

<p align="center">SHEET 1</p> <p align="center">LTPP TRAFFIC DATA</p> <p align="center">SUMMARY TRANSMITTAL FORM</p>	*STATE ASSIGNED ID [ <u>  2  </u> ]
	*STATE CODE [ <u>19</u> ]
	*SHRP SECTION ID [ <u>3033</u> ]

STATE OR PROVINCE IOWA COUNTY JOHNSON

HIGHWAY ROUTE NO. USH 218 MILEPOST# 86

NEAREST CITY/TOWN 6 miles south OF IOWA CITY NEAREST INTERSECTION 10 miles south OF IH 80

FUNCTIONAL CLASS 02 NO. LANES EACH DIRECTION 2 TOTAL NO. LANES 4

DIRECTION OF TRAVEL GPS LANE NORTH DATE OPENED TO TRAF. 10-84 83 **IDS 4**

FIPS COUNTY CODE 103 FHWA STATION IDENTIFICATION NO. \_\_\_\_\_

HPMS SAMPLE NO. \_\_\_\_\_ HPMS SUBDIVISION NO. \_\_\_\_\_

TYPE OF PAVEMENT: AC \_\_\_\_\_ PCC X OTHER \_\_\_\_\_

CONTROL OF ACCESS: YES X NO \_\_\_\_\_ MEDIAN: YES X NO \_\_\_\_\_

CURRENT SURROUNDING DEVELOPMENT:  
 URBAN \_\_\_\_\_ SUBURBAN \_\_\_\_\_ RURAL X

HAS INTENSITY OF ROADSIDE DEVELOPMENT INCREASED OVER PAST 10 YEARS?  
 YES \_\_\_\_\_ NO X  
 IF YES, DESCRIBE CHANGES \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**NOTE: ATTACH ALL RELATED FORMS AND COUNT DATA AND SUBMIT TO THE SHRP REGIONAL OFFICE. ATTACH MAP INDICATING THE LOCATION OF EACH TRAFFIC COUNT, VEHICLE CLASSIFICATION COUNT, OR WEIGHT STATION RELATIVE TO THIS GPS TEST SECTION.**

NAME OF PREPARER <u>EARL SCHEUERMANN</u>	PHONE # <u>515-239-1153</u>
DATE PREPARED <u>11-25-91</u>	

SHEET 2 LTPP TRAFFIC DATA TRAFFIC VOLUMES AND LOAD ESTIMATES	*STATE ASSIGNED ID [1A54] *STATE CODE [19] *SHRP SECTION ID [3033]
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YEAR	1. ESTIMATED TOTAL VEHICLES AADT (TWO-WAY)	2. ESTIMATED TOTAL TRUCK AADT (TWO-WAY)	3. ESTIMATED TOTAL VEHICLES AADT GPS LANE	4. ESTIMATED TOTAL TRUCKS AADT GPS LANE	5. ESTIMATED ESAL'S/YR GPS LANE (1000's)
1989	6470	886	2754	368	164
1988	6250	856	2660	356	159*
1987	6091	803	2593	334	146*
1986	5841	770	2486	320	140
1985	5656	673	2407	280	118**
1984	4410	525	1877	218	92**
1983					
1982					
1981					
1980					
1979					
1978					
1977					
1976					
1975					
1974					
1973					
1972					
1971					
1970					
1969					
1968					
1967					
1966					
1965					

Forwarded  
1-10-92  
226-92

\* ESTIMATED BASED ON 1986 COUNT.  
 \*\* ESTIMATED ON Model ASSIGNMENT

Red figures  
estimated  
based upon  
previous  
years  
data.  
6-8-92

NAME OF PREPARER	EARL SCHEUERMANN	PHONE #	515-239-1153
DATE PREPARED	11-25-91		

<p>SHEET 2</p> <p><b>LTPP TRAFFIC DATA</b></p> <p><b>TRAFFIC VOLUMES AND LOAD ESTIMATES</b></p>	<p>*STATE ASSIGNED ID [IA54]</p> <p>*STATE CODE [19]</p> <p>*SHRP SECTION ID [3033]</p>
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YEAR	1. ESTIMATED TOTAL VEHICLES AADT (TWO-WAY)	2. ESTIMATED TOTAL TRUCK AADT (TWO-WAY)	3. ESTIMATED TOTAL VEHICLES AADT GPS LANE	4. ESTIMATED TOTAL TRUCKS AADT GPS LANE	5. ESTIMATED ESAL'S/YR GPS LANE (1000's)
1989					
1988	6250	856	2660	356	159*
1987					146*
1986	5841	770	2486	320	140
1985					118**
1984	4410	525	1877	218	92**
1983					
1982					
1981					
1980					
1979					
1978					
1977					
1976					
1975					
1974					
1973					
1972					
1971					
1970					
1969					
1968					
1967					
1966					
1965					

\* ESTIMATED BASED ON 1986 COUNT.

