

<b>ALBERTA HISTORICAL SUMMARY</b> <b>SHEET 10</b> <b>LTPP TRAFFIC DATA</b>  <b>TRAFFIC VOLUME AND LOAD</b> <b>ESTIMATE UPDATE - NO SITE COUNT</b>	State Assigned ID	
	State Code	81
	SHRP Section ID	A900

1. ANNUAL TRAFFIC ESTIMATES

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)
1970					
1971					
1972					
1973					
1974					
1975					
1976					
1977					
1978					
1979					
1980					
1981					
1982					
1983					
1984					
1985					
1986					
1987					
1988					
1989					
1990					
1991					
1992					
1993					
1994					
1995					
1996	4160	640	1900	300	130 196
1997	4350	670	1990	310	170 204
1998	4520	700	2070	320	180 212
1999	6030	570	2530	270	180 283
2000	6070	1190	2550	560 530	262 247
2001	6040	1310	2590	560	324
2002	6270 680	1160	2630 320	550	200 286
2003	6270	1200	2670	570	301

ENTERED JUN 22 2004

*ASX*

<b>SHEET 10</b> <b>LTPP TRAFFIC DATA</b>  <b>TRAFFIC VOLUME AND LOAD</b> <b>ESTIMATE UPDATE - NO SITE COUNT</b>	State Assigned ID _____
	State Code _____ 81
	SHRP Section ID _____ A900

## 1. ANNUAL TRAFFIC ESTIMATES

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)
2000	6070	1190	2550	<del>580</del> 530	<del>282</del> 247

## 2. METHOD FOR ESTIMATING TOTAL VEHICLE AADT (TWO-WAY)

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

## 5. METHOD FOR ESTIMATING TOTAL TRUCKS, GPS LANE, AADT

- ☐ System distribution factors  
☒ Other  
WIM on Site

## 6. METHOD FOR ESTIMATING ESAL / YEAR IN GPS LANE

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

## 7. ESAL ESTIMATES - SOURCE OF DATA

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

## 8. WEIGHT SCALE TYPE

- ☒ WIM Scale  
☐ Static scale used for enforcement  
☐ Static scale not used for enforcement  
☐ Other

## 3. METHOD FOR ESTIMATING TOTAL TRUCK AADT (TWO-WAY)

- ☐ 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  
☒ Other  
WIM on Site

## 4. METHOD FOR ESTIMATING TOTAL VEHICLES GPS LANE AADT

- ☐ System distribution factors  
☒ Other  
WIM on Site

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Phone #: (780) 415-1359

Date Prepared: 2002.06.24

File: C:\MY DOCUMENTS\ECM\WIM\SHRP\SHRP2000\HWY0308E.XLS

JUN 25 2002  
MPT

<b>SHEET 16</b> <b>LTPP MONITORED TRAFFIC DATA</b> <b>SITE CALIBRATION SUMMARY</b>	*STATE ASSIGNED ID	[-----]
	*STATE CODE	[ 81 ]
	*SHRP SECTION ID	[A 900]

SITE CALIBRATION INFORMATION

1. \* DATE OF CALIBRATION (MONTH/DAY/YEAR) [ 09/ 14/ 2000 ]
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      NUMBER OF TEST TRUCKS USED
- |       |                             |
|-------|-----------------------------|
|       | <u> 7 </u> PASSES PER TRUCK |
| TRUCK | TYPE                        |
| 1     | <u> 9 </u>                  |
| 2     | <u>    </u>                 |
| 3     | <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  - 9.3 %  STANDARD DEVIATION  5.3%   
DYNAMIC AND STATIC SINGLE AXLES  - 2.5 %  STANDARD DEVIATION  8.1%   
DYNAMIC AND STATIC DOUBLE AXLES  - 10.5 %  STANDARD DEVIATION  5.5%
8.  1  NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH)  67 MPH
10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED)  1.05
- 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](mailto:peter.kilburn@gov.ab.ca) (780) 415-1359 rev. November 9, 1999

