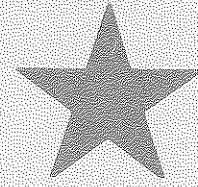# Statewide Transportation Analysis & Research

MICHIGAN'S STATEWIDE
TRANSPORTATION MODELING SYSTEM

REFERENCE HANDBOOK NO. 3

**MINOR ORIGIN & DESTINATION
TRAVEL CHARACTERISTICS
REGION 7**

STATEWIDE PROCEDURES SECTION

SEPTEMBER, 1978

**Statewide**

MICHIGAN DEPARTMENT OF STATE HIGHWAYS AND TRANSPORTATION

# MICHIGAN DEPARTMENT OF STATE HIGHWAYS AND TRANSPORTATION

## BUREAU OF TRANSPORTATION PLANNING

MICHIGAN'S STATEWIDE
TRANSPORTATION MODELING SYSTEM

REFERENCE HANDBOOK NO. 3

MINOR ORIGIN & DESTINATION
TRAVEL CHARACTERISTICS
REGION 7

STATEWIDE PROCEDURES SECTION

SEPTEMBER, 1978

## STATE HIGHWAY COMMISSION

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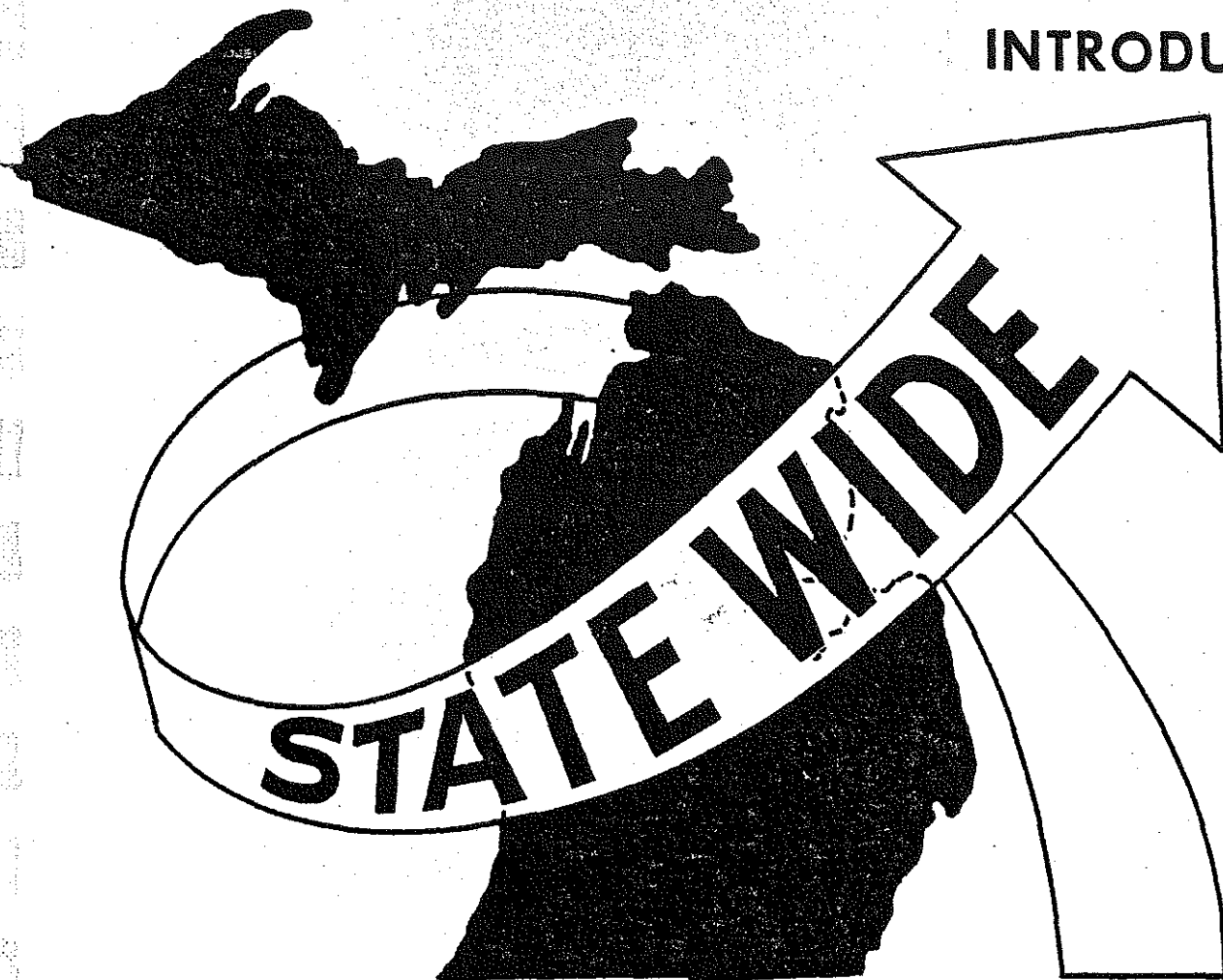
DIRECTOR

John P. Woodford

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# MINOR ORIGIN AND DESTINATION

# TRAVEL CHARACTERISTICS

BY:   DAVID  R  SCHADE

INTRODUCTION

STATE WIDE

# INTRODUCTION

The Statewide Procedures Section, Bureau of Transportation Planning, Department of State Highways and Transportation, has prepared a travel characteristics handbook in order to fully utilize information collected in minor origin and destination studies. The conversion of minor O&D studies to a single format made this handbook possible and is intended to supply the user with travel characteristics about a specific minor O&D study or a group of studies by region. The geographical locations of the minor O&D studies appear in Figure 1.

This handbook was organized at the regional level, with an individual book for each of the 14 planning regions. This format will allow the user to compare one region to another. There were no minor O&D studies taken in Regions 6 and 14; thus, no handbook is presently available for these regions. Each handbook contains the following sections:

1. Statewide Travel Characteristics Summaries

2. Regional Travel Characteristics Summaries

3. City Travel Characteristics Summaries in Alphabetical Order

The O&D data collection process is based upon the 547-zone system with Michigan consisting of 508 zones (Figure 2) and the remaining zones representing out-of-state locations (Figure 3). Each zone number corresponds to a specific city or area. Appendix A is a list of the zone number and its corresponding area. Basing the O&D data collection process around a single zone system allows the Department to fully utilize many of the analysis routines that were developed in conjunction with the statewide transportation modeling system. A list documenting other utilizations of the statewide modeling system follows on the next pages.

# STATEWIDE SYSTEM DEVELOPMENT REPORTS

```
VOLUME I          - OBJECTIVES AND WORK PROGRAM
VOLUME I-A        - REGION 4 WORKSHOP TOPIC SUMMARIES
VOLUME I-B        - SINGLE AND MULTIPLE CORRIDOR ANALYSIS
VOLUME I-D        - PROXIMITY ANALYSIS
VOLUME I-E        - MODEL APPLICATION:  COST-BENEFIT ANALYSIS
VOLUME I-F        - AIR AND NOISE POLLUTION
VOLUME I-G        - PSYCHOLOGICAL IMPACT MODEL
VOLUME I-H        - LEVEL OF SERVICE MODEL
VOLUME I-I        - STATEWIDE SOCIO-ECONOMIC AND TRANSPORTATION RESOURCES
VOLUME I-J        - SERVICE AREA MODEL
VOLUME I-K        - EFFECTIVE SPEED MODEL
VOLUME I-L        - SYSTEM IMPACT ANALYSIS GRAPHIC DISPLAY
VOLUME I-M        - MODELING GASOLINE CONSUMPTION
VOLUME I-O        - ACCIDENT RATES 547 ZONE SYSTEM
VOLUME I-P        - POPULATION PROJECTIONS 547 ZONE SYSTEM
VOLUME II         - DEVELOPMENT OF NETWORK MODELS
VOLUME II-A       - EFFICIENT NETWORK UPDATING WITH INTERACTIVE GRAPHICS
VOLUME II-B       - TREE PLOTTING WITH INTERACTIVE GRAPHICS
VOLUME II-C       - CALIBRATION OF MICHIGAN'S STATEWIDE TRAFFIC FORECASTING
                    MODEL
VOLUME III        - SEGMENTAL MODEL
VOLUME III-A      - SEMI-AUTOMATIC NETWORK GENERATOR USING A "DIGITIZER"
VOLUME III-B      - AUTOMATIC NETWORK GENERATOR USING INTERACTIVE GRAPHICS
VOLUME IV         - AASHTO REPORT
VOLUME IV-A       - MICHIGAN'S STATEWIDE MODELING SYSTEM - SYNOPSIS
VOLUME V          - PART A - REFORMATION - TRIP DATA BANK PREPARATION
VOLUME V          - PART B - DEVELOPMENT OF SOCIO-ECONOMIC DATA BANK FOR
                    TRIP GENERATION - DISTRIBUTION
VOLUME V-A        - SINGLE STATION O&D PROCEDURES MANUAL
VOLUME V-B        - EXTERNAL O&D PROCEDURES MANUAL
VOLUME VI         - CORRIDOR LOCATION DYNAMICS
VOLUME VI-A       - ENVIRONMENTAL SENSITIVITY COMPUTER MAPPING
VOLUME VII        - DESIGN HOUR VOLUME MODEL
VOLUME VII-A      - CAPACITY ADEQUACY FORECASTING MODEL
VOLUME VII-B      - MODELING MAJOR FACILITY OPENING IMPACT ON DHV
VOLUME VIII       - PUBLIC AND PRIVATE FACILITY FILE
VOLUME VIII-A     - CONVERSION OF INDUSTRIAL EXPANSION FILE
VOLUME IX         - SOCIO-ECONOMIC DATA FILE
VOLUME IX-A       - MAPPING SOCIO-ECONOMIC DATA WITH SYMAP
VOLUME IX-B       - CONVERSION OF THE AGRICULTURAL CENSUS FILE
VOLUME IX-C       - TAX RATE AND ASSESSED VALUATION INFORMATION
VOLUME IX-D       - SCHOOL DISTRICT DATA FILE
VOLUME X-A        - TRAVEL IMPACT ANALYSIS PROCEDURES
VOLUME X-A-1      - AUTOMATED DESIRELINE PLOTTING
VOLUME X-A-2      - TRAFFIC FORECASTING FOR A SPECIAL GENERATOR
VOLUME X-B        - SOCIAL IMPACT ANALYSIS PROCEDURES
VOLUME X-C        - ECONOMIC IMPACT ANALYSIS PROCEDURES
VOLUME XI         - COMPUTER RUN TIMES
VOLUME XIII       - MICHIGAN GOES MULTI-MODAL
```

# STATEWIDE SYSTEM APPLICATION REPORTS

REPORT 1     - COMMUNITY COLLEGE SERVICE - AREA ANALYSIS
REPORT 2     - PROXIMITY OF PEOPLE TO GENERAL PURPOSE HOSPITALS
REPORT 3     - INDUSTRIAL PARK PROXIMITY ANALYSIS
REPORT 4     - PROXIMITY OF AUTOMOBILE INJURY ACCIDENTS TO HOSPITALS
REPORT 5     - PROXIMITY OF AIRPORTS WITH SCHEDULED SERVICE TO
                  POPULATION
REPORT 6     - REGIONAL PARK PROXIMITY ANALYSIS
REPORT 7     - RIFLE RANGE PROXIMITY ANALYSIS
REPORT 8     - AMBULANCE SERVICE - AREA ANALYSIS
REPORT 9     - COMPREHENSIVE STATEWIDE PLANNING
REPORT 10    - GRAPHIC DISPLAY OF FIXED-OBJECT ACCIDENT DATA
REPORT 11    - PRELIMINARY INVESTIGATION:  A TECHNIQUE FOR THE
                  PROJECTION OF ACCIDENT RATES
REPORT 12    - IMPACT OF 50, 55, OR 60 M.P.H. STATEWIDE SPEED LIMIT
REPORT 13    - A METHOD FOR FUNCTIONALLY CLASSIFYING RURAL ARTERIAL
                  HIGHWAYS
REPORT 14    - ECONOMIC AND TRAVEL IMPACTS OF SPEED LIMIT REDUCTION
                  USING A STATEWIDE TRANSPORTATION MODELING SYSTEM
REPORT 15    - I-69 IMPACT ON THE ACCESSIBILITY OF HEALTH, FIRE, AND
                  AMBULANCE SERVICES TO RESIDENTIAL AREAS
REPORT 16    - CRISIS OR OPPORTUNITY:  APPLICATION OF AN OPERATIONAL
                  STATEWIDE TRANSPORTATION MODELING SYSTEM
REPORT 17    - US-23 CORRIDOR LOCATION STUDY - PRELIMINARY TRAVEL
                  IMPACT ANALYSIS
REPORT 19    - GRAPHIC DISPLAY OF ACCIDENT DATA
REPORT 20    - DEMOGRAPHIC INFORMATION FOR THE NORTHWEST REGION
REPORT 21    - AMTRAK MARKET AREA ANALYSIS - SYSTEM APPLICATION

# STATEWIDE SYSTEM REFERENCE HANDBOOKS

REFERENCE HANDBOOK #1 - STATEWIDE BUS TICKET SURVEY TRAVEL
        CHARACTERISTICS
REFERENCE HANDBOOK #2 - MICHIGAN'S PERMANENT TRAFFIC RECORDER TRENDS -
        POTENTIAL APPLICATION IN TRANSPORTATION PLANNING - ENERGY
        ANALYSIS
REFERENCE HANDBOOK #3 - MINOR ORIGIN & DESTINATION TRAVEL
        CHARACTERISTICS - PART A

