

SHEET 1 LTPP TRAFFIC DATA SUMMARY TRANSMITTAL FORM	*STATE ASSIGNED ID [2328] *STATE CODE [38] *SHRP SECTION ID [2001]
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STATE OR PROVINCE NORTH DAKOTA COUNTY GRAND FORKS
 HIGHWAY ROUTE NO. US 2 MILEPOST# 340.00
 NEAREST CITY/TOWN EMERADO NEAREST INTERSECTION ND#18
 FUNCTIONAL CLASS 02 NO. LANES EACH DIRECTION 2 TOTAL NO. LANES 4
 DIRECTION OF TRAVEL GPS LANE EAST DATE OPENED TO TRAF. 7-1-80
 FIPS COUNTY CODE 035 FHWA STATION IDENTIFICATION NO. _____
 HPMS SAMPLE NO. 000002337320 HPMS SUBDIVISION NO. _____
 TYPE OF PAVEMENT: AC ☒ PCC _____ OTHER _____
 CONTROL OF ACCESS: YES _____ NO ☒ MEDIAN: YES ☒ NO _____
 CURRENT SURROUNDING DEVELOPMENT:
 URBAN _____ SUBURBAN _____ RURAL ☒
 HAS INTENSITY OF ROADSIDE DEVELOPMENT INCREASED OVER PAST 10 YEARS?
 YES _____ NO ☒
 IF YES, DESCRIBE CHANGES _____

NOTE: ATTACH ALL RELATED FORMS AND COUNT DATA AND SUBMIT TO THE
 SHRP REGIONAL OFFICE. ATTACH MAP INDICATING THE LOCATION OF
 EACH TRAFFIC COUNT, VEHICLE CLASSIFICATION COUNT, OR WEIGHT
 STATION RELATIVE TO THIS GPS TEST SECTION.

NAME OF PREPARER <u>Bob Speckmann</u> DATE PREPARED <u>4-18-91</u>	PHONE # <u>701-224-4401</u>
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SHEET 2 LTPP TRAFFIC DATA TRAFFIC VOLUMES AND LOAD ESTIMATES	*STATE ASSIGNED ID [2288]
	*STATE CODE [38]
	*SHRP SECTION ID [2001]

YEAR	1. ESTIMATED TOTAL VEHICLES AADT (TWO-WAY)	2. ESTIMATED TOTAL TRUCK AADT (TWO-WAY)	3. ESTIMATED TOTAL VEHICLES AADT GPS LANE	4. ESTIMATED TOTAL TRUCKS AADT GPS LANE	5. ESTIMATED ESAL'S/YR GPS LANE (1000's) FLEXIBLE
1989	4950	520	2230	220	165
1988	4700	495	2100	205	155
1987	4500	590 ⁴⁷⁵	2025	200	150
1986	4300	540 ⁴⁵⁰	1925	190	140
1985	4050	560 ⁴²⁵	1825	180	135
1984	4100	430	1850	180	135
1983	4100	690 ⁴³⁰	1850	180	135
1982	4200	440	1900	185	140
1981	4300	720 ⁴⁵⁰	1925	190	140
1980					
1979					
1978					
1977					
1976					
1975					
1974					
1973					
1972					
1971					
1970					
1969					
1968					
1967					
1966					
1965					

NAME OF PREPARER Bob Speckmann PHONE # 701-224-4401
DATE PREPARED 4-17-91

SHEET 2 LTPP TRAFFIC DATA TRAFFIC VOLUMES AND LOAD ESTIMATES	*STATE ASSIGNED ID <u>[5048]</u> *STATE CODE <u>[38]</u> *SHRP SECTION ID <u>[5002]</u>
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YEAR	1. ESTIMATED TOTAL VEHICLES AADT (TWO-WAY)	2. ESTIMATED TOTAL TRUCK AADT (TWO-WAY)	3. ESTIMATED TOTAL VEHICLES AADT GPS LANE	4. ESTIMATED TOTAL TRUCKS AADT GPS LANE	5. ESTIMATED ESAL'S/YR GPS LANE (1000's) RIGID
1989	4630	650	8080 4908	300 386	400 117.0
1988	4490	900 625	2020	290	385
1987	4260	810 650	4075 1920	377	87.365
1986	3920	910 600	1770	255	340
1985	3840	720 575	1730	250	330
1984	3720	840 560	1675	240	320
1983	3530	800 525	1100	230	305
1982	3440	780 510	1550	225	300
1981	3350	760 500	1500	215	285
1980	3420	780 510	1540	220	290
1979	3400	780 510	1530	220	290
1978	3100	650 475	1400	200	265
1977	2880	540 425	1300	190	250
1976	2430	455 375	1100	160	210
1975	2410	455 375	1080	155	205
1974	1660	320 250	750	110	145
1973					
1972					
1971					
1970					
1969					
1968					
1967					
1966					
1965					