JUL 30 2003  
entered 0-01

<b>SHEET 16</b> <b>LTPP MONITORED TRAFFIC DATA</b> <b>SITE CALIBRATION SUMMARY</b>	*STATE ASSIGNED ID	[-----]
	*STATE CODE	[ 81 ]
	*SHRP SECTION ID	[A 900]

SITE CALIBRATION INFORMATION

1. \* DATE OF CALIBRATION (MONTH/DAY/YEAR) [ 06/ 22/ 2000 ]
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
- |                                      |            |                  |            |
|--------------------------------------|------------|------------------|------------|
|                                      | <u> 7 </u> | PASSES PER TRUCK |            |
|                                      | TRUCK      | TYPE             | SUSPENSION |
| TYPE PER FHWA 13 BIN SYSTEM          | 1          | <u> 9 </u>       | <u> 1 </u> |
| SUSPENSION: 1 - AIR; 2 - LEAF SPRING | 2          | _____            | _____      |
| 3 - OTHER (DESCRIBE)                 | 3          | _____            | _____      |
7. SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)  
 MEAN DIFFERENCE BETWEEN ---  
 DYNAMIC AND STATIC GVW  - 11.7 %  STANDARD DEVIATION  1.5%   
 DYNAMIC AND STATIC SINGLE AXLES  - 28.5 %  STANDARD DEVIATION  3.3%   
 DYNAMIC AND STATIC DOUBLE AXLES  - 8.1 %  STANDARD DEVIATION  6.5%
8.  1  NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH)  68 MPH
10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED)  1.14

- 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. November 9, 1999

file 800.12.13.9.12

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	*STATE CODE	[ 81 ]
	*SHRP SECTION ID	[ A 900 ]

SITE CALIBRATION INFORMATION

- \* DATE OF CALIBRATION (MONTH/DAY/YEAR) [ 05/08/2000 ]
- \* 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 ECM

WIM SYSTEM CALIBRATION SPECIFICS\*\*

- \*\* CALIBRATION TECHNIQUE USED:  
☐ TRAFFIC STREAM -- ☐ Y\_STATIC SCALE (Y/N) ☒ TEST TRUCKS  
☐ NUMBER OF TRUCKS COMPARED ☐ 1 NUMBER OF TEST TRUCKS USED  

	<u>6</u> PASSES PER TRUCK
TRUCK	TYPE
1	<u>9</u>
2	
3	

TYPE PER FHWA 13 BIN SYSTEM  
 SUSPENSION: 1 - AIR; 2 - LEAF SPRING  
 3 - OTHER (DESCRIBE)
- SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)  
 MEAN DIFFERENCE BETWEEN ---  
 DYNAMIC AND STATIC GVW - 41.3 % STANDARD DEVIATION 4.7%  
 DYNAMIC AND STATIC SINGLE AXLES - 34.5 % STANDARD DEVIATION 4.5%  
 DYNAMIC AND STATIC DOUBLE AXLES - 42.6 % STANDARD DEVIATION 4.8%
- 1 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
- DEFINE THE SPEED RANGES USED (MPH) 65 MPH
- CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) 1.00
- \*\* 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\*\*\*

- \*\*\* METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:  
☐ VIDEO ☐ MANUAL ☐ PARALLEL CLASSIFIERS **NOT DONE**
- METHOD TO DETERMINE LENGTH OF COUNT ☐ TIME ☐ NUMBER OF TRUCKS
- MEAN DIFFERENCE IN VOLUMES BY VEHICLES CLASSIFICATION:  
 \*\*\* FHWA CLASS 9 \_\_\_\_\_ FHWA CLASS \_\_\_\_\_  
 \*\*\* FHWA CLASS 8 \_\_\_\_\_ FHWA CLASS \_\_\_\_\_  
 \_\_\_\_\_ FHWA CLASS \_\_\_\_\_  
 \_\_\_\_\_ FHWA CLASS \_\_\_\_\_  
 \*\*\* PERCENT "UNCLASSIFIED" VEHICLES: \_\_\_\_\_

JUL 30 2000  
 entered GCB

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