

<b>SHEET 10</b> <b>LTPP TRAFFIC DATA</b> <b>TRAFFIC VOLUME AND LOAD</b> <b>ESTIMATE UPDATE - NO SITE COUNT</b>	*STATE ASSIGNED ID [ <u>9003</u> ] *STATE CODE [ <u>27</u> ] *SHRP SECTION ID [ <u>9075</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>2255</u>	<u>265</u>	<u>1125</u>	<u>130</u>	<u>60</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>7-9-92</u>	

Sheet 12  
Traffic Data  
Collection Site

State Assigned ID: 9003  
State Code: 27  
SHRP Section ID: 9075  
Effective Date: 11/90

Highway Rt No:US 71

Milepost No: 103.45

Location: Olivia, Minnesota .4 mi N of CSAH 11 N of Olivia

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: Piezo

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

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

Comments: There is no known missing data.

NAME OF PREPARER: Vicky Sarner  
DATE PREPARED: September 22, 1993

PHONE NO.: 612-296-8526

Sheet 12  
Traffic Data  
Collection Site

State Assigned ID: 9003  
State Code: 27  
SHRP Section ID: 9075  
Effective Date: 11/90

Highway Rt No:US 71

Milepost No: 103.45

Location: Olivia, Minnesota .4 mi N of CSAH 11 N of Olivia

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: Piezo

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

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

Comments: 1/15/92 - 1/22/92 Report generation locked up system.  
1/29/92 - 2/5/92 Report generation locked up system.  
So, there may be some missing data during this time period.

NAME OF PREPARER: Vicky Sarner  
DATE PREPARED: June 14, 1993

PHONE NO.: 612-296-8526

Sheet 12  
Traffic Data  
Collection Site

State Assigned ID: 9003  
State Code: 27  
SHRP Section ID: 9075  
Effective Date: 11/90

**Highway Rt No:**US 71

**Milepost No:** 103.45

**Location:** Olivia, Minnesota .4 mi N of CSAH 11 N of Olivia

**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:** Piezo

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

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

**Comments:** 1/15/92 - 1/22/92 Report generation locked up system.  
1/29/92 - 2/5/92 Report generation locked up system.  
So, there may be some missing data during this time period.

NAME OF PREPARER: Vicky Sarner  
DATE PREPARED: June 14, 1993

PHONE NO.: 612-296-8526

Sheet 12  
Traffic Data  
Collection Site

State Assigned ID: 9003  
State Code: 27  
SHRP Section ID: 9075  
Effective Date: 11/90

**Highway Rt No:**US 71

**Milepost No:** 103.45

**Location:** Olivia, Minnesota .4 mi N of CSAH 11 N of Olivia

**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:** Piezo

**Method of Calibration:** Initial calibration with a loaded 5 axle semi & subsequent calibrations are 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 - 1/11/94  
3/14/94 - 3/16/94

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

PHONE NO.: 612-296-8526

Sheet 12  
Traffic Data  
Collection Site

State Assigned ID: 9003  
State Code: 27  
SHRP Section ID: 9075  
Effective Date: 11/90

**Highway Rt No:**US 71

**Milepost No:** 103.45

**Location:** Olivia, Minnesota .4 mi N of CSAH 11 N of Olivia

**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:** Piezo

**Method of Calibration:** Initial calibration with a loaded 5 axle semi & subsequent calibrations are 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: 9003  
State Code: 27  
SHRP Section ID: 9075  
Effective Date: 11/90

**Highway Rt No:**US 71

**Milepost No:** 103.45

**Location:** Olivia, Minnesota .4 mi N of CSAH 11 N of Olivia

**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:** Piezo

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

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

**Comments:** Data is missing from the following time periods:  
9/12/94 - 9/28/94

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

PHONE NO.: 612-296-8526

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Sheet 12  
Traffic Data  
Collection Site

State Assigned ID: 9003  
State Code: 27  
SHRP Section ID: 9075  
Effective Date: 11/90

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**Highway Rt No:** US 71

**Milepost No:** 103.45

**Location:** Olivia, Minnesota .4 mi N of CSAH 11 N of Olivia

**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:** Piezo

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

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NAME OF PREPARER: Jim Muske    PHONE NO.: 612-296-1655  
DATE PREPARED: June 26, 1996

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Sheet 12  
Traffic Data  
Collection Site

State Assigned ID: 9003  
State Code: 27  
SHRP Section ID: 9075  
Effective Date: 11/90

