

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

*STATE ASSIGNED ID [4022]
 *STATE CODE [27]
 *SHRP SECTION ID [4050]

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>2400</u> | <u>270</u> | <u>1075</u> | <u>120</u> | <u>51</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.

ENTERED APR 08 2003

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

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 4022
State Code: 27
SHRP Section ID: 4050
Effective Date: 11/91

Highway Rt No: US 2 Milepost No: 45.82

Location: Marcoux, 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~~
2/1/94 - 2/28/94
4/3/94 - 4/4/94

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

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 4022
State Code: 27
SHRP Section ID: 1050
Effective Date: 11/91

Highway Rt No: US 2 **Milepost No:** 45.82

Location: Marcoux, 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 1/26/95, and 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: 4022
State Code: 27
SHRP Section ID: 1050
Effective Date: 11/91

Highway Rt No: US 2 **Milepost No:** 45.82

Location: Marcoux, 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: 1/1/93 thru 4/4/93.

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

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 4022
State Code: 27
SHRP Section ID: 1050
Effective Date: 11/91

Highway Rt No: US 2 **Milepost No:** 45.82

Location: Marcoux, 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:
9/1/94 - 9/13/94

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

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 4022
State Code: 27
SHRP Section ID: 1050
Effective Date: 11/91

Highway Rt No: US 2 **Milepost No:** 45.82

Location: Marcoux, 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 Sarner
DATE PREPARED: December 16, 1993

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 4022
State Code: 27
SHRP Section ID: 1050
Effective Date: 11/91

Highway Rt No: US 2 Milepost No: 45.82

Location: Marcoux, 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: 1/1/93 thru 4/4/93.

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

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 4022
State Code: 27
SHRP Section ID: 1050
Effective Date: 11/91

Highway Rt No: US 2 Milepost No: 45.82

Location: Marcoux, 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 9/1/95 - 12/31/95. Missing data from 10/15/95 - 11-6-95.

NAME OF PREPARER: Jim Muske PHONE NO.: 612-296-1665
DATE PREPARED: September 16, 1996

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 4022
State Code: 27
SHRP Section ID: 4050
Effective Date: 11/91

Highway Rt No: US 2 Milepost No: 45.82

Location: Marcoux, 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:
5/16/94, 5/28/94, 5/31/94, 6/1/94, 6/5/94, 6/6/94
7/20/94 - 8/31/94

NAME OF PREPARER: Vicky Sarner
DATE PREPARED: October 18, 1994

PHONE NO.: 612-296-8526

Sheet 12
Traffic Data
Collection Site

State Assigned ID: 4022
State Code: 27
SHRP Section ID: 1050
Effective Date: 11/91

Highway Rt No: US 2

Milepost No: 45.82

Location: Marcoux, 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 from:
3/16/92 - 5/4/92
8/20/92 - 10/10/92
12/21/92 - 1/1/93

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

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 [4022]

STATE CODE [27]

SHRP SECTION ID [4050]

LOCATION US 2 Marcoux, MN

DATE OF INSTALLATION November 1991

| | TYPE | BRAND NAME | SERIAL NUMBER |
|--|---------------|------------|---------------|
| Control Unit(s) and peripheral equipment | | | |
| Control Unit | 1060 | IRD | |
| Interface | | | |
| Modem | V32 9600 | Multi tech | 206 2331 |
| 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 [4022]

STATE CODE [27]

SHRP SECTION ID [4050]

LOCATION US 2 Marcoux, MN

DATE OF INSTALLATION November 1991

| | TYPE | BRAND NAME | SERIAL NUMBER |
|--|---------------|------------|---------------|
| Control Unit(s) and peripheral equipment | | | |
| Control Unit | 1060 | IRD | |
| Interface | | | |
| Modem | V32 9600 | Multitech | 206 2331 |
| 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 14

*STATE ASSIGNED ID [4022]

*STATE CODE [27]

*SHRP SECTION ID [1050]

LOCATION Marcony TYPE EQUIP. WIND BP

MP # 45 MODEL # 720[illegible]

SHEET 15
LTPP TRAFFIC DATA

EQUIPMENT INSTALLATION LOG

STATE ASSIGNED ID [4022]

STATE CODE [27]

SHRP SECTION ID [4050]

LOCATION Marcoux, Mn US-2

DATE OF INSTALLATION November 1991

| | TYPE | BRAND NAME | SERIAL NUMBER |
|--|---------------|-------------|-----------------------------|
| Control Unit(s) and peripheral equipment | | | |
| Control Unit | 1060 | FRD | 9088-0619 |
| Interface | | | |
| Modem | V32 9600 bps | Multi-Tech | 2062551 300 9997 |
| Loop Amplifiers | | Micro Sense | |
| Other _____ | | | |
| Sensor(s) / Platform(s) | | | |
| GPS Lane Sensor | Bending Plate | FRD | |
| Sensor Next Adjacent Lane (1) | 11 | | |
| 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 | FRD | |
| 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 [4022]

STATE CODE [27]

SHRP SECTION ID [4050]

LOCATION US 2 Marcoux, MN

DATE OF INSTALLATION November 1991

| | TYPE | BRAND NAME | SERIAL NUMBER |
|--|---------------|-------------|---------------|
| Control Unit(s) and peripheral equipment | | | |
| Control Unit | 1060 | IRD | |
| Interface | | | |
| Modem | V32 9600 | Multi tech | 206 2331 |
| Loop Amplifiers | | MICROSENS E | |
| 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 [4022]

STATE CODE [27]

SHRP SECTION ID [4050]

LOCATION US 2 Marcoux, MN

DATE OF INSTALLATION November 1991

| | TYPE | BRAND NAME | SERIAL NUMBER |
|--|---------------|------------|---------------|
| Control Unit(s) and peripheral equipment | | | |
| Control Unit | 1060 | IRD | 9008-0619 |
| Interface | | | |
| Modem | V32 9600 | Multi tech | 206 2331 |
| 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 [4022]

STATE CODE [27]

SHRP SECTION ID [4050]

LOCATION US 2 Marcoux, MN

DATE OF INSTALLATION November 1991

| | TYPE | BRAND NAME | SERIAL NUMBER |
|--|---------------|------------|---------------|
| Control Unit(s) and peripheral equipment | | | |
| Control Unit | 1060 | IRD | |
| Interface | | | |
| Modem | V32 9600 | Multi tech | 206 2331 |
| 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 | | | |