

| | |
|---|---------------------------------------|
| <p>SHEET 10</p> <p>LTTP TRAFFIC DATA</p> <p>TRAFFIC VOLUME AND LOAD</p> <p>ESTIMATE UPDATE - NO SITE COUNT</p> | <p>State Assigned ID</p> <hr/> |
| | <p>State Code</p> <hr/> |
| | <p>SHRP Section ID</p> <hr/> |

| YEAR | ESTIMATED TOTAL VEHICLES AADT (TWO WAY) | ESTIMATED TOTAL TRUCK AADT (TWO WAY) | ESTIMATED TOTAL VEHICLES AADT GPS LANE | ESTIMATED TOTAL TRUCK AADT GPS LANE | ESTIMATED ESAL'S / YR GPS LANE (1000's) |
|------|--|---|---|--|--|
| 2008 | 7390 | 1620 | 2913 | 844 | 539 |

8 ☐ Growth factored last year's estimates
☐ Estimated based on volume counts at nearby locations
☒ Used computerized network analysis
☐ Other _____

WIM on Site _____

☐ Used system average for counts taken this year
☐ Used count data from nearby sites
☐ Used count data from previous years at GPS site
☐ Used system averages from previous years counts
☐ Used computerized network analysis
 9 ☒ Other _____

WIM on Site

3

| |
|---|
| |
| X |

 System distribution factors
Other _____
WIM on Site

3 ☐ System distribution factors
☒ Other _____
WIM on Site _____

☐ ESAL / Truck factor
☐ ESAL / vehicle class factors -
 Number of classes _____
 4 ☒ Other _____
WIM on Site _____

☐ Prior years data collected at GPS site
☐ Current year system average
☐ Prior year system average
☐ Historical W-4 tables
☒ Other _____

WIM on Site _____

1

| | |
|---|---------------------------------------|
| X | WIM Scale |
| | Static scale used for enforcement |
| | Static scale not used for enforcement |
| | Other _____ |

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4-13-10

SHEET 16
LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

* State Assigned ID []
* State Code [81]
* SHRP Section ID [500]

SITE CALIBRATION INFORMATION

- 1 * DATE OF CALIBRATION (MONTH/DAY/YEAR) **December 8, 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 ECM

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
- | | | 10 | PASSES PER TRUCK | |
|-------|----------|----|------------------|------------|
| TRUCK | TYPE | | | SUSPENSION |
| 1 | <u>9</u> | | | <u>1</u> |
| 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 -2.73% STANDARD DEVIATION +/- 3.51%
DYNAMIC AND STATIC SINGLE AXLES 4.32% STANDARD DEVIATION +/- 5.05%
DYNAMIC AND STATIC DOUBLE AXLES -3.30% STANDARD DEVIATION +/- 4.44%
- 8 1 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
- 9 DEFINE THE SPEED RANGES USED (MPH) 68.5 MPH
- 10 CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) 1.00
- 11 ** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) Y
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE:
Alberta Transportation uses a typical 3000 lb - 8.8 foot wheel base passenger vehicle
as it is the only vehicle which occurs + 100 times daily

CLASSIFIER TEST SPECIFICS***

- 12 *** METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:
☐ VIDEO ☐ MANUAL ☐ PARALLEL CLASSIFIERS **NOT DONE**
- 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 _____
FHWA CLASS _____
FHWA CLASS _____
*** PERCENT "UNCLASSIFIED" VEHICLES: _____

PERSON LEADING CALIBRATION EFFORT: Peter Kilburn P.Eng. Alberta Transportation
CONTACT INFORMATION: peter.kilburn@gov.ab.ca (780) 415-1359 rev. April 12, 2010

ENTERED
4-13-10

SHEET 16
LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

* State Assigned ID []
* State Code [81]
* SHRP Section ID [500]

SITE CALIBRATION INFORMATION

- 1 * DATE OF CALIBRATION (MONTH/DAY/YEAR) **November 17, 2008**
- 2 * TYPE OF EQUIPMENT CALIBRATED ☒ WIM ☐ CLASSIFIER ☐ BOTH
- 3 * REASON FOR CALIBRATION
☒ REGULARLY SCHEDULED SITE VISIT
☐ EQUIPMENT REPLACEMENT
☐ DATA TRIGGERED SYSTEM REVISION
☐ OTHER (SPECIFY) _____
☐ RESEARCH
☐ TRAINING
☐ NEW EQUIPMENT INSTALLATION
- 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 ECM