NAME OF PREPARER

DATE PREPARED

Bob Speckmann PHONE # 701-224-4401
4-11-91

<p align="center">SHEET 2</p> <p align="center">LTPP TRAFFIC DATA</p> <p align="center">TRAFFIC VOLUMES AND LOAD ESTIMATES</p>	<p>*STATE ASSIGNED ID [2728]</p> <p>*STATE CODE [38]</p> <p>*SHRP SECTION ID [2001]</p>
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YEAR	1. ESTIMATED TOTAL VEHICLES AADT (TWO-WAY)	2. ESTIMATED TOTAL TRUCK AADT (TWO-WAY)	3. ESTIMATED TOTAL VEHICLES AADT GPS LANE	4. ESTIMATED TOTAL TRUCKS AADT GPS LANE	5. ESTIMATED ESAL'S / YR GPS LANE (1000's)
1989	4950	525			
1988					
1987	4500	590			
1986	4300	540			
1985	4050	560			
1984					
1983	4100	690			
1982					
1981	4300	720			
1980					
1979					
1978					
1977					
1976					
1975					
1974					
1973					
1972					
1971					
1970					
1969					
1968					
1967					
1966					
1965					

NAME OF PREPARER <u>Bob Speckmann</u>	PHONE # <u>701-224-4401</u>
DATE PREPARED <u>4-17-91</u>	

SHEET 3

**LTPP TRAFFIC DATA
PROCEDURES FOR ESTIMATING
ANNUAL AVERAGE VOLUMES AND
TOTAL ANNUAL ESALS**

*STATE ASSIGNED ID [2328]

*STATE CODE [38]

*SHRP SECTION ID [2001]

1. Year Applicable 1981

2. METHOD FOR ESTIMATING AADT

- ☒ Factored a single count taken this year at the GPS site.
- ☐ Averaged multiple counts taken this year at the GPS site.
- ☐ Averaged and factored multiple counts taken this year at the GPS site.
- ☐ Growth factored last year's estimate.
- ☐ Estimated based on volume counts at nearby locations.
- ☐ Used flow maps.
- ☐ Used computerized network analyses.
- ☐ Other: _____

3. METHOD FOR ESTIMATING TRUCK VOLUMES OR PERCENTAGES

- ☐ Used a single count taken this year at the GPS site.
- ☐ Factored a single count taken this year at the GPS site.
- ☐ Averaged multiple counts taken this year at the GPS site.
- ☐ Used system averages from counts taken this year.
- ☒ Used count data from nearby sites.
- ☐ Used count data taken in earlier years at the GPS site.
- ☐ Used system averages taken in earlier years at the GPS site.
- ☐ Used computerized network analyses.
- ☐ Other: _____

4. METHOD FOR ESTIMATING AADT BY GPS LANE

- ☐ Based on actual lane count data.
- ☐ System distribution factors.
- ☐ Other: _____

5. METHOD FOR ESTIMATING TRUCK AADT IN GPS LANES

- ☐ Based on actual lane count data.
- ☐ System distribution factors.
- ☐ Other: _____

6. METHOD FOR ESTIMATING ESAL/VEHICLE

- ☐ ESAL/Truck.
- ☐ ESAL/Vehicle class. (no. of classes) _____
- ☐ Other: _____

7. ESAL ESTIMATES

(A) Source of Data

- ☐ Weight data collected at GPS site this year.
- ☐ Weight data collected at GPS site prior years.
- ☐ Weight data from system averages this year.
- ☐ Weight data from system averages prior years.
- ☐ Weight data from historic W-4 Tables used.
- ☐ Other: _____

