

SHEET 10 LTPP TRAFFIC DATA TRAFFIC VOLUME AND LOAD ESTIMATE UPDATE - NO SITE COUNT	*STATE ASSIGNED ID [<u>4008</u>] *STATE CODE [<u>27</u>] *SHRP SECTION ID [<u>4040</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>5000</u>	<u>900</u>	<u>2250</u>	<u>400</u>	<u>209</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.

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

- ☐ System distribution factors.
☒ 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.

6. METHOD FOR ESTIMATING ESAL/YEAR IN GPS LANE

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

4. METHOD FOR ESTIMATING TOTAL VEHICLES GPS LANE AADT

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

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 _____

Started monitoring in 1991.

NAME OF PREPARER <u>Curtis Dahlin</u>	PHONE # <u>(612) 296-6846</u>
DATE PREPARED <u>7-15-92</u>	

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 4008
State Code: 27
SHRP Section ID: 4040
Effective Date: 11/91

Highway Rt No: US 2

Milepost No: 172.21

Location: Deer River, 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:

Missing Data: 2/22/93 thru 3/18/93.

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

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 4008
State Code: 27
SHRP Section ID: 4040
Effective Date: 11/91

Highway Rt No: US 2

Milepost No: 172.21

Location: Deer River, 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 data missing according to my records.

NAME OF PREPARER: Vicky Sarner
DATE PREPARED: August 2, 1993

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 4008
State Code: 27
SHRP Section ID: 4040
Effective Date: 11/91

Highway Rt No: US 2

Milepost No: 172.21

Location: Deer River, 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:

Missing 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: 4008
State Code: 27
SHRP Section ID: 4040
Effective Date: 11/91

Highway Rt No: US 2

Milepost No: 172.21

Location: Deer River, 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: 4008
State Code: 27
SHRP Section ID: 4040
Effective Date: 11/91

Highway Rt No: US 2

Milepost No: 172.21

Location: Deer River, 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: Janaury 24, 1995

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 4008
State Code: 27
SHRP Section ID: 4040
Effective Date: 11/91

Highway Rt No: US 2

Milepost No: 172.21

Location: Deer River, 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

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Comments: No missing data for this time period.

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

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 4008
State Code: 27
SHRP Section ID: 4040
Effective Date: 11/91

Highway Rt No: US 2

Milepost No: 172.21

Location: Deer River, 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 data missing according to my records.

NAME OF PREPARER: Vicky Sarner
DATE PREPARED: August 2, 1993

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 4008
State Code: 27
SHRP Section ID: 4040
Effective Date: 11/91

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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: March 28, 1994

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 4008
State Code: 27
SHRP Section ID: 4040
Effective Date: 11/91

Highway Rt No: US 2

Milepost No: 172.21

Location: Deer River, 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:

Missing Data: 2/22/93 thru 3/18/93.

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

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

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State Code: 27
SHRP Section ID: 4040
Effective Date: 11/91

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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 18, 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 [4008]

STATE CODE [27]

SHRP SECTION ID [4040]

LOCATION US 2 Deer River 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>9107-1310</u>
Interface			
Modem	<u>V32 9600</u>	<u>Multi-Tech</u>	<u>2062329</u>
Loop Amplifiers			
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)	<u>BENDING PLATE</u>	<u>IRD</u>	
Sensor Next Adjacent Lane (3)			
Diagonal Sensor			
Offscale Sensor			
Right Platform			
Left Platform			
Other _____			
Software			
Complete Package	<u>7.2</u>	<u>IRD</u>	
Axle Spacing Algorithm Only			
Other _____			
Loops			
Upstream - Lane 1	<u>Microsense</u>		
Downstream - Lane 1			
Upstream - Other Lanes			
Downstream - Other Lanes	<u>↓</u>		

SHEET 15
LTPP TRAFFIC DATA

EQUIPMENT INSTALLATION LOG

STATE ASSIGNED ID [4008]

STATE CODE [27]

SHRP SECTION ID [4040]