**FIGURE 1**



STATE PLANNING REGION

O&D STUDY LOCATION

DETROIT
METROPOLITAN
AREA

**FIGURE 2**
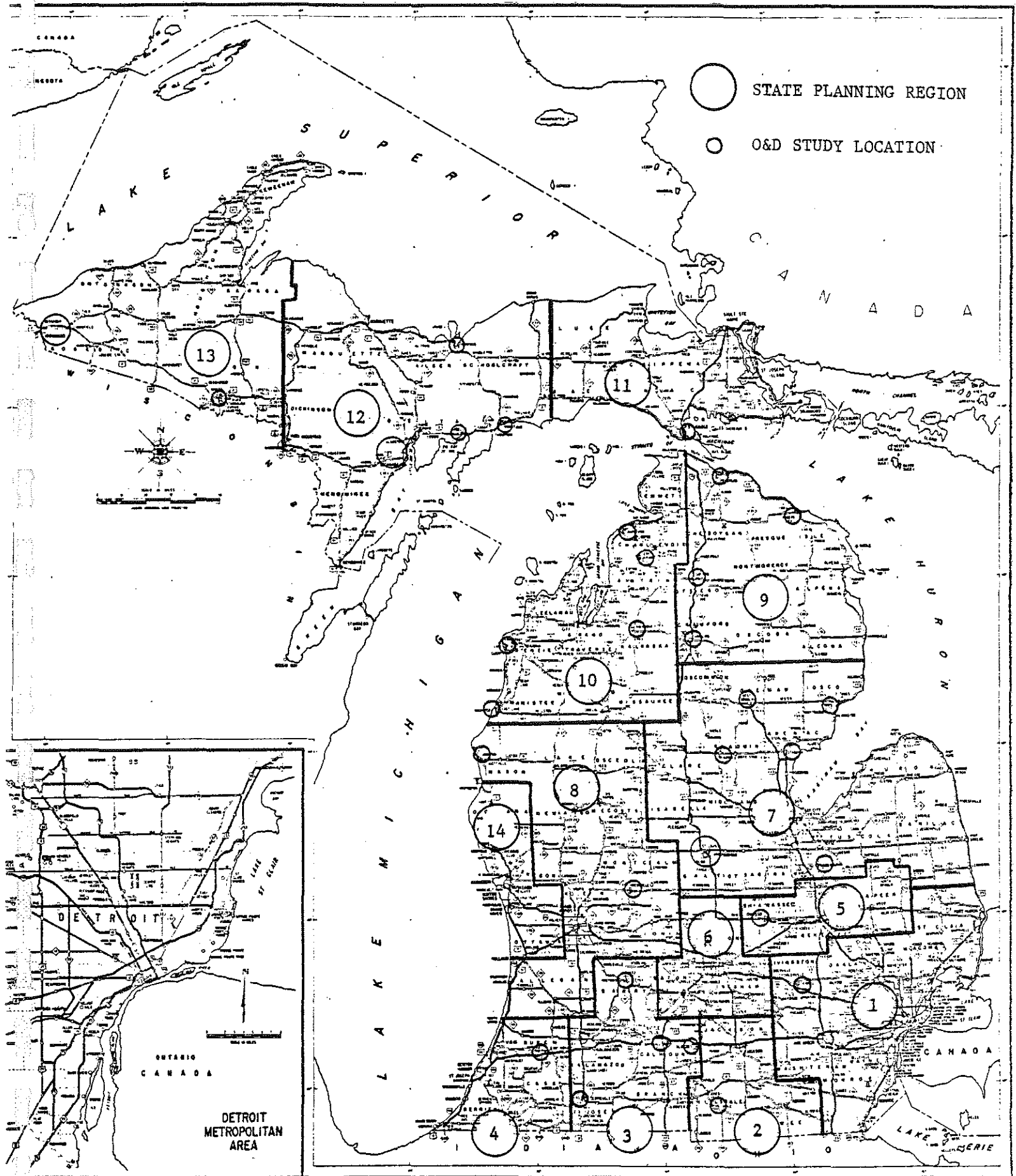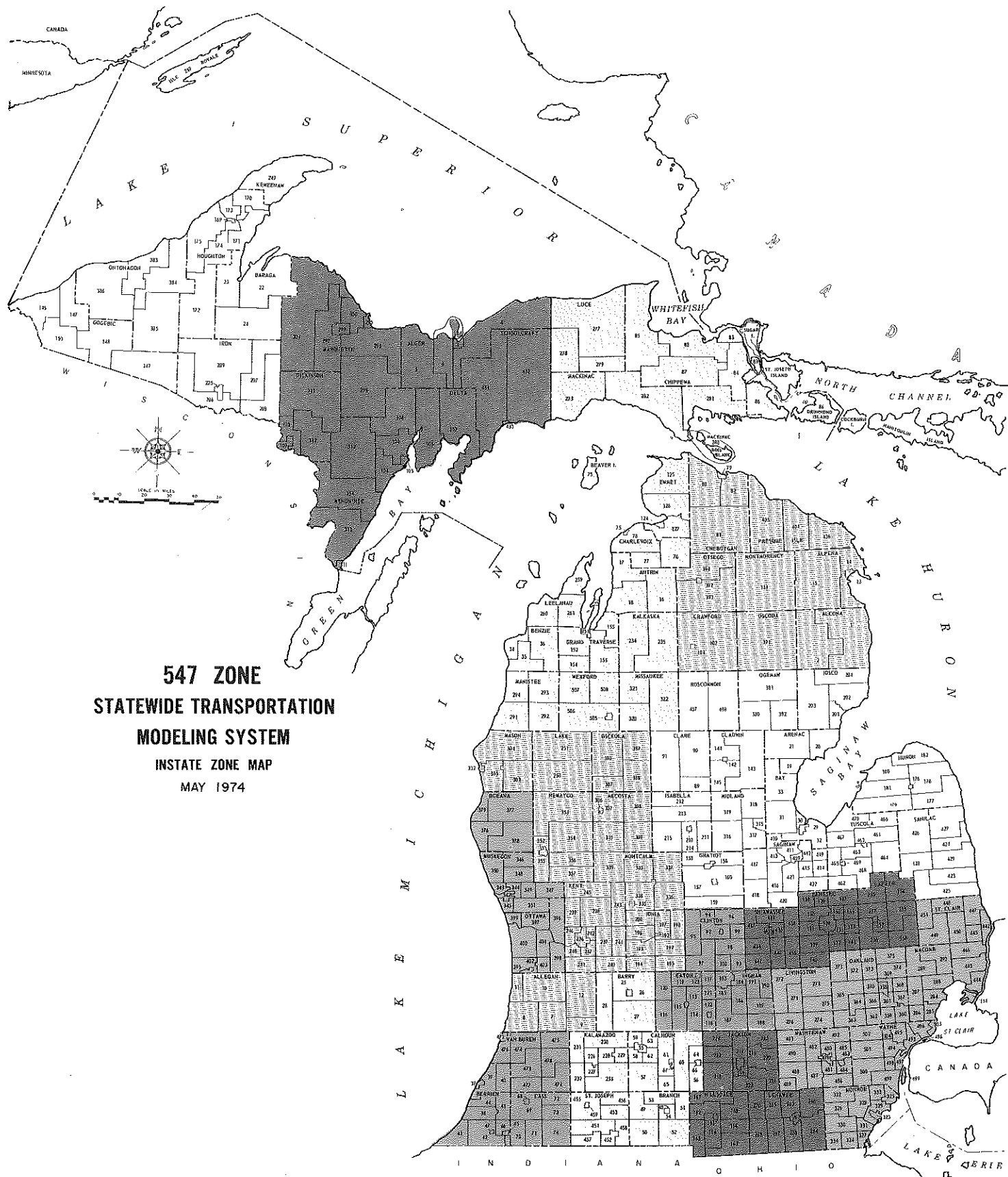


**547 ZONE**
**STATEWIDE TRANSPORTATION**
**MODELING SYSTEM**
INSTATE ZONE MAP
MAY 1974

FIGURE 3

# MICHIGAN'S TRANSPORTATION MODELING SYSTEM

## 547 ZONE
### OUTSTATE ANALYSIS ZONES
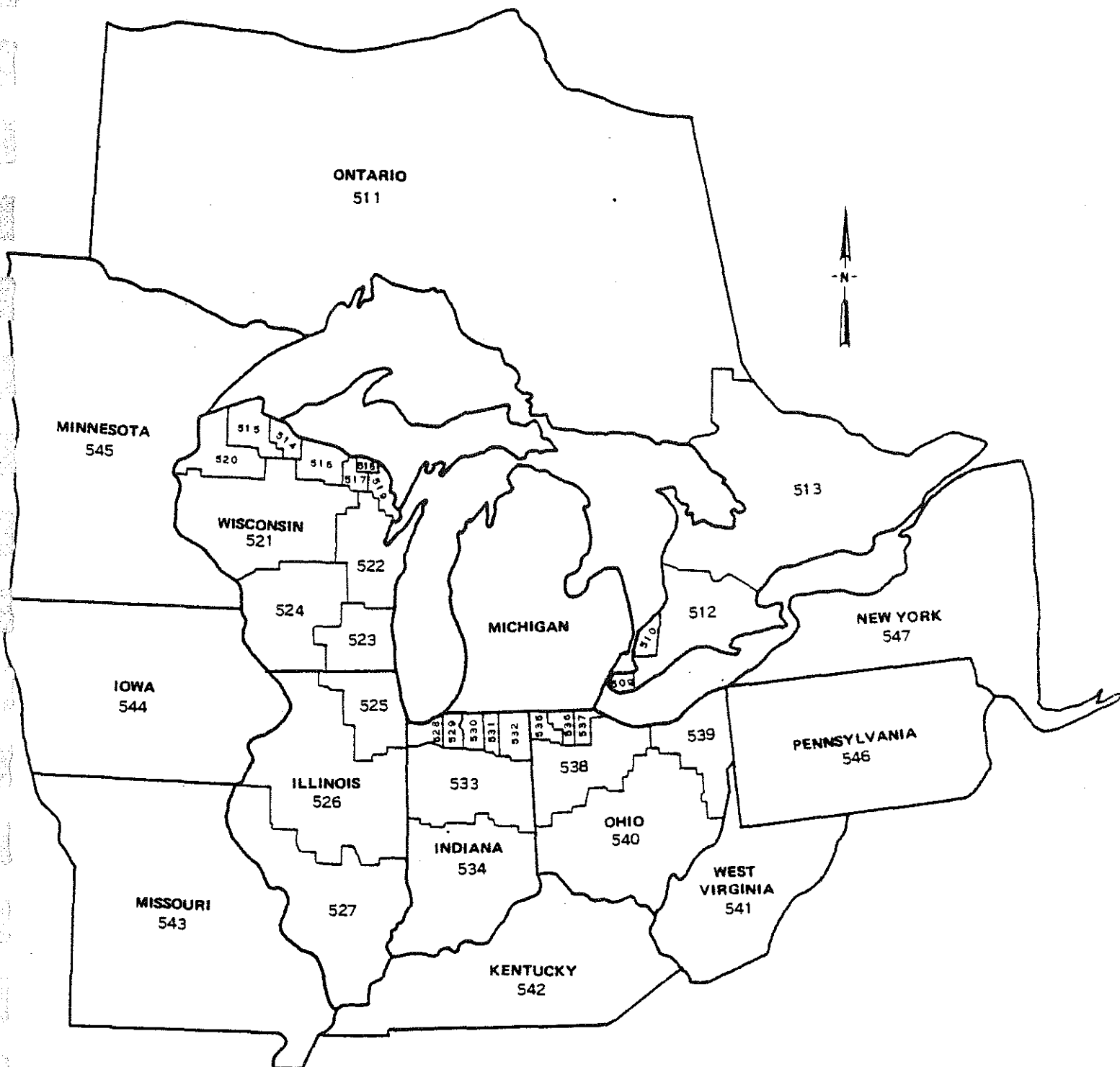
SPECIAL INFORMATION

STATE WIDE
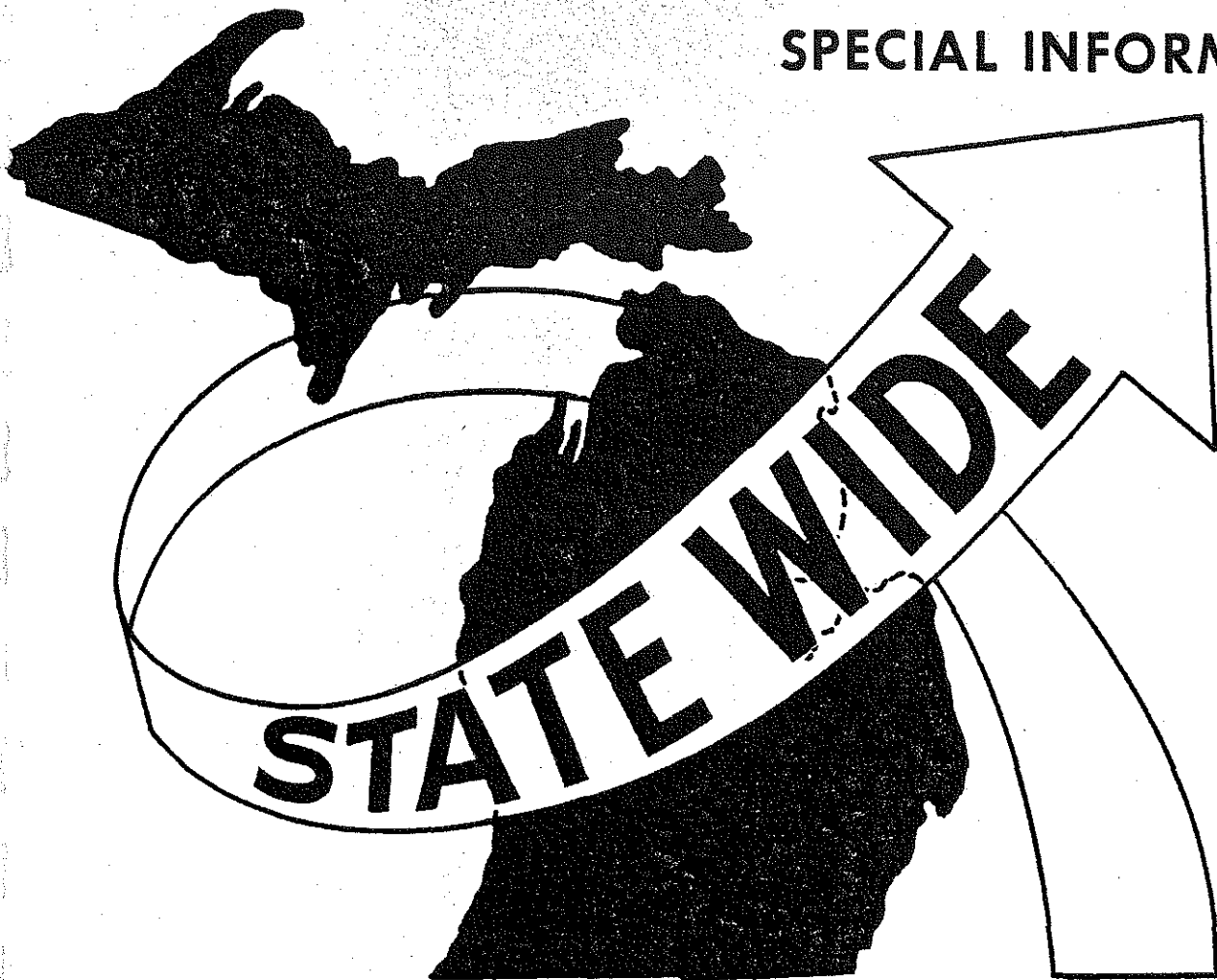
# SPECIAL INFORMATION

To properly evaluate the following handbook information, it is important to understand how the data is used. Each handbook has been set up to analyze the travel characteristics of minor O&D studies. It was necessary to use only terminal trips to analyze the travel impacts generated as a result of a specific city. These are trips that have an origin and/or destination in that city or study area. Any trips that were not terminal in relation to the study area were not used. Nonterminal trips are classified as "thru trips", those which pass through a given city or study area. Figures 4a and 4b show the effect thru trips would have on a city's true travel characteristics. It is obvious that including thru trips could greatly distort the travel pattern and the actual impacts a specific city has on its region.

There are some instances where the O&D city is not a statewide model zone in itself, such as in Figure 5a. Generally, this does not present a problem, but the reader should be made aware of it. The trips that go into the study city will be shown as going to the zone that surrounds the city. The ideal situation arises when the study cordon is set up as close to the city boundary as possible and the city represents its own zone, such as in Figure 5b.

**FIGURE 5a**                                      **FIGURE 5b**
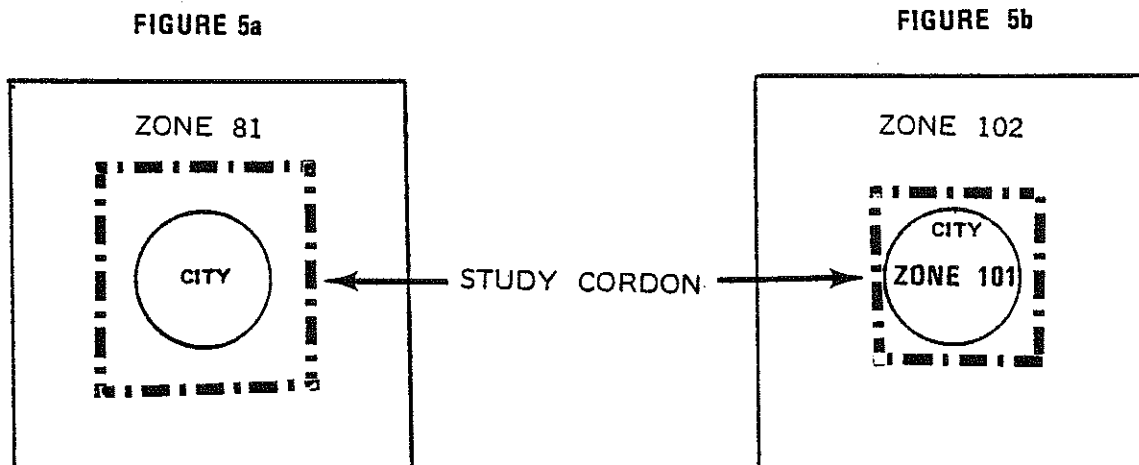
TERMINAL TRIPS ONLY



ALMASTLOUIS BANDWIDTH
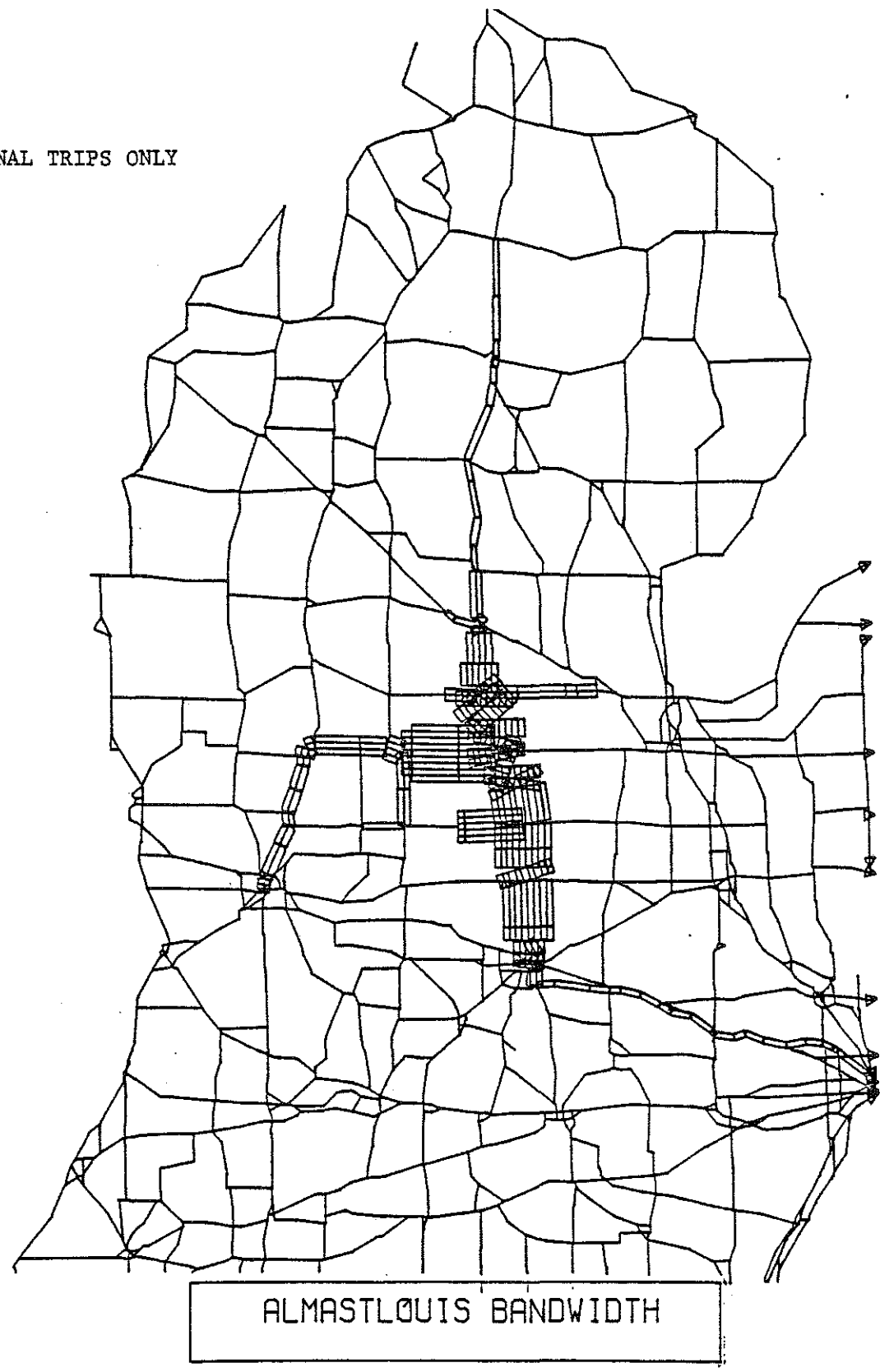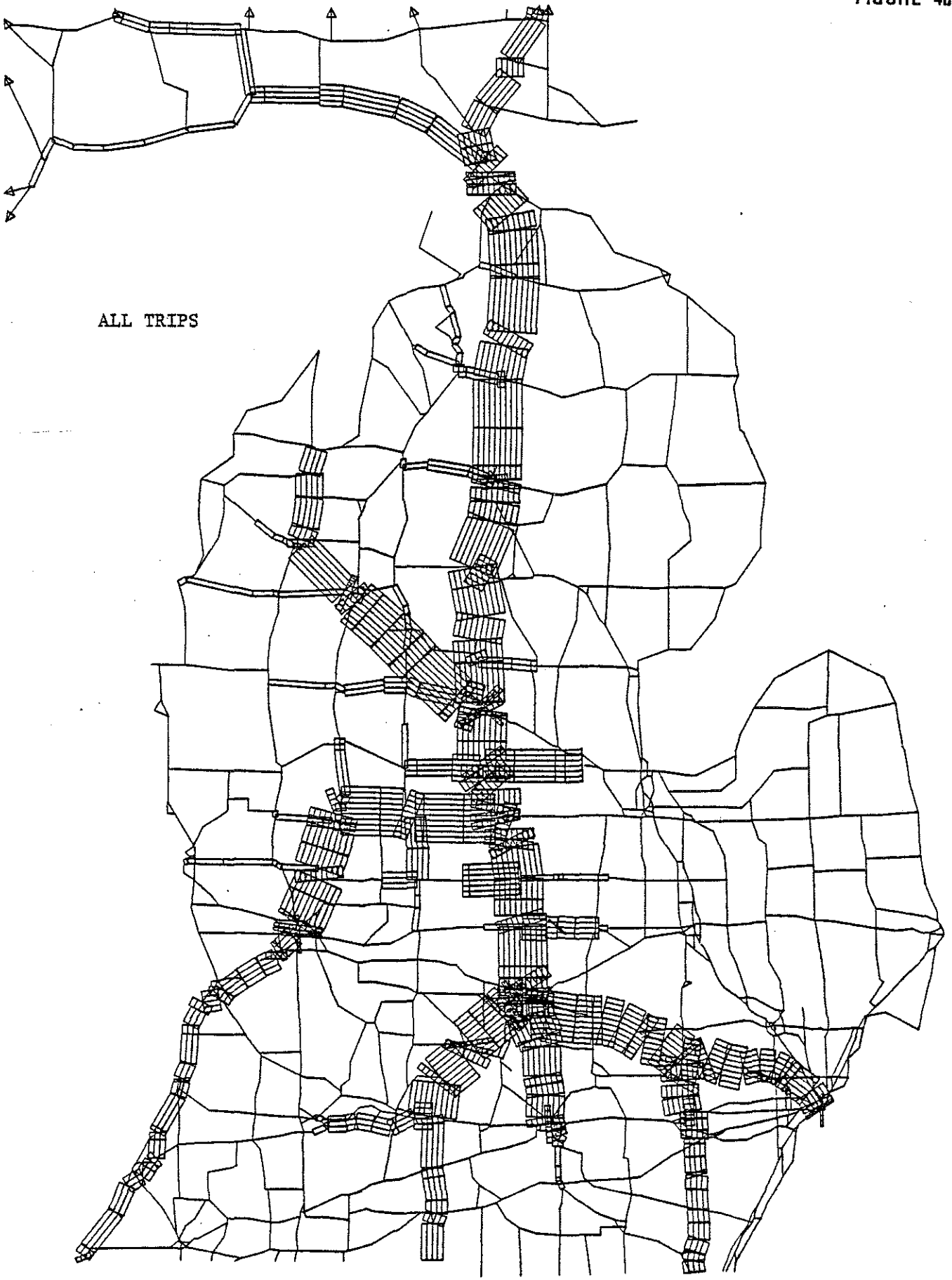
ALL TRIPS



ALMASTLOUIS BANDWIDTH

The travel analysis in this handbook is based on three main computer routines. These routines deal with three types of transportation analysis:

1. General Purpose Summary Program Tables

2. Trip Length Distribution Graphs

3. Selected Link Plots

The following is a brief explanation of the three areas:

## General Purpose Summary Program (GPSP)

Terminal trips were summarized by vehicle type, trip purpose, number of occupants, and by where the vehicle is garaged (Figure 6). For example, in Figure 6, 34.8% of all trips to and from Cheboygan are work trips (4095 trips).

In addition to the straight percentage breakdowns and actual trips, cross tabulations of trip purpose versus vehicle occupancy and trip purpose versus vehicle type were supplied. Figure 7 shows that 75.1% of all work trips to and from Cheboygan have one person in the vehicle (3075 trips). These summaries like the previous data appear at the statewide, regional, and city levels.

## Trip Length Distribution (TLD)

A trip length frequency distribution (TLD) is a graph that summaries the distribution of the length of trips in minutes for each study. In each handbook, TLD's are available at three levels:

1. Statewide

2. Regional

3. City

FIGURE 6

CHEBOYGAN

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE

## VEHICLE TYPE
----------------------

| CAR W/O TRLR | CAR W/ TRLR | PICK-UP W/O/TRLR | PICK-UP W/ TRLR | SINGLE-UNIT TRUCKS | COMBINATION TRUCKS |
|---|---|---|---|---|---|
| 80.9% | 1.0% | 13.9% | 0.4% | 2.6% | 1.3% |
| 9533 | 113 | 1632 | 52 | 303 | 150 |

## TRIP PURPOSE
----------------------

| WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|
| PERCENT OF TRIPS 34.8% | 7.2% | 30.5% | 3.8% | 17.2% | 6.6% |
| 4095 | 848 | 3595 | 446 | 2021 | 779 |

NUMBER OF TRIPS

## NUMBER IN VEHICLE
----------------------

| 1 | 2 | 3 | 4 | 5 | 6+ |
|---|---|---|---|---|---|
| 46.5% | 27.7% | 11.4% | 7.5% | 3.7% | 3.2% |
| 5479 | 3260 | 1342 | 883 | 440 | 379 |

## VEHICLE GARAGED AT
----------------------

| ORIGIN | DESTIN | OTHER |
|---|---|---|
| 40.4% | 27.5% | 32.1% |
| 4762 | 3244 | 3777 |

TOTAL TRIPS = 11783

FIGURE 7

# MINOR

## EXTERNAL ORIGIN-DESTINATION INTERVIEW

## TERMINAL-TRIP SUMMARY TABLE FOR CHEBOYGAN

### TRIP PURPOSE

| # IN VEH. | WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|-----------|------|----------|------|----------|---------|-------|
| | 75.1% ← PERCENT OF TOTAL WORK TRIPS | 43.3% | 30.4% | 8.6% | 29.9% | 39.0% |
| 1 | 3075 | 367 | 1091 | 38 | 604 | 304 |
| | 16.8% ← NUMBER OF TRIPS | 36.0% | 33.1% | 40.4% | 31.9% | 32.2% |
| 2 | 688 | 306 | 1191 | 180 | 644 | 25: |
| | 4.7% | 11.4% | 15.9% | 14.5% | 14.7% | 15.7% |
| 3 | 192 | 96 | 570 | 65 | 296 | 12: |
| | 2.4% | 4.9% | 11.2% | 15.3% | 10.5% | 7.7% |
| 4 | 99 | 41 | 402 | 68 | 212 | 6( |
| | 0.5% | 2.7% | 5.7% | 12.0% | 5.6% | 3.4% |
| 5 | 19 | 23 | 205 | 54 | 113 | 27 |
| | 0.5% | 1.7% | 3.8% | 9.1% | 7.5% | 1.9% |
| 6+ | 22 | 15 | 135 | 41 | 151 | 1: |
| | 100% | 100% | 100% | 100% | 100% | 100% |
| TOTAL | 4095 | 848 | 3595 | 446 | 2021 | 77: |

TOTAL TERMINAL-TRIPS FOR CHEBOYGAN        = 11783

The left hand column of the chart (Figure 8) is the trip length in 10-minute increments. If a trip is less than 10 minutes, it was recorded as a 10-minute trip. All trips over the maximum time allowed by the program were recorded in the last time span.