(B) Weight Scale Type

- ☐ WIM scale.
- ☐ Static scale used for enforcement.
- ☐ Static scale not used for enforcement.
- ☐ Other: _____

NAME OF PREPARER Bob SpeckmannPHONE # 201-224-4401DATE PREPARED 4-12-91

SHEET 3

LTPP TRAFFIC DATA PROCEDURES FOR ESTIMATING ANNUAL AVERAGE VOLUMES AND TOTAL ANNUAL ESALS

*STATE ASSIGNED ID [2328]

*STATE CODE [38]

*SHRP SECTION ID [2001]

1. Year Applicable 1983

2. METHOD FOR ESTIMATING AADT

- ☒ Factored a single count taken this year at the GPS site.
- ☐ Averaged multiple counts taken this year at the GPS site.
- ☐ Averaged and factored multiple counts taken this year at the GPS site.
- ☐ Growth factored last year's estimate.
- ☐ Estimated based on volume counts at nearby locations.
- ☐ Used flow maps.
- ☐ Used computerized network analyses.
- ☐ Other: _____

3. METHOD FOR ESTIMATING TRUCK VOLUMES OR PERCENTAGES

- ☐ Used a single count taken this year at the GPS site.
- ☐ Factored a single count taken this year at the GPS site.
- ☐ Averaged multiple counts taken this year at the GPS site.
- ☐ Used system averages from counts taken this year.
- ☒ Used count data from nearby sites.
- ☐ Used count data taken in earlier years at the GPS site.
- ☐ Used system averages taken in earlier years at the GPS site.
- ☐ Used computerized network analyses.
- ☐ Other: _____

4. METHOD FOR ESTIMATING AADT BY GPS LANE

- ☐ Based on actual lane count data.
- ☐ System distribution factors.
- ☐ Other: _____

5. METHOD FOR ESTIMATING TRUCK AADT IN GPS LANES

- ☐ Based on actual lane count data.
- ☐ System distribution factors.
- ☐ Other: _____

6. METHOD FOR ESTIMATING ESAL/VEHICLE

- ☐ ESAL/Truck.
- ☐ ESAL/Vehicle class. (no. of classes) _____
- ☐ Other: _____

7. ESAL ESTIMATES

(A) Source of Data

- ☐ Weight data collected at GPS site this year.
- ☐ Weight data collected at GPS site prior years.
- ☐ Weight data from system averages this year.
- ☐ Weight data from system averages prior years.
- ☐ Weight data from historic W-4 Tables used.
- ☐ Other: _____

(B) Weight Scale Type

- ☐ WIM scale.
- ☐ Static scale used for enforcement.
- ☐ Static scale not used for enforcement.
- ☐ Other: _____

NAME OF PREPARER

DATE PREPARED

Bob Speckmann

PHONE #

701-224-4401

SHEET 3

LTPP TRAFFIC DATA
PROCEDURES FOR ESTIMATING
ANNUAL AVERAGE VOLUMES AND
TOTAL ANNUAL ESALS

*STATE ASSIGNED ID [2328]

*STATE CODE [38]

*SHRP SECTION ID [2001]

1. Year Applicable 1985

2. METHOD FOR ESTIMATING AADT

- ☒ Factored a single count taken this year at the GPS site.
- ☐ Averaged multiple counts taken this year at the GPS site.
- ☐ Averaged and factored multiple counts taken this year at the GPS site.
- ☐ Growth factored last year's estimate.
- ☐ Estimated based on volume counts at nearby locations.
- ☐ Used flow maps.
- ☐ Used computerized network analyses.
- ☐ Other: _____

3. METHOD FOR ESTIMATING TRUCK
VOLUMES OR PERCENTAGES

- ☐ Used a single count taken this year at the GPS site.
- ☐ Factored a single count taken this year at the GPS site.
- ☐ Averaged multiple counts taken this year at the GPS site.
- ☐ Used system averages from counts taken this year.
- ☒ Used count data from nearby sites.
- ☐ Used count data taken in earlier years at the GPS site.
- ☐ Used system averages taken in earlier years at the GPS site.
- ☐ Used computerized network analyses.
- ☐ Other: _____