**Highway Rt No:** US 71

**Milepost No:** 103.45

**Location:** Olivia, Minnesota .4 mi N of CSAH 11 N of Olivia

**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:** Piezo

**Method of Calibration:** Initial calibration with a loaded 5 axle semi & subsequent calibrations are 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 11/20/93

12/20/93 thru 12/31/93

**NAME OF PREPARER:** Vicky Sarner  
**DATE PREPARED:** September 22, 1993

**PHONE NO.:** 612-296-8526

Sheet 12  
Traffic Data  
Collection Site

State Assigned ID: 9003  
State Code: 27  
SHRP Section ID: 9075  
Effective Date: 11/90

**Highway Rt No:**US 71

**Milepost No:** 103.45

**Location:** Olivia, Minnesota .4 mi N of CSAH 11 N of Olivia

**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:** Piezo

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

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

**Comments:** There is no known missing data.

NAME OF PREPARER: Vicky Sarner  
DATE PREPARED: September 22, 1993

PHONE NO.: 612-296-8526

Sheet 12  
Traffic Data  
Collection Site

State Assigned ID: 9003  
State Code: 27  
SHRP Section ID: 9075  
Effective Date: 11/90

Highway Rt No: US 71

Milepost No: 103.45

Location: Olivia, Minnesota .4 mi N of CSAH 11 N of Olivia

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: Piezo

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

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

Comments: Data is missing from the following time periods:  
6/21/94 - 7/25/94

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 [ 9003 ]

STATE CODE [ 27 ]

SHRP SECTION ID [ 9075 ]

LOCATION TH - 71 Olivia, MN

DATE OF INSTALLATION November 1990

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	Dell 286	IRD	9008-0635
Interface		IRD	
Modem	V32 9600	Multitech	2037660
Loop Amplifiers		Microsense	
Other _____			
Sensor(s) / Platform(s)			
GPS Lane Sensor	Piezo	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 [ 9003 ]

STATE CODE [ 27 ]

SHRP SECTION ID [ 9075 ]

LOCATION TH - 71 Olivia, MN

DATE OF INSTALLATION November 1990

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	DeIT 286	IRD	9008-0635
Interface		IRD	
Modem	V32 9600	Multitech	2037660
Loop Amplifiers		Microsense	
Other _____			
Sensor(s) / Platform(s)			
GPS Lane Sensor	Piezo	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	7.3.5	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 [9003]

STATE CODE [27]

SHRP SECTION ID [9075]

LOCATION TH 71, Oliver, Mn

DATE OF INSTALLATION November 1990

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit		IRD	
Interface		IRD	
Modem	MT 932	Multitech	2035737
Loop Amplifiers		Microsense	
Other _____			
Sensor(s) / Platform(s)			
GPS Lane Sensor	Picco	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 [ 9003 ]

STATE CODE [ 27 ]

SHRP SECTION ID [ 9075 ]

LOCATION TH - 71 Olivia, MN

DATE OF INSTALLATION November 1990

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	Dell 286	IRD	9008-0635
Interface		IRD	
Modem	V32 9600	Multitech	2037660
Loop Amplifiers		Microsense	
Other _____			
Sensor(s) / Platform(s)			
GPS Lane Sensor	Piezo	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 [ 9003 ]

STATE CODE [ 27 ]

SHRP SECTION ID [ 9075 ]

LOCATION TH - 71 Olivia, MN

DATE OF INSTALLATION November 1990

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	DeIT 286	IRD	9008-0635
Interface		IRD	
Modem	V32 9600	Multitech	2037660
Loop Amplifiers		Microsense	
Other _____			
Sensor(s) / Platform(s)			
GPS Lane Sensor	Piezo	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 [ 9003 ]

STATE CODE [ 27 ]

SHRP SECTION ID [ 9075 ]

LOCATION TH - 71 Olivia, MN

DATE OF INSTALLATION November 1990

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	DeIT 286	IRD	9008-0635
Interface		IRD	
Modem	V32 9600	Multitech	2037660
Loop Amplifiers		Microsense	
Other _____			
Sensor(s) / Platform(s)			
GPS Lane Sensor	Piezo	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	7.3.5	IRD	
Axle Spacing Algorithm Only			
Other _____			
Loops			
Upstream - Lane 1			
Downstream - Lane 1			
Upstream - Other Lanes			
Downstream - Other Lanes			