The top row of the chart is the percent of total travel for that TLD. Figure 8 indicates that 40.460% of all work trips to and from Cheboygan are between 30-40 minutes. Each graph is for a specific trip purpose with the last chart showing all purposes combined.

At the bottom left of the TLD, the "volume table number" designates the trip purpose:

    201 = work trips

    202 = business trips

    203 = shopping trips

    204 = vacation trips

    205 = other social or recreational trips

    206 = all other trips

    207 = total trips

Selected Link Plots

Selected link plots are available at the city level only. These plots are a diagram of the distribution of travel that has an origin or destination in the city and the probable routes on the state trunkline system this traffic used.

The magnitude of the travel on each highway link is shown by the bandwidths with each band's value representing 100 trips. The value assigned to the bands
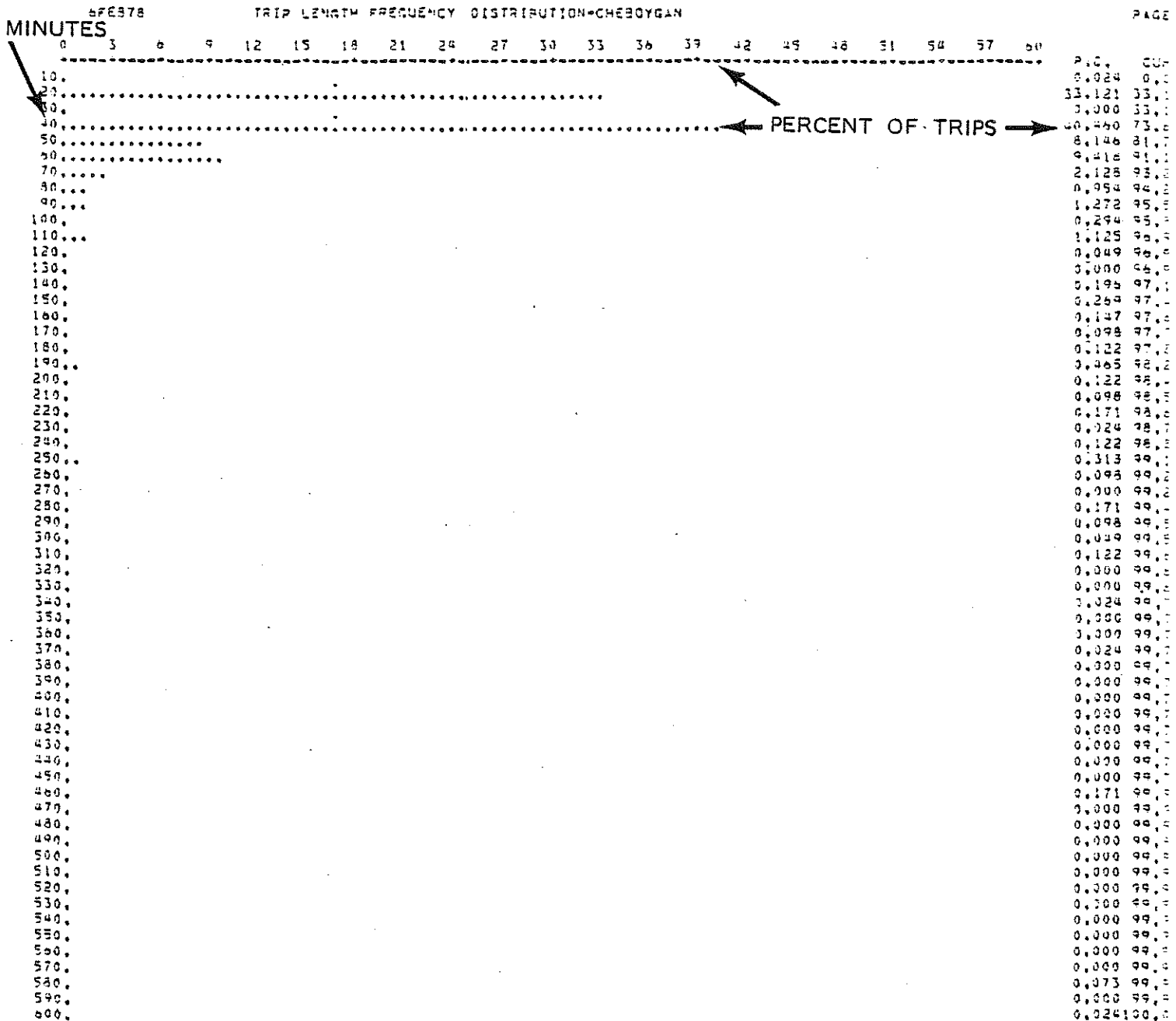
FIGURE 8



Trip Length Frequency Distribution—Cheboygan

is the same for all cities.  Using the same value accomplishes two purposes:

1. simplifies the reading of the plots

2. shows the importance of one city relative to another

These plots, using the constant bandwidth values, can be used to identify
the service area of a city and the function one city plays relative to another.

# STATEWIDE TRIP CHARACTERISTICS

STATE WIDE
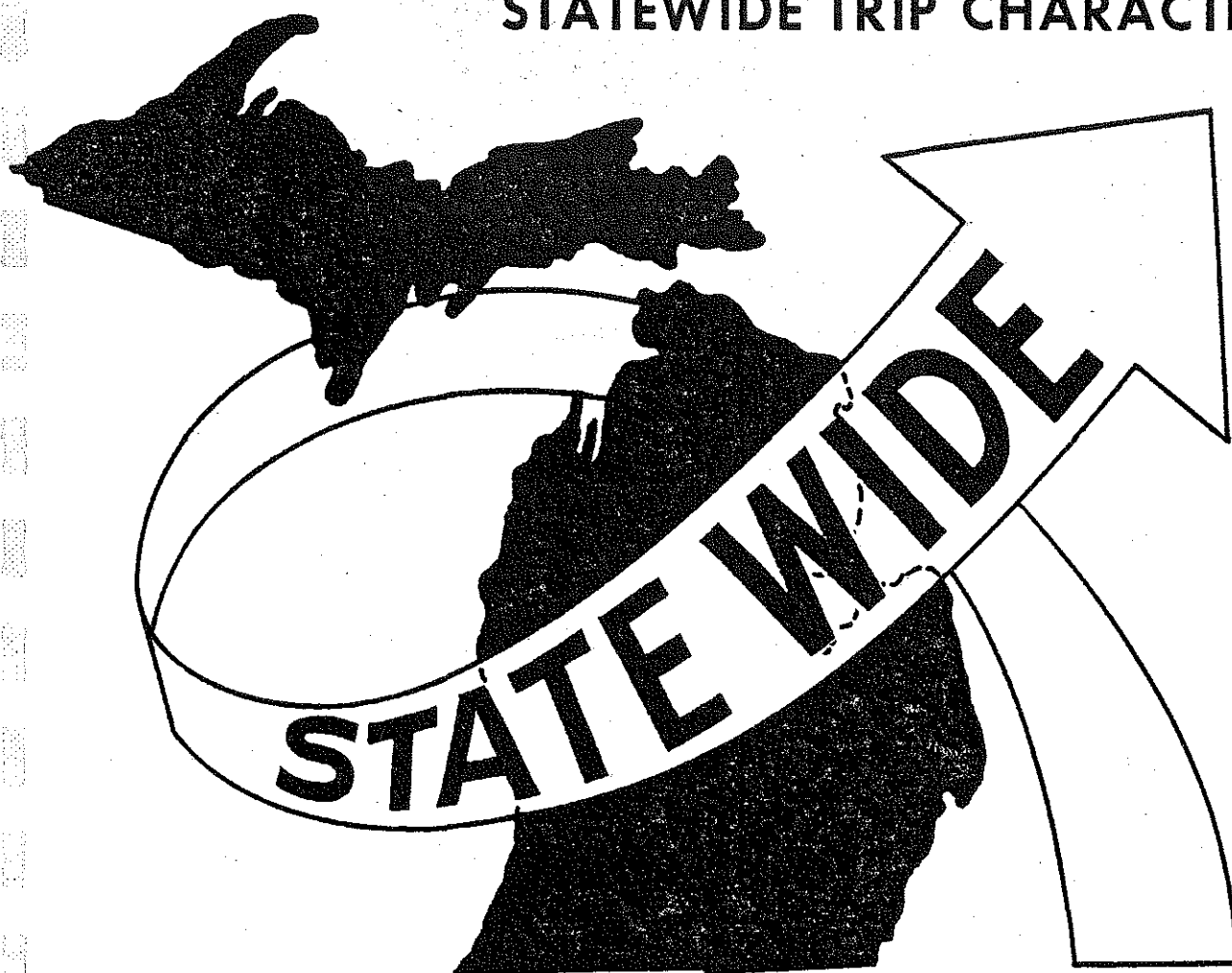
## EXTERNAL ORIGIN-DESTINATION INTERVIEW

## TERMINAL-TRIP SUMMARY TABLE

### VEHICLE TYPE

| REGION | CAR W/O TRLR | CAR W/ TRLR | PICK-UP W/O/TRLR | PICK-UP W/ TRLR | SINGLE-UNIT TRUCKS | COMBINATION TRUCKS |
|---|---|---|---|---|---|---|
| 1 | 81.1%<br>26968 | 0.4%<br>119 | 14.6%<br>4859 | 0.2%<br>64 | 2.8%<br>924 | 1.0%<br>324 |
| 2 | 78.3%<br>16424 | 0.2%<br>50 | 16.3%<br>3425 | 0.2%<br>49 | 3.3%<br>686 | 1.6%<br>343 |
| 3 | 79.6%<br>57205 | 0.3%<br>203 | 14.5%<br>10427 | 0.2%<br>145 | 3.7%<br>2669 | 1.8%<br>1261 |
| 4 | 80.6%<br>13958 | 0.3%<br>50 | 15.2%<br>2627 | 0.2%<br>41 | 2.8%<br>479 | 1.0%<br>172 |
| 5 | 77.6%<br>22200 | 0.4%<br>100 | 15.3%<br>4390 | 0.2%<br>54 | 4.2%<br>1192 | 2.4%<br>675 |
| 6 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 |
| 7 | 78.1%<br>59871 | 0.8%<br>646 | 14.9%<br>11455 | 0.4%<br>282 | 3.8%<br>2936 | 2.0%<br>1508 |
| 8 | 79.8%<br>50406 | 0.7%<br>463 | 14.2%<br>8987 | 0.4%<br>222 | 3.4%<br>2139 | 1.5%<br>959 |
| 9 | 78.4%<br>43329 | 2.0%<br>1096 | 12.9%<br>7134 | 0.4%<br>232 | 4.8%<br>2625 | 1.5%<br>845 |
| 10 | 79.8%<br>40959 | 0.8%<br>416 | 14.0%<br>7210 | 0.3%<br>142 | 3.6%<br>1841 | 1.5%<br>762 |
| 11 | 78.8%<br>9864 | 3.3%<br>416 | 12.7%<br>1592 | 0.5%<br>69 | 4.1%<br>508 | 0.6%<br>73 |
| 12 | 76.8%<br>21307 | 1.5%<br>409 | 15.5%<br>4303 | 0.5%<br>133 | 3.5%<br>961 | 2.2%<br>614 |
| 13 | 76.1%<br>19369 | 1.1%<br>278 | 17.3%<br>4399 | 0.4%<br>114 | 3.8%<br>960 | 1.4%<br>348 |
| 14 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 |
| STATE | 78.9%<br>381860 | 0.9%<br>4247 | 14.6%<br>70806 | 0.3%<br>1546 | 3.7%<br>17922 | 1.6%<br>7884 |

TABLE SHOWS PCT OF EXPANDED ORIGIN-DESTINATION INTERVIEWS FOR EACH CATEG
ORY IN THE REGION. ACTUAL TRIPS BELOW EACH PCT DOES NOT REPRESENT ALL TR
AVEL IN THE REGION--ONLY THAT INTERVIEWED.

MINOR

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE

TRIP PURPOSE

| REGION | WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|--------|------|----------|------|----------|---------|-------|
| 1 | 40.7%<br>13537 | 10.7%<br>3573 | 19.1%<br>6350 | 0.7%<br>229 | 16.6%<br>5512 | 12.2%<br>4056 |
| 2 | 48.1%<br>10082 | 7.1%<br>1486 | 19.8%<br>4147 | 0.1%<br>22 | 12.1%<br>2540 | 12.9%<br>2702 |
| 3 | 46.7%<br>33564 | 7.2%<br>5146 | 18.2%<br>13123 | 0.8%<br>607 | 15.4%<br>11098 | 11.6%<br>8372 |
| 4 | 34.8%<br>6026 | 9.5%<br>1653 | 23.5%<br>4077 | 2.4%<br>416 | 16.7%<br>2886 | 13.1%<br>2268 |
| 5 | 51.9%<br>14847 | 9.3%<br>2662 | 14.5%<br>4160 | 0.2%<br>71 | 12.9%<br>3693 | 11.1%<br>3179 |
| 6 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 |
| 7 | 38.8%<br>29779 | 9.9%<br>7609 | 20.7%<br>15856 | 3.5%<br>2723 | 16.2%<br>12429 | 10.8%<br>8302 |
| 8 | 39.4%<br>24916 | 8.0%<br>5070 | 22.4%<br>14124 | 2.7%<br>1690 | 17.1%<br>10810 | 10.4%<br>6565 |
| 9 | 33.4%<br>18432 | 7.0%<br>3852 | 27.9%<br>15443 | 7.4%<br>4108 | 15.9%<br>8782 | 8.4%<br>4645 |
| 10 | 35.5%<br>18224 | 8.1%<br>4140 | 19.9%<br>10189 | 6.6%<br>3371 | 19.8%<br>10168 | 10.2%<br>5237 |
| 11 | 19.0%<br>2380 | 4.3%<br>536 | 12.3%<br>1536 | 36.1%<br>4516 | 18.8%<br>2354 | 9.6%<br>1200 |
| 12 | 32.7%<br>9072 | 8.0%<br>2208 | 22.5%<br>6240 | 7.0%<br>1934 | 21.4%<br>5942 | 8.4%<br>2331 |
| 13 | 29.5%<br>7520 | 6.9%<br>1762 | 23.7%<br>6047 | 6.9%<br>1754 | 21.4%<br>5452 | 11.5%<br>2933 |
| 14 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 |
| STATE | 38.9%<br>188380 | 8.2%<br>39698 | 20.9%<br>101291 | 4.4%<br>21441 | 16.9%<br>81666 | 10.7%<br>51789 |

TABLE SHOWS PCT OF EXPANDED ORIGIN-DESTINATION INTERVIEWS FOR EACH CATEG
ORY IN THE REGION. ACTUAL TRIPS BELOW EACH PCT DOES NOT REPRESENT ALL TR
AVEL IN THE REGION--ONLY THAT INTERVIEWED.

-18-

MINOR

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE

NUMBER IN VEHICLE

| REGION | 1 | 2 | 3 | 4 | 5 | 6+ |
|---|---|---|---|---|---|---|
| 1 | 60.5%<br>20136 | 23.2%<br>7713 | 8.9%<br>2968 | 4.3%<br>1424 | 1.7%<br>575 | 1.3%<br>440 |
| 2 | 64.1%<br>13437 | 24.0%<br>5044 | 7.6%<br>1596 | 2.8%<br>589 | 0.9%<br>183 | 0.6%<br>129 |
| 3 | 62.6%<br>45020 | 23.7%<br>17048 | 7.6%<br>5476 | 3.6%<br>2562 | 1.5%<br>1100 | 1.0%<br>703 |
| 4 | 56.8%<br>9848 | 25.4%<br>4399 | 9.5%<br>1638 | 5.3%<br>911 | 1.9%<br>337 | 1.1%<br>194 |
| 5 | 65.9%<br>18855 | 22.4%<br>6399 | 6.9%<br>1982 | 3.1%<br>882 | 1.0%<br>290 | 0.7%<br>204 |
| 6 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 |
| 7 | 53.8%<br>41250 | 26.0%<br>19974 | 9.8%<br>7530 | 5.8%<br>4455 | 2.5%<br>1906 | 2.1%<br>1582 |
| 8 | 53.9%<br>34083 | 26.3%<br>16585 | 9.7%<br>6113 | 5.6%<br>3554 | 2.5%<br>1552 | 2.0%<br>1289 |
| 9 | 44.4%<br>24536 | 28.7%<br>15864 | 11.3%<br>6246 | 8.2%<br>4551 | 3.8%<br>2094 | 3.6%<br>1971 |
| 10 | 50.6%<br>25964 | 27.7%<br>14196 | 10.3%<br>5275 | 6.5%<br>3340 | 2.7%<br>1410 | 2.2%<br>1144 |
| 11 | 27.5%<br>3445 | 30.5%<br>3815 | 14.1%<br>1767 | 14.3%<br>1785 | 7.0%<br>878 | 6.7%<br>833 |
| 12 | 44.9%<br>12450 | 28.8%<br>7980 | 11.7%<br>3244 | 7.6%<br>2115 | 4.0%<br>1118 | 3.0%<br>820 |
| 13 | 47.8%<br>12184 | 30.5%<br>7779 | 10.8%<br>2738 | 6.0%<br>1520 | 2.9%<br>728 | 2.0%<br>520 |
| 14 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 |
| STATE | 53.9%<br>261207 | 26.2%<br>126796 | 9.6%<br>46574 | 5.7%<br>27688 | 2.5%<br>12170 | 2.0%<br>9829 |

TABLE SHOWS PCT OF EXPANDED ORIGIN-DESTINATION INTERVIEWS FOR EACH CATEG
ORY IN THE REGION. ACTUAL TRIPS BELOW EACH PCT DOES NOT REPRESENT ALL TR
AVEL IN THE REGION--ONLY THAT INTERVIEWED.

MINOR

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE

VEHICLE GARAGED AT

| REGION | ORIGIN | DESTIN | OTHER |
|--------|--------|--------|-------|
| 1 | 44.6% | 35.1% | 20.4% |
|   | 14820 | 11660 | 6777 |
| 2 | 46.9% | 37.2% | 15.9% |
|   | 9845 | 7801 | 3332 |
| 3 | 46.1% | 37.0% | 16.9% |
|   | 33165 | 26580 | 12164 |
| 4 | 44.4% | 34.4% | 21.2% |
|   | 7686 | 5966 | 3675 |
| 5 | 50.0% | 39.4% | 10.5% |
|   | 14319 | 11277 | 3015 |
| 6 | 0.0% | 0.0% | 0.0% |
|   | 0 | 0 | 0 |
| 7 | 44.1% | 35.2% | 20.7% |
|   | 33808 | 27011 | 15879 |
| 8 | 43.6% | 35.0% | 21.4% |
|   | 27521 | 22118 | 13536 |
| 9 | 37.0% | 27.9% | 35.1% |
|   | 20468 | 15401 | 19392 |
| 10 | 38.1% | 30.5% | 31.4% |
|    | 19557 | 15640 | 16132 |
| 11 | 20.7% | 19.5% | 59.8% |
|    | 2589 | 2445 | 7488 |
| 12 | 42.6% | 32.6% | 24.8% |
|    | 11810 | 9034 | 6883 |
| 13 | 38.9% | 33.4% | 27.7% |
|    | 9902 | 8504 | 7063 |
| 14 | 0.0% | 0.0% | 0.0% |
|    | 0 | 0 | 0 |
| STATE | 42.4% | 33.7% | 23.8% |
|       | 205492 | 163438 | 115335 |

TABLE SHOWS PCT OF EXPANDED ORIGIN-DESTINATION INTERVIEWS FOR EACH CATEG
ORY IN THE REGION. ACTUAL TRIPS BELOW EACH PCT DOES NOT REPRESENT ALL TR
AVEL IN THE REGION--ONLY THAT INTERVIEWED.

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE FOR STATE

TRIP PURPOSE

| # IN VEH. | WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|---|
| 1 | 79.7%<br>150202 | 49.5%<br>19644 | 38.5%<br>39042 | 6.8%<br>1468 | 35.5%<br>29020 | 42.2%<br>21831 |
| 2 | 15.1%<br>28469 | 31.1%<br>12354 | 33.7%<br>34147 | 37.9%<br>8123 | 33.0%<br>26925 | 32.4%<br>16777 |
| 3 | 3.4%<br>6354 | 10.6%<br>4202 | 14.0%<br>14150 | 17.2%<br>.3690 | 13.9%<br>11381 | 13.1%<br>6796 |
| 4 | 1.2%<br>2215 | 5.3%<br>2107 | 7.7%<br>7821 | 20.3%<br>4353 | 9.3%<br>7575 | 7.0%<br>3617 |
| 5 | 0.4%<br>697 | 2.1%<br>844 | 3.5%<br>3544 | 9.5%<br>2036 | 4.3%<br>3495 | 3.0%<br>1554 |
| 6+ | 0.2%<br>442 | 1.4%<br>546 | 2.6%<br>2586 | 8.3%<br>1770 | 4.0%<br>3270 | 2.3%<br>1214 |
| TOTAL | 100%<br>188380 | 100%<br>39698 | 100%<br>101291 | 100%<br>21441 | 100%<br>81666 | 100%<br>51789 |

TOTAL TERMINAL-TRIPS FOR ALL STUDIES IN REGION = 484264

TABLE SHOWS PCT OF EXPANDED ORIGIN-DESTINATION INTERVIEWS FOR EACH CATEG
ORY IN THE REGION. ACTUAL TRIPS BELOW EACH PCT DOES NOT REPRESENT ALL TR
AVEL IN THE REGION--ONLY THAT INTERVIEWED.

