

SHEET 10 LTPP TRAFFIC DATA TRAFFIC VOLUME AND LOAD ESTIMATE UPDATE - NO SITE COUNT	*STATE ASSIGNED ID [<u>1003</u>] *STATE CODE [<u>27</u>] *SHRP SECTION ID [<u>1016</u>]
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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 TRUCKS AADT GPS LANE	ESTIMATED ESAL'S / YR GPS LANE (1000's)
<u>1991</u>	<u>3000</u>	<u>150</u>	<u>1350</u>	<u>70</u>	<u>20</u>

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

- ☐ Growth factored last year's estimate.
☐ Estimated based on volume counts at nearby locations.
☐ Used computerized network analysis.
☒ Other Counts at the site

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

- ☐ Used system average from counts taken this year.
☐ Used count data from nearby sites.
☐ Used count data from previous years at GPS site.
☐ Used system averages from previous year counts.
☐ Used computerized network analysis.
☒ Other Counts at the site

4. METHOD FOR ESTIMATING TOTAL VEHICLES GPS LANE AADT

- ☐ System distribution factors.
☒ Other Counts at the site

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

- ☐ System distribution factors.
☒ Other Counts at the site

6. METHOD FOR ESTIMATING ESAL/YEAR IN GPS LANE

- ☒ ESAL/Truck factor.
☐ ESAL/vehicle class factors -
 Number of classes
☐ Other

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

8. WEIGHT SCALE TYPE

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

NAME OF PREPARER <u>Curtis Dahlin</u>	PHONE # <u>(612) 296-6846</u>
DATE PREPARED <u>7-8-92</u>	

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 1003
State Code: 27
SHRP Section ID: 1016
Effective Date: 11/91

Highway Rt No: US 71

Milepost No: 313.69

Location: No of Bemdi ji, MN

Vehicle Classification Method: FHWA

Type of Classification Equipment: NA

AVC Equipment Make/Model No.: NA

Sensor Type: NA

Weight Scale Type: Permanent WIM

Equipment Make/Model No.: IRD 1060

Sensor Type: Bending Plate

Method of Calibration: Initial calibration with a loaded 5 axle semi & subsequent calibrations done automatically.

Frequency of Calibration: Dependent on need. Can be as often as every week.

Comments:

No known missing data.

NAME OF PREPARER: Vicky Sarner
DATE PREPARED: September 13, 1993

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 1003
State Code: 27
SHRP Section ID: 1016
Effective Date: 11/91

Highway Rt No: US 71

Milepost No: 313.69

Location: No of Bemdiji, MN

Vehicle Classification Method: FHWA

Type of Classification Equipment: NA

AVC Equipment Make/Model No.: NA

Sensor Type: NA

Weight Scale Type: Permanent WIM

Equipment Make/Model No.: IRD 1060

Sensor Type: Bending Plate

Method of Calibration: Initial calibration with a loaded 5 axle semi & subsequent calibrations done automatically.

Frequency of Calibration: Dependent on need. Can be as often as every week.

Comments:

No known missing data.

NAME OF PREPARER: Vicky Sarner
DATE PREPARED: December 16, 1993

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 1003
State Code: 27
SHRP Section ID: 1016
Effective Date: 11/91

Highway Rt No: US 71

Milepost No: 313.69

Location: No of Bemdiji, MN

Vehicle Classification Method: FHWA

Type of Classification Equipment: NA

AVC Equipment Make/Model No.: NA

Sensor Type: NA

Weight Scale Type: Permanent WIM

Equipment Make/Model No.: IRD 1060

Sensor Type: Bending Plate

Method of Calibration: Initial calibration with a loaded 5 axle semi & subsequent calibrations done automatically.

Frequency of Calibration: Dependent on need. Can be as often as every week.