\*\* ESTIMATED ON MODEL ASSIGNMENT

NAME OF PREPARER <u>EARL SCHEUERMANN</u>	PHONE # <u>515-239-1153</u>
DATE PREPARED <u>11-25-91</u>	

<b>SHEET 2</b> <b>LTPP TRAFFIC DATA</b> <b>TRAFFIC VOLUMES</b> <b>AND LOAD ESTIMATES</b>	*STATE ASSIGNED ID <u>[1A54]</u> *STATE CODE <u>[19]</u> *SHRP SECTION ID <u>[3033]</u>
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YEAR	1. ESTIMATED TOTAL VEHICLES AADT (TWO-WAY)	2. ESTIMATED TOTAL TRUCK AADT (TWO-WAY)	3. ESTIMATED TOTAL VEHICLES AADT GPS LANE	4. ESTIMATED TOTAL TRUCKS AADT GPS LANE	5. ESTIMATED ESAL'S / YR GPS LANE (1000's)
1989	<u>6470</u>	<u>886</u>	<u>2754</u>	<u>368</u>	<u>164</u>
1988					
1987					
1986					
1985					
1984					
1983					
1982					
1981					
1980					
1979					
1978					
1977					
1976					
1975					
1974					
1973					
1972					
1971					
1970					
1969					
1968					
1967					
1966					
1965					

*Submission on sheet 2+3  
for 1989 was forwarded  
to you Jan. 10, 1992  
on sheet 10.*

NAME OF PREPARER <u>EARL SCHEYERMAN</u>	PHONE # <u>515-239-1153</u>
DATE PREPARED <u>2-26-92</u>	

2

<p>SHEET <u>10</u></p> <p><b>LTPP TRAFFIC DATA</b></p> <p><b>TRAFFIC VOLUME AND LOAD</b></p> <p><b>ESTIMATE UPDATE - NO SITE COUNT</b></p>	<p>*STATE ASSIGNED ID [<u>IA54</u>]</p> <p>*STATE CODE [<u>19</u>]</p> <p>*SHRP SECTION ID [<u>3033</u>]</p>
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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>1989</u>	<u>6470</u>	<u>886</u>	<u>2754</u>	<u>368</u>	<u>164</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 \_\_\_\_\_

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 GROWTH FACTORED  
LAST YEARS ESTIMATE

4. METHOD FOR ESTIMATING TOTAL VEHICLES GPS LANE AADT

- ☒ System distribution factors.
- ☐ Other \_\_\_\_\_

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

- ☒ System distribution factors.
- ☐ Other \_\_\_\_\_

6. METHOD FOR ESTIMATING ESAL/YEAR IN GPS LANE

- ☐ ESAL/Truck factor.
- ☐ ESAL/vehicle class factors -  
Number of classes
- ☒ Other GROWTH FACTORED  
LAST YEARS ESTIMATE

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 GROWTH FACTORED  
LAST YEARS ESTIMATE

8. WEIGHT SCALE TYPE

- ☐ WIM Scale.
- ☐ Static scale used for enforcement.
- ☐ Static scale not used for enforcement.
- ☒ Other Static scales used  
FOR ENFORCEMENT AND  
PORTABLE SCALES

NAME OF PREPARER <u>EARL SCHEYERMAN</u>	PHONE # <u>515-239-1153</u>
DATE PREPARED <u>1-9-92</u>	

SHEET 2 LTPP TRAFFIC DATA TRAFFIC VOLUMES AND LOAD ESTIMATES	*STATE ASSIGNED ID [1A54]
	*STATE CODE [19]
	*SHRP SECTION ID [3033]

YEAR	1. ESTIMATED TOTAL VEHICLES AADT (TWO-WAY)	2. ESTIMATED TOTAL TRUCK AADT (TWO-WAY)	3. ESTIMATED TOTAL VEHICLES AADT GPS LANE #10	4. ESTIMATED TOTAL TRUCKS AADT GPS LANE	5. ESTIMATED ESALS/YR GPS LANE (1000's)
1989	6470	886	2754	368	164
1988	6250	856	2660	356	159*
1987	6091	803	2593	334	146*
1986	5841	770	2486	320	140
1985	5656	673	2407	280	118**
1984	4410	525	1877	218	92**
1983	4248	505	1808	210	NA
1982					
1981					
1980					
1979					
1978					
1977					
1976					
1975					
1974					
1973					
1972					
1971					
1970					
1969					
1968					
1967					
1966					
1965					

*Forwarded*  
*1-10-92*  
*8226*

\* ESTIMATED BASED ON 1986 COUNT.  
 \*\* ESTIMATED ON Model ASSIGNMENT

*Red figure*  
*estimates*  
*based upon*  
*previous*  
*years*  
*data.*  
*6-7-92*

NAME OF PREPARER	EARL SCHEUERMANN	PHONE #	515-239-1153
DATE PREPARED	11-25-91		

*John A. ... 2/10/92 05234-1526*

## SHEET 3

# LTPP TRAFFIC DATA PROCEDURES FOR ESTIMATING ANNUAL AVERAGE VOLUMES AND TOTAL ANNUAL ESALS

\*STATE ASSIGNED ID [1054]  
 \*STATE CODE [19]  
 \*SHRP SECTION ID [3033]

1. Year (s) Applicable 1984

## 2. METHOD FOR ESTIMATING AADT

- ☐ Factored a single count taken this year at the GPS site.  
☐ Averaged multiple counts taken this year at the GPS site.  
☐ Averaged and factored multiple counts taken this year at the GPS site.  
☐ Growth factored last year's estimate.  
☐ Estimated based on volume counts at nearby locations.  
☐ Used flow maps.  
☐ Used computerized network analyses.  
☒ Other: ESTIMATE MADE ON MODEL ASSIGNMENT

