

SHEET 10 LTPP TRAFFIC DATA TRAFFIC VOLUME AND LOAD ESTIMATE UPDATE - NO SITE COUNT	*STATE ASSIGNED ID [<u>1006</u>] *STATE CODE [<u>27</u>] *SHRP SECTION ID [<u>1019</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>1990</u>	<u>6815</u>	<u>290</u>	<u>3075</u>	<u>130</u>	<u>36</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 Interpolation 89-91

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

- ☐ System distribution factors.
☒ Other Interpolation 89-91

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 Interpolation 89-91

6. METHOD FOR ESTIMATING ESAL/YEAR IN GPS LANE

- ☐ ESAL/Truck factor.
☐ ESAL/vehicle class factors -
 Number of classes
☒ Other Interpolation 89-91

4. METHOD FOR ESTIMATING TOTAL VEHICLES GPS LANE AADT

- ☐ System distribution factors.
☒ Other Interpolation 89-91

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 Interpolation 89-91

8. WEIGHT SCALE TYPE

- ☐ WIM Scale.
☐ Static scale used for enforcement.
☐ Static scale not used for enforcement.
☒ Other Interpolation 89-91

Monitoring started in 1990.

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: 1006
State Code: 27
SHRP Section ID: 1019
Effective Date: 10/90

Highway Rt No: US 169

Milepost No: 179.5

Location: Princeton, 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: 1006
State Code: 27
SHRP Section ID: 1019
Effective Date: 10/90

Highway Rt No: US Hwy 169

Milepost No: 179.5

Location: Princeton, Minnesota

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:

Known dates of missing data:

2/14/92 - 2/19/92 Problems with controller.
3/11/92 - 3/12/92 Power outage.
7/2/92 - 7/7/92 Power outage from a storm.
11/30/92 - 12/3/92 Software problems.

NAME OF PREPARER: Vicky Sarner
DATE PREPARED: July 12, 1993

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 1006
State Code: 27
SHRP Section ID: 1019
Effective Date: 10/90

Highway Rt No: US Hwy 169

Milepost No: 179.5

Location: Princeton, Minnesota

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 missing from the following time periods:
4/3/94
4/25/94 - 4/30/94

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

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 1006
State Code: 27
SHRP Section ID: 1019
Effective Date: 10/90

Highway Rt No: US Hwy 169

Milepost No: 179.5

Location: Princeton, Minnesota

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.

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

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 1006
State Code: 27
SHRP Section ID: 1019
Effective Date: 10/90

Highway Rt No: US Hwy 169

Milepost No: 179.5

Location: Princeton, Minnesota

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:

Known dates of missing data:

2/14/92 - 2/19/92 Problems with controller.

3/11/92 - 3/12/92 Power outage.

7/2/92 - 7/7/92 Power outage from a storm.

11/30/92 - 12/3/92 Software problems.

NAME OF PREPARER: Vicky Sarner
DATE PREPARED: July 12, 1993

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 1006
State Code: 27
SHRP Section ID: 1019
Effective Date: 10/90

Highway Rt No: US Hwy 169

Milepost No: 179.5

Location: Princeton, Minnesota

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: January 24, 1995

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 1006
State Code: 27
SHRP Section ID: 1019
Effective Date: 10/90

Highway Rt No: US Hwy 169

Milepost No: 179.5

Location: Princeton, Minnesota

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 5/1/95 - 8/31/95. No Missing data.

NAME OF PREPARER: Jim Muske PHONE NO.: 612-296-1665
DATE PREPARED: June 26, 1996

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 1006
State Code: 27
SHRP Section ID: 1019
Effective Date: 10/90

Highway Rt No: US Hwy 169

Milepost No: 179.5

Location: Princeton, Minnesota

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 missing from the following time periods:
8/1/93 thru 8/31/93
11/1/93

NAME OF PREPARER: Vicky Sarner
DATE PREPARED: July 12, 1993

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 1006
State Code: 27
SHRP Section ID: 1019
Effective Date: 10/90

Highway Rt No: US 169

Milepost No: 179.5

Location: Princeton, 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: 1006
State Code: 27
SHRP Section ID: 1019
Effective Date: 10/90

Highway Rt No: US Hwy 169

Milepost No: 179.5

Location: Princeton, Minnesota

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 missing from the following time periods:
5/1/94 - 5/5/94

NAME OF PREPARER: Vicky Sarner
DATE PREPARED: October 14, 1994

PHONE NO.: 612-296-8526

SHEET 15
LTPP TRAFFIC DATA

EQUIPMENT INSTALLATION LOG

STATE ASSIGNED ID [1006]

STATE CODE [27]

SHRP SECTION ID [1019]

LOCATION US 169, Princeton, MN DATE OF INSTALLATION October, 1990

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	<u>1060</u>	<u>IRD</u>	<u>9008-0620</u>
Interface			
Modem	<u>MULTI TECH 9600 V32</u>	<u>MULTI TECH</u>	<u>2035736</u>
Loop Amplifiers	<u>1</u>	<u>MICRO SENSE</u>	
Other _____			
Sensor(s) / Platform(s)			
GPS Lane Sensor	<u>BENDING PLATE</u>	<u>IRD</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>7.2.2</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 [1006]

STATE CODE [27]

SHRP SECTION ID [1019]

LOCATION US 169, Princeton, MN

DATE OF INSTALLATION October, 1990

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	1060	IRD	9008-0620
Interface			
Modem	Mult. TECH 9600 V32	Multi TECH	2035736
Loop Amplifiers	1	MICRO SENSE	
Other _____			
Sensor(s) / Platform(s)			
GPS Lane Sensor	BENDING PLATE	IRD	
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	IRD	
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 [1066]

STATE CODE [27]

SHRP SECTION ID [1019]

LOCATION US 169, Princeton, MN DATE OF INSTALLATION _____

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	<u>1060</u>	<u>IR0</u>	<u>9008-0620</u>
Interface			
Modem	<u>Multitech 9600 V32</u>	<u>Multi-Tech</u>	<u>2035736</u>
Loop Amplifiers		<u>Micro Sense</u>	
Other _____			
Sensor(s) / Platform(s)			
GPS Lane Sensor	<u>Bending Plate</u>	<u>IR0</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>IR0</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 [1006]

STATE CODE [27]

SHRP SECTION ID [1019]

LOCATION US 169, Princeton, MN

DATE OF INSTALLATION October, 1990

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	1060	IRD	9008-0620
Interface			
Modem	MULTI TECH 9600 V32	MULTI TECH	2035736
Loop Amplifiers	1	MICRO SENSE	
Other _____			
Sensor(s) / Platform(s)			
GPS Lane Sensor	BENDING PLATE	IRD	
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	7.2.2	IRD	
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 [1006]

STATE CODE [27]

SHRP SECTION ID [1019]

LOCATION US 169, Princeton, MN DATE OF INSTALLATION October, 1990

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	1060	IRD	9008-0620
Interface			
Modem	MULTI TECH 9600 V32	MULTI TECH	2035736
Loop Amplifiers	1	MICRO SENSE	
Other _____			
Sensor(s) / Platform(s)			
GPS Lane Sensor	BENDING PLATE	IRD	
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	7.2.2	IRD	
Axle Spacing Algorithm Only			
Other _____			
Loops			
Upstream - Lane 1			
Downstream - Lane 1			
Upstream - Other Lanes			
Downstream - Other Lanes			