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
- | | | 10 PASSES PER TRUCK | |
|-------|------|---------------------|--|
| TRUCK | TYPE | SUSPENSION | |
| 1 | 9 | 1 | |
| 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 0.93% STANDARD DEVIATION +/- 2.87%
 DYNAMIC AND STATIC SINGLE AXLES 2.14% STANDARD DEVIATION +/- 5.94%
 DYNAMIC AND STATIC DOUBLE AXLES -0.42% STANDARD DEVIATION +/- 3.42%

- 8 1 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
- 9 DEFINE THE SPEED RANGES USED (MPH) 68.4 MPH
- 10 CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) 1.00
- 11 ** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) Y
 IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE:
Alberta Transportation uses a typical 3000 lb - 8.8 foot wheel base passenger vehicle
as it is the only vehicle which occurs + 100 times daily

CLASSIFIER TEST SPECIFICS***

- 12 *** METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:
☐ VIDEO ☐ MANUAL ☐ PARALLEL CLASSIFIERS NOT DONE
- 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: Peter Kilburn P.Eng. Alberta Transportation
 CONTACT INFORMATION: peter.kilburn@gov.ab.ca (780) 415-1359 rev. April 12, 2010

ENTERED
4-13-10

SHEET 16
LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

* State Assigned ID []
* State Code [81]
* SHRP Section ID [500]

SITE CALIBRATION INFORMATION

- 1 * DATE OF CALIBRATION (MONTH/DAY/YEAR) **October 20, 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 **ECM**

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
- | TYPE PER FHWA 13 BIN SYSTEM | | 10 PASSES PER TRUCK | |
|-----------------------------|--|---------------------|------------|
| SUSPENSION: | | TRUCK | SUSPENSION |
| 1 - AIR; 2 - LEAF SPRING | | 1 | 9 |
| 3 - OTHER (DESCRIBE) | | 2 | |
| | | 3 | |
- 7 SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)
MEAN DIFFERENCE BETWEEN ---
DYNAMIC AND STATIC GVW **3.98%** STANDARD DEVIATION +/- **5.55%**
DYNAMIC AND STATIC SINGLE AXLES **11.87%** STANDARD DEVIATION +/- **7.61%**
DYNAMIC AND STATIC DOUBLE AXLES **1.75%** STANDARD DEVIATION +/- **6.17%**
- 8 **1** NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
- 9 DEFINE THE SPEED RANGES USED (MPH) **68.3 MPH**
- 10 CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) **1.00**
- 11 ** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) **Y**
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE:
Alberta Transportation uses a typical 3000 lb - 8.8 foot wheel base passenger vehicle
as it is the only vehicle which occurs + 100 times daily

CLASSIFIER TEST SPECIFICS***

- 12 *** METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:
☐ VIDEO ☐ MANUAL ☐ PARALLEL CLASSIFIERS **NOT DONE**
- 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: Peter Kilburn P.Eng. Alberta Transportation
CONTACT INFORMATION: peter.kilburn@gov.ab.ca (780) 415-1359 rev. April 12, 2010

ENTERED
4-13-10

SHEET 16
LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

* State Assigned ID []
* State Code [81]
* SHRP Section ID [500]

SITE CALIBRATION INFORMATION

- 1 * DATE OF CALIBRATION (MONTH/DAY/YEAR) **September 8, 2008**
- 2 * TYPE OF EQUIPMENT CALIBRATED ☒ WIM ☐ CLASSIFIER ☐ BOTH
- 3 * REASON FOR CALIBRATION
☒ REGULARLY SCHEDULED SITE VISIT
☐ EQUIPMENT REPLACEMENT
☐ DATA TRIGGERED SYSTEM REVISION
☐ OTHER (SPECIFY) _____
☐ RESEARCH
☐ TRAINING
☐ NEW EQUIPMENT INSTALLATION
- 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 ECM