## 3. METHOD FOR ESTIMATING TRUCK VOLUMES OR PERCENTAGES

- ☐ Used a single count taken this year at the GPS site.  
☐ Factored a single count taken this year at the GPS site.  
☐ Averaged multiple counts taken this year at the GPS site.  
☐ Used system averages from counts taken this year.  
☐ Used count data from nearby sites.  
☐ Used count data taken in earlier years at the GPS site.  
☐ Used system averages taken in earlier years at the GPS site.  
☐ Used computerized network analyses.  
☒ Other: ESTIMATE MADE ON MODEL ASSIGNMENT

## 4. METHOD FOR ESTIMATING AADT BY GPS LANE

- ☐ Based on actual lane count data.  
☒ System distribution factors.  
☐ Other: \_\_\_\_\_

## 5. METHOD FOR ESTIMATING TRUCK AADT IN GPS LANES

- ☐ Based on actual lane count data.  
☒ System distribution factors.  
☐ Other: \_\_\_\_\_

## 6. METHOD FOR ESTIMATING ESAL/VEHICLE

- ☐ ESAL/Truck.  
☒ ESAL/Vehicle class. (no. of classes) 11  
☐ Other: \_\_\_\_\_

## 7. ESAL ESTIMATES

### (A) Source of Data

- ☐ Weight data collected at GPS site this year.  
☐ Weight data collected at GPS site prior years.  
☐ Weight data from system averages this year.  
☐ Weight data from system averages prior years.  
☐ Weight data from historic W-4 Tables used.  
☒ Other: ESTIMATE MADE ON SYSTEM AVERAGES APPLIED TO MODEL ASSIGNMENT

### (B) Weight Scale Type

- ☐ WIM scale.  
☐ Static scale used for enforcement.  
☐ Static scale not used for enforcement.  
☒ Other: STATIC SCALES USED FOR ENFORCEMENT AND PORTABLE SCALES

NAME OF PREPARER EARL SCHEUERMAN PHONE # 515-239-1153  
 DATE PREPARED 2-26-92

## SHEET 3

# LTPP TRAFFIC DATA PROCEDURES FOR ESTIMATING ANNUAL AVERAGE VOLUMES AND TOTAL ANNUAL ESALS

\*STATE ASSIGNED ID [DA54]

\*STATE CODE [19]

\*SHRP SECTION ID [3033]

1. Year (s) Applicable 1985

## 2. METHOD FOR ESTIMATING AADT

- ☐ Factored a single count taken this year at the GPS site.
- ☐ Averaged multiple counts taken this year at the GPS site.
- ☐ Averaged and factored multiple counts taken this year at the GPS site.
- ☒ Growth factored last year's estimate.
- ☐ Estimated based on volume counts at nearby locations.
- ☐ Used flow maps.
- ☐ Used computerized network analyses.
- ☐ Other: \_\_\_\_\_

## 3. METHOD FOR ESTIMATING TRUCK VOLUMES OR PERCENTAGES

- ☐ Used a single count taken this year at the GPS site.
- ☐ Factored a single count taken this year at the GPS site.
- ☐ Averaged multiple counts taken this year at the GPS site.
- ☐ Used system averages from counts taken this year.
- ☐ Used count data from nearby sites.
- ☐ Used count data taken in earlier years at the GPS site.
- ☐ Used system averages taken in earlier years at the GPS site.
- ☐ Used computerized network analyses.
- ☒ Other: Growth Factored last years estimate

## 4. METHOD FOR ESTIMATING AADT BY GPS LANE

- ☐ Based on actual lane count data.
- ☒ System distribution factors.
- ☐ Other: \_\_\_\_\_

## 5. METHOD FOR ESTIMATING TRUCK AADT IN GPS LANES

- ☐ Based on actual lane count data.
- ☒ System distribution factors.
- ☐ Other: \_\_\_\_\_

## 6. METHOD FOR ESTIMATING ESAL/VEHICLE

- ☐ ESAL/Truck.
- ☒ ESAL/Vehicle class. (no. of classes) 11
- ☐ Other: \_\_\_\_\_

## 7. ESAL ESTIMATES

## (A) Source of Data

- ☐ Weight data collected at GPS site this year.
- ☐ Weight data collected at GPS site prior years.
- ☐ Weight data from system averages this year.
- ☐ Weight data from system averages prior years.
- ☐ Weight data from historic W-4 Tables used.
- ☒ Other: Growth Factored last years estimate

## (B) Weight Scale Type

- ☐ WIM scale.
- ☐ Static scale used for enforcement.
- ☐ Static scale not used for enforcement.
- ☒ Other: Static Scales used for enforcement and portable scales.