Comments: Data is missing from the following time periods:

~~1/1/94 - 1/19/94~~
4/3/94 - 4/4/94

NAME OF PREPARER: Vicky Sarner
DATE PREPARED: June 3, 1994

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 1003
State Code: 27
SHRP Section ID: 1016
Effective Date: 11/91

Highway Rt No: US 71

Milepost No: 313.69

Location: No of Bemdiji, MN

Vehicle Classification Method: FHWA

Type of Classification Equipment: NA

AVC Equipment Make/Model No.: NA

Sensor Type: NA

Weight Scale Type: Permanent WIM

Equipment Make/Model No.: IRD 1060

Sensor Type: Bending Plate

Method of Calibration: Initial calibration with a loaded 5 axle semi & subsequent calibrations done automatically.

Frequency of Calibration: Dependent on need. Can be as often as every week.

Comments: Time period covered 1/1/95 - 4/30/95. Missing 4/2/95, and 4/30/95.

NAME OF PREPARER: Vicky Sarner
DATE PREPARED: May 18, 1995

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 1003
State Code: 27
SHRP Section ID: 1016
Effective Date: 11/91

Highway Rt No: US 71

Milepost No: 313.69

Location: No of Bemdiiji, MN

Vehicle Classification Method: FHWA

Type of Classification Equipment: NA

AVC Equipment Make/Model No.: NA

Sensor Type: NA

Weight Scale Type: Permanent WIM

Equipment Make/Model No.: IRD 1060

Sensor Type: Bending Plate

Method of Calibration: Initial calibration with a loaded 5 axle semi & subsequent calibrations done automatically.

Frequency of Calibration: Dependent on need. Can be as often as every week.

Comments: The following dates are missing from this time period.
11/13/94 - 11/14/94

NAME OF PREPARER: Vicky Sarner
DATE PREPARED: Janaury 24, 1995

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 1003
State Code: 27
SHRP Section ID: 1016
Effective Date: 11/91

Highway Rt No: US 71

Milepost No: 313.69

Location: No of Bemdiji, MN

Vehicle Classification Method: FHWA

Type of Classification Equipment: NA

AVC Equipment Make/Model No.: NA

Sensor Type: NA

Weight Scale Type: Permanent WIM

Equipment Make/Model No.: IRD 1060

Sensor Type: Bending Plate

Method of Calibration: Initial calibration with a loaded 5 axle semi & subsequent calibrations done automatically.

Frequency of Calibration: Dependent on need. Can be as often as every week.

Comments: Data is missing from the following time periods:
11/15/93 thru 12/31/93

NAME OF PREPARER: Vicky Sarnier
DATE PREPARED: December 16, 1993

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 1003
State Code: 27
SHRP Section ID: 1016
Effective Date: 11/91

Highway Rt No: US 71

Milepost No: 313.69

Location: No of Bemdiji, MN

Vehicle Classification Method: FHWA

Type of Classification Equipment: NA

AVC Equipment Make/Model No.: NA

Sensor Type: NA

Weight Scale Type: Permanent WIM

Equipment Make/Model No.: IRD 1060

Sensor Type: Bending Plate

Method of Calibration: Initial calibration with a loaded 5 axle semi & subsequent calibrations done automatically.

Frequency of Calibration: Dependent on need. Can be as often as every week.

Comments:

No known missing data.

NAME OF PREPARER: Vicky Sarnier
DATE PREPARED: December 16, 1993

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 1003
State Code: 27
SHRP Section ID: 1016
Effective Date: 11/91

Highway Rt No: US 71

Milepost No: 313.69

Location: No of Bemdiji, MN

Vehicle Classification Method: FHWA

Type of Classification Equipment: NA

AVC Equipment Make/Model No.: NA

Sensor Type: NA

Weight Scale Type: Permanent WIM

Equipment Make/Model No.: IRD 1060

Sensor Type: Bending Plate

Method of Calibration: Initial calibration with a loaded 5 axle semi & subsequent calibrations done automatically.

Frequency of Calibration: Dependent on need. Can be as often as every week.

Comments: No missing data for this time period.