4. METHOD FOR ESTIMATING AADT
BY GPS LANE

- ☐ Based on actual lane count data.
- ☐ System distribution factors.
- ☐ Other: _____

5. METHOD FOR ESTIMATING TRUCK AADT
IN GPS LANES

- ☐ Based on actual lane count data.
- ☐ System distribution factors.
- ☐ Other: _____

6. METHOD FOR ESTIMATING ESAL/VEHICLE

- ☐ ESAL/Truck.
- ☐ ESAL/Vehicle class. (no. of classes) _____
- ☐ Other: _____

7. ESAL ESTIMATES

(A) Source of Data

- ☐ Weight data collected at GPS site this year.
- ☐ Weight data collected at GPS site prior years.
- ☐ Weight data from system averages this year.
- ☐ Weight data from system averages prior years.
- ☐ Weight data from historic W-4 Tables used.
- ☐ Other: _____

(B) Weight Scale Type

- ☐ WIM scale.
- ☐ Static scale used for enforcement.
- ☐ Static scale not used for enforcement.
- ☐ Other: _____

NAME OF PREPARER

Bob Spectmann

PHONE #

701-224-4401

DATE PREPARED

4-17-91

SHEET 3

LTPP TRAFFIC DATA PROCEDURES FOR ESTIMATING ANNUAL AVERAGE VOLUMES AND TOTAL ANNUAL ESALS

*STATE ASSIGNED ID [2328]

*STATE CODE [38]

*SHRP SECTION ID [2001]

1. Year Applicable 1986

2. METHOD FOR ESTIMATING AADT

- ☐ Factored a single count taken this year at the GPS site.
☐ Averaged multiple counts taken this year at the GPS site.
☐ Averaged and factored multiple counts taken this year at the GPS site.
☒ Growth factored last year's estimate.
☐ Estimated based on volume counts at nearby locations.
☐ Used flow maps.
☐ Used computerized network analyses.
☐ Other: _____

3. METHOD FOR ESTIMATING TRUCK VOLUMES OR PERCENTAGES

- ☐ Used a single count taken this year at the GPS site.
☐ Factored a single count taken this year at the GPS site.
☐ Averaged multiple counts taken this year at the GPS site.
☐ Used system averages from counts taken this year.
☐ Used count data from nearby sites.
☒ Used count data taken in earlier years at the GPS site.
☐ Used system averages taken in earlier years at the GPS site.
☐ Used computerized network analyses.
☐ Other: _____

4. METHOD FOR ESTIMATING AADT BY GPS LANE

- ☐ Based on actual lane count data.
☐ System distribution factors.
☐ Other: _____

5. METHOD FOR ESTIMATING TRUCK AADT IN GPS LANES

- ☐ Based on actual lane count data.
☐ System distribution factors.
☐ Other: _____

6. METHOD FOR ESTIMATING ESAL/VEHICLE

- ☐ ESAL/Truck.
☐ ESAL/Vehicle class. (no. of classes) _____
☐ Other: _____

7. ESAL ESTIMATES

(A) Source of Data

- ☐ Weight data collected at GPS site this year.
☐ Weight data collected at GPS site prior years.
☐ Weight data from system averages this year.
☐ Weight data from system averages prior years.
☐ Weight data from historic W-4 Tables used.
☐ Other: _____

(B) Weight Scale Type

- ☐ WIM scale.
☐ Static scale used for enforcement.
☐ Static scale not used for enforcement.
☐ Other: _____

NAME OF PREPARER Bob Speckmann PHONE # 701-224-4401
DATE PREPARED 4-17-91

SHEET 3

LTPP TRAFFIC DATA
PROCEDURES FOR ESTIMATING
ANNUAL AVERAGE VOLUMES AND
TOTAL ANNUAL ESALS

*STATE ASSIGNED ID [2328]

*STATE CODE [38]

*SHRP SECTION ID [2001]

1. Year Applicable 1987

2. METHOD FOR ESTIMATING AADT

- ☐ Factored a single count taken this year at the GPS site.
- ☐ Averaged multiple counts taken this year at the GPS site.
- ☐ Averaged and factored multiple counts taken this year at the GPS site.
- ☐ Growth factored last year's estimate.
- ☐ Estimated based on volume counts at nearby locations.
- ☒ Used flow maps.
- ☐ Used computerized network analyses.
- ☐ Other: _____

