

<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	0500

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	2525	341	1263	170	54
1971	2545	309	1273	155	50
1972	2275	333	1138	166	52
1973	2380	236	1190	118	42
1974	2855	499	1428	249	81
1975	3380	642	1690	321	112
1976	3050	270	1525	135	48
1977	2750	372	1375	186	66
1978	4500	945	2250	473	175
1979	3910	610	1955	305	112
1980	4085	817	2043	409	162
1981	4425	986	2213	493	188
1982	4330	664	2165	332	120
1983	4192	731	2096	366	137
1984	3660	479	1830	240	96
1985	3780	752	1890	376	158
1986	3740	648	1870	324	127
1987	4480	962	2240	481	189
1988	4428	595	2214	297	120
1989	4490	548	2245	274	120
1990	4880	717	2196	323	137
1991	4260	626	1917	282	119
1992	4627	680	2082	306	130
1993	5065	745	2279	335	142
1994	5100	1100	2500	500	600
1995	5316	1620	2550	600	630
1996	5130	1560	2460	580	510
1997	5550	1690	2660	630	560
1998	5760	1750	2760	650	570
1999	5760	1380	2420	650	570
2000	5950	1930	2500	910	262
2001	6300	2010	2610	950	530
2002	6220	2100	2610	570	373
2003	6080	2200	2590	1020	405

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<p><b>SHEET 10</b> <b>LTPP TRAFFIC DATA</b></p> <p><b>TRAFFIC VOLUME AND LOAD</b> <b>ESTIMATE UPDATE - NO SITE COUNT</b></p>	<p>State Assigned ID _____</p> <p>State Code _____ 81</p> <p>SHRP Section ID _____ 500</p>
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**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)
2002	6220	1200 <sup>2100</sup>	2610	870 <sup>905</sup>	373 <sup>365</sup>

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

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

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

- 9 ☐ 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**

- 3 ☐ System distribution factors  
☒ Other \_\_\_\_\_  
WIM on Site

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

- 3 ☐ System distribution factors  
☒ Other \_\_\_\_\_  
WIM on Site

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

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

**7. ESAL ESTIMATES - SOURCE OF DATA**

- 6 ☐ 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**

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

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*[Signature]*

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Date Prepared	2003.07.11		

<b>SHEET 16</b> <b>LTPP MONITORED TRAFFIC DATA</b> <b>SITE CALIBRATION SUMMARY</b>	*STATE ASSIGNED ID	[ ---- ]
	*STATE CODE	[ 81 ]
	*SHRP SECTION ID	[ 500 ]

SITE CALIBRATION INFORMATION

1. \* DATE OF CALIBRATION (MONTH/DAY/YEAR) [ 09/ 11/ 2002 ]
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  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  
 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 ---  
 DYNAMIC AND STATIC GVW  + 23.8 %  STANDARD DEVIATION  6.9%   
 DYNAMIC AND STATIC SINGLE AXLES  + 24.7 %  STANDARD DEVIATION  10.8%   
 DYNAMIC AND STATIC DOUBLE AXLES  + 24.0 %  STANDARD DEVIATION  9.3%
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)  0.84
- 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

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file 800.12.13.9.12

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	*SHRP SECTION ID	[ 500 ]

SITE CALIBRATION INFORMATION

1. \* DATE OF CALIBRATION (MONTH/DAY/YEAR) [ 05/ 13/ 2002 ]
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  
 8  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  - 11.4 %  STANDARD DEVIATION  1.9%   
DYNAMIC AND STATIC SINGLE AXLES  + 4.5 %  STANDARD DEVIATION  8.2%   
DYNAMIC AND STATIC DOUBLE AXLES  - 14.5 %  STANDARD DEVIATION  4.9%
8.  1  NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH)  65 MPH
10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED)  1.06
- 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\*\*\*

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\*\*\* 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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