NAME OF PREPARER: Vicky Sarner
DATE PREPARED: October 24, 1994

PHONE NO.: 612-296-8526

Sheet 13
Traffic Data Files
Transmittal Form

State: Minnesota
State Code: 27

FILE NAME	START DATE	START TIME	END DATE	END TIME	CLASS SCHEME
C271029.IR1	07/28/91	00:00	12/31/91	24:00	Minn2
W271029.IR1	07/28/91	00:00	12/31/91	24:00	Minn2
C279075.J11	8/1/91	00:00	12/31/91	24:00	Minn2
W279075.J11	8/1/91	00:00	12/31/91	24:00	Minn2
C271085.MB1	11/12/91	00:00	12/31/91	24:00	Minn2
W271085.MB1	11/12/91	00:00	12/31/91	24:00	Minn2
C274033.M71	11/7/91	00:00	12/31/91	24:00	Minn2
W274033.M71	11/7/91	00:00	12/31/91	24:00	Minn2
C274037.M71	11/7/91	00:00	12/31/91	24:00	Minn2
W274037.M71	11/7/91	00:00	12/31/91	24:00	Minn2
4050 C271050.LJ1	11/1/91	00:00	12/31/91	24:00	Minn2
W271050.LJ1	11/1/91	00:00	12/31/91	24:00	Minn2
C271016.M11	11/1/91	00:00	12/31/91	24:00	Minn2
W271016.M11	11/1/91	00:00	12/31/91	24:00	Minn2
C274040.M11	11/1/91	00:00	12/31/91	24:00	Minn2
W274040.M11	11/1/91	00:00	12/31/91	24:00	Minn2
C274055.N11	12/1/91	00:00	12/31/91	24:00	Minn2
W274055.N11	12/1/91	00:00	12/31/91	24:00	Minn2

NAME OF PREPARER: Vicky Sarner
DATE PREPARED: April 28, 1994

PHONE NO.: 612-296-8526

**SHEET 15
LTPP TRAFFIC DATA**

EQUIPMENT INSTALLATION LOG

STATE ASSIGNED ID [1003]

STATE CODE [27]

SHRP SECTION ID [1016]

LOCATION US 71, Ns of Bemidji, MN DATE OF INSTALLATION November, 1991

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	<u>1060</u>	<u>TRD</u>	
Interface			
Modem	<u>V32 - 9600</u>	<u>MULTI-Tech</u>	
Loop Amplifiers		<u>MICROSENSE</u>	
Other _____			
Sensor(s) / Platform(s)			
GPS Lane Sensor	<u>Bending Plate</u>	<u>TRD</u>	
Sensor Next Adjacent Lane (1)			
Sensor Next Adjacent Lane (2)			
Sensor Next Adjacent Lane (3)			
Diagonal Sensor			
Offscale Sensor			
Right Platform			
Left Platform			
Other _____			
Software			
Complete Package	<u>7.2.8</u>	<u>TRD</u>	
Axle Spacing Algorithm Only			
Other _____			
Loops			
Upstream - Lane 1			
Downstream - Lane 1			
Upstream - Other Lanes			
Downstream - Other Lanes			

**SHEET 15
LTPP TRAFFIC DATA**

EQUIPMENT INSTALLATION LOG

STATE ASSIGNED ID [1003]

STATE CODE [27]

SHRP SECTION ID [1016]

LOCATION US 71, Ns of Bemidji, MN

DATE OF INSTALLATION November, 1991

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	10600	IFD	9204-1683
Interface			
Modem	V32 - 9600	MULTI-Tech	
Loop Amplifiers		MICROSense	
Other _____			
Sensor(s) / Platform(s)			
GPS Lane Sensor	Bending Plate	IFD	
Sensor Next Adjacent Lane (1)	↓	↓	
Sensor Next Adjacent Lane (2)			
Sensor Next Adjacent Lane (3)			
Diagonal Sensor			
Offscale Sensor			
Right Platform			
Left Platform			
Other _____			
Software			
Complete Package	7.3.3	IFD	
Axle Spacing Algorithm Only			
Other _____			
Loops			
Upstream - Lane 1			
Downstream - Lane 1			
Upstream - Other Lanes			
Downstream - Other Lanes			