3. METHOD FOR ESTIMATING TRUCK
VOLUMES OR PERCENTAGES

- ☐ Used a single count taken this year at the GPS site.
- ☐ Factored a single count taken this year at the GPS site.
- ☐ Averaged multiple counts taken this year at the GPS site.
- ☐ Used system averages from counts taken this year.
- ☒ Used count data from nearby sites.
- ☐ Used count data taken in earlier years at the GPS site.
- ☐ Used system averages taken in earlier years at the GPS site.
- ☐ Used computerized network analyses.
- ☐ Other: _____

4. METHOD FOR ESTIMATING AADT
BY GPS LANE

- ☐ Based on actual lane count data.
- ☐ System distribution factors.
- ☐ Other: _____

5. METHOD FOR ESTIMATING TRUCK AADT
IN GPS LANES

- ☐ Based on actual lane count data.
- ☐ System distribution factors.
- ☐ Other: _____

6. METHOD FOR ESTIMATING ESAL/VEHICLE

- ☐ ESAL/Truck.
- ☐ ESAL/Vehicle class. (no. of classes) _____
- ☐ Other: _____

7. ESAL ESTIMATES

(A) Source of Data

- ☐ Weight data collected at GPS site this year.
- ☐ Weight data collected at GPS site prior years.
- ☐ Weight data from system averages this year.
- ☐ Weight data from system averages prior years.
- ☐ Weight data from historic W-4 Tables used.
- ☐ Other: _____

(B) Weight Scale Type

- ☐ WIM scale.
- ☐ Static scale used for enforcement.
- ☐ Static scale not used for enforcement.
- ☐ Other: _____

NAME OF PREPARER Bob Speckmann PHONE # 701-224-4401
DATE PREPARED 4-17-91

SHEET 3

LTPP TRAFFIC DATA PROCEDURES FOR ESTIMATING ANNUAL AVERAGE VOLUMES AND TOTAL ANNUAL ESALS

*STATE ASSIGNED ID [2328]

*STATE CODE [38]

*SHRP SECTION ID [2001]

1. Year Applicable 1989

2. METHOD FOR ESTIMATING AADT

- ☐ Factored a single count taken this year at the GPS site.
☐ Averaged multiple counts taken this year at the GPS site.
☐ Averaged and factored multiple counts taken this year at the GPS site.
☐ Growth factored last year's estimate.
☐ Estimated based on volume counts at nearby locations.
☒ Used flow maps.
☐ Used computerized network analyses.
☐ Other: _____

3. METHOD FOR ESTIMATING TRUCK VOLUMES OR PERCENTAGES

- ☐ Used a single count taken this year at the GPS site.
☐ Factored a single count taken this year at the GPS site.
☐ Averaged multiple counts taken this year at the GPS site.
☐ Used system averages from counts taken this year.
☒ Used count data from nearby sites.
☐ Used count data taken in earlier years at the GPS site.
☐ Used system averages taken in earlier years at the GPS site.
☐ Used computerized network analyses.
☐ Other: _____

4. METHOD FOR ESTIMATING AADT BY GPS LANE

- ☐ Based on actual lane count data.
☐ System distribution factors.
☐ Other: _____

5. METHOD FOR ESTIMATING TRUCK AADT IN GPS LANES

- ☐ Based on actual lane count data.
☐ System distribution factors.
☐ Other: _____

6. METHOD FOR ESTIMATING ESAL/VEHICLE

- ☐ ESAL/Truck.
☐ ESAL/Vehicle class. (no. of classes) _____
☐ Other: _____

7. ESAL ESTIMATES

(A) Source of Data

- ☐ Weight data collected at GPS site this year.
☐ Weight data collected at GPS site prior years.
☐ Weight data from system averages this year.
☐ Weight data from system averages prior years.
☐ Weight data from historic W-4 Tables used.
☐ Other: _____

(B) Weight Scale Type

- ☐ WIM scale.
☐ Static scale used for enforcement.
☐ Static scale not used for enforcement.
☐ Other: _____

NAME OF PREPARER Bob Speckmann PHONE # 201-224-4401
DATE PREPARED 4-17-91