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
- | | | 10 | PASSES PER TRUCK |
|-------|------|----|------------------|
| TRUCK | TYPE | | SUSPENSION |
| 1 | 9 | | 1 |
| 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 2.00% STANDARD DEVIATION +/- 3.04%
DYNAMIC AND STATIC SINGLE AXLES 8.07% STANDARD DEVIATION +/- 5.38%
DYNAMIC AND STATIC DOUBLE AXLES 1.12% STANDARD DEVIATION +/- 4.11%
- 8 1 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
- 9 DEFINE THE SPEED RANGES USED (MPH) 68.4 MPH
- 10 CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) 1.00
- 11 ** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) Y
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE:
Alberta Transportation uses a typical 3000 lb - 8.8 foot wheel base passenger vehicle
as it is the only vehicle which occurs + 100 times daily

CLASSIFIER TEST SPECIFICS***

- 12 *** METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:
☐ VIDEO ☐ MANUAL ☐ PARALLEL CLASSIFIERS **NOT DONE**
- 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 _____
FHWA CLASS _____
*** PERCENT "UNCLASSIFIED" VEHICLES: _____

PERSON LEADING CALIBRATION EFFORT: Peter Kilburn P.Eng. Alberta Transportation
CONTACT INFORMATION: peter.kilburn@gov.ab.ca (780) 415-1359 rev. April 12, 2010

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4-13-10

SHEET 16
LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

* State Assigned ID []
* State Code [81]
* SHRP Section ID [500]

SITE CALIBRATION INFORMATION

- 1 * DATE OF CALIBRATION (MONTH/DAY/YEAR) **August 11, 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 ECM

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
- | | | <u>10</u> PASSES PER TRUCK |
|-------|----------|----------------------------|
| TRUCK | TYPE | SUSPENSION |
| 1 | <u>9</u> | <u>1</u> |
| 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 0.51% STANDARD DEVIATION +/- 5.48%
DYNAMIC AND STATIC SINGLE AXLES 2.38% STANDARD DEVIATION +/- 7.32%
DYNAMIC AND STATIC DOUBLE AXLES -0.80% STANDARD DEVIATION +/- 6.03%
- 8 1 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
- 9 DEFINE THE SPEED RANGES USED (MPH) 68.4 MPH
- 10 CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) 1.00
- 11 ** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) Y
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE:
Alberta Transportation uses a typical 3000 lb - 8.8 foot wheel base passenger vehicle
as it is the only vehicle which occurs + 100 times daily

CLASSIFIER TEST SPECIFICS***

- 12 *** METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:
_____ VIDEO _____ MANUAL _____ PARALLEL CLASSIFIERS **NOT DONE**
- 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: Peter Kilburn P.Eng. Alberta Transportation
CONTACT INFORMATION: peter.kilburn@gov.ab.ca (780) 415-1359 rev. April 12, 2010

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4-13-10

SHEET 16
LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

* State Assigned ID []
* State Code [81]
* SHRP Section ID [500]

SITE CALIBRATION INFORMATION

- 1 * DATE OF CALIBRATION (MONTH/DAY/YEAR) July 21, 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 BARE FLAT PIEZO BENDING PLATES
X CHANNELIZED ROUND PIEZO LOAD CELLS QUARTZ PIEZO
 CHANNELIZED FLAT PIEZO X INDUCTANCE LOOPS CAPACITANCE PADS
 OTHER (SPECIFY)
- 5 EQUIPMENT MANUFACTURER ECM

WIM SYSTEM CALIBRATION SPECIFICS**

- 6 ** CALIBRATION TECHNIQUE USED:
 TRAFFIC STREAM -- X STATIC SCALE (Y/N) X TEST TRUCKS
 NUMBER OF TRUCKS COMPARED 1 NUMBER OF TEST TRUCKS USED
- | | | 10 | PASSES PER TRUCK | |
|---|--|-------|------------------|------------|
| | | TRUCK | TYPE | SUSPENSION |
| TYPE PER FHWA 13 BIN SYSTEM SUSPENSION: 1 - AIR; 2 - LEAF SPRING 3 - OTHER (DESCRIBE) | | 1 | <u>9</u> | <u>1</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 -16.33% STANDARD DEVIATION +/- 9.05%
DYNAMIC AND STATIC SINGLE AXLES -13.85% STANDARD DEVIATION +/- 8.93%
DYNAMIC AND STATIC DOUBLE AXLES -17.10% STANDARD DEVIATION +/- 9.24%
- 8 1 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
- 9 DEFINE THE SPEED RANGES USED (MPH) 68.2 MPH
- 10 CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) 1.00
- 11 ** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) Y
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE:
Alberta Transportation uses a typical 3000 lb - 8.8 foot wheel base passenger vehicle
as it is the only vehicle which occurs + 100 times daily

