

**SHEET 12
LTPP TRAFFIC DATA
CLASSIFICATION DATA
TRANSMITTAL FORM**

*STATE ASSIGNED ID

*STATE CODE

*SHRP SECTION ID 0900

HIGHWAY RT.: (THIS SESSION) I-15 MILEPOST: (THIS SESSION) 259.2

LOCATION: (THIS COUNT) I-15 2.7 MILES SOUTH OF CASCADE INTERCHANGE (ULM) WIM #112

FILENAME W30A900.N1D

BEGINNING DATE: DEC 1, 2003 BEGINNING TIME: 00:00

ENDING DATE: DEC 31, 2003 ENDING TIME: 23:00

COUNT DURATION: 1 [] HOURS [] DAYS [XX] MONTHS

VEHICLE CLASSIFICATION METHOD: FHWA X OTHER # BINS

NOTE: If not previously provided to SHRP, please attach Sheet 6 describing the vehicle classification categories and also attach Sheet 7 describing how the SHRP would convert its classification scheme to the FHWA 13 Class System.

TYPE OF AVC EQUIPMENT: PORTABLE: PERMANENT: XX

EQUIPMENT MAKE/MODEL #: ECM / HESTIA

SENSOR TYPE: LOOPS & PIEZOS

ADJUSTMENT FACTORS FOR ESTIMATING AVERAGE ANNUAL VOLUMES BY CLASSIFICATION:

GENERAL FACTORS:

CLASS SPECIFIC FACTOR: (PROVIDE BY CLASS OR CLASS GROUPS)

COMMENTS TO TEXT: NB DRIVING LANE IS DOWN CPU PROBLEM. CALIBRATION FACTORS
IMPLEMENTED ON 11/04/03.

FILL OUT ONE TRANSMITTAL SHEET FOR EACH DATA FILE SUBMITTED.

NAME OF PREPARER Danny O. Haynes PHONE # (406) 444-7217

DATE PREPARED January 26, 2004

**SHEET 12
LTPP TRAFFIC DATA
CLASSIFICATION DATA
TRANSMITTAL FORM**

*STATE ASSIGNED ID

*STATE CODE 30

*SHRP SECTION ID A900 0900

HIGHWAY RT.: (THIS SESSION) I-15 MILEPOST: (THIS SESSION) 259.2

LOCATION: (THIS COUNT) I-15 2.7 MILES SOUTH OF CASCADE INTERCHANGE (ULM) WIM #112

FILENAME: C30A900.K1D W30A900.K1D

BEGINNING DATE: SEPT 1, 2003 BEGINNING TIME: 00:00

ENDING DATE: SEPT 30, 2003 ENDING TIME: 23:00

COUNT DURATION: 1 [] HOURS [] DAYS [XX] MONTHS

VEHICLE CLASSIFICATION METHOD: FHWA X OTHER # BINS

NOTE: If not previously provided to SHRP, please attach Sheet 6 describing the vehicle classification categories and also attach Sheet 7 describing how the SHRP would convert its classification scheme to the FHWA 13 Class System.

TYPE OF AVC EQUIPMENT: PORTABLE: PERMANENT: XX

EQUIPMENT MAKE/MODEL #: ECM / HESTIA

SENSOR TYPE: LOOPS & PIEZOS

ADJUSTMENT FACTORS FOR ESTIMATING AVERAGE ANNUAL VOLUMES BY CLASSIFICATION:

GENERAL FACTORS:

CLASS SPECIFIC FACTOR: (PROVIDE BY CLASS OR CLASS GROUPS)

COMMENTS TO TEXT: PIEZOS REPLACED IN NORTH BOUND LANE. WILL BE CALIBRATED IN THE FALL.

THE CALIBRATION FACTORS WERE IMPLEMENTED ON JANUARY 31, 2003

FILL OUT ONE TRANSMITTAL SHEET FOR EACH DATA FILE SUBMITTED.

NAME OF PREPARER Danny O. Haynes PHONE # (406) 444-7217

DATE PREPARED February 19, 2004

SHEET 16
LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

*STATE ASSIGNED ID [30A900]
*STATE CODE [30]
*SHRP SECTION ID 0900 [A900]

I-15 NB MP 259.2 GREAT FALLS

SITE CALIBRATION INFORMATION

1. * DATE OF CALIBRATION (MONTH/DAY/YEAR) [11/04/2003]
2. * TYPE OF EQUIPMENT CALIBRATED ☒ WIM ☐ CLASSIFIER ☒ BOTH *TP 3/2/15 AMEL-14*
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) Ceramic Piezo _____
5. EQUIPMENT MANUFACTURER ECM _____

WIM SYSTEM CALIBRATION SPECIFICS**

- 6.** CALIBRATION TECHNIQUE USED:
☐ TRAFFIC STREAM -- ☐ STATIC SCALE (Y/N) ☒ TEST TRUCKS
LM 12-9-03
☐ NUMBER OF TRUCKS COMPARED _____ ☐ NUMBER OF TEST TRUCKS USED _____

		PASSES PER TRUCK	
TYPE PER FHWA 13 BIN SYSTEM	TRUCK	TYPE	SUSPENSION
SUSPENSION: 1 - AIR; 2 - LEAF SPRING	1	9	1
3 - OTHER (DESCRIBE)	2		
	3		

7. SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)
MEAN DIFFERENCE BETWEEN ---
DYNAMIC AND STATIC GVW ☐ -45.25% STANDARD DEVIATION ☐ 5.72%
DYNAMIC AND STATIC SINGLE AXLES ☐ -51.55% STANDARD DEVIATION ☐ 6.16%
DYNAMIC AND STATIC DOUBLE AXLES ☐ -44.11% STANDARD DEVIATION ☐ 7.6%
8. 1 _____ NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH) 63 63 63 63 63
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: _____

CLASSIFIER TEST SPECIFICS***

ENTERED MAY 18 2004

[Signature]

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: DAN BISOM (406) 444-6122 rev. March 30, 2004

file 800.12.7.9.12

SHEET 16 LTPP MONITORED TRAFFIC DATA SITE CALIBRATION SUMMARY	*STATE ASSIGNED ID	[30A900]
	*STATE CODE	[30]
	*SHRP SECTION ID	[A900]

0900

I-15 NB MP 259.2 GREAT FALLS

SITE CALIBRATION INFORMATION

1. * DATE OF CALIBRATION (MONTH/DAY/YEAR) [07/30/2003]
2. * TYPE OF EQUIPMENT CALIBRATED ☒ WIM ☐ CLASSIFIER ☒ BOTH *TP 3/2/15*
AMELH
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) Ceramic Piezo _____
5. EQUIPMENT MANUFACTURER ECM _____

WIM SYSTEM CALIBRATION SPECIFICS**

- 6.** CALIBRATION TECHNIQUE USED:
☐ TRAFFIC STREAM -- ☐ STATIC SCALE (Y/N) ☒ TEST TRUCKS
LM 12-4-08
☐ 9 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	<u>9</u> <u>1</u>
	2	_____
	3	_____

7. SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)
MEAN DIFFERENCE BETWEEN ---
DYNAMIC AND STATIC GVW 12.09% STANDARD DEVIATION 1.09%
DYNAMIC AND STATIC SINGLE AXLES 18.15% STANDARD DEVIATION 2.84%
DYNAMIC AND STATIC DOUBLE AXLES 10.94% STANDARD DEVIATION 2.62%
8. 1 NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH) 62 62 62 62 62 _____
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: _____

SEP 25 2003 *LDK*

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: DAN BISOM (406) 444-6122 rev. December 31, 2002