NAME OF PREPARER EARL SCHEUERMAN PHONE # 515-239-1153  
DATE PREPARED 2-26-92

## SHEET 3

# LTPP TRAFFIC DATA PROCEDURES FOR ESTIMATING ANNUAL AVERAGE VOLUMES AND TOTAL ANNUAL ESALS

\*STATE ASSIGNED ID [1654]

\*STATE CODE [19]

\*SHRP SECTION ID [3233]

1. Year Applicable 1986

## 2. METHOD FOR ESTIMATING AADT

- ☒ Factored a single count taken this year at the GPS site.
- ☐ Averaged multiple counts taken this year at the GPS site.
- ☐ Averaged and factored multiple counts taken this year at the GPS site.
- ☐ Growth factored last year's estimate.
- ☐ Estimated based on volume counts at nearby locations.
- ☐ Used flow maps.
- ☐ Used computerized network analyses.
- ☐ Other: \_\_\_\_\_

## 3. METHOD FOR ESTIMATING TRUCK VOLUMES OR PERCENTAGES

- ☒ Used a single count taken this year at the GPS site.
- ☐ Factored a single count taken this year at the GPS site.
- ☐ Averaged multiple counts taken this year at the GPS site.
- ☐ Used system averages from counts taken this year.
- ☐ Used count data from nearby sites.
- ☐ Used count data taken in earlier years at the GPS site.
- ☐ Used system averages taken in earlier years at the GPS site.
- ☐ Used computerized network analyses.
- ☐ Other: \_\_\_\_\_

## 4. METHOD FOR ESTIMATING AADT BY GPS LANE

- ☒ Based on actual lane count data.
- ☐ System distribution factors.
- ☐ Other: \_\_\_\_\_

## 5. METHOD FOR ESTIMATING TRUCK AADT IN GPS LANES

- ☒ Based on actual lane count data.
- ☐ System distribution factors.
- ☐ Other: \_\_\_\_\_

## 6. METHOD FOR ESTIMATING ESAL/VEHICLE

- ☐ ESAL/Truck.
- ☒ ESAL/Vehicle class. (no. of classes) 11
- ☐ Other: \_\_\_\_\_

## 7. ESAL ESTIMATES

## (A) Source of Data

- ☐ Weight data collected at GPS site this year.
- ☐ Weight data collected at GPS site prior years.
- ☐ Weight data from system averages this year.
- ☐ Weight data from system averages prior years.
- ☐ Weight data from historic W-4 Tables used.
- ☒ Other: WEIGHT DATA FROM SYSTEM 3 YEAR AVERAGES

## (B) Weight Scale Type

- ☐ WIM scale.
- ☐ Static scale used for enforcement.
- ☐ Static scale not used for enforcement.
- ☒ Other: STATIC SCALE USED FOR ENFORCEMENT AND PORTABLE SCALES

NAME OF PREPARER EARL SCHEUERMANN PHONE # 515-239-1153

DATE PREPARED 11-25-91

## SHEET 3

**LTPP TRAFFIC DATA  
PROCEDURES FOR ESTIMATING  
ANNUAL AVERAGE VOLUMES AND  
TOTAL ANNUAL ESALS**

\*STATE ASSIGNED ID [IA54]  
\*STATE CODE [19]  
\*SHRP SECTION ID [3033]

1. Year (s) Applicable 1989  
also 1987, 1988

## 2. METHOD FOR ESTIMATING AADT

- ☐ Factored a single count taken this year at the GPS site.  
☐ Averaged multiple counts taken this year at the GPS site.  
☐ Averaged and factored multiple counts taken this year at the GPS site.  
☒ Growth factored last year's estimate.  
☐ Estimated based on volume counts at nearby locations.  
☐ Used flow maps.  
☐ Used computerized network analyses.  
☐ Other: \_\_\_\_\_

## 5. METHOD FOR ESTIMATING TRUCK AADT IN GPS LANES

- ☐ Based on actual lane count data.  
☒ System distribution factors.  
☐ Other: \_\_\_\_\_

## 6. METHOD FOR ESTIMATING ESAL/VEHICLE

- ☐ ESAL/Truck.  
☒ ESAL/Vehicle class. (no. of classes) 11  
☐ Other: \_\_\_\_\_

## 3. METHOD FOR ESTIMATING TRUCK VOLUMES OR PERCENTAGES

- ☐ Used a single count taken this year at the GPS site.  
☐ Factored a single count taken this year at the GPS site.  
☐ Averaged multiple counts taken this year at the GPS site.  
☐ Used system averages from counts taken this year.  
☐ Used count data from nearby sites.  
☐ Used count data taken in earlier years at the GPS site.  
☐ Used system averages taken in earlier years at the GPS site.  
☐ Used computerized network analyses.  
☒ Other: Growth Factored  
Last years estimate

## 7. ESAL ESTIMATES

## (A) Source of Data

- ☐ Weight data collected at GPS site this year.  
☐ Weight data collected at GPS site prior years.  
☐ Weight data from system averages this year.  
☐ Weight data from system averages prior years.  
☐ Weight data from historic W-4 Tables used.  
☒ Other: Growth Factored  
Last years estimate

## (B) Weight Scale Type

- ☐ WIM scale.  
☐ Static scale used for enforcement.  
☐ Static scale not used for enforcement.  
☒ Other: Static scales used for  
enforcement and  
portable scales

## 4. METHOD FOR ESTIMATING AADT BY GPS LANE

- ☐ Based on actual lane count data.  
☒ System distribution factors.  
☐ Other: \_\_\_\_\_