MINOR

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE FOR STATE

TRIP PURPOSE

| VEH TYPE | WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|----------|------|----------|------|----------|---------|-------|
| CAR W/O TRLR | 66.1% 124466 | 85.0% 33758 | 86.4% 87559 | 82.9% 17775 | 89.4% 73046 | 87.4% 45256 |
| CAR W/ TRLR | 0.2% 422 | 0.6% 226 | 0.8% 805 | 7.0% 1501 | 1.1% 922 | 0.7% 371 |
| PICK-UP W/O/TRLR | 21.1% 39816 | 13.5% 5367 | 11.8% 11931 | 5.5% 1171 | 8.5% 6937 | 10.8% 5583 |
| PICK-UP W/ TRLR | 0.4% 670 | 0.2% 71 | 0.2% 171 | 1.3% 280 | 0.3% 250 | 0.2% 104 |
| SINGLE-UNIT TRUCKS | 8.2% 15420 | 0.6% 250 | 0.7% 754 | 3.0% 634 | 0.5% 443 | 0.8% 421 |
| COMBINATION TRUCKS | 4.0% 7585 | 0.1% 27 | 0.1% 71 | 0.4% 80 | 0.1% 68 | 0.1% 54 |
| TOTAL | 100% 188380 | 100% 39698 | 100% 101291 | 100% 21441 | 100% 81666 | 100% 51789 |

TOTAL TERMINAL-TRIPS FOR ALL STUDIES IN REGION = 484264

TABLE SHOWS PCT OF EXPANDED ORIGIN-DESTINATION INTERVIEWS FOR EACH CATEG
ORY IN THE REGION. ACTUAL TRIPS BELOW EACH PCT DOES NOT REPRESENT ALL TR
AVEL IN THE REGION--ONLY THAT INTERVIEWED.

```
    0    2    4    6    8   10   12   14   16   18   20   22   24   26   28   30   32   34   36   38   40
    +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
 10................................................
 20.........................................................................................
 30...........................................
 40.....................................
 50..................
 60.........
 70....
 80...
 90....
100...
110...
120..
130..
140.
150.
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170.
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190.
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210.
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230.
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270.
280.
290.
300.
310.
320.
330.
340.
350.
360.
370.
380.
390.
400.
410.
420.
430.
440.
450.
460.
470.
480.
490.
500.
510.
520.
530.
540.
550.
560.
570.
580.
590.
600.
610.
620.
630.
640.
650.
660.
670.
680.
690.
700.
710.
720.
730.
740.
750.
```

| | P.C. | CUM. | ACTUAL |
|---|---|---|---|
| 10 | 17.058 | 17.058 | 31907 |
| 20 | 31.697 | 48.735 | 59361 |
| 30 | 16.806 | 65.541 | 31474 |
| 40 | 13.658 | 79.199 | 25578 |
| 50 | 7.157 | 86.356 | 13403 |
| 60 | 3.848 | 90.204 | 7206 |
| 70 | 1.948 | 92.153 | 3649 |
| 80 | 1.561 | 93.714 | 2924 |
| 90 | 1.170 | 94.885 | 2196 |
| 100 | 0.637 | 95.521 | 1192 |
| 110 | 0.908 | 96.429 | 1701 |
| 120 | 0.591 | 97.020 | 1107 |
| 130 | 0.399 | 97.420 | 748 |
| 140 | 0.232 | 97.652 | 436 |
| 150 | 0.214 | 97.865 | 400 |
| 160 | 0.372 | 98.237 | 696 |
| 170 | 0.140 | 98.377 | 262 |
| 180 | 0.146 | 98.523 | 274 |
| 190 | 0.173 | 98.696 | 324 |
| 200 | 0.135 | 98.831 | 253 |
| 210 | 0.075 | 98.906 | 141 |
| 220 | 0.088 | 98.994 | 164 |
| 230 | 0.133 | 99.127 | 250 |
| 240 | 0.075 | 99.203 | 141 |
| 250 | 0.138 | 99.341 | 259 |
| 260 | 0.061 | 99.402 | 114 |
| 270 | 0.056 | 99.457 | 104 |
| 280 | 0.029 | 99.486 | 54 |
| 290 | 0.059 | 99.545 | 110 |
| 300 | 0.030 | 99.575 | 57 |
| 310 | 0.022 | 99.597 | 41 |
| 320 | 0.038 | 99.635 | 71 |
| 330 | 0.026 | 99.661 | 49 |
| 340 | 0.024 | 99.685 | 45 |
| 350 | 0.034 | 99.720 | 64 |
| 360 | 0.014 | 99.734 | 27 |
| 370 | 0.034 | 99.768 | 64 |
| 380 | 0.011 | 99.779 | 21 |
| 390 | 0.010 | 99.789 | 18 |
| 400 | 0.014 | 99.803 | 27 |
| 410 | 0.004 | 99.807 |  |
| 420 | 0.011 | 99.818 | 20 |
| 430 | 0.008 | 99.826 | 15 |
| 440 | 0.036 | 99.862 | 66 |
| 450 | 0.012 | 99.874 | 22 |
| 460 | 0.015 | 99.889 | 28 |
| 470 | 0.017 | 99.905 | 33 |
| 480 | 0.006 | 99.912 | 14 |
| 490 | 0.011 | 99.923 | 20 |
| 500 | 0.003 | 99.925 |  |
| 510 | 0.004 | 99.930 |  |
| 520 | 0.008 | 99.938 | 15 |
| 530 | 0.002 | 99.940 |  |
| 540 | 0.006 | 99.946 | 1 |
| 550 | 0.003 | 99.948 |  |
| 560 | 0.005 | 99.953 |  |
| 570 | 0.002 | 99.955 |  |
| 580 | 0.008 | 99.963 | 15 |
| 590 | 0.006 | 99.968 | 1 |
| 600 | 0.003 | 99.971 |  |
| 610 | 0.005 | 99.977 | 1 |
| 620 | 0.001 | 99.978 |  |
| 630 | 0.000 | 99.978 |  |
| 640 | 0.000 | 99.978 |  |
| 650 | 0.001 | 99.978 |  |
| 660 | 0.003 | 99.981 |  |
| 670 | 0.002 | 99.982 |  |
| 680 | 0.001 | 99.983 |  |
| 690 | 0.005 | 99.988 |  |
| 700 | 0.001 | 99.989 |  |
| 710 | 0.000 | 99.989 |  |
| 720 | 0.000 | 99.989 |  |
| 730 | 0.000 | 99.989 |  |
| 740 | 0.002 | 99.991 |  |
| 750 | 0.009 | 100.000 | 1 |

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=   187279       SUM=   6066433.       MEAN=  32.393       VAR=    1745.897       SD=  41.784

ALL TRIPS OVER MAXP    =       17
ALL TRIPS OVER 255     =        0
TIME TABLE NUMBER      =      201
TREE NUMBER            =      101


WORK TRIPS

```
      0    2    4    6    8   10   12   14   16   18   20   22   24   26   28   30   32   34   36   38   40
     +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
                                                                                                          P.C.    CUM.   ACTUAL
  10.................................................................                                   19.028  19.028     749
  20.............................................................................................       35.341  54.369    1392
  30............................................................                                       17.227  71.596     678
  40..................................                                                                 12.596  84.192     496
  50.................                                                                                   4.906  89.092     193
  60.........                                                                                           3.007  92.098     118
  70......                                                                                              1.540  93.639      60
  80....                                                                                                1.108  94.745      43
  90...                                                                                                 0.812  95.557      32
 100..                                                                                                  0.487  96.044      19
 110...                                                                                                 0.787  96.831      31
 120..                                                                                                  0.370  97.201      14
 130..                                                                                                  0.279  97.480      11
 140.                                                                                                   0.186  97.668       7
 150..                                                                                                  0.218  97.886       8
 160..                                                                                                  0.520  98.406      20
 170.                                                                                                   0.140  98.546       5
 180.                                                                                                   0.119  98.665       6
 190.                                                                                                   0.165  98.830       6
 200.                                                                                                   0.137  98.967       5
 210.                                                                                                   0.104  99.071       8
 220.                                                                                                   0.084  99.155       3
 230.                                                                                                   0.063  99.218       2
 240.                                                                                                   0.069  99.287       2
 250.                                                                                                   0.069  99.355       2
 260.                                                                                                   0.071  99.427       2
 270.                                                                                                   0.089  99.515       3
 280.                                                                                                   0.036  99.551       1
 290.                                                                                                   0.023  99.574
 300.                                                                                                   0.053  99.627       2
 310.                                                                                                   0.020  99.647
 320.                                                                                                   0.028  99.675       1
 330.                                                                                                   0.025  99.701       1
 340.                                                                                                   0.028  99.728       1
 350.                                                                                                   0.025  99.754       1
 360.                                                                                                   0.000  99.754
 370.                                                                                                   0.020  99.774
 380.                                                                                                   0.005  99.779
 390.                                                                                                   0.005  99.784
 400.                                                                                                   0.005  99.789
 410.                                                                                                   0.008  99.797
 420.                                                                                                   0.018  99.815
 430.                                                                                                   0.013  99.827
 440.                                                                                                   0.005  99.833
 450.                                                                                                   0.005  99.838
 460.                                                                                                   0.010  99.848
 470.                                                                                                   0.020  99.868
 480.                                                                                                   0.008  99.876
 490.                                                                                                   0.000  99.876
 500.                                                                                                   0.010  99.886
 510.                                                                                                   0.005  99.891
 520.                                                                                                   0.013  99.904
 530.                                                                                                   0.006  99.911
 540.                                                                                                   0.008  99.919
 550.                                                                                                   0.000  99.919
 560.                                                                                                   0.000  99.919
 570.                                                                                                   0.005  99.924
 580.                                                                                                   0.005  99.929
 590.                                                                                                   0.005  99.934
 600.                                                                                                   0.008  99.942
 610.                                                                                                   0.003  99.944
 620.                                                                                                   0.005  99.949
 630.                                                                                                   0.010  99.959
 640.                                                                                                   0.000  99.959
 650.                                                                                                   0.005  99.964
 660.                                                                                                   0.000  99.964
 670.                                                                                                   0.015  99.980
 680.                                                                                                   0.003  99.982
 690.                                                                                                   0.008  99.990
 700.                                                                                                   0.005  99.995
 710.                                                                                                   0.000  99.995
 720.                                                                                                   0.000  99.995
 730.                                                                                                   0.000  99.995
 740.                                                                                                   0.000  99.995
 750.                                                                                                   0.005 100.000
```

.INING VALUES ARE ALL ZERO
.ER OF OBSERVATIONS=    39410        SUM=    1165781.        MEAN=  29.581        VAR=    1678.348        50=  40.966

```
.L TRIPS OVER MAXP   =        2
.L TRIPS OVER 255    =        0
.HE TABLE NUMBER     =      202
.I TREE NUMBER       =      161
```

PERS.BUSINESS TRIPS

```
   0    2    4    6    8   10   12   14   16   18   20   22   24   26   28   30   32   34   36   38   40
   +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
```

|      | P.C.    | CUM.    | ACTUAL |
|------|---------|---------|--------|
| 10   | 20.889  | 20.889  | 2102.  |
| 20   | 37.583  | 58.473  | 3782.  |
| 30   | 15.472  | 73.944  | 1557.  |
| 40   | 12.236  | 86.181  | 1231.  |
| 50   | 4.805   | 90.986  | 483.   |
| 60   | 2.457   | 93.444  | 247.   |
| 70   | 0.927   | 94.371  | 93.    |
| 80   | 1.060   | 95.451  | 108.   |
| 90   | 0.554   | 96.005  | 55.    |
| 100  | 0.263   | 96.269  | 26.    |
| 110  | 0.862   | 97.130  | 86.    |
| 120  | 0.288   | 97.418  | 29.    |
| 130  | 0.281   | 97.700  | 28.    |
| 140  | 0.215   | 97.914  | 21.    |
| 150  | 0.064   | 97.978  | 6.     |
| 160  | 0.199   | 98.177  | 20.    |
| 170  | 0.063   | 98.239  | 0      |
| 180  | 0.125   | 98.364  | 12.    |
| 190  | 0.180   | 98.544  | 18     |
| 200  | 0.106   | 98.651  | 10     |
| 210  | 0.095   | 98.746  | 9.     |
| 220  | 0.067   | 98.813  | 6      |
| 230  | 0.178   | 98.990  | 17.    |
| 240  | 0.090   | 99.081  | 9      |
| 250  | 0.093   | 99.174  | 9.     |
| 260  | 0.201   | 99.375  | 20.    |
| 270  | 0.075   | 99.449  | 7.     |
| 280  | 0.049   | 99.498  | 4.     |
| 290  | 0.023   | 99.521  | 2      |
| 300  | 0.079   | 99.600  | 7.     |
| 310  | 0.063   | 99.662  | 6      |
| 320  | 0.022   | 99.684  | 2      |
| 330  | 0.044   | 99.728  | 4.     |
| 340  | 0.010   | 99.738  | 1      |
| 350  | 0.013   | 99.751  | 1      |
| 360  | 0.010   | 99.761  | 1      |
| 370  | 0.042   | 99.802  | 4      |
| 380  | 0.005   | 99.807  |        |
| 390  | 0.022   | 99.829  | 2.     |
| 400  | 0.011   | 99.840  | 1      |
| 410  | 0.000   | 99.840  |        |
| 420  | 0.012   | 99.852  | 1      |
| 430  | 0.008   | 99.860  |        |
| 440  | 0.023   | 99.883  | 2      |
| 450  | 0.018   | 99.901  | 1      |
| 460  | 0.017   | 99.918  | 1      |
| 470  | 0.001   | 99.919  |        |
| 480  | 0.003   | 99.921  |        |
| 490  | 0.008   | 99.929  |        |
| 500  | 0.013   | 99.942  | 1      |
| 510  | 0.001   | 99.943  |        |
| 520  | 0.011   | 99.954  | 1      |
| 530  | 0.006   | 99.962  |        |
| 540  | 0.002   | 99.964  |        |
| 550  | 0.008   | 99.972  |        |
| 560  | 0.003   | 99.975  |        |
| 570  | 0.003   | 99.978  |        |
| 580  | 0.002   | 99.980  |        |
| 590  | 0.000   | 99.980  |        |
| 600  | 0.001   | 99.981  |        |
| 610  | 0.001   | 99.982  |        |
| 620  | 0.003   | 99.985  |        |
| 630  | 0.000   | 99.985  |        |
| 640  | 0.000   | 99.985  |        |
| 650  | 0.002   | 99.987  |        |
| 660  | 0.000   | 99.987  |        |
| 670  | 0.000   | 99.987  |        |
| 680  | 0.004   | 99.991  |        |
| 690  | 0.002   | 99.993  |        |
| 700  | 0.001   | 99.994  |        |
| 710  | 0.000   | 99.994  |        |
| 720  | 0.000   | 99.994  |        |
| 730  | 0.000   | 99.994  |        |
| 740  | 0.000   | 99.994  |        |
| 750  | 0.006   | 100.000 |        |

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=   100635      SUM=   2816970.      MEAN= 27.992      VAR= 1603.356      50%= 40.042

ALL TRIPS OVER MAXP   =      0
ALL TRIPS OVER 255    =      0
THE TABLE NUMBER      =    203
TREE NUMBER           =    101

SHOPPING TRIPS

```
         0    1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19   20
         +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
  10...........................................                                    P.C.    CUM.   ACTUAL
  20.................................................                              5.683   5.683    119
  30.......................................                                        8.715  14.398    182
  40.................................................................              5.542  19.990    117
  50....................                                                          12.107  32.157    255
  60..............................................                                 3.342  35.499     70
  70.....................                                                          7.638  43.137    160
  80.........................                                                      2.565  45.702     53
  90......................                                                         5.507  51.209    115
 100..........                                                                     4.105  55.313     86
 110................                                                               1.856  57.149     38
 120............                                                                   3.280  60.429     68
 130..........                                                                     1.778  62.207     37
 140...........                                                                    2.207  64.415     46
 150.....                                                                          1.754  66.169     36
 160..............                                                                 0.882  67.051     18
 170.........                                                                      2.532  69.583     53
 180........                                                                       1.440  71.023     30
 190.........                                                                      1.411  72.434     29
 200........                                                                       1.874  74.308     39
 210.......                                                                        1.383  75.690     29
 220.....                                                                          1.545  77.235     32
 230.........                                                                      0.658  77.893     13
 240.......                                                                        1.526  79.418     32
 250.......                                                                        1.235  80.653     25
 260.........                                                                      1.216  81.869     25
 270.......                                                                        1.764  83.638     37
 280.....                                                                          1.492  85.130     31
 290.....                                                                          0.987  86.117     20
 300.......                                                                        0.853  86.970     17
 310......                                                                         1.125  88.095     23
 320.....                                                                          0.968  89.063     20
 330......                                                                         0.806  89.869     16
 340..                                                                            1.087  90.956     22
 350...                                                                           0.234  91.190      9
 360...                                                                           0.462  91.652      9
 370...                                                                           0.319  91.971      8
 380..                                                                            0.420  92.391      8
 390...                                                                           0.277  92.667      6
 400..                                                                            0.319  92.987      6
 410..                                                                            0.290  93.262      6
 420...                                                                           0.287  93.549      5
 430...                                                                           0.486  94.036     10
 440......                                                                         0.305  94.341      6
 450..                                                                            1.025  95.366     21
 460..                                                                            0.267  95.633      5
 470...                                                                           0.191  95.824      4
 480...                                                                           0.343  96.167      7
 490..                                                                            0.324  96.491      6
 500..                                                                            0.200  96.891      4
 510..                                                                            0.170  96.868      5
 520...                                                                           0.234  97.101      6
 530.                                                                             0.391  97.492      8
 540...                                                                           0.038  97.530      2
 550..                                                                            0.391  97.921      8
 560..                                                                            0.186  98.107      4
 570...                                                                           0.138  98.246      3
 580.                                                                             0.143  98.389      3
 590.                                                                             0.033  98.422      1
 600.                                                                             0.110  98.532      2
 610..                                                                            0.024  98.555      1
 620.                                                                             0.243  98.794      5
 630.                                                                             0.095  98.894      2
 640.                                                                             0.091  98.985      2
 650.                                                                             0.029  99.013      1
 660.                                                                             0.024  99.037      1
 670..                                                                            0.010  99.046      1
 680.                                                                             0.200  99.247      5
 690.                                                                             0.010  99.256      1
 700.                                                                             0.119  99.375      2
 710.                                                                             0.057  99.433      1
 720.                                                                             0.010  99.442      1
 730.                                                                             0.029  99.471      1
 740.                                                                             0.057  99.528      1
 750...                                                                           0.057  99.585      1
                                                                                 0.415 100.000      9
INING VALUES ARE ALL ZERO
ER OF OBSERVATIONS=    21975    SUM=   2821726,    MEAN= 134.528    VAR=  20258.672    SD= 142.333

L TRIPS OVER MAXP  =      87
L TRIPS OVER 255   =       0
ME TABLE NUMBER    =     204
TREE NUMBER        =     191
```

```
    0     2     4     6     8    10    12    14    16    18    20    22    24    26    28    30    32    34    36    38    40
    +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
```

| | P.C. | CUM. | ACTUAL |
|---|---|---|---|
| 10 | 17.917 | 17.917 | 1449t |
| 20 | 34.385 | 52.301 | 2792c |
| 30 | 15.558 | 67.860 | 1258c |
| 40 | 10.738 | 78.598 | 868t |
| 50 | 4.744 | 83.342 | 383t |
| 60 | 3.420 | 86.762 | 276i |
| 70 | 1.667 | 88.429 | 134c |
| 80 | 1.606 | 90.034 | 129c |
| 90 | 1.175 | 91.210 | 95i |
| 100 | 0.735 | 91.945 | 59c |
| 110 | 1.649 | 93.594 | 133t |
| 120 | 0.787 | 94.381 | 63i |
| 130 | 0.666 | 95.047 | 53c |
| 140 | 0.428 | 95.475 | 34t |
| 150 | 0.377 | 95.852 | 30i |
| 160 | 0.492 | 96.344 | 39i |
| 170 | 0.264 | 96.608 | 21i |
| 180 | 0.240 | 96.848 | 19i |
| 190 | 0.374 | 97.223 | 30. |
| 200 | 0.292 | 97.514 | 23c |
| 210 | 0.197 | 97.711 | 15i |
| 220 | 0.130 | 97.841 | 10i |
| 230 | 0.251 | 98.092 | 20. |
| 240 | 0.159 | 98.251 | 12i |
| 250 | 0.187 | 98.438 | 15i |
| 260 | 0.185 | 98.623 | 15i |
| 270 | 0.137 | 98.760 | 11i |
| 280 | 0.053 | 98.813 | 4. |
| 290 | 0.125 | 98.938 | 10 |
| 300 | 0.091 | 99.030 | 7. |
| 310 | 0.087 | 99.116 | 7i |
| 320 | 0.061 | 99.177 | 4i |
| 330 | 0.069 | 99.246 | 5i |
| 340 | 0.016 | 99.262 | 1. |
| 350 | 0.044 | 99.307 | 3. |
| 360 | 0.017 | 99.324 | 1. |
| 370 | 0.052 | 99.376 | 4. |
| 380 | 0.027 | 99.403 | 2. |
| 390 | 0.028 | 99.431 | 2. |
| 400 | 0.025 | 99.456 | 2. |
| 410 | 0.007 | 99.464 | |
| 420 | 0.047 | 99.511 | 3 |
| 430 | 0.025 | 99.535 | 2 |
| 440 | 0.060 | 99.616 | 6i |
| 450 | 0.023 | 99.639 | 1i |
| 460 | 0.015 | 99.654 | 1. |
| 470 | 0.042 | 99.696 | 3. |
| 480 | 0.022 | 99.718 | 1 |
| 490 | 0.019 | 99.737 | 1 |
| 500 | 0.026 | 99.763 | 2 |
| 510 | 0.041 | 99.803 | 3 |
| 520 | 0.016 | 99.820 | 1 |
| 530 | 0.002 | 99.822 | |
| 540 | 0.026 | 99.848 | 2 |
| 550 | 0.021 | 99.869 | 1 |
| 560 | 0.009 | 99.878 | |
| 570 | 0.010 | 99.888 | |
| 580 | 0.004 | 99.891 | |
| 590 | 0.004 | 99.895 | |
| 600 | 0.010 | 99.905 | |
| 610 | 0.009 | 99.913 | |
| 620 | 0.004 | 99.917 | |
| 630 | 0.010 | 99.927 | |
| 640 | 0.006 | 99.933 | |
| 650 | 0.026 | 99.959 | 2 |
| 660 | 0.000 | 99.959 | |
| 670 | 0.007 | 99.967 | |
| 680 | 0.001 | 99.968 | |
| 690 | 0.000 | 99.968 | |
| 700 | 0.000 | 99.968 | |
| 710 | 0.001 | 99.969 | |
| 720 | 0.002 | 99.972 | |
| 730 | 0.000 | 99.972 | |
| 740 | 0.005 | 99.977 | |
| 750 | 0.023 | 100.000 | 1 |