**SHEET 15
LTPP TRAFFIC DATA**

EQUIPMENT INSTALLATION LOG

STATE ASSIGNED ID [1003]

STATE CODE [27]

SHRP SECTION ID [1016]

LOCATION Bonidje, Mn US-71 DATE OF INSTALLATION November 1991

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	<u>1060</u>	<u>TRD</u>	<u>9204 - 1683</u>
Interface			
Modem	<u>V32, 9600 bps</u>	<u>Multi-Tech</u>	<u>2037660</u>
Loop Amplifiers		<u>Micro sense</u>	
Other _____			
Sensor(s) / Platform(s)			
GPS Lane Sensor	<u>Bending Plate</u>	<u>TRD</u>	
Sensor Next Adjacent Lane (1)	↓	↓	
Sensor Next Adjacent Lane (2)			
Sensor Next Adjacent Lane (3)			
Diagonal Sensor			
Offscale Sensor			
Right Platform			
Left Platform			
Other _____			
Software			
Complete Package	<u>7.3.3</u>	<u>TRD</u>	
Axle Spacing Algorithm Only			
Other _____			
Loops			
Upstream - Lane 1			
Downstream - Lane 1			
Upstream - Other Lanes			
Downstream - Other Lanes			

**SHEET 15
LTPP TRAFFIC DATA**

EQUIPMENT INSTALLATION LOG

STATE ASSIGNED ID [1003]

STATE CODE [27]

SHRP SECTION ID [1016]

LOCATION US 71 No of Bemidji, MN DATE OF INSTALLATION November, 1991

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	<u>1060</u>	<u>IRD</u>	<u>9101 - 0855</u>
Interface			
Modem	<u>Multi V-32 9600</u>	<u>Multi-Tech</u>	<u>2062333</u>
Loop Amplifiers		<u>Microsense</u>	
Other _____			
Sensor(s) / Platform(s)			
GPS Lane Sensor	<u>Bending Plate</u>	<u>IRD</u>	
Sensor Next Adjacent Lane (1)	<u>Bending Plate</u>	<u>IRD</u>	
Sensor Next Adjacent Lane (2)	<u>Bending Plate</u>	<u>IRD</u>	
Sensor Next Adjacent Lane (3)	<u>Bending Plate</u>	<u>IRD</u>	
Diagonal Sensor			
Offscale Sensor			
Right Platform			
Left Platform			
Other _____			
Software			
Complete Package	<u>7.2.2</u>	<u>IRD</u>	
Axle Spacing Algorithm Only			
Other _____			
Loops			
Upstream - Lane 1			
Downstream - Lane 1			
Upstream - Other Lanes			
Downstream - Other Lanes			

**SHEET 15
LTPP TRAFFIC DATA**

EQUIPMENT INSTALLATION LOG

STATE ASSIGNED ID [1003]

STATE CODE [27]

SHRP SECTION ID [1016]

LOCATION US 71, Ns of Bemidji, MN

DATE OF INSTALLATION November, 1991

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	1060	TRD	9204-1683
Interface			
Modem	V32 - 9600	MULTI-Tech	
Loop Amplifiers		Microsense	
Other _____			
Sensor(s) / Platform(s)			
GPS Lane Sensor	Bending Plate	TRD	
Sensor Next Adjacent Lane (1)	↓	↓	
Sensor Next Adjacent Lane (2)			
Sensor Next Adjacent Lane (3)			
Diagonal Sensor			
Offscale Sensor			
Right Platform			
Left Platform			
Other _____			
Software			
Complete Package	7.3.3	TRD	
Axle Spacing Algorithm Only			
Other _____			
Loops			
Upstream - Lane 1			
Downstream - Lane 1			
Upstream - Other Lanes			
Downstream - Other Lanes			