CLASSIFIER TEST SPECIFICS***

- 12 *** METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:
 VIDEO MANUAL PARALLEL CLASSIFIERS NOT DONE
- 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
FHWA CLASS
*** PERCENT "UNCLASSIFIED" VEHICLES:

PERSON LEADING CALIBRATION EFFORT: Peter Kilburn P.Eng. Alberta Transportation
CONTACT INFORMATION: peter.kilburn@gov.ab.ca (780) 415-1359 rev. April 12, 2010

ENTERED
4-13-10

SHEET 16
LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

* State Assigned ID []
* State Code [81]
* SHRP Section ID [500]

SITE CALIBRATION INFORMATION

- 1 * DATE OF CALIBRATION (MONTH/DAY/YEAR) **April 14, 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 ECM

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
- | | | 10 | PASSES PER TRUCK |
|-------|------|----|------------------|
| TRUCK | TYPE | | SUSPENSION |
| 1 | 9 | | 1 |
| 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 -4.87% STANDARD DEVIATION +/- 6.29%
DYNAMIC AND STATIC SINGLE AXLES 0.17% STANDARD DEVIATION +/- 7.19%
DYNAMIC AND STATIC DOUBLE AXLES -5.96% STANDARD DEVIATION +/- 6.68%
- 8 1 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
- 9 DEFINE THE SPEED RANGES USED (MPH) 68.3 MPH
- 10 CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) 1.00
- 11 ** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) Y
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE:
Alberta Transportation uses a typical 3000 lb - 8.8 foot wheel base passenger vehicle
as it is the only vehicle which occurs + 100 times daily

CLASSIFIER TEST SPECIFICS***

- 12 *** METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:
☐ VIDEO ☐ MANUAL ☐ PARALLEL CLASSIFIERS NOT DONE
- 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 _____
FHWA CLASS _____
*** PERCENT "UNCLASSIFIED" VEHICLES: _____

PERSON LEADING CALIBRATION EFFORT: **Peter Kilburn P.Eng. Alberta Transportation**
CONTACT INFORMATION: **peter.kilburn@gov.ab.ca (780) 415-1359 rev. April 12, 2010**

ENTERED
4-13-10

SHEET 16
LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

* State Assigned ID []
* State Code [81]
* SHRP Section ID [500]

SITE CALIBRATION INFORMATION

- 1 * DATE OF CALIBRATION (MONTH/DAY/YEAR) **March 17, 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 BARE FLAT PIEZO BENDING PLATES
X CHANNELIZED ROUND PIEZO LOAD CELLS QUARTZ PIEZO
 CHANNELIZED FLAT PIEZO X INDUCTANCE LOOPS CAPACITANCE PADS
 OTHER (SPECIFY)
- 5 EQUIPMENT MANUFACTURER ECM

WIM SYSTEM CALIBRATION SPECIFICS**

- 6 ** CALIBRATION TECHNIQUE USED:
 TRAFFIC STREAM -- Y STATIC SCALE (Y/N) X TEST TRUCKS
 NUMBER OF TRUCKS COMPARED 1 NUMBER OF TEST TRUCKS USED
- | | | 10 | 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 ---
DYNAMIC AND STATIC GVW 11.65% STANDARD DEVIATION +/- 7.16%
DYNAMIC AND STATIC SINGLE AXLES 19.26% STANDARD DEVIATION +/- 11.24%
DYNAMIC AND STATIC DOUBLE AXLES 10.64% STANDARD DEVIATION +/- 6.90%
- 8 1 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
- 9 DEFINE THE SPEED RANGES USED (MPH) 68.2 MPH
- 10 CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) 1.00
- 11 ** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) Y
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE:
Alberta Transportation uses a typical 3000 lb - 8.8 foot wheel base passenger vehicle
as it is the only vehicle which occurs + 100 times daily