INTING VALUES ARE ALL ZERO
ER OF OBSERVATIONS=    81968       SUM=   3028356.      MEAN=  37.430      VAR=   3367.270          SD=  58.028

L TRIPS OVER MAXP   =     19
L TRIPS OVER 255    =      0
HE TABLE NUMBER     =    205
 TREE NUMBER        =    101
```

OTHER SOC. OR REC. TRIPS

```
    0    2    4    6    8   10   12   14   16   18   20   22   24   26   28   30   32   34   36   38   40          F.C.   CUM.   ACTUAL
   +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
 10.................................................................................................              20.480 20.480   105(
 20..............................................................................................................  35.123 55.583   180.
 30.........................................................                                                      15.978 71.561    82(
 40...........................................                                                                    11.242 82.803    57
 50...................                                                                                             5.050 87.853    25(
 60..........                                                                                                      2.807 90.659    14(
 70....                                                                                                            1.313 91.972     b.
 80....                                                                                                            1.190 93.182     6:
 90...                                                                                                             0.843 94.005     4.
100..                                                                                                              0.510 94.516     2(
110...                                                                                                             0.795 95.310     4(
120...                                                                                                             0.871 96.181     4(
130..                                                                                                             0.547 96.728     2(
140..                                                                                                             0.251 96.979     1.
150..                                                                                                             0.259 97.235     1.
160..                                                                                                             0.545 97.784     2(
170.                                                                                                               0.148 97.932
180.                                                                                                               0.179 98.111
190..                                                                                                              0.208 98.319    1(
200.                                                                                                               0.105 98.424
210.                                                                                                               0.105 98.530
220.                                                                                                               0.082 98.611
230.                                                                                                               0.156 98.767
240.                                                                                                               0.107 98.874
250.                                                                                                               0.175 99.050
260.                                                                                                               0.109 99.159
270.                                                                                                               0.105 99.264
280.                                                                                                               0.047 99.311
290.                                                                                                               0.082 99.392
300.                                                                                                               0.045 99.437
310.                                                                                                               0.027 99.464
320.                                                                                                               0.029 99.494
330.                                                                                                               0.058 99.552
340.                                                                                                               0.019 99.572
350.                                                                                                               0.025 99.597
360.                                                                                                               0.014 99.610
370.                                                                                                               0.031 99.642
380.                                                                                                               0.019 99.661
390.                                                                                                               0.010 99.671
400.                                                                                                               0.014 99.684
410.                                                                                                               0.016 99.700
420.                                                                                                               0.019 99.720
430.                                                                                                               0.021 99.741
440.                                                                                                               0.039 99.780
450.                                                                                                               0.012 99.792
460.                                                                                                               0.008 99.799
470.                                                                                                               0.021 99.821
480.                                                                                                               0.019 99.840
490.                                                                                                               0.012 99.852
500.                                                                                                               0.018 99.870
510.                                                                                                               0.018 99.887
520.                                                                                                               0.006 99.893
530.                                                                                                               0.006 99.899
540.                                                                                                               0.006 99.905
550.                                                                                                               0.006 99.910
560.                                                                                                               0.000 99.910
570.                                                                                                               0.004 99.914
580.                                                                                                               0.008 99.922
590.                                                                                                               0.000 99.922
600.                                                                                                               0.002 99.924
610.                                                                                                               0.006 99.932
620.                                                                                                               0.010 99.942
630.                                                                                                               0.000 99.942
640.                                                                                                               0.002 99.944
650.                                                                                                               0.014 99.957
660.                                                                                                               0.000 99.957
670.                                                                                                               0.012 99.969
680.                                                                                                               0.000 99.969
690.                                                                                                               0.002 99.971
700.                                                                                                               0.010 99.981
710.                                                                                                               0.000 99.981
720.                                                                                                               0.004 99.984
730.                                                                                                               0.008 99.992
740.                                                                                                               0.002 99.994
750.                                                                                                               0.006 100.000
```

INING VALUES ARE ALL ZERO
ER OF OBSERVATIONS=    51345        SUM=    1622116.        MEAN=  31.592        VAR=   2262.102          SD=  47.562

```
L TRIPS OVER MAXP    =       3
L TRIPS OVER 255     =       0
HE TABLE NUMBER      =     2(6
TREE NUMBER          =     101
```

ALL OTHER TRIPS

-28-

```
     0    2    4    6    8   10   12   14   16   18   20   22   24   26   28   30   32   34   36   38   40
     +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+      P.C.   CUM.   ACTUAL
  10.....................................................                                                      18.026 18.026   86621
  20.........................................................................................                 33.044 51.070  158793
  30.................................................                                                         15.773 66.843   75798
  40.......................................                                                                   12.458 79.301   59866
  50.............                                                                                              5.661 84.963   27302
  60......                                                                                                     3.470 88.453   16674
  70.....                                                                                                      1.613 90.065    7750
  80.....                                                                                                      1.563 91.625    7512
  90....                                                                                                       1.106 92.735    5315
 100...                                                                                                        0.602 93.336    2891
 110....                                                                                                       1.105 94.441    5308
 120...                                                                                                        0.624 95.065    3000
 130..                                                                                                         0.504 95.569    2424
 140..                                                                                                         0.326 95.896    1567
 150..                                                                                                         0.244 96.140    1173
 160..                                                                                                         0.481 96.620    2310
 170..                                                                                                         0.202 96.823     972
 180..                                                                                                         0.214 97.037    1029
 190..                                                                                                         0.286 97.322    1373
 200..                                                                                                         0.207 97.529     994
 210.                                                                                                          0.170 97.699     815
 220.                                                                                                          0.114 97.813     549
 230..                                                                                                         0.220 98.033    1057
 240.                                                                                                          0.146 98.179     702
 250.                                                                                                          0.182 98.361     876
 260.                                                                                                          0.192 98.553     921
 270.                                                                                                          0.144 98.697     692
 280.                                                                                                          0.081 98.778     391
 290.                                                                                                          0.097 98.875     464
 300.                                                                                                          0.102 98.977     490
 310.                                                                                                          0.083 99.060     399
 320.                                                                                                          0.070 99.130     337
 330.                                                                                                          0.087 99.217     417
 340.                                                                                                          0.029 99.246     138
 350.                                                                                                          0.048 99.294     233
 360.                                                                                                          0.026 99.320     125
 370.                                                                                                          0.054 99.374     260
 380.                                                                                                          0.025 99.394     118
 390.                                                                                                          0.029 99.427     137
 400.                                                                                                          0.027 99.454     129
 410.                                                                                                          0.017 99.471      80
 420.                                                                                                          0.039 99.510     189
 430.                                                                                                          0.026 99.536     123
 440.                                                                                                          0.082 99.618     393
 450.                                                                                                          0.026 99.643     123
 460.                                                                                                          0.022 99.665     105
 470.                                                                                                          0.033 99.698     157
 480.                                                                                                          0.024 99.721     114
 490.                                                                                                          0.019 99.740      91
 500.                                                                                                          0.019 99.759      89
 510.                                                                                                          0.021 99.780     102
 520.                                                                                                          0.027 99.807     129
 530.                                                                                                          0.006 99.813      28
 540.                                                                                                          0.025 99.838     122
 550.                                                                                                          0.015 99.853      72
 560.                                                                                                          0.010 99.863      48
 570.                                                                                                          0.010 99.873      46
 580.                                                                                                          0.007 99.880      33
 590.                                                                                                          0.008 99.888      39
 600.                                                                                                          0.005 99.893      25
 610.                                                                                                          0.015 99.908      74
 620.                                                                                                          0.007 99.914      35
 630.                                                                                                          0.006 99.922      31
 640.                                                                                                          0.002 99.924      12
 650.                                                                                                          0.008 99.932      36
 660.                                                                                                          0.001 99.934       7
 670.                                                                                                          0.013 99.947      63
 680.                                                                                                          0.002 99.949       9
 690.                                                                                                          0.008 99.957      40
 700.                                                                                                          0.005 99.962      22
 710.                                                                                                          0.001 99.962       3
 720.                                                                                                          0.002 99.964      10
 730.                                                                                                          0.003 99.965      16
 740.                                                                                                          0.004 99.972      21
 750.                                                                                                          0.028 100.000    134
```

```
MISSING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=   480547     SUM=   17521382.      MEAN=  36.461      VAR=   3294.507        SD=  57.398
```

```
ALL TRIPS OVER MAXP    =     134
ALL TRIPS OVER 255     =       0
THE TABLE NUMBER       =     207
TREE NUMBER            =     101
```

TOTAL TRIPS

# MINOR ORIGIN AND DESTINATION STUDIES

## MEAN TRIP LENGTHS BY PURPOSE

REGION 1

| TRIP PURPOSE | MINUTES | PERCENT OF TOTAL TRIPS |
|:---:|:---:|:---:|
| 1 | 26 | 41 |
| 2 | 21 | 11 |
| 3 | 18 | 19 |
| 4 | 119 | 1 |
| 5 | 22 | 17 |
| 6 | 20 | 12 |
| ALL | 23 | |

REGION 2

| TRIP PURPOSE | MINUTES | PERCENT OF TOTAL TRIPS |
|:---:|:---:|:---:|
| 1 | 27 | 48 |
| 2 | 25 | 7 |
| 3 | 20 | 20 |
| 4 | 197 | 0 |
| 5 | 22 | 12 |
| 6 | 25 | 13 |
| ALL | 25 | |

REGION 3

| TRIP PURPOSE | MINUTES | PERCENT OF TOTAL TRIPS |
|:---:|:---:|:---:|
| 1 | 25 | 47 |
| 2 | 20 | 7 |
| 3 | 18 | 18 |
| 4 | 149 | 1 |
| 5 | 24 | 15 |
| 6 | 25 | 12 |
| ALL | 24 | |

TRIP PURPOSE

1  WORK
2  PERS. BUSINESS
3  SHOPPING
4  VACATION
5  OTHER SOC. OR REC.
6  ALL OTHER

REGION 4

| TRIP PURPOSE | MINUTES | PERCENT OF TOTAL TRIPS |
|---|---|---|
| 1 | 33 | 35 |
| 2 | 35 | 10 |
| 3 | 20 | 24 |
| 4 | 124 | 2 |
| 5 | 41 | 17 |
| 6 | 36 | 13 |
| ALL | 34 | |

REGION 5

| TRIP PURPOSE | MINUTES | PERCENT OF TOTAL TRIPS |
|---|---|---|
| 1 | 35 | 52 |
| 2 | 30 | 9 |
| 3 | 26 | 15 |
| 4 | 193 | 0 |
| 5 | 32 | 13 |
| 6 | 30 | 11 |
| ALL | 33 | |

REGION 7

| TRIP PURPOSE | MINUTES | PERCENT OF TOTAL TRIPS |
|---|---|---|
| 1 | 33 | 39 |
| 2 | 31 | 10 |
| 3 | 26 | 21 |
| 4 | 115 | 3 |
| 5 | 38 | 16 |
| 6 | 33 | 11 |
| ALL | 35 | |

REGION 8

| TRIP PURPOSE | MINUTES | PERCENT OF TOTAL TRIPS |
|---|---|---|
| 1 | 32 | 39 |
| 2 | 26 | 8 |
| 3 | 24 | 22 |
| 4 | 145 | 3 |
| 5 | 33 | 17 |
| 6 | 27 | 10 |
| ALL | 32 | |

REGION 9

| TRIP PURPOSE | MINUTES | PERCENT OF TOTAL TRIPS |
|:---:|:---:|:---:|
| 1 | 34 | 33 |
| 2 | 35 | 7 |
| 3 | 47 | 28 |
| 4 | 136 | 7 |
| 5 | 52 | 16 |
| 6 | 47 | 8 |
| ALL | 49 | |

REGION 10

| TRIP PURPOSE | MINUTES | PERCENT OF TOTAL TRIPS |
|:---:|:---:|:---:|
| 1 | 31 | 36 |
| 2 | 29 | 8 |
| 3 | 23 | 20 |
| 4 | 92 | 7 |
| 5 | 31 | 20 |
| 6 | 26 | 10 |
| ALL | 33 | |

REGION 11

| TRIP PURPOSE | MINUTES | PERCENT OF TOTAL TRIPS |
|:---:|:---:|:---:|
| 1 | 51 | 19 |
| 2 | 50 | 4 |
| 3 | 48 | 12 |
| 4 | 125 | 36 |
| 5 | 76 | 19 |
| 6 | 52 | 10 |
| ALL | 82 | |

REGION 12

| TRIP PURPOSE | MINUTES | PERCENT OF TOTAL TRIPS |
|:---:|:---:|:---:|
| 1 | 58 | 33 |
| 2 | 51 | 8 |
| 3 | 45 | 23 |
| 4 | 201 | 7 |
| 5 | 64 | 21 |
| 6 | 53 | 8 |
| ALL | 65 | |

REGION 13

| TRIP PURPOSE | MINUTES | PERCENT OF TOTAL TRIPS |
|:---:|:---:|:---:|
| 1 | 42 | 30 |
| 2 | 35 | 7 |
| 3 | 24 | 24 |
| 4 | 179 | 7 |
| 5 | 40 | 21 |
| 6 | 37 | 12 |
| ALL | 46 | |

STATEWIDE AVERAGE

| TRIP PURPOSE | MINUTES | PERCENT OF TOTAL TRIPS |
|:---:|:---:|:---:|
| 1 | 32 | 39 |
| 2 | 30 | 8 |
| 3 | 28 | 21 |
| 4 | 135 | 4 |
| 5 | 37 | 17 |
| 6 | 32 | 11 |
| ALL | 36 | |

# REGIONAL TRIP CHARCTERISTICS

REGION 7

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE


## VEHICLE TYPE
----------------

| CAR W/O TRLR | CAR W/ TRLR | PICK-UP W/O/TRLR | PICK-UP W/ TRLR | SINGLE-UNIT TRUCKS | COMBINATION TRUCKS |
|---|---|---|---|---|---|
| 78.2% | 0.8% | 14.9% | 0.3% | 3.8% | 2.0% |
| 59205 | 587 | 11257 | 254 | 2898 | 1495 |


## TRIP PURPOSE
--------------------

| WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|
| 39.1% | 10.0% | 20.8% | 3.2% | 16.1% | 10.9% |
| 29581 | 7549 | 15707 | 2422 | 12202 | 8233 |


## NUMBER IN VEHICLE
--------------------

| 1 | 2 | 3 | 4 | 5 | 6+ |
|---|---|---|---|---|---|
| 54.2% | 25.9% | 9.8% | 5.7% | 2.5% | 2.0% |
| 40990 | 19605 | 7382 | 4326 | 1857 | 1536 |


## VEHICLE GARAGED AT
--------------------

| ORIGIN | DESTIN | OTHER |
|---|---|---|
| 44.3% | 35.2% | 20.6% |
| 33523 | 26615 | 15557 |


TOTAL TRIPS = 75696

MINOR

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE FOR REGION   7

TRIP PURPOSE

| # IN VEH. | WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|---|
| 1 | 80.5%<br>23959 | 46.9%<br>3566 | 37.6%<br>5955 | 8.6%<br>235 | 33.8%<br>4206 | 40.1%<br>3330 |
| 2 | 14.5%<br>4313 | 32.0%<br>2439 | 33.8%<br>5352 | 38.8%<br>1056 | 33.0%<br>4101 | 32.7%<br>2713 |
| 3 | 3.2%<br>963 | 11.1%<br>846 | 14.5%<br>2294 | 17.4%<br>474 | 14.6%<br>1810 | 13.8%<br>1143 |
| 4 | 1.2%<br>371 | 5.9%<br>448 | 8.3%<br>1313 | 19.0%<br>517 | 9.4%<br>1174 | 7.6%<br>633 |
| 5 | 0.4%<br>118 | 2.7%<br>208 | 3.3%<br>527 | 8.4%<br>229 | 4.5%<br>553 | 3.3%<br>272 |
| 6+ | 0.2%<br>56 | 1.4%<br>103 | 2.6%<br>416 | 7.8%<br>212 | 4.7%<br>584 | 2.5%<br>211 |
| TOTAL | 100%<br>29779 | 100%<br>7609 | 100%<br>15856 | 100%<br>2723 | 100%<br>12429 | 100%<br>8302 |

TOTAL TERMINAL-TRIPS FOR ALL STUDIES IN REGION =   76698

TABLE SHOWS PCT OF EXPANDED ORIGIN-DESTINATION INTERVIEWS FOR EACH CATEGORY IN THE REGION. ACTUAL TRIPS BELOW EACH PCT DOES NOT REPRESENT ALL TRAVEL IN THE REGION--ONLY THAT INTERVIEWED.

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE FOR REGION 7

TRIP PURPOSE

| VEH TYPE | WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|---|
| CAR W/O TRLR | 64.7% 19281 | 84.4% 6422 | 85.5% 13564 | 78.8% 2147 | 90.4% 11238 | 87.0% 7220 |
| CAR W/ TRLR | 0.3% 81 | 0.8% 58 | 0.6% 88 | 9.1% 248 | 0.9% 109 | 0.7% 62 |
| PICK-UP W/O/TRLR | 21.0% 6263 | 13.7% 1042 | 12.9% 2040 | 7.2% 195 | 7.9% 987 | 11.2% 927 |
| PICK-UP W/ TRLR | 0.5% 141 | 0.0% 4 | 0.3% 40 | 1.9% 52 | 0.3% 32 | 0.2% 13 |
| SINGLE-UNIT TRUCKS | 8.5% 2536 | 1.0% 79 | 0.7% 116 | 2.9% 79 | 0.4% 52 | 0.9% 75 |
| COMBINATION TRUCKS | 5.0% 1477 | 0.1% 4 | 0.1% 8 | 0.1% 3 | 0.1% 11 | 0.1% 5 |
| TOTAL | 100% 29779 | 100% 7609 | 100% 15856 | 100% 2723 | 100% 12429 | 100% 8302 |

TOTAL TERMINAL-TRIPS FOR ALL STUDIES IN REGION = 76698

TABLE SHOWS PCT OF EXPANDED ORIGIN-DESTINATION INTERVIEWS FOR EACH CATEG
ORY IN THE REGION. ACTUAL TRIPS BELOW EACH PCT DOES NOT REPRESENT ALL TR
AVEL IN THE REGION--ONLY THAT INTERVIEWED.