NAME OF PREPARER EARL SCHEUERMAN PHONE # 515-239-1153  
DATE PREPARED 2-26-92

SHEET 4  LTPP TRAFFIC DATA  TRAFFIC VOLUME COUNTS	*STATE ASSIGNED ID <u>FA54</u> *STATE CODE <u>19</u> *SHRP SECTION ID <u>3_033</u>
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 HIGHWAY ROUTE NO. (THIS COUNT) US H 218

 MILEPOST# OR LOCATION (THIS COUNT) 86

 BEGINNING DATE 07-14-86 ENDING DATE 07-14-86

 BEGINNING TIME 7AM - 11AM <sup>AND</sup> ENDING TIME 2PM - 6PM

 COUNT DURATION 8 ☒ HOURS ☐ DAYS ☐ MONTHS

 TYPE OF COUNTER Manual NAME/MODEL # \_\_\_\_\_

 TYPE OF COUNT: TWO-WAY ☒ ONE DIRECTION ONLY \_\_\_\_\_ GPS TEST LANE ONLY \_\_\_\_\_

ITEM	ACTUAL COUNTS	UNITS
1. TOTAL NO. OF VEHICLES (RAW COUNT)	<u>3421</u>	
2. ADJUSTMENT FACTORS (FILL IN AS APPLICABLE):		
A. ADJUSTMENT TO 24-HOUR COUNT	<u>---</u>	
B. AXLE CORRECTION FACTOR	<u>---</u>	
C. DAY OF WEEK FACTOR	<u>---</u>	
D. MONTH FACTOR	<u>---</u>	
E. OTHER FACTOR (_____)	<u>1.707</u>	
3. ANNUAL AVERAGE DAILY TRAFFIC (AADT) (TWO-WAY)	<u>5841</u>	
4. DIRECTIONAL DISTRIBUTION FACTOR	<u>.509</u>	
5. GPS LANE DISTRIBUTION FACTOR	<u>.836</u>	
6. AADT GPS LANE	<u>2486</u>	

FACTOR ADJUST  
 TO 24 HOURS, DOZ  
 AND MONTH.

NOTE: COMPLETE ONE SHEET FOR EACH COUNTING SESSION.

NAME OF PREPARER <u>EARL SCHEYERMAN</u> DATE PREPARED <u>11-25-91</u>	PHONE # <u>515-239-1153</u>
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<p>SHEET 5</p> <p>LTPP TRAFFIC DATA</p> <p>VEHICLE CLASSIFICATION DATA</p> <p>FHWA 13-CLASS SYSTEM</p>	<p>*STATE ASSIGNED ID [EA 51]</p> <p>*STATE CODE [19]</p> <p>*SHRP SECTION ID [3033]</p>
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HIGHWAY RT. NO. (THIS COUNT) US H218 MILEPOST# (THIS COUNT) 86

LOCATION (THIS COUNT) SHPP SITE FUNCTIONAL CLASS 02

BEGINNING DATE 7-14-86 ENDING DATE 7-14-86

BEGINNING TIME 7AM-11AM ENDING TIME 2PM-6PM DURATION (HRS) 8

TYPE OF COUNT: MANUAL X AUTOMATED \_\_\_\_\_ NO. OF LANES COUNTED 2

TYPE OF EQUIP.: AVC PERM. \_\_\_\_\_ AVC PORT. \_\_\_\_\_ WIM PERM. \_\_\_\_\_ WIM PORT. \_\_\_\_\_

EQUIPMENT NAME / MODEL # \_\_\_\_\_

TOTAL NO. OF VEHICLES CLASSIFIED 3421 # TRUCKS 464 % TRUCKS 13.6

NO. OF TRUCKS IN GPS LANE 201 % OF TRUCKS IN GPS LANE 43.3

VEHICLE CLASSIFICATION METHOD: FHWA \_\_\_\_\_ OTHER X # BINS \_\_\_\_\_

NOTE: IF THIS COUNT DOES NOT USE THE FHWA 13-BIN CLASSIFICATION SYSTEM USE SHEET 6. PLEASE DESCRIBE ON AN ATTACHED PAGE THE VEHICLE CLASSIFICATION SYSTEM USED BY THE AGENCY AND COMPLETE SHEET 7 DESCRIBING HOW THE SHA WOULD EXPAND OR COLLAPSE THE USER CLASSIFICATION SYSTEM TO CORRESPOND WITH THE FHWA 13 CLASSES.

VEHICLE CLASSES	TOTAL NUMBER OF VEHICLES TWO-WAY	TOTAL NUMBER OF VEHICLES GPS DIRECTION	TOTAL NUMBER OF VEHICLES GPS LANE
1. FHWA CLASSES 1-3 (Cars, Motorcycles, Vans)	_____	_____	_____
2. FHWA CLASS 4 (Buses)	_____	_____	_____
3. FHWA CLASS 5 (Two Axle, 6-Tire, SU Truck)	_____	_____	_____
4. FHWA CLASS 6 (3 AXLE SU TRUCK)	_____	_____	_____
5. FHWA CLASS 7 (4 or more Axle SU Truck)	_____	_____	_____
6. FHWA CLASS 8 (4 or less axle 1-Trlr.Truck)	_____	_____	_____
7. FHWA CLASS 9 (5 Axle, 1-Trlr.Truck)	_____	_____	_____
8. FHWA CLASS 10 (6 or more Axle, 1-Trlr.Truck)	_____	_____	_____
9. FHWA CLASS 11 (5 or less Axle, Multi-Trlr.Truck)	_____	_____	_____
10. FHWA CLASS 12 (6 Axle, Multi-Trlr.Truck)	_____	_____	_____
11. FHWA CLASS 13 (7 or more Axle, Multi-Trlr.Truck)	_____	_____	_____
12. OTHER VEHICLES	_____	_____	_____