CLASSIFIER TEST SPECIFICS***

- 12 *** METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:
 VIDEO MANUAL PARALLEL CLASSIFIERS NOT DONE
- 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
FHWA CLASS
*** PERCENT "UNCLASSIFIED" VEHICLES:

PERSON LEADING CALIBRATION EFFORT: Peter Kilburn P.Eng. Alberta Transportation
CONTACT INFORMATION: peter.kilburn@gov.ab.ca (780) 415-1359 rev. April 12, 2010

ENTERED
4-13-10

SHEET 16
LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

* State Assigned ID []
* State Code [81]
* SHRP Section ID [500]

SITE CALIBRATION INFORMATION

- 1 * DATE OF CALIBRATION (MONTH/DAY/YEAR) **February 11, 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 **ECM**

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
- | | | 10 | PASSES PER TRUCK |
|-------|------|----|------------------|
| TRUCK | TYPE | | SUSPENSION |
| 1 | 9 | | 1 |
| 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 **18.15%** STANDARD DEVIATION +/- **12.40%**
DYNAMIC AND STATIC SINGLE AXLES **28.24%** STANDARD DEVIATION +/- **21.13%**
DYNAMIC AND STATIC DOUBLE AXLES **17.13%** STANDARD DEVIATION +/- **11.73%**
- 8 ☐ 1 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
- 9 DEFINE THE SPEED RANGES USED (MPH) **68.4 MPH**
- 10 CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) **1.00**
- 11 ** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) ☒
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE:
Alberta Transportation uses a typical 3000 lb - 8.8 foot wheel base passenger vehicle
as it is the only vehicle which occurs + 100 times daily

CLASSIFIER TEST SPECIFICS***

- 12 *** METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:
☐ VIDEO ☐ MANUAL ☐ PARALLEL CLASSIFIERS **NOT DONE**
- 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: Peter Kilburn P.Eng. Alberta Transportation
CONTACT INFORMATION: peter.kilburn@gov.ab.ca (780) 415-1359 rev. April 12, 2010

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4-13-10

SHEET 16
LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

* State Assigned ID []
* State Code [81]
* SHRP Section ID [500]

SITE CALIBRATION INFORMATION

- 1 * DATE OF CALIBRATION (MONTH/DAY/YEAR) **January 21, 2008**
- 2 * TYPE OF EQUIPMENT CALIBRATED ☒ WIM ☐ CLASSIFIER ☐ BOTH
- 3 * REASON FOR CALIBRATION
☒ REGULARLY SCHEDULED SITE VISIT
☐ EQUIPMENT REPLACEMENT
☐ DATA TRIGGERED SYSTEM REVISION
☐ OTHER (SPECIFY) _____
☐ RESEARCH
☐ TRAINING
☐ NEW EQUIPMENT INSTALLATION
- 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 **ECM**

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
- | | | 10 PASSES PER TRUCK | |
|-------|------|---------------------|--|
| TRUCK | TYPE | SUSPENSION | |
| 1 | 9 | 1 | |
| 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 **3.83%** STANDARD DEVIATION +/- **8.83%**
 DYNAMIC AND STATIC SINGLE AXLES **11.42%** STANDARD DEVIATION +/- **15.23%**
 DYNAMIC AND STATIC DOUBLE AXLES **2.65%** STANDARD DEVIATION +/- **8.00%**
- 8 **1** NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
- 9 DEFINE THE SPEED RANGES USED (MPH) **68.2 MPH**
- 10 CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) **1.00**
- 11 ** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) **Y**
 IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE:
Alberta Transportation uses a typical 3000 lb - 8.8 foot wheel base passenger vehicle
as it is the only vehicle which occurs + 100 times daily

CLASSIFIER TEST SPECIFICS***

- 12 *** METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:
☐ VIDEO ☐ MANUAL ☐ PARALLEL CLASSIFIERS **NOT DONE**
- 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: Peter Kilburn P.Eng. Alberta Transportation
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