```
       0    2    4    6    8   10   12   14   16   18   20   22   24   26   28   30   32   34   36   38   40
       +---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+      P.C.    CUM.   ACTUAL
  10.................                                                                            6.432    6.432      1
  20.................................................................................           35.894   42.326     1C
  30...........................................................                                 24.725   67.051      7
  40...........................                                                                 10.483   77.534      3
  50..................                                                                           7.314   84.848      2
  60.............                                                                                4.764   89.612      1
  70........                                                                                     2.539   92.152
  80......                                                                                       1.859   94.001
  90....                                                                                         1.045   95.046
 100...                                                                                          0.923   95.969
 110...                                                                                          0.720   96.690
 120..                                                                                           0.514   97.204
 130..                                                                                           0.257   97.461
 140..                                                                                           0.389   97.849
 150.                                                                                            0.200   98.049
 160..                                                                                           0.480   98.529
 170..                                                                                           0.210   98.739
 180.                                                                                            0.098   98.837
 190..                                                                                           0.291   99.128
 200.                                                                                            0.200   99.327
 210.                                                                                            0.118   99.445
 220.                                                                                            0.081   99.527
 230.                                                                                            0.044   99.571
 240.                                                                                            0.047   99.618
 250.                                                                                            0.057   99.675
 260.                                                                                            0.000   99.675
 270.                                                                                            0.027   99.702
 280.                                                                                            0.020   99.723
 290.                                                                                            0.007   99.729
 300.                                                                                            0.047   99.777
 310.                                                                                            0.007   99.784
 320.                                                                                            0.007   99.790
 330.                                                                                            0.003   99.794
 340.                                                                                            0.037   99.831
 350.                                                                                            0.000   99.831
 360.                                                                                            0.000   99.831
 370.                                                                                            0.017   99.848
 380.                                                                                            0.000   99.848
 390.                                                                                            0.000   99.848
 400.                                                                                            0.000   99.848
 410.                                                                                            0.003   99.851
 420.                                                                                            0.014   99.865
 430.                                                                                            0.003   99.868
 440.                                                                                            0.007   99.875
 450.                                                                                            0.020   99.895
 460.                                                                                            0.047   99.943
 470.                                                                                            0.000   99.943
 480.                                                                                            0.007   99.949
 490.                                                                                            0.000   99.949
 500.                                                                                            0.000   99.949
 510.                                                                                            0.000   99.949
 520.                                                                                            0.000   99.949
 530.                                                                                            0.000   99.949
 540.                                                                                            0.010   99.959
 550.                                                                                            0.000   99.959
 560.                                                                                            0.017   99.976
 570.                                                                                            0.000   99.976
 580.                                                                                            0.000   99.976
 590.                                                                                            0.010   99.986
 600.                                                                                            0.007   99.993
 610.                                                                                            0.003   99.997
 620.                                                                                            0.000   99.997
 630.                                                                                            0.000   99.997
 640.                                                                                            0.000   99.997
 650.                                                                                            0.000   99.997
 660.                                                                                            0.000   99.997
 670.                                                                                            0.000   99.997
 680.                                                                                            0.000   99.997
 690.                                                                                            0.000   99.997
 700.                                                                                            0.000   99.997
 710.                                                                                            0.000   99.997
 720.                                                                                            0.000   99.997
 730.                                                                                            0.000   99.997
 740.                                                                                            0.000   99.997
 750.                                                                                            0.003  100.000
```

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=   29573     SUM=   977044.     MEAN=  33.038     VAR=   1339.369     SD=  36.597

TOTAL TRIPS OVER MAXP   =    1
TOTAL TRIPS OVER 255    =    0
VOLUME TABLE NUMBER     =  201
SKIM TREE NUMBER       =  101

```
     0     2     4     6     8    10    12    14    16    18    20    22    24    26    28    30    32    34    36    38    40
     +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+    P.C.    CUM.   ACTUAL
  10 ............................                                                                                                  9.989    9.989       7
  20 ..............................................................................................................................  39.852  49.841      30
  30 ..............................................                                                                                 19.422  69.263      14
  40 ..............................                                                                                                 11.429  80.684       8
  50 ..................                                                                                                              6.253  86.937       4
  60 .............                                                                                                                   3.935  90.872       2
  70 ......                                                                                                                          1.921  92.793       1
  80 ....                                                                                                                            1.166  93.959
  90 ...                                                                                                                             1.020  94.979
 100 ...                                                                                                                             0.755  95.734
 110 ..                                                                                                                              0.437  96.171
 120 ...                                                                                                                             0.649  96.820
 130 ..                                                                                                                              0.291  97.112
 140 ..                                                                                                                              0.344  97.456
 150 ..                                                                                                                              0.305  97.761
 160 ..                                                                                                                              0.358  98.119
 170 ..                                                                                                                              0.371  98.490
 180 .                                                                                                                               0.172  98.662
 190 ..                                                                                                                              0.397  99.059
 200 ..                                                                                                                              0.344  99.404
 210 ..                                                                                                                              0.212  99.616
 220 .                                                                                                                               0.146  99.762
 230 .                                                                                                                               0.013  99.775
 240 .                                                                                                                               0.000  99.775
 250 .                                                                                                                               0.040  99.815
 260 .                                                                                                                               0.013  99.828
 270 .                                                                                                                               0.026  99.854
 280 .                                                                                                                               0.000  99.854
 290 .                                                                                                                               0.000  99.854
 300 .                                                                                                                               0.000  99.854
 310 .                                                                                                                               0.000  99.854
 320 .                                                                                                                               0.000  99.854
 330 .                                                                                                                               0.000  99.854
 340 .                                                                                                                               0.026  99.881
 350 .                                                                                                                               0.000  99.881
 360 .                                                                                                                               0.000  99.881
 370 .                                                                                                                               0.013  99.894
 380 .                                                                                                                               0.000  99.894
 390 .                                                                                                                               0.000  99.894
 400 .                                                                                                                               0.000  99.894
 410 .                                                                                                                               0.000  99.894
 420 .                                                                                                                               0.040  99.934
 430 .                                                                                                                               0.000  99.934
 440 .                                                                                                                               0.000  99.934
 450 .                                                                                                                               0.013  99.947
 460 .                                                                                                                               0.026  99.974
 470 .                                                                                                                               0.000  99.974
 480 .                                                                                                                               0.000  99.974
 490 .                                                                                                                               0.000  99.974
 500 .                                                                                                                               0.000  99.974
 510 .                                                                                                                               0.000  99.974
 520 .                                                                                                                               0.000  99.974
 530 .                                                                                                                               0.026 100.000
```

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=       7548        SUM=       235398.        MEAN=   31.187        VAR=        1244.890            SD=   35.283

TOTAL TRIPS OVER MAXP    =        0
TOTAL TRIPS OVER 255     =        0
VOLUME TABLE NUMBER      =      202
KIM TREE NUMBER          =      101

```
    6MAR78          TRIP LENGTH FREQUENCY DISTRIBUTION-REG7                                    PAGE   4

    0     3     6     9    12    15    18    21    24    27    3C    33    36    39    42    45    48    51    54    57    60    P.C.   CUM.  ACTUAL
    +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
 10.................                                                                          10.348 10.348      1
 20..........................................................................................43.832 54.181      €
 30............................................                                               20.627 74.807      :
 40.........................                                                                  11.756 86.563      1
 50............                                                                                6.056 92.619
 60.....                                                                                       2.356 94.975
 70...                                                                                         1.299 96.275
 80..                                                                                          0.732 97.007
 90..                                                                                          0.427 97.434
100..                                                                                          0.331 97.765
110.                                                                                           0.248 98.013
120..                                                                                          0.325 98.338
130.                                                                                           0.089 98.427
140.                                                                                           0.166 98.593
150.                                                                                           0.076 98.669
160.                                                                                           0.172 98.841
170.                                                                                           0.096 98.937
180.                                                                                           0.146 99.083
190.                                                                                           0.134 99.217
200.                                                                                           0.236 99.452
210.                                                                                           0.159 99.612
220.                                                                                           0.076 99.688
230.                                                                                           0.032 99.720
240.                                                                                           0.032 99.752
250.                                                                                           0.045 99.796
260.                                                                                           0.019 99.815
270.                                                                                           0.006 99.822
280.                                                                                           0.025 99.847
290.                                                                                           0.000 99.847
300.                                                                                           0.025 99.873
310.                                                                                           0.016 99.879
320.                                                                                           0.013 99.892
330.                                                                                           0.006 99.898
340.                                                                                           0.000 99.898
350.                                                                                           0.013 99.911
360.                                                                                           0.000 99.911
370.                                                                                           0.019 99.930
380.                                                                                           0.000 99.930
390.                                                                                           0.013 99.943
400.                                                                                           0.006 99.949
410.                                                                                           0.000 99.949
420.                                                                                           0.038 99.987
430.                                                                                           0.000 99.987
440.                                                                                           0.000 99.987
450.                                                                                           0.000 99.987
460.                                                                                           0.000 99.987
470.                                                                                           0.000 99.987
480.                                                                                           0.000 99.987
490.                                                                                           0.000 99.987
500.                                                                                           0.000 99.987
510.                                                                                           0.000 99.987
520.                                                                                           0.000 99.987
530.                                                                                           0.013 100.000
EMAINING VALUES ARE ALL ZERO
UMBER OF OBSERVATIONS=    15703      SUM=    415707.      MEAN=  26.473      VAR=     840.900          SD=  28.99


OTAL TRIPS OVER MAXP   =      0
OTAL TRIPS OVER 255    =      0
OLUME TABLE NUMBER     =    203
KIM TREE NUMBER        =    101
```

-39-

```
        0    1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19   20
        +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+      P.C.   CUM.   ACTUA:
   10.....................                                                                                        4.061   4.061
   20..................................................                                                          10.278  14.339
   30.............................................                                                                9.242  23.581
   40.......................................                                                                      7.915  31.496
   50.........................                                                                                    5.056  36.552
   60...............                                                                                              3.067  39.619
   70...........                                                                                                  2.238  41.857
   80...............                                                                                              3.150  45.006
   90..................                                                                                           3.647  48.653
  100...........................                                                                                  5.346  53.999
  110..........                                                                                                   2.031  56.030
  120............................                                                                                 5.512  61.542
  130..........                                                                                                   1.989  63.531
  140.................                                                                                            3.481  67.012
  150...........                                                                                                  2.279  69.291
  160...................                                                                                          3.854  73.145
  170.............                                                                                                2.652  75.798
  180..........                                                                                                   1.906  77.704
  190.................                                                                                            3.481  81.185
  200..............                                                                                               2.901  84.086
  210.......................                                                                                      4.683  88.769
  220.....                                                                                                        0.705  89.474
  230......                                                                                                       1.202  90.676
  240...........                                                                                                  2.155  92.831
  250......                                                                                                       1.077  93.908
  260....                                                                                                         0.663  94.571
  270...                                                                                                          0.373  94.944
  280...                                                                                                          0.332  95.276
  290...                                                                                                          0.332  95.607
  300..                                                                                                           0.249  95.856
  310..                                                                                                           0.249  96.104
  320..                                                                                                           0.290  96.395
  330..                                                                                                           0.166  96.560
  340...                                                                                                          0.373  96.933
  350..                                                                                                           0.207  97.140
  360.                                                                                                            0.083  97.223
  370..                                                                                                           0.207  97.431
  380.                                                                                                            0.000  97.431
  390.                                                                                                            0.000  97.431
  400.                                                                                                            0.000  97.431
  410..                                                                                                           0.290  97.721
  420.                                                                                                            0.000  97.721
  430.                                                                                                            0.041  97.762
  440.                                                                                                            0.000  97.762
  450.                                                                                                            0.083  97.845
  460.                                                                                                            0.000  97.845
  470..                                                                                                           0.124  97.969
  480.                                                                                                            0.000  97.969
  490.                                                                                                            0.000  97.969
  500.                                                                                                            0.000  97.969
  510.                                                                                                            0.041  98.011
  520.                                                                                                            0.000  98.011
  530.                                                                                                            0.083  98.094
  540.                                                                                                            0.000  98.094
  550..                                                                                                           0.166  98.259
  560.                                                                                                            0.000  98.259
  570.                                                                                                            0.000  98.259
  580.                                                                                                            0.000  98.259
  590..                                                                                                           0.249  98.508
  600.                                                                                                            0.000  98.508
  610..                                                                                                           0.166  98.674
  620.                                                                                                            0.000  98.674
  630...                                                                                                          0.373  99.047
  640.                                                                                                            0.000  99.047
  650.                                                                                                            0.041  99.088
  660.                                                                                                            0.000  99.088
  670.                                                                                                            0.000  99.088
  680.                                                                                                            0.000  99.088
  690.                                                                                                            0.000  99.088
  700.                                                                                                            0.000  99.088
  710.                                                                                                            0.000  99.088
  720.                                                                                                            0.041  99.130
  730.                                                                                                            0.000  99.130
  740.                                                                                                            0.000  99.130
  750.....                                                                                                        0.870 100.000
```

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=    2413      SUM=    278502.       MEAN= 115.417      VAR=    13314.123          SD= 115.38

TOTAL TRIPS OVER MAXP  =     21
TOTAL TRIPS OVER 255   =      0
VOLUME TABLE NUMBER    =    204
KIM TREE NUMBER        =    101

```
       0    2    4    6    8   10   12   14   16   18   20   22   24   26   28   30   32   34   36   38   40
       +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
  10 ...................                                                                                        
  20 ............................................................................................................
  30 ..............................................................                                            
  40 ................................                                                                          
  50 ...............                                                                                           
  60 .........                                                                                                 
  70 .......                                                                                                   
  80 ....                                                                                                      
  90 .....                                                                                                     
 100 .......                                                                                                   
 110 ...                                                                                                       
 120 ......                                                                                                    
 130 ..                                                                                                        
 140 ....                                                                                                      
 150 ..                                                                                                        
 160 ..                                                                                                        
 170 ..                                                                                                        
 180 ..                                                                                                        
 190 ..                                                                                                        
 200 ..                                                                                                        
 210 ..                                                                                                        
 220 .                                                                                                         
 230 .                                                                                                         
 240 .                                                                                                         
 250 .                                                                                                         
 260 .                                                                                                         
 270 .                                                                                                         
 280 .                                                                                                         
 290 .                                                                                                         
 300 .                                                                                                         
 310 .                                                                                                         
 320 .                                                                                                         
 330 .                                                                                                         
 340 .                                                                                                         
 350 .                                                                                                         
 360 .                                                                                                         
 370 .                                                                                                         
 380 .                                                                                                         
 390 .                                                                                                         
 400 .                                                                                                         
 410 .                                                                                                         
 420 .                                                                                                         
 430 .                                                                                                         
 440 .                                                                                                         
 450 .                                                                                                         
 460 .                                                                                                         
 470 .                                                                                                         
 480 .                                                                                                         
 490 .                                                                                                         
 500 .                                                                                                         
 510 .                                                                                                         
 520 .                                                                                                         
 530 .                                                                                                         
 540 .                                                                                                         
 550 .                                                                                                         
 560 .                                                                                                         
 570 .                                                                                                         
 580 .                                                                                                         
 590 .                                                                                                         
 600 .                                                                                                         
 610 .                                                                                                         
 620 .                                                                                                         
 630 .                                                                                                         
 640 .                                                                                                         
 650 .                                                                                                         
 660 .                                                                                                         
 670 .                                                                                                         
 680 .                                                                                                         
 690 .                                                                                                         
 700 .                                                                                                         
 710 .                                                                                                         
 720 .                                                                                                         
 730 .                                                                                                         
 740 .                                                                                                         
```

| | P.C. | CUM. | ACTUAL |
|---|---|---|---|
| 10 | 7.590 | 7.590 | |
| 20 | 36.197 | 43.787 | 44 |
| 30 | 20.984 | 64.770 | 25 |
| 40 | 10.795 | 75.566 | 1 |
| 50 | 5.754 | 81.320 | |
| 60 | 3.328 | 84.648 | |
| 70 | 2.238 | 86.885 | |
| 80 | 1.361 | 88.246 | |
| 90 | 1.533 | 89.779 | |
| 100 | 2.246 | 92.025 | |
| 110 | 0.770 | 92.795 | |
| 120 | 1.861 | 94.656 | |
| 130 | 0.238 | 94.893 | |
| 140 | 1.057 | 95.951 | |
| 150 | 0.467 | 96.418 | |
| 160 | 0.484 | 96.902 | |
| 170 | 0.426 | 97.328 | |
| 180 | 0.352 | 97.680 | |
| 190 | 0.533 | 98.213 | |
| 200 | 0.533 | 98.746 | |
| 210 | 0.467 | 99.213 | |
| 220 | 0.098 | 99.311 | |
| 230 | 0.107 | 99.418 | |
| 240 | 0.049 | 99.467 | |
| 250 | 0.066 | 99.533 | |
| 260 | 0.057 | 99.590 | |
| 270 | 0.016 | 99.607 | |
| 280 | 0.000 | 99.607 | |
| 290 | 0.016 | 99.623 | |
| 300 | 0.008 | 99.631 | |
| 310 | 0.008 | 99.639 | |
| 320 | 0.008 | 99.648 | |
| 330 | 0.016 | 99.664 | |
| 340 | 0.000 | 99.664 | |
| 350 | 0.049 | 99.713 | |
| 360 | 0.000 | 99.713 | |
| 370 | 0.000 | 99.713 | |
| 380 | 0.025 | 99.738 | |
| 390 | 0.008 | 99.746 | |
| 400 | 0.000 | 99.746 | |
| 410 | 0.000 | 99.746 | |
| 420 | 0.082 | 99.828 | |
| 430 | 0.000 | 99.828 | |
| 440 | 0.008 | 99.836 | |
| 450 | 0.016 | 99.852 | |
| 460 | 0.000 | 99.852 | |
| 470 | 0.008 | 99.861 | |
| 480 | 0.000 | 99.861 | |
| 490 | 0.000 | 99.861 | |
| 500 | 0.008 | 99.869 | |
| 510 | 0.025 | 99.893 | |
| 520 | 0.000 | 99.893 | |
| 530 | 0.008 | 99.902 | |
| 540 | 0.000 | 99.902 | |
| 550 | 0.000 | 99.902 | |
| 560 | 0.008 | 99.910 | |
| 570 | 0.008 | 99.918 | |
| 580 | 0.008 | 99.926 | |
| 590 | 0.000 | 99.926 | |
| 600 | 0.000 | 99.926 | |
| 610 | 0.016 | 99.943 | |
| 620 | 0.000 | 99.943 | |
| 630 | 0.033 | 99.975 | |
| 640 | 0.000 | 99.975 | |
| 650 | 0.000 | 99.975 | |
| 660 | 0.000 | 99.975 | |
| 670 | 0.000 | 99.975 | |
| 680 | 0.000 | 99.975 | |
| 690 | 0.000 | 99.975 | |
| 700 | 0.000 | 99.975 | |
| 710 | 0.008 | 99.984 | |
| 720 | 0.000 | 99.984 | |
| 730 | 0.000 | 99.984 | |
| 740 | 0.016 | 100.000 | |

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=    12200      SUM=     466788.     MEAN=   38.261      VAR=     2264.259      SD=   47.584

TOTAL TRIPS OVER MAXP   =       0
TOTAL TRIPS OVER 255    =       0
VOLUME TABLE NUMBER     =     205
MIN TREE NUMBER        =     101

```
     0    2    4    6    8   10   12   14   16   18   20   22   24   26   28   30   32   34   36   38   40         P.C.    CUM.  ACTUAL
     +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
 10.....................                                                                                         6.694   6.694
 20..................................................................................................            39.289  45.983      3
 30.............................................                                                                 22.152  68.135      1
 40.......................                                                                                       10.054  78.189
 50..................                                                                                             7.607  85.796
 60.........                                                                                                      3.165  88.961
 70......                                                                                                         1.887  90.847
 80....                                                                                                           1.193  92.040
 90...                                                                                                            0.901  92.941
100....                                                                                                           1.108  94.048
110...                                                                                                            0.669  94.718
120.......                                                                                                        2.264  96.981
130..                                                                                                             0.438  97.420
140..                                                                                                             0.389  97.809
150..                                                                                                             0.353  98.162
160..                                                                                                             0.402  98.564
170..                                                                                                             0.219  98.783
180.                                                                                                              0.158  98.941
190..                                                                                                             0.341  99.282
200..                                                                                                             0.268  99.550
210.                                                                                                              0.024  99.574
220.                                                                                                              0.097  99.671
230.                                                                                                              0.037  99.708
240.                                                                                                              0.037  99.744
250.                                                                                                              0.000  99.744
260.                                                                                                              0.012  99.757
270.                                                                                                              0.012  99.769
280.                                                                                                              0.000  99.769
290.                                                                                                              0.024  99.793
300.                                                                                                              0.012  99.805
310.                                                                                                              0.000  99.805
320.                                                                                                              0.000  99.805
330.                                                                                                              0.024  99.830
340.                                                                                                              0.000  99.830
350.                                                                                                              0.000  99.830
360.                                                                                                              0.000  99.830
370.                                                                                                              0.037  99.866
380.                                                                                                              0.000  99.866
390.                                                                                                              0.000  99.866
400.                                                                                                              0.024  99.890
410.                                                                                                              0.024  99.915
420.                                                                                                              0.012  99.927
430.                                                                                                              0.012  99.939
440.                                                                                                              0.024  99.963
450.                                                                                                              0.000  99.963
460.                                                                                                              0.000  99.963
470.                                                                                                              0.024  99.988
480.                                                                                                              0.000  99.988
490.                                                                                                              0.000  99.988
500.                                                                                                              0.000  99.988
510.                                                                                                              0.012 100.000
```

REMAINING VALUES ARE ALL ZERO

NUMBER OF OBSERVATIONS=    8216     SUM=    272065.     MEAN=  33.114     VAR=    1305.753     SD=  36.135

```
TOTAL TRIPS OVER MAXP   =      0
TOTAL TRIPS OVER 255    =      0
VOLUME TABLE NUMBER     =    206
MIN TREE NUMBER         =    101
```