GRAND TOTAL \_\_\_\_\_

NAME OF PREPARER EARL SCHEUERMAN PHONE # 515-239-1153

DATE PREPARED 11-25-91

<b>SHEET 5</b>  <b>LTPP TRAFFIC DATA</b>  <b>VEHICLE CLASSIFICATION DATA</b> <b>FHWA 13-CLASS SYSTEM</b>	*STATE ASSIGNED ID [ <u>FA54</u> ]  *STATE CODE [ <u>19</u> ]  *SHRP SECTION ID [ <u>3033</u> ]
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HIGHWAY RT. NO. (THIS COUNT) 45 H 218 MILEPOST# (THIS COUNT) 86

LOCATION (THIS COUNT) SHRP SITE FUNCTIONAL CLASS 02  
 BEGINNING DATE 08-20-90 ENDING DATE 08-22-90  
 BEGINNING TIME 1200 (NOON) ENDING TIME 1300 (1PM) DURATION (HRS) 49

TYPE OF COUNT: MANUAL \_\_\_\_\_ AUTOMATED X NO. OF LANES COUNTED 4

TYPE OF EQUIP.: AVC PERM. \_\_\_\_\_ AVC PORT. X WIM PERM. \_\_\_\_\_ WIM PORT. \_\_\_\_\_

EQUIPMENT NAME / MODEL # TC 3

TOTAL NO. OF VEHICLES CLASSIFIED 22123 # TRUCKS 3633 % TRUCKS 16.4

NO. OF TRUCKS IN GPS LANE 1478 % OF TRUCKS IN GPS LANE 15.6

VEHICLE CLASSIFICATION METHOD: FHWA X OTHER \_\_\_\_\_ # BINS \_\_\_\_\_

NOTE: IF THIS COUNT DOES NOT USE THE FHWA 13-BIN CLASSIFICATION SYSTEM USE SHEET 6. PLEASE DESCRIBE ON AN ATTACHED PAGE THE VEHICLE CLASSIFICATION SYSTEM USED BY THE AGENCY AND COMPLETE SHEET 7 DESCRIBING HOW THE SHA WOULD EXPAND OR COLLAPSE THE USER CLASSIFICATION SYSTEM TO CORRESPOND WITH THE FHWA 13 CLASSES.

VEHICLE CLASSES	TOTAL NUMBER OF VEHICLES TWO-WAY	TOTAL NUMBER OF VEHICLES GPS DIRECTION	TOTAL NUMBER OF VEHICLES GPS LANE
1. FHWA CLASSES 1-3 (Cars, Motorcycles, Vans)	<u>18540</u>	<u>9506</u>	<u>7969</u>
2. FHWA CLASS 4 (Buses)	<u>81</u>	<u>31</u>	<u>19</u>
3. FHWA CLASS 5 (Two Axle, 6-Tire, SU Truck)	<u>618</u>	<u>329</u>	<u>163</u>
4. FHWA CLASS 6 (3 AXLE SU TRUCK)	<u>140</u>	<u>74</u>	<u>20</u>
5. FHWA CLASS 7 (4 or more Axle SU Truck)	<u>23</u>	<u>16</u>	<u>16</u>
6. FHWA CLASS 8 (4 or less axle 1-Trlr.Truck)	<u>467</u>	<u>182</u>	<u>163</u>
7. FHWA CLASS 9 (5 Axle, 1-Trlr.Truck)	<u>2229</u>	<u>1106</u>	<u>990</u>
8. FHWA CLASS 10 (6 or more Axle, 1-Trlr.Truck)	<u>71</u>	<u>56</u>	<u>53</u>
9. FHWA CLASS 11 (5 or less Axle, Multi-Trlr.Truck)	<u>2</u>	<u>2</u>	<u>2</u>
10. FHWA CLASS 12 (6 Axle, Multi-Trlr.Truck)	<u>0</u>	<u>0</u>	<u>0</u>
11. FHWA CLASS 13 (7 or more Axle, Multi-Trlr.Truck)	<u>2</u>	<u>2</u>	<u>2</u>
12. OTHER VEHICLES	_____	_____	_____
<b>GRAND TOTAL</b>	<u>22173</u>	<u>11304</u>	<u>9447</u>

NAME OF PREPARER EARL SCHEUERMAU PHONE # 515-239-1153  
 DATE PREPARED 2-26-92

<p>SHEET 6</p> <p>LTPP TRAFFIC DATA</p> <p>VEHICLE CLASSIFICATION DATA</p> <p>AGENCY DEFINED CLASSES</p>	<p>*STATE ASSIGNED ID [ <u>FA 54</u> ]</p> <p>*STATE CODE [ <u>19</u> ]</p> <p>*SHRP SECTION ID [ <u>2033</u> ]</p>
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FOR 4-BIN OR OTHER CLASSIFICATION SYSTEMS