LOCATION US 2 Deer River MN

DATE OF INSTALLATION November, 1991

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	1060	IRD	9107-1310
Interface			
Modem	V32 9600	Multi-Tech	2062329
Loop Amplifiers			
Other _____			
Sensor(s) / Platform(s)			
GPS Lane Sensor	BENDING PLATE	IRD	
Sensor Next Adjacent Lane (1)			
Sensor Next Adjacent Lane (2)	BENDING PLATE	IRD	
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	Microsense		
Downstream - Lane 1			
Upstream - Other Lanes			
Downstream - Other Lanes	↓		

**SHEET 15
LTPP TRAFFIC DATA**

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Control Unit	<u>1060</u>	<u>IRD</u>	<u>9107-1310</u>
Interface			
Modem	<u>V32 9600</u>	<u>Multi-Tech</u>	<u>2062329</u>
Loop Amplifiers			
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)	<u>BENDING PLATE</u>	<u>IRD</u>	
Sensor Next Adjacent Lane (3)			
Diagonal Sensor			
Offscale Sensor			
Right Platform			
Left Platform			
Other _____			
Software			
Complete Package	<u>7.2</u>	<u>IRD</u>	
Axle Spacing Algorithm Only			
Other _____			
Loops			
Upstream - Lane 1	<u>Microsense</u>		
Downstream - Lane 1			
Upstream - Other Lanes			
Downstream - Other Lanes	<u>J</u>		

SHEET 15
LTPP TRAFFIC DATA

EQUIPMENT INSTALLATION LOG

STATE ASSIGNED ID [4008]

STATE CODE [27]

SHRP SECTION ID [4040]

LOCATION Deer River, Mn, US-2 DATE OF INSTALLATION November, 1991

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	1060	IRD	9107-1310
Interface			
Modem	V32, 9600 bps	Mult-Tech	206 2329
Loop Amplifiers		Microsense	
Other _____			
Sensor(s) / Platform(s)			
GPS Lane Sensor	Bending Plate	IRD	
Sensor Next Adjacent Lane (1)			
Sensor Next Adjacent Lane (2)	Bending Plate	IRD	
Sensor Next Adjacent Lane (3)			
Diagonal Sensor			
Offscale Sensor			
Right Platform			
Left Platform			
Other _____			
Software			
Complete Package	7.3.5	IRD	
Axle Spacing Algorithm Only			
Other _____			
Loops			
Upstream - Lane 1	Microsense		
Downstream - Lane 1			
Upstream - Other Lanes			
Downstream - Other Lanes			

SHEET 15
LTPP TRAFFIC DATA

EQUIPMENT INSTALLATION LOG

STATE ASSIGNED ID [4008]

STATE CODE [27]

SHRP SECTION ID [4040]

LOCATION US 2 Deer River 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>9107-1310</u>
Interface			
Modem	<u>V32 9600</u>	<u>Multi-Tech</u>	<u>2062329</u>
Loop Amplifiers			
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)	<u>BENDING PLATE</u>	<u>IRD</u>	
Sensor Next Adjacent Lane (3)			
Diagonal Sensor			
Offscale Sensor			
Right Platform			
Left Platform			
Other _____			
Software			
Complete Package	<u>7.2</u>	<u>IRD</u>	
Axle Spacing Algorithm Only			
Other _____			
Loops			
Upstream - Lane 1	<u>MICROSENSE</u>		
Downstream - Lane 1			
Upstream - Other Lanes			
Downstream - Other Lanes			

SHEET 15
LTPP TRAFFIC DATA

EQUIPMENT INSTALLATION LOG

STATE ASSIGNED ID [4008]

STATE CODE [27]

SHRP SECTION ID [4040]

LOCATION US 2 Deer River MN

DATE OF INSTALLATION November, 1991

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	1060	IRD	9107-1310
Interface			
Modem	V32 9600	Multi-Tech	2062329
Loop Amplifiers			
Other _____			
Sensor(s) / Platform(s)			
GPS Lane Sensor	BENDING PLATE	IRD	
Sensor Next Adjacent Lane (1)			
Sensor Next Adjacent Lane (2)	BENDING PLATE	IRD	
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	MICROSENSE		
Downstream - Lane 1			
Upstream - Other Lanes			
Downstream - Other Lanes	↓		