```
        0    2    4    6    8   10   12   14   16   18   20   22   24   26   28   30   32   34   36   38   40
        +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+    P.C.    CUM.   ACTUAL
   10...................                                                                                         7.739    7.739       5
   20.........................................................................................................  37.537   45.276      28
   30...............................................                                                            21.969   67.245      16
   40.......................................                                                                    10.762   78.067       8
   50....................                                                                                        6.655   84.663       5
   60.............                                                                                               3.722   88.385       2
   70.......                                                                                                     2.091   90.476       1
   80.....                                                                                                       1.441   91.917       1
   90....                                                                                                        1.060   92.977
  100....                                                                                                        1.158   94.135
  110....                                                                                                        0.638   94.774
  120....                                                                                                        1.055   95.828
  130..                                                                                                          0.297   96.126
  140..                                                                                                          0.545   96.670
  150..                                                                                                          0.311   96.981
  160..                                                                                                          0.504   97.485
  170..                                                                                                          0.316   97.800
  180..                                                                                                          0.221   98.021
  190..                                                                                                          0.415   98.436
  200..                                                                                                          0.369   98.805
  210.                                                                                                           0.328   99.133
  220.                                                                                                           0.111   99.244
  230.                                                                                                           0.085   99.329
  240.                                                                                                           0.106   99.434
  250.                                                                                                           0.081   99.515
  260.                                                                                                           0.037   99.552
  270.                                                                                                           0.030   99.582
  280.                                                                                                           0.024   99.606
  290.                                                                                                           0.019   99.625
  300.                                                                                                           0.034   99.659
  310.                                                                                                           0.013   99.672
  320.                                                                                                           0.016   99.688
  330.                                                                                                           0.013   99.701
  340.                                                                                                           0.029   99.730
  350.                                                                                                           0.017   99.748
  360.                                                                                                           0.003   99.751
  370.                                                                                                           0.022   99.773
  380.                                                                                                           0.004   99.777
  390.                                                                                                           0.004   99.781
  400.                                                                                                           0.004   99.785
  410.                                                                                                           0.013   99.798
  420.                                                                                                           0.032   99.829
  430.                                                                                                           0.004   99.833
  440.                                                                                                           0.007   99.840
  450.                                                                                                           0.015   99.855
  460.                                                                                                           0.021   99.876
  470.                                                                                                           0.008   99.884
  480.                                                                                                           0.003   99.886
  490.                                                                                                           0.000   99.886
  500.                                                                                                           0.001   99.888
  510.                                                                                                           0.007   99.894
  520.                                                                                                           0.000   99.894
  530.                                                                                                           0.009   99.904
  540.                                                                                                           0.004   99.907
  550.                                                                                                           0.005   99.913
  560.                                                                                                           0.008   99.921
  570.                                                                                                           0.001   99.922
  580.                                                                                                           0.001   99.923
  590.                                                                                                           0.012   99.935
  600.                                                                                                           0.003   99.938
  610.                                                                                                           0.009   99.947
  620.                                                                                                           0.000   99.947
  630.                                                                                                           0.017   99.964
  640.                                                                                                           0.000   99.964
  650.                                                                                                           0.001   99.966
  660.                                                                                                           0.000   99.966
  670.                                                                                                           0.000   99.966
  680.                                                                                                           0.000   99.966
  690.                                                                                                           0.000   99.966
  700.                                                                                                           0.000   99.966
  710.                                                                                                           0.001   99.967
  720.                                                                                                           0.001   99.968
  730.                                                                                                           0.000   99.968
  740.                                                                                                           0.003   99.971
  750.                                                                                                           0.029  100.000
REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=     75653        SUM=    2645504.        MEAN=  34.969        VAR=    1980.334          SD=  44.501

TOTAL TRIPS OVER MAXP    =       22
TOTAL TRIPS OVER 255     =        0
VOLUME TABLE NUMBER      =      207
MIN TREE NUMBER          =      101
```

# CITY TRIP CHARACTERISTICS
# BY ALPHA NAME

STATE WIDE

ALMASTLOUIS BANDWIDTH

ALMASTLOUIS

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE

VEHICLE TYPE
--------------------

| CAR<br>W/O TRLR | CAR<br>W/ TRLR | PICK-UP<br>W/O/TRLR | PICK-UP<br>W/ TRLR | SINGLE-UNIT<br>TRUCKS | COMBINATION<br>TRUCKS |
|---|---|---|---|---|---|
| 76.5% | 0.5% | 16.2% | 0.3% | 3.5% | 3.2% |
| 17746 | 109 | 3755 | 60 | 802 | 734 |

TRIP PURPOSE
--------------------

| WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|
| 46.4% | 7.9% | 18.3% | 1.0% | 14.5% | 11.9% |
| 10766 | 1829 | 4256 | 237 | 3354 | 2764 |

NUMBER IN VEHICLE
--------------------

| 1 | 2 | 3 | 4 | 5 | 6+ |
|---|---|---|---|---|---|
| 59.8% | 23.4% | 8.8% | 4.6% | 2.0% | 1.4% |
| 13881 | 5437 | 2047 | 1066 | 458 | 318 |

VEHICLE GARAGED AT
--------------------

| ORIGIN | DESTIN | OTHER |
|---|---|---|
| 47.2% | 37.8% | 15.0% |
| 10949 | 8778 | 3480 |

TOTAL TRIPS = 23206

# MINOR

## EXTERNAL ORIGIN-DESTINATION INTERVIEW

## TERMINAL-TRIP SUMMARY TABLE FOR ALMASTLOUIS

### TRIP PURPOSE

| # IN VEH. | WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|---|
| 1 | 81.7%<br>8796 | 52.1%<br>952 | 36.1%<br>1536 | 12.0%<br>28 | 38.0%<br>1275 | 46.8%<br>1293 |
| 2 | 13.7%<br>1471 | 28.3%<br>517 | 32.6%<br>1386 | 39.9%<br>95 | 34.3%<br>1150 | 29.6%<br>819 |
| 3 | 3.0%<br>328 | 10.2%<br>187 | 15.3%<br>649 | 17.0%<br>40 | 13.8%<br>461 | 13.8%<br>381 |
| 4 | 1.1%<br>119 | 5.1%<br>93 | 8.9%<br>379 | 20.4%<br>48 | 7.7%<br>259 | 6.1%<br>168 |
| 5 | 0.3%<br>32 | 2.5%<br>46 | 4.6%<br>196 | 4.1%<br>10 | 3.5%<br>118 | 2.0%<br>57 |
| 6+ | 0.2%<br>20 | 1.9%<br>34 | 2.6%<br>109 | 6.7%<br>16 | 2.7%<br>90 | 1.7%<br>47 |
| TOTAL | 100%<br>10766 | 100%<br>1829 | 100%<br>4256 | 100%<br>237 | 100%<br>3354 | 100%<br>2764 |

TOTAL TERMINAL-TRIPS FOR ALMASTLOUIS    = 23206

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE FOR ALMASTLOUIS

TRIP PURPOSE

| VEH TYPE | WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|---|
| CAR<br>W/O TRLR | 64.9%<br>6988 | 84.8%<br>1551 | 85.1%<br>3624 | 84.1%<br>199 | 90.5%<br>3033 | 85.0%<br>2350 |
| CAR<br>W/ TRLR | 0.2%<br>22 | 0.1%<br>1 | 0.4%<br>18 | 9.7%<br>23 | 0.6%<br>22 | 0.9%<br>24 |
| PICK-UP<br>W/O/TRLR | 21.1%<br>2272 | 14.2%<br>259 | 13.4%<br>572 | 4.1%<br>10 | 8.4%<br>281 | 13.0%<br>361 |
| PICK-UP<br>W/ TRLR | 0.3%<br>36 | 0.1%<br>2 | 0.2%<br>11 | 0.7%<br>2 | 0.2%<br>5 | 0.2%<br>5 |
| SINGLE-UNIT<br>TRUCKS | 6.7%<br>718 | 0.9%<br>16 | 0.7%<br>29 | 1.4%<br>3 | 0.3%<br>11 | 0.9%<br>25 |
| COMBINATION<br>TRUCKS | 6.8%<br>729 | 0.0%<br>0 | 0.1%<br>4 | 0.0%<br>0 | 0.0%<br>2 | 0.0%<br>0 |
| TOTAL | 100%<br>10766 | 100%<br>1829 | 100%<br>4256 | 100%<br>237 | 100%<br>3354 | 100%<br>2764 |

TOTAL TERMINAL-TRIPS FOR ALMASTLOUIS    = 23206

```
        0    3    6    9   12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60
        +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+      P.C.    CUM.  A
     10.                    .                   .                       .                                        0.279   0.279
     20.................................................................................................        42.646  42.925
     30...................................................................                                      22.271  65.196
     40................                                                                                          9.096  74.292
     50................                                                                                          5.110  79.402
     60................                                                                                          8.195  87.596
     70.......                                                                                                   3.857  91.453
     80......                                                                                                    2.090  93.524
     90..                                                                                                        0.762  94.286
    100...                                                                                                       1.041  95.327
    110....                                                                                                      1.542  96.869
    120.                                                                                                         0.149  97.018
    130.                                                                                                         0.232  97.250
    140..                                                                                                        0.483  97.733
    150.                                                                                                         0.232  97.965
    160...                                                                                                       0.957  98.922
    170.                                                                                                         0.111  99.034
    180.                                                                                                         0.046  99.069
    190.                                                                                                         0.204  99.285
    200.                                                                                                         0.195  99.480
    210.                                                                                                         0.056  99.535
    220.                                                                                                         0.037  99.573
    230.                                                                                                         0.019  99.591
    240.                                                                                                         0.019  99.610
    250.                                                                                                         0.019  99.628
    260.                                                                                                         0.000  99.628
    270.                                                                                                         0.000  99.628
    280.                                                                                                         0.000  99.628
    290.                                                                                                         0.000  99.628
    300.                                                                                                         0.121  99.749
    310.                                                                                                         0.019  99.768
    320.                                                                                                         0.000  99.768
    330.                                                                                                         0.000  99.768
    340.                                                                                                         0.102  99.870
    350.                                                                                                         0.000  99.870
    360.                                                                                                         0.000  99.870
    370.                                                                                                         0.000  99.870
    380.                                                                                                         0.000  99.870
    390.                                                                                                         0.000  99.870
    400.                                                                                                         0.000  99.870
    410.                                                                                                         0.000  99.870
    420.                                                                                                         0.000  99.870
    430.                                                                                                         0.009  99.879
    440.                                                                                                         0.000  99.879
    450.                                                                                                         0.056  99.935
    460.                                                                                                         0.028  99.963
    470.                                                                                                         0.000  99.963
    480.                                                                                                         0.000  99.963
    490.                                                                                                         0.000  99.963
    500.                                                                                                         0.000  99.963
    510.                                                                                                         0.000  99.963
    520.                                                                                                         0.000  99.963
    530.                                                                                                         0.000  99.963
    540.                                                                                                         0.000  99.963
    550.                                                                                                         0.000  99.963
    560.                                                                                                         0.037 100.000
```

REMAINING VALUES ARE ALL ZERO

NUMBER OF OBSERVATIONS=   10763     SUM=   383415.     MEAN=  35.623     VAR=    1268,132     SD=  3

TOTAL TRIPS OVER MAXP  =       0
TOTAL TRIPS OVER 255  =       0
VOLUME TABLE NUMBER   =     201
SKIM TREE NUMBER      =     101

```
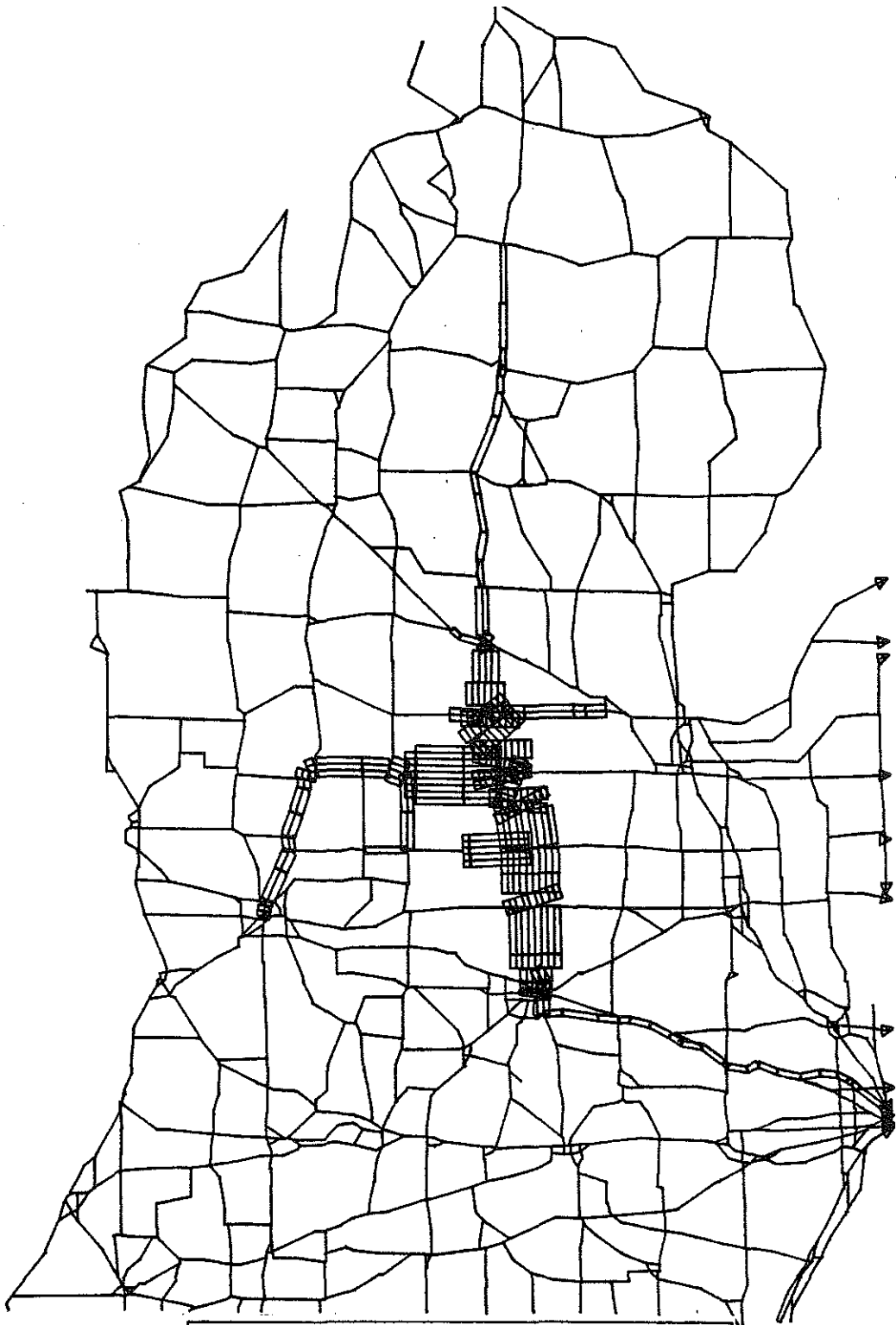     0    3    6    9   12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60
     +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+        P.C.    CUM.
 10..                                                                                                             0.710   0.710
 20.............................................................................................................. 50.410  51.120
 30.........................................                                                                      19.496  70.617
 40..................                                                                                              8.520  79.137
 50...........                                                                                                     5.660  84.817
 60...............                                                                                                 7.318  92.155
 70.....                                                                                                           2.185  94.320
 80....                                                                                                            1.638  95.958
 90...                                                                                                             1.202  97.160
100.                                                                                                               0.164  97.324
110..                                                                                                              0.745  98.068
120.                                                                                                               0.055  98.143
130.                                                                                                               0.164  98.307
140.                                                                                                               0.109  98.416
150..                                                                                                              0.546  98.962
160..                                                                                                              0.457  99.399
170.                                                                                                               0.218  99.618
180.                                                                                                               0.000  99.618
190.                                                                                                               0.055  99.672
200.                                                                                                               0.109  99.782
210.                                                                                                               0.000  99.782
220.                                                                                                               0.109  99.891
230.                                                                                                               0.000  99.891
240.                                                                                                               0.000  99.891
250.                                                                                                               0.000  99.891
260.                                                                                                               0.000  99.891
270.                                                                                                               0.000  99.891
280.                                                                                                               0.000  99.891
290.                                                                                                               0.000  99.891
300.                                                                                                               0.000  99.891
310.                                                                                                               0.000  99.891
320.                                                                                                               0.000  99.891
330.                                                                                                               0.000  99.891
340.                                                                                                               0.000  99.891
350.                                                                                                               0.000  99.891
360.                                                                                                               0.000  99.891
370.                                                                                                               0.000  99.891
380.                                                                                                               0.000  99.891
390.                                                                                                               0.000  99.891
400.                                                                                                               0.000  99.891
410.                                                                                                               0.000  99.891
420.                                                                                                               0.000  99.891
430.                                                                                                               0.000  99.891
440.                                                                                                               0.000  99.891
450.                                                                                                               0.000  99.891
460.                                                                                                               0.109 100.000
```

REMAINING VALUES ARE ALL ZERO

NUMBER OF OBSERVATIONS=    1631       SUM=    56292.        MEAN=  30.744         VAR=     812.494         SD=

TOTAL TRIPS OVER MAXP   =      0
TOTAL TRIPS OVER 255    =      0
VOLUME TABLE NUMBER     =    202
PATH TREE NUMBER        =    101

```
     0    3    6    9   12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60       P.C.    CUM.
     +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+      0.611   0.611
 10..                                                                                                          52.832  53.443
 20.........................................................................................................   20.141  73.584
 30...............................................                                                             11.445  85.029
 40.......................                                                                                      5.452  90.482
 50...........                                                                                                  5.640  96.122
 60..........                                                                                                   1.622  97.744
 70....                                                                                                         0.729  98.472
 80..                                                                                                           0.259  98.731
 90..                                                                                                           0.235  98.966
100.                                                                                                            0.306  99.271
110..                                                                                                           0.094  99.365
120.                                                                                                            0.047  99.412
130.                                                                                                            0.071  99.483
140.                                                                                                            0.141  99.624
150.                                                                                                            0.141  99.765
160.                                                                                                            0.000  99.765
170.                                                                                                            0.000  99.765
180.                                                                                                            0.071  99.835
190.                                                                                                            0.000  99.835
200.                                                                                                            0.000  99.835
210.                                                                                                            0.000  99.835
220.                                                                                                            0.000  99.835
230.                                                                                                            0.071  99.906
240.                                                                                                            0.000  99.906
250.                                                                                                            0.000  99.906
260.                                                                                                            0.000  99.906
270.                                                                                                            0.000  99.906
280.                                                                                                            0.000  99.906
290.                                                                                                            0.094 100.000
300.
```

REMAINING VALUES ARE ALL ZERO

NUMBER OF OBSERVATIONS=    4255    SUM=    115325.    MEAN=  27.103    VAR=    409.536    SD=

TOTAL TRIPS OVER MAXP   =      0
TOTAL TRIPS OVER 255    =      0
VOLUME TABLE NUMBER     =    203
FROM TREE NUMBER        =    101

```
     0    5   10   15   20   25   30   35   40   45   50   55   60   65   70   75   80   85   90   95  100      P.C.   CUM.  A
     +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+     0.000  0.000
 10.                                                                                                           0.000  0.000
 20.....................................................................................................      7.234  7.234
 30..............................................................................                             5.106 12.340
 40.................................                                                                          2.979 15.319
 50...................................................................................                        6.809 22.128
 60.......................................................................................................    8.085 30.213
 70..................................................................                                         4.681 34.894
 80..........                                                                                                 0.851 35.745
 90....................................................                                                       5.106 40.851
100..................                                                                                         1.702 42.553
110....................................................                                                       5.106 47.660
120...........                                                                                                0.851 48.511
130..................................                                                                         3.404 51.915
140.....................                                                                                      2.128 54.043
150..................................                                                                         3.404 57.447
160........................................                                                                   4.681 62.128
170.................................................................                                          6.383 68.511
180.                                                                                                          0.000 68.511
190..........                                                                                                 0.851 69.362
200.                                                                                                          0.000 69.362
210.............................................................                                              5.957 75.319
220..............                                                                                             1.277 76.596
230.......................................                                                                    3.830 80.426
240.....                                                                                                      0.426 80.851
250..............                                                                                             1.277 82.128
260..........................                                                                                 2.553 84.681
270.                                                                                                          0.000 84.681
280..............                                                                                             1.277 85.957
290.                                                                                                          0.000 85.957
300..............                                                                                             1.277 87.234
310..................                                                                                         1.702 88.936
320..........................                                                                                 2.553 91.489
330.                                                                                                          0.000 91.489
340..................                                                                                         1.702 93.191
350.                                                                                                          0.000 93.191
360.                                                                                                          0.000 93.191
370.                                                                                                          0.000 93.191
380.                                                                                                          0.000 93.191
390.                                                                                                          0.000 93.191
400.                                                                                                          0.000 93.191
410.                                                                                                          0.000 93.191
420.                                                                                                          0.000 93.191
430.....                                                                                                      0.426 93.617
440.                                                                                                          0.000 93.617
450.                                                                                                          0.000 93.617
460.                                                                                                          0.000 93.617
470.                                                                                                          0.000 93.617
480.                                                                                                          0.000 93.617
490.                                                                                                          0.000 93.617
500.                                                                                                          0.000 93.617
510.                                                                                                          0.000 93.617
520.                                                                                                          0.000 93.617
530.                                                                                                          0.000 93.617
540.                                                                                                          0.000 93.617
550..................                                                                                         1.702 95.319
560.                                                                                                          0.000 95.319
570.                                                                                                          0.000 95.319
580.                                                                                                          0.000 95.319
590.                                                                                                          0.000 95.319
600.                                                                                                          0.000 95.319
610..................                                                                                         1.702 97.021
620.                                                                                                          0.000 97.021
630....................                                                                                       2.128 99.149
640.                                                                                                          0.000 99.149
650.                                                                                                          0.000 99.149
660.                                                                                                          0.000 99.149
670.                                                                                                          0.000 99.149
680.                                                                                                          0.000 99.149
690.                                                                                                          0.000 99.149
700.                                                                                                          0.000 99.149
710.                                                                                                          0.000 99.149
720.                                                                                                          0.000 99.149
730.                                                                                                          0.000 99.149
740.                                                                                                          0.000 99.149
750.........                                                                                                  0.851 100.000
```

MAINING VALUES ARE ALL ZERO
BER OF OBSERVATIONS=     235        SUM=     37672.        MEAN= 160.306        VAR=     22641.906            SD= 15

```
TAL TRIPS OVER MAXP    =        2
AL TRIPS OVER 255      =        0
UME TABLE NUMBER       =      204
IN TREE NUMBER         =      101
```

-51-

