATION (MONTH/DAY/YEAR) [05 / 06 / 2004]
2. * TYPE OF EQUIPMENT CALIBRATED X WIM CLASSIFIER BOTH
3. * REASON FOR CALIBRATION

<u> </u> REGULARLY SCHEDULED SITE VISIT	<u> </u> RESEARCH
<u> </u> EQUIPMENT REPLACEMENT	<u>X</u> TRAINING
<u> </u> DATA TRIGGERED SYSTEM REVISION	<u> </u> NEW EQUIPMENT INSTALLATION
<u> </u> OTHER (SPECIFY) _____	
4. * SENSORS INSTALLED IN LTPP LANE AT THIS SITE (CHECK ALL THAT APPLY):

<u> </u> BARE ROUND PIEZO CERAMIC	<u> </u> BARE FLAT PIEZO	<u> </u> BENDING PLATES
<u> </u> CHANNELIZED ROUND PIEZO	<u> </u> LOAD CELLS	<u> </u> QUARTZ PIEZO
<u> </u> CHANNELIZED FLAT PIEZO	<u>X</u> INDUCTANCE LOOPS	<u> </u> CAPACITANCE PADS
<u> </u> OTHER (SPECIFY) <u> </u> BL Piezos _____		
5. EQUIPMENT MANUFACTURER MSI

WIM SYSTEM CALIBRATION SPECIFICS**

- 6.** CALIBRATION TECHNIQUE USED:

<u> </u> TRAFFIC STREAM -- <u> </u> STATIC SCALE (Y/N)	<u>X</u> TEST TRUCKS
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NUMBER OF TRUCKS COMPARED

TYPE PER FHWA 13 BIN SYSTEM

SUSPENSION: 1 - AIR; 2 - LEAF SPRING

3 - OTHER (DESCRIBE)

1 NUMBER OF TEST TRUCKS USED

10 PASSES PER TRUCK

TRUCK	TYPE	SUSPENSION
1	<u>10</u>	<u>Air</u>
2	<u> </u>	<u> </u>
3	<u> </u>	<u> </u>
7. SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)

MEAN DIFFERENCE BETWEEN ---		
DYNAMIC AND STATIC GVW	-8.72 %	STANDARD DEVIATION 3.61 %
DYNAMIC AND STATIC SINGLE AXLES	-2.29 %	STANDARD DEVIATION 6.59 %
DYNAMIC AND STATIC DOUBLE AXLES	-9.68 %	STANDARD DEVIATION 3.6 %
8. 1 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH) 60 mph _____
10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) Upstream .19461 Downstream .1957
- 11.** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) Yes
 IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE: 4.8 tons or 10,600 pounds _____

CLASSIFIER TEST SPECIFICS***

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

<u> </u> VIDEO	<u> </u> MANUAL	<u> </u> PARALLEL CLASSIFIERS
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No need to enter this - sv.

SHEET 16 LTPP MONITORED TRAFFIC DATA SITE CALIBRATION SUMMARY	*STATE ASSIGNED ID	[P10 lane #2]
	*STATE CODE	[<u>53</u>]
	*SHRP SECTION ID	[<u>1 005</u>]

SITE CALIBRATION INFORMATION

1. * DATE OF CALIBRATION (MONTH/DAY/YEAR) [05 / 06 / 2004]
2. * TYPE OF EQUIPMENT CALIBRATED X WIM CLASSIFIER BOTH
3. * REASON FOR CALIBRATION
 REGULARLY SCHEDULED SITE VISIT RESEARCH
 EQUIPMENT REPLACEMENT X 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 X INDUCTANCE LOOPS CAPACITANCE PADS
 OTHER (SPECIFY) BL Piezos
5. EQUIPMENT MANUFACTURER MSI

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
- 10 PASSES PER TRUCK
- | | TRUCK | TYPE | SUSPENSION |
|--------------------------------------|-------|------------------------|-------------------------|
| TYPE PER FHWA 13 BIN SYSTEM | 1 | <u> </u> 10 <u> </u> | <u> </u> Air <u> </u> |
| SUSPENSION: 1 - AIR; 2 - LEAF SPRING | 2 | <u> </u> | <u> </u> |
| 3 - OTHER (DESCRIBE) | 3 | <u> </u> | <u> </u> |
7. SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)
MEAN DIFFERENCE BETWEEN ---
DYNAMIC AND STATIC GVW 1.3 % STANDARD DEVIATION 1.79 %
DYNAMIC AND STATIC SINGLE AXLES 11.16 % STANDARD DEVIATION 4.07 %
DYNAMIC AND STATIC DOUBLE AXLES -0.28 % STANDARD DEVIATION 2.55 %
8. 1 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH) 60 mph
10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) Upstream .27239 Downstream .2792
- 11.** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) Yes
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE: 4.8 tons or 10,600 pounds

CLASSIFIER TEST SPECIFICS***

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

SHEET 16
LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

*STATE ASSIGNED ID [P10 lane #3]
*STATE CODE [53]
*SHRP SECTION ID [1005]

SITE CALIBRATION INFORMATION

1. * DATE OF CALIBRATION (MONTH/DAY/YEAR) [05 / 06 / 2004]
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) _____ BL Piezos _____
5. EQUIPMENT MANUFACTURER _____ MSI _____

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
- ☐ PASSES PER TRUCK
- | TRUCK | TYPE | SUSPENSION |
|-------|-----------------------------|------------------------------|
| 1 | <input type="checkbox"/> 10 | <input type="checkbox"/> Air |
| 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 -1.42 % STANDARD DEVIATION 1.91 %
DYNAMIC AND STATIC SINGLE AXLES 6.98 % STANDARD DEVIATION 9.07 %
DYNAMIC AND STATIC DOUBLE AXLES -2.78 % STANDARD DEVIATION 1.76 %
8. ☐ NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH) ☐ 60 mph _____
10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) Upstream .29566 Downstream .2858
- 11.** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) ☐ Yes
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE: ☐ 4.8 tons or 10,600 pounds _____

CLASSIFIER TEST SPECIFICS***

- 12.*** METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:
☐ VIDEO ☐ MANUAL ☐ PARALLEL CLASSIFIERS

SHEET 16
LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

*STATE ASSIGNED ID [P10 lane #4]
*STATE CODE [53]
*SHRP SECTION ID [1005]

SITE CALIBRATION INFORMATION

1. * DATE OF CALIBRATION (MONTH/DAY/YEAR) [05 / 06 / 2004]
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) _____ BL Piezos _____
5. EQUIPMENT MANUFACTURER _____ MSI _____

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
- ☐ 10 PASSES PER TRUCK
- | TRUCK | TYPE | SUSPENSION |
|-------|------|------------|
| 1 | 10 | Air |
| 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 36.11 % STANDARD DEVIATION 57.17 %
DYNAMIC AND STATIC SINGLE AXLES 45.30 % STANDARD DEVIATION 60.76 %
DYNAMIC AND STATIC DOUBLE AXLES 34.57 % STANDARD DEVIATION 56.62 %
Note: Sensors in this lane are failing as we calibrated site.
8. ☐ 1 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH) ☐ 60 mph _____
10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) Upstream .27029 Downstream .2869
- 11.** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) ☐ Yes
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE: ☐ 4.8 tons or 10,600 pounds _____

CLASSIFIER TEST SPECIFICS***

- 12.** METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:
☐ VIDEO ☐ MANUAL ☐ PARALLEL CLASSIFIERS