HIGHWAY ROUTE NO. (THIS COUNT) US H 218 MILEPOST # (THIS COUNT) 86

BEGINNING DATE 7-14-86 ENDING DATE 7-14-86

BEGINNING TIME 7AM-11AM ENDING TIME 2PM-6PM DURATION (HRS) 8

VEHICLE CLASSES (DESCRIBE VEHICLE TYPES IN EACH CLASS OR AXLE SPACING CATEGORY)	TOTAL NUMBER OF VEHICLES TWO-WAY	TOTAL NUMBER OF VEHICLES GPS DIRECTION	TOTAL NUMBER OF VEHICLES GPS LANE
A. <u>PASSENGER CARS</u>	<u>5071</u>	<u>2591</u>	<u>2166</u>
<u>&amp; PICKUPS</u>	<u>257</u>	<u>130</u>	<u>109</u>
B. <u>SINGLE UNIT</u>			
<u>TRUCKS</u>	<u>513</u>	<u>253</u>	<u>211</u>
C. <u>TTSTs</u>			
D.			
E.			
F.			
G.			
H.			
I.			
J.			
K.			
L.			
M.			
N.			
O.			
P.			
Q.			
R.			
S.			
T.			

GRAND TOTAL 5841 2974 2486

NAME OF PREPARER <u>EARL SCHEUERMANN</u>	PHONE # <u>515-239-1153</u>
DATE PREPARED <u>11-25-91</u>	

SHEET 7  
LTPP TRAFFIC DATA  
VEHICLE CLASSIFICATION  
CONVERSION CHART

\*STATE ASSIGNED ID [FA54]  
\*STATE CODE [19]  
\*SHRP SECTION ID [3033]

FOR 4-BIN, 6-BIN, OR OTHER NON FHWA CLASSIFICATION SYSTEMS

USE THIS SHEET TO DESCRIBE HOW THE AGENCY'S CLASSIFICATION SYSTEM CAN BE CONVERTED TO THE FHWA 13-CLASSES. ENTER PERCENTAGE OF TOTAL SHA CLASS DISTRIBUTED TO EACH FHWA CLASS. APPLICABLE PERIOD FROM 1986 TO \_\_\_\_\_

SHA CLASS	FHWA CLASSES												TOTAL
	1-3	4	5	6	7	8	9	10	11	12	13	OTHER	
A	100												100
B		10	20	17	3								100
C						17	79	3	1	0	0		100
D													
E													
F													
G													
H													
I													
J													
K													
L													
M													
N													
O													
P													
Q													
R													
S													
T													
TOTAL	100	10	20	17	3	17	79	3	1	0	0		300

NAME OF PREPARER EARL SCHEHERMANN PHONE # 515-239-1153  
DATE PREPARED 11-25-91

Not Applicable

<b>SHEET 8</b> <b>LTPP TRAFFIC DATA</b> <b>TRUCK WEIGHT</b> <b>SESSION INFORMATION</b>	<b>*STATE ASSIGNED ID</b> [5654] <b>*STATE CODE</b> [19] <b>*SHRP SECTION ID</b> [3033]
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HIGHWAY RT. NO.(THIS SESSION) \_\_\_\_\_ MILEPOST # (THIS SESSION) \_\_\_\_\_

LOCATION (THIS SESSION) \_\_\_\_\_

FUNCTIONAL CLASSIFICATION \_\_\_\_\_ DIRECTION OF TRAVEL \_\_\_\_\_

1. FHWA STATION IDENTIFICATION NUMBER \_\_\_\_\_

2. TYPE OF WEIGHING EQUIPMENT: PERM. SCALE \_\_\_\_\_ PERM. WIM \_\_\_\_\_  
PORT. SCALE \_\_\_\_\_ PORT. WIM \_\_\_\_\_

3. COUNT DURATION (HOURS) \_\_\_\_\_ COUNT LANE \_\_\_\_\_

4. BEGINNING TIME (MONTH, DAY, YEAR, TIME) \_\_\_\_-\_\_\_\_-\_\_\_\_-\_\_\_\_

5. ENDING TIME (MONTH, DAY, YEAR, TIME) \_\_\_\_-\_\_\_\_-\_\_\_\_-\_\_\_\_

6. EQUIPMENT MANUFACTURER / MODEL # \_\_\_\_\_

7. PURPOSE OF WEIGHT SESSION:  
DATA COLLECTION \_\_\_\_\_ ENFORCEMENT \_\_\_\_\_

8. VEHICLE CLASSIFICATION SCHEME: FHWA \_\_\_\_\_ OTHER \_\_\_\_\_ # BINS \_\_\_\_\_

9. PAVEMENT TYPE: AC \_\_\_\_\_ PCC \_\_\_\_\_ OTHER \_\_\_\_\_

10. METHOD OF CALIBRATION AND FREQUENCY: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

NOTE: IF THIS WEIGHT SESSION IS NOT BASED UPON THE FHWA 13-BIN CLASSIFICATION SYSTEM, USE SHEET 7 TO DESCRIBE HOW THE SHA WOULD EXPAND OR COLLAPSE THE AGENCY CLASSIFICATION SYSTEM TO CORRESPOND WITH THE FHWA 13 CLASSES. ALSO PROVIDE A DESCRIPTION OF THE CLASSIFICATION SCHEME THAT WAS USED.

