

**SHEET 10**  
**LTPP TRAFFIC DATA**  
**TRAFFIC VOLUME AND LOAD**  
**ESTIMATE UPDATE - NO SITE COUNT**

\*STATE ASSIGNED ID [ 3003 ]  
 \*STATE CODE [ 27 ]  
 \*SHRP SECTION ID [ 3003 ]

**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>3105</u>	<u>290</u>	<u>1550</u>	<u>145</u>	<u>70</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 Curtis Dahlin PHONE # (612) 296-6846  
 DATE PREPARED 7-8-92

Sheet 12  
Traffic Data  
Collection Site

State Assigned ID: 3003  
State Code: 27  
SHRP Section ID: 3003  
Effective Date: 10/90

Highway Rt No: State Hwy 15    Milepost No: 64.61

Location: New, Ulm, 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:**

1/1/92 - 1/25/92 site was down. A new interface card was installed on 1/25/92.

On 3/27/92 it was discovered that classes 1, 2 and 3 were being filtered out since the new interface card was installed. So, from 1/25/92 until 3/25/92 these classes had been filtered out. Files will approximately double in size from this date forward.

9/30/92 Missing data.

10/5/92 Missing data modem 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: 3003  
State Code: 27  
SHRP Section ID: 3003  
Effective Date: 10/90

Highway Rt No: State Hwy 15

Milepost No: 64.61

Location: New Ulm, 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:**

Missing data: 3/4/93, 6/24/93 - 7/8/93, 7/27/93

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

PHONE NO.: 612-296-8526

Sheet 12  
Traffic Data  
Collection Site

State Assigned ID: 3003  
State Code: 27  
SHRP Section ID: 3003  
Effective Date: 10/90

**Highway Rt No:** State Hwy 15    **Milepost No:** 64.61

**Location:** New, Ulm, 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 is missing from the following time period:  
3/16/94 - 3/19/94  
4/3/94

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

PHONE NO.: 612-296-8526

Sheet 12  
Traffic Data  
Collection Site

State Assigned ID: 3003  
State Code: 27  
SHRP Section ID: 3003  
Effective Date: 10/90

**Highway Rt No:** State Hwy 15    **Milepost No:** 64.61

**Location:** New Ulm, 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: 3003  
State Code: 27  
SHRP Section ID: 3003  
Effective Date: 10/90

**Highway Rt No:** State Hwy 15    **Milepost No:** 64.61

**Location:** New, Ulm, 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:**

1/1/92 - 1/25/92 site was down. A new interface card was installed on 1/25/92.

On 3/27/92 it was discovered that classes 1,2 and 3 were being filtered out since the new interface card was installed. So, from 1/25/92 until 3/25/92 these classes had been filtered out. Files will approximatley double in size from this date forward.

9/30/92 Missing data.

10/5/92 Missing data modem 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: 3003  
State Code: 27  
SHRP Section ID: 3003  
Effective Date: 10/90

**Highway Rt No:** State Hwy 15    **Milepost No:** 64.61

**Location:** New, Ulm, 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 for this time period.

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

PHONE NO.: 612-296-8526

---

Sheet 12	State Assigned ID: 3003
Traffic Data	State Code: 27
Collection Site	SHRP Section ID: 3003
	Effective Date: 10/90

---

**Highway Rt No:** State Hwy 15    **Milepost No:** 64.61

**Location:** New, Ulm, 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. Data missing 5/11/95 - 5/14/95 and 8/16/95 - 8/31/95

---

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

---



Sheet 12  
Traffic Data  
Collection Site

State Assigned ID: 3003  
State Code: 27  
SHRP Section ID: 3003  
Effective Date: 10/90

**Highway Rt No:** State Hwy 15    **Milepost No:** 64.61

**Location:** New, Ulm, 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 is missing from the following time period:  
8/12/93 thru 9/12/93  
10/1/93 thru 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: 3003  
State Code: 27  
SHRP Section ID: 3003  
Effective Date: 10/90

**Highway Rt No:** State Hwy 15

**Milepost No:** 64.61

**Location:** New Ulm, 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:**

Missing data: 3/4/93, 6/24/93 - 7/8/93, 7/27/93

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

PHONE NO.: 612-296-8526

Sheet 12  
Traffic Data  
Collection Site

State Assigned ID: 3003  
State Code: 27  
SHRP Section ID: 3003  
Effective Date: 10/90

**Highway Rt No:** State Hwy 15    **Milepost No:** 64.61

**Location:** New, Ulm, 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 for this time period.

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 [ 3003 ]

STATE CODE [ 27 ]

SHRP SECTION ID [ 3003 ]

LOCATION ST 15, New Ulm, MN

DATE OF INSTALLATION October, 1990

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	1060	IRD	
Interface			
Modem	V32 9600	Multi TECH	2035737
Loop Amplifiers		MICROSENSE	
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 [3003]

STATE CODE [27]

SHRP SECTION ID [3003]

LOCATION ST 15, New Ulm, MN

DATE OF INSTALLATION October, 1990

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	1060	IRD	
Interface			
Modem	V32 9600	Multi TECH	2035737
Loop Amplifiers		MICROSENSE	
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 [ 3003 ]

STATE CODE [ 27 ]

SHRP SECTION ID [ 3003 ]

LOCATION At 15, New Ulm, Mn DATE OF INSTALLATION \_\_\_\_\_

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	1060	IRD	9303-2146
Interface			
Modem	V32 9600	Multi-Tech	<del>2035137</del> 2029613
Loop Amplifiers		Microsense	
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	7.3.7	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 [3003]

STATE CODE [27]

SHRP SECTION ID [3003]

LOCATION ST 15, New Ulm, MN

DATE OF INSTALLATION October, 1990

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	1060	IRD	
Interface			
Modem	V32 9600	Multi TECH	2035737
Loop Amplifiers		MICROSENSE	
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 [3003]

STATE CODE [27]

SHRP SECTION ID [3003]

LOCATION ST 15, New Ulm, MN

DATE OF INSTALLATION October, 1990

	TYPE	BRAND NAME	SERIAL NUMBER
Control Unit(s) and peripheral equipment			
Control Unit	1060	IRD	9303-2146
Interface			
Modem	V32 9600	Multi TECH	2035737
Loop Amplifiers		MICROSENSE	
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 [ 3003 ]

STATE CODE [ 27 ]

SHRP SECTION ID [ 3003 ]

LOCATION ST 15, New Ulm, 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>	
Interface			
Modem	<u>V32 9600</u>	<u>MULTI TECH</u>	<u>2035737</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)			
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			