NAME OF PREPARER <u>EARL SCHEUERMANN</u>	PHONE # <u>515-239-1153</u>
DATE PREPARED <u>11-25-91</u>	

Not Applicable

<p align="center">SHEET 9</p> <p align="center">LTPP TRAFFIC DATA</p> <p>TRUCK AXLE LOAD MEASUREMENTS BY VEHICLE CLASSIFICATION</p>	*STATE ASSIGNED ID [5200]
	*STATE CODE [17]
	*SHRP SECTION ID [3033]

FHWA CLASSIFICATION SCHEME: FHWA \_\_\_\_\_ OTHER \_\_\_\_\_ #BINS \_\_\_\_\_

NOTE: FOR CLASSIFICATION SCHEMES OTHER THAN FHWA, ATTACH SHEET 7  
DESCRIBING CONVERSION FROM AGENCY CLASSIFICATION SCHEME TO  
FHWA 13 CLASSES.

1. VEHICLE CLASS \_\_\_\_\_

2. TOTAL NUMBER VEHICLES COUNTED \_\_\_\_\_

3. SINGLE AXLES LOAD RANGE	NUMBER OF SINGLE AXLES WEIGHED	4. TANDEM AXLES LOAD RANGE	NUMBER OF TANDEM AXLES WEIGHED	5. TRIPLE AXLES LOAD RANGE	NUMBER OF TRIPLE AXLES WEIGHED
< 3000	-----	< 6000	-----	< 12000	-----
3000 - 3999	-----	6000 - 7999	-----	12000 - 14999	-----
4000 - 4999	-----	8000 - 9999	-----	15000 - 17999	-----
5000 - 5999	-----	10000 - 11999	-----	18000 - 20999	-----
6000 - 6999	-----	12000 - 13999	-----	21000 - 23999	-----
7000 - 7999	-----	14000 - 15999	-----	24000 - 26999	-----
8000 - 8999	-----	16000 - 17999	-----	27000 - 29999	-----
9000 - 9999	-----	18000 - 19999	-----	30000 - 32999	-----
10000 - 10999	-----	20000 - 21999	-----	33000 - 35999	-----
11000 - 11999	-----	22000 - 23999	-----	36000 - 38999	-----
12000 - 12999	-----	24000 - 25999	-----	39000 - 41999	-----
13000 - 13999	-----	26000 - 27999	-----	42000 - 44999	-----
14000 - 14999	-----	28000 - 29999	-----	45000 - 47999	-----
15000 - 15999	-----	30000 - 31999	-----	48000 - 50999	-----
16000 - 16999	-----	32000 - 33999	-----	51000 - 53999	-----
17000 - 17999	-----	34000 - 35999	-----	54000 - 56999	-----
18000 - 18999	-----	36000 - 37999	-----	57000 - 59999	-----
19000 - 19999	-----	38000 - 39999	-----	60000 - 62999	-----
20000 - 20999	-----	40000 - 41999	-----	63000 - 65999	-----
21000 - 21999	-----	42000 - 43999	-----	66000 - 68999	-----
22000 - 22999	-----	44000 - 45999	-----	69000 - 71999	-----
23000 - 23999	-----	46000 - 47999	-----	72000 - 74999	-----
24000 - 24999	-----	48000 - 49999	-----	75000 - 77999	-----
25000 - 25999	-----	50000 - 51999	-----	78000 - 79999	-----
26000 - 26999	-----	52000 - 53999	-----	> 80000	-----
27000 - 27999	-----	54000 - 55999	-----		
28000 - 28999	-----	56000 - 57999	-----		
29000 - 29999	-----	58000 - 59999	-----		
> 30000	-----	> 60000	-----		

6. USE SECOND PAGE FOR FOUR AXLE GROUPS.

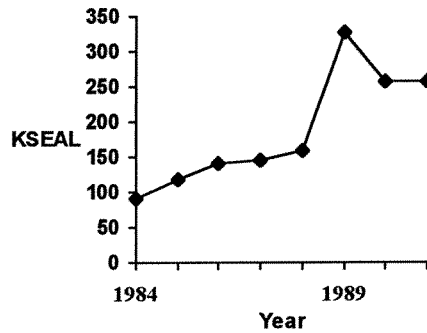
NAME OF PREPARER	EARL SCHEUERMANN	PHONE #	515-239-1153
DATE PREPARED	11-25-91		

Agency ID: 19

SHRP ID: 3033

Agency Name: Iowa

### Historical Traffic Data



Year:	KESAL:	SRO:
1989	164	
1990	256	
1991	256	

Permanent System WIM

Installation Date 7/1/91

Manufacturer GK Instruments

Model AWACS 6000

Type Piezo Cable

Site Location US-218 NB

MP or Station MP 86.35

Design KESAL 260

Level P

Number of Lanes 4

Lanes Monitored 1N

Equipment Location .2 MLN

Construction Event 1

Layer Number	Layer Type	Thickness0	Thickness5
1	SS		
2	TB	4.7	4.9
3	PC	9.7	9.6

water problem  
moisture  
holding static charge