```
        0     3     6     9    12    15    18    21    24    27    30    33    36    39    42    45    48    51    54    57    60                   P.C.     CUM.
        +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
  10..                                          .                                                                                                0.566    0.566
  20.......................................................................................................................                     46.456   47.022
  30...........................................................                                                                                 20.429   67.451
  40.................                                                                                                                            8.964   76.415
  50.........                                                                                                                                    4.527   80.941
  60..............                                                                                                                               6.998   87.939
  70........                                                                                                                                     3.663   91.602
  80.....                                                                                                                                        1.727   93.329
  90..                                                                                                                                           0.804   94.133
 100..                                                                                                                                           0.893   95.027
 110...                                                                                                                                          1.400   96.426
 120.                                                                                                                                            0.179   96.605
 130.                                                                                                                                            0.208   96.814
 140..                                                                                                                                           0.834   97.647
 150...                                                                                                                                          0.596   98.243
 160.                                                                                                                                            0.298   98.541
 170..                                                                                                                                           0.387   98.928
 180.                                                                                                                                            0.000   98.928
 190.                                                                                                                                            0.268   99.196
 200.                                                                                                                                            0.089   99.285
 210.                                                                                                                                            0.000   99.285
 220.                                                                                                                                            0.000   99.285
 230.                                                                                                                                            0.149   99.434
 240.                                                                                                                                            0.000   99.434
 250.                                                                                                                                            0.000   99.434
 260.                                                                                                                                            0.149   99.583
 270.                                                                                                                                            0.000   99.583
 280.                                                                                                                                            0.000   99.583
 290.                                                                                                                                            0.000   99.583
 300.                                                                                                                                            0.000   99.583
 310.                                                                                                                                            0.030   99.613
 320.                                                                                                                                            0.000   99.613
 330.                                                                                                                                            0.000   99.613
 340.                                                                                                                                            0.000   99.613
 350.                                                                                                                                            0.000   99.613
 360.                                                                                                                                            0.000   99.613
 370.                                                                                                                                            0.000   99.613
 380.                                                                                                                                            0.089   99.702
 390.                                                                                                                                            0.000   99.702
 400.                                                                                                                                            0.000   99.702
 410.                                                                                                                                            0.000   99.702
 420.                                                                                                                                            0.179   99.881
 430.                                                                                                                                            0.000   99.881
 440.                                                                                                                                            0.000   99.881
 450.                                                                                                                                            0.000   99.881
 460.                                                                                                                                            0.000   99.881
 470.                                                                                                                                            0.000   99.881
 480.                                                                                                                                            0.000   99.881
 490.                                                                                                                                            0.000   99.881
 500.                                                                                                                                            0.000   99.881
 510.                                                                                                                                            0.000   99.881
 520.                                                                                                                                            0.000   99.881
 530.                                                                                                                                            0.000   99.881
 540.                                                                                                                                            0.000   99.881
 550.                                                                                                                                            0.000   99.881
 560.                                                                                                                                            0.000   99.881
 570.                                                                                                                                            0.000   99.881
 580.                                                                                                                                            0.000   99.881
 590.                                                                                                                                            0.000   99.881
 600.                                                                                                                                            0.000   99.881
 610.                                                                                                                                            0.000   99.881
 620.                                                                                                                                            0.000   99.881
 630.                                                                                                                                            0.089   99.970
 640.                                                                                                                                            0.000   99.970
 650.                                                                                                                                            0.030   99.970
 660.                                                                                                                                            0.000   99.970
 670.                                                                                                                                            0.000   99.970
 680.                                                                                                                                            0.000   99.970
 690.                                                                                                                                            0.000   99.970
 700.                                                                                                                                            0.000   99.970
 710.                                                                                                                                            0.030  100.000
```

REMAINING VALUES ARE ALL ZERO

NUMBER OF OBSERVATIONS=   3358      SUM=   118728,      MEAN=  35,357      VAR=   1758,121      SD=  4

ALL TRIPS OVER MAXP  =         0
ALL TRIPS OVER 255   =         0
TIME TABLE NUMBER    =       205
TREE NUMBER          =       101

```
    0     3     6     9    12    15    18    21    24    27    30    33    36    39    42    45    48    51    54    57    60          P.C.   CUM.  A
    +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+         
 10..                                                                                                             0.435   0.435
 20.................................................................................................             50.199  50.634
 30...................................................................                                           23.506  74.140
 40...................                                                                                            9.055  83.194
 50...........                                                                                                    4.165  87.360
 60............                                                                                                   5.940  93.300
 70.....                                                                                                          2.246  95.545
 80..                                                                                                             0.869  96.414
 90..                                                                                                             0.543  96.956
100..                                                                                                             0.543  97.501
110...                                                                                                            0.905  98.406
120.                                                                                                              0.109  98.515
130.                                                                                                              0.072  98.587
140..                                                                                                             0.507  99.095
150.                                                                                                              0.181  99.276
160..                                                                                                             0.362  99.638
170.                                                                                                              0.072  99.710
180.                                                                                                              0.000  99.710
190.                                                                                                              0.109  99.819
200.                                                                                                              0.072  99.891
210.                                                                                                              0.000  99.891
220.                                                                                                              0.036  99.928
230.                                                                                                              0.000  99.928
240.                                                                                                              0.000  99.928
250.                                                                                                              0.000  99.928
260.                                                                                                              0.000  99.928
270.                                                                                                              0.000  99.928
280.                                                                                                              0.000  99.928
290.                                                                                                              0.000  99.928
300.                                                                                                              0.036  99.964
310.                                                                                                              0.000  99.964
320.                                                                                                              0.000  99.964
330.                                                                                                              0.000  99.964
340.                                                                                                              0.000  99.964
350.                                                                                                              0.000  99.964
360.                                                                                                              0.000  99.964
370.                                                                                                              0.000  99.964
380.                                                                                                              0.000  99.964
390.                                                                                                              0.000  99.964
400.                                                                                                              0.000  99.964
410.                                                                                                              0.000  99.964
420.                                                                                                              0.000  99.964
430.                                                                                                              0.036 100.000
AINING VALUES ARE ALL ZERO
3ER OF OBSERVATIONS=    2761        SUM=     80558.        MEAN=  29.177         VAR=      605.716              SD=  2
```

```
AL TRIPS OVER MAXP   =         0
AL TRIPS OVER 255    =         0
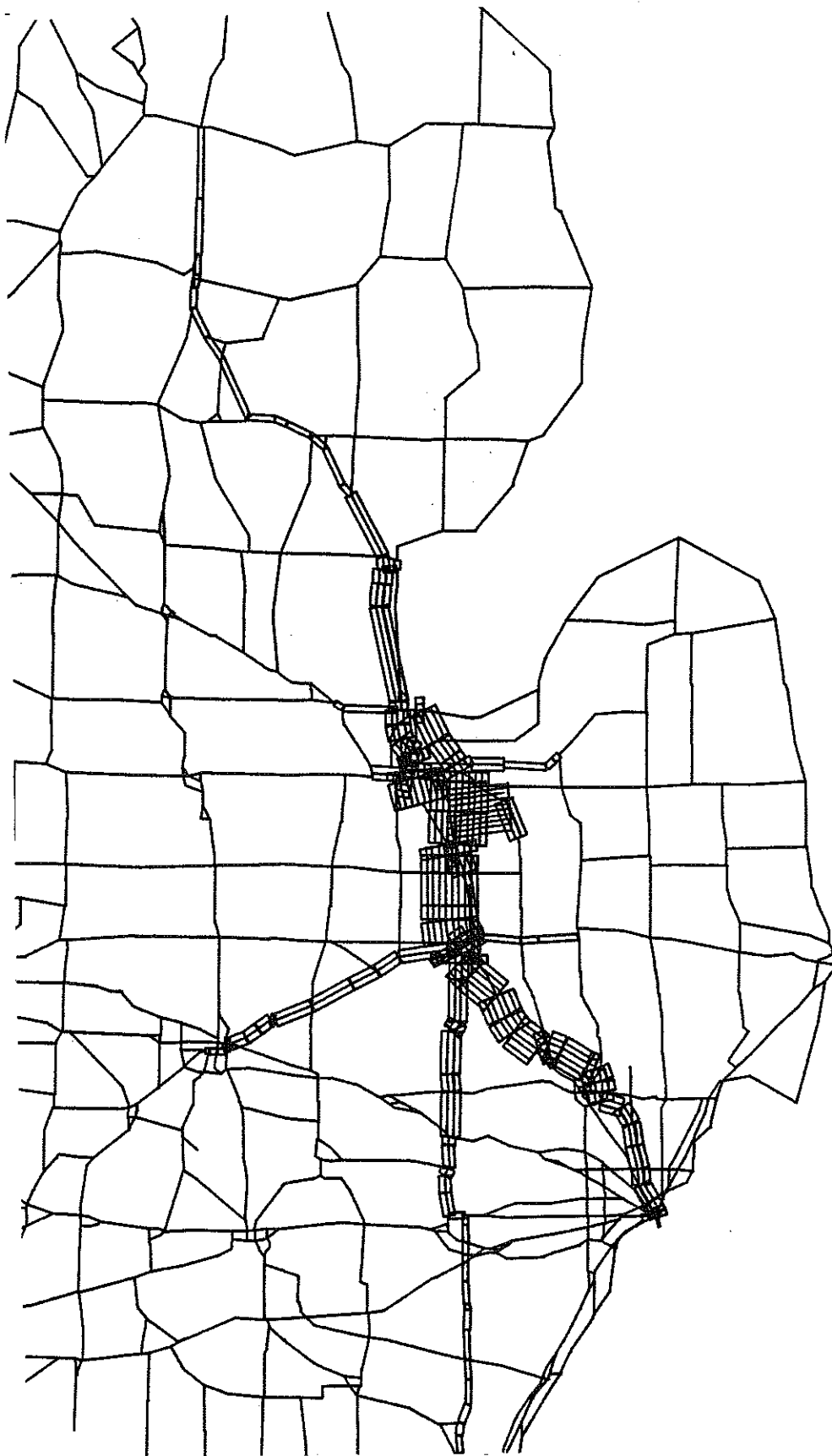UME TABLE NUMBER     =       206
M TREE NUMBER        =       101
```

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```
      0    3    6    9   12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60              P.C.    CUM.
      +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
  10..                              .                                                                             0.431    0.431
  20.....................................................................................................        46.218   46.649
  30.........................................................                                                    21.368   68.017
  40.......................                                                                                       9.395   77.412
  50...........                                                                                                   5.038   82.451
  60...........                                                                                                   7.215   89.665
  70.......                                                                                                       3.094   92.760
  80....                                                                                                          1.595   94.354
  90..                                                                                                            0.728   95.083
 100..                                                                                                            0.750   95.832
 110...                                                                                                           1.194   97.026
 120.                                                                                                             0.138   97.164
 130.                                                                                                             0.203   97.367
 140..                                                                                                            0.448   97.815
 150..                                                                                                            0.319   98.134
 160..                                                                                                            0.638   98.772
 170..                                                                                                            0.198   98.970
 180.                                                                                                             0.022   98.992
 190.                                                                                                             0.172   99.164
 200.                                                                                                             0.121   99.285
 210.                                                                                                             0.086   99.371
 220.                                                                                                             0.043   99.414
 230.                                                                                                             0.069   99.483
 240.                                                                                                             0.026   99.509
 250.                                                                                                             0.022   99.530
 260.                                                                                                             0.047   99.578
 270.                                                                                                             0.000   99.578
 280.                                                                                                             0.013   99.591
 290.                                                                                                             0.000   99.591
 300.                                                                                                             0.091   99.681
 310.                                                                                                             0.030   99.711
 320.                                                                                                             0.026   99.737
 330.                                                                                                             0.000   99.737
 340.                                                                                                             0.065   99.802
 350.                                                                                                             0.000   99.802
 360.                                                                                                             0.000   99.802
 370.                                                                                                             0.000   99.802
 380.                                                                                                             0.013   99.815
 390.                                                                                                             0.000   99.815
 400.                                                                                                             0.000   99.815
 410.                                                                                                             0.000   99.815
 420.                                                                                                             0.026   99.841
 430.                                                                                                             0.013   99.853
 440.                                                                                                             0.000   99.853
 450.                                                                                                             0.026   99.879
 460.                                                                                                             0.022   99.901
 470.                                                                                                             0.000   99.901
 480.                                                                                                             0.000   99.901
 490.                                                                                                             0.000   99.901
 500.                                                                                                             0.000   99.901
 510.                                                                                                             0.000   99.901
 520.                                                                                                             0.000   99.901
 530.                                                                                                             0.000   99.901
 540.                                                                                                             0.000   99.901
 550.                                                                                                             0.017   99.918
 560.                                                                                                             0.017   99.935
 570.                                                                                                             0.000   99.935
 580.                                                                                                             0.000   99.935
 590.                                                                                                             0.000   99.935
 600.                                                                                                             0.000   99.935
 610.                                                                                                             0.017   99.953
 620.                                                                                                             0.000   99.953
 630.                                                                                                             0.034   99.987
 640.                                                                                                             0.000   99.987
 650.                                                                                                             0.000   99.987
 660.                                                                                                             0.000   99.987
 670.                                                                                                             0.000   99.987
 680.                                                                                                             0.000   99.987
 690.                                                                                                             0.000   99.987
 700.                                                                                                             0.000   99.987
 710.                                                                                                             0.004   99.991
 720.                                                                                                             0.000   99.991
 730.                                                                                                             0.000   99.991
 740.                                                                                                             0.000   99.991
 750.                                                                                                             0.009  100.000
```

AINING VALUES ARE ALL ZERO
BER OF OBSERVATIONS=    23203     SUM=    791990.     MEAN=  34.133     VAR=    1467.939     SD=

AL TRIPS OVER MAXP  =      2
AL TRIPS OVER 255   =      0
UME TABLE NUMBER    =    207
M TREE NUMBER       =    101

FRANKENMUTH BANDWIDTH

FRANKENMUTH

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE

## VEHICLE TYPE
------------------

| CAR<br>W/O TRLR | CAR<br>W/ TRLR | PICK-UP<br>W/O/TRLR | PICK-UP<br>W/ TRLR | SINGLE-UNIT<br>TRUCKS | COMBINATION<br>TRUCKS |
|---|---|---|---|---|---|
| 84.0% | 0.6% | 10.3% | 0.4% | 3.1% | 1.6% |
| 9576 | 68 | 1172 | 44 | 356 | 182 |

## TRIP PURPOSE
------------------

| WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|
| 41.6% | 7.1% | 13.8% | 6.0% | 17.9% | 13.6% |
| 4745 | 807 | 1572 | 684 | 2041 | 1549 |

## NUMBER IN VEHICLE
------------------

| 1 | 2 | 3 | 4 | 5 | 6+ |
|---|---|---|---|---|---|
| 52.1% | 25.8% | 9.7% | 7.2% | 2.9% | 2.3% |
| 5937 | 2938 | 1100 | 825 | 332 | 267 |

## VEHICLE GARAGED AT
------------------

| ORIGIN | DESTIN | OTHER |
|---|---|---|
| 45.2% | 35.3% | 19.5% |
| 5150 | 4026 | 2223 |

TOTAL TRIPS = 11399

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE FOR FRANKENMUTH

TRIP PURPOSE

| # IN VEH. | WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|---|
| 1 | 84.4%<br>4007 | 49.5%<br>399 | 38.6%<br>607 | 3.4%<br>23 | 27.1%<br>553 | 22.5%<br>348 |
| 2 | 11.9%<br>564 | 33.4%<br>269 | 31.8%<br>500 | 45.3%<br>310 | 34.3%<br>700 | 38.4%<br>595 |
| 3 | 2.2%<br>102 | 8.9%<br>72 | 17.0%<br>267 | 14.6%<br>100 | 14.9%<br>304 | 16.4%<br>255 |
| 4 | 1.0%<br>49 | 3.9%<br>31 | 8.5%<br>133 | 22.1%<br>151 | 12.5%<br>256 | 13.1%<br>203 |
| 5 | 0.4%<br>20 | 3.6%<br>29 | 2.2%<br>35 | 7.5%<br>52 | 6.0%<br>123 | 4.8%<br>75 |
| 6+ | 0.1%<br>3 | 0.8%<br>6 | 1.9%<br>30 | 7.1%<br>48 | 5.2%<br>106 | 4.7%<br>73 |
| TOTAL | 100%<br>4745 | 100%<br>807 | 100%<br>1572 | 100%<br>684 | 100%<br>2041 | 100%<br>1549 |

TOTAL TERMINAL-TRIPS FOR FRANKENMUTH    = 11399

## EXTERNAL ORIGIN-DESTINATION INTERVIEW
### TERMINAL-TRIP SUMMARY TABLE FOR FRANKENMUTH

### TRIP PURPOSE

| VEH TYPE | WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|---|
| CAR W/O TRLR | 73.4% 3484 | 87.6% 707 | 89.2% 1402 | 83.8% 574 | 94.8% 1935 | 95.2% 1475 |
| CAR W/ TRLR | 0.0% 1 | 0.6% 5 | 0.3% 5 | 6.6% 45 | 0.3% 6 | 0.4% 6 |
| PICK-UP W/O/TRLR | 15.7% 746 | 10.9% 88 | 10.0% 157 | 4.8% 33 | 4.4% 90 | 3.8% 58 |
| PICK-UP W/ TRLR | 0.4% 21 | 0.0% 0 | 0.3% 4 | 2.0% 14 | 0.3% 5 | 0.0% 0 |
| SINGLE-UNIT TRUCKS | 6.7% 317 | 0.9% 7 | 0.3% 5 | 2.3% 16 | 0.1% 2 | 0.6% 9 |
| COMBINATION TRUCKS | 3.7% 176 | 0.0% 0 | 0.0% 0 | 0.4% 3 | 0.2% 4 | 0.0% 0 |
| TOTAL | 100% 4745 | 100% 807 | 100% 1572 | 100% 684 | 100% 2041 | 100% 1549 |

TOTAL TERMINAL-TRIPS FOR FRANKENMUTH     = 11399

```
   0    4    8   12   16   20   24   28   32   36   40   44   48   52   56   60   64   68   72   76   80
   +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
```

| Bin | Histogram | P.C. | CUM. |
|---|---|---|---|
| 10 | .. | 0.907 | 0.907 |
| 20 | ............. | 9.731 | 10.607 |
| 30 | ................................................................................. | 64.003 | 74.610 |
| 40 | .............. | 10.396 | 85.006 |
| 50 | .......... | 7.528 | 92.535 |
| 60 | ... | 1.666 | 94.201 |
| 70 | . | 0.148 | 94.348 |
| 80 | .. | 0.633 | 94.981 |
| 90 | .. | 0.464 | 95.445 |
| 100 | .. | 0.991 | 96.436 |
| 110 | .. | 0.422 | 96.858 |
| 120 | ... | 1.371 | 98.229 |
| 130 | . | 0.253 | 98.482 |
| 140 | . | 0.084 | 98.566 |
| 150 | . | 0.127 | 98.693 |
| 160 | . | 0.190 | 98.882 |
| 170 | . | 0.169 | 99.051 |
| 180 | . | 0.000 | 99.051 |
| 190 | . | 0.253 | 99.304 |
| 200 | . | 0.127 | 99.431 |
| 210 | . | 0.063 | 99.494 |
| 220 | . | 0.042 | 99.536 |
| 230 | . | 0.042 | 99.578 |
| 240 | . | 0.127 | 99.705 |
| 250 | . | 0.000 | 99.705 |
| 260 | . | 0.000 | 99.705 |
| 270 | . | 0.000 | 99.705 |
| 280 | . | 0.021 | 99.726 |
| 290 | . | 0.000 | 99.726 |
| 300 | . | 0.021 | 99.747 |
| 310 | . | 0.000 | 99.747 |
| 320 | . | 0.000 | 99.747 |
| 330 | . | 0.021 | 99.768 |
| 340 | . | 0.000 | 99.768 |
| 350 | . | 0.000 | 99.768 |
| 360 | . | 0.000 | 99.768 |
| 370 | . | 0.105 | 99.873 |
| 380 | . | 0.000 | 99.873 |
| 390 | . | 0.000 | 99.873 |
| 400 | . | 0.000 | 99.873 |
| 410 | . | 0.000 | 99.873 |
| 420 | . | 0.000 | 99.873 |
| 430 | . | 0.000 | 99.873 |
| 440 | . | 0.000 | 99.873 |
| 450 | . | 0.000 | 99.873 |
| 460 | . | 0.000 | 99.873 |
| 470 | . | 0.000 | 99.873 |
| 480 | . | 0.000 | 99.873 |
| 490 | . | 0.000 | 99.873 |
| 500 | . | 0.000 | 99.873 |
| 510 | . | 0.000 | 99.873 |
| 520 | . | 0.000 | 99.873 |
| 530 | . | 0.000 | 99.873 |
| 540 | . | 0.000 | 99.873 |
| 550 | . | 0.000 | 99.873 |
| 560 | . | 0.000 | 99.873 |
| 570 | . | 0.000 | 99.873 |
| 580 | . | 0.000 | 99.873 |
| 590 | . | 0.000 | 99.873 |
| 600 | . | 0.063 | 99.937 |
| 610 | . | 0.042 | 99.979 |
|  |  | 0.021 | 100.000 |

REMAINING VALUES ARE ALL ZERO

NUMBER OF OBSERVATIONS=    4742        SUM=    149487.        MEAN=  31.524        VAR=     1150.719          SD=  3

TOTAL TRIPS OVER MAXP   =       0
TOTAL TRIPS OVER 255    =       0
VOLUME TABLE NUMBER     =     201
SKIM TREE NUMBER        =     101

```
          0    4    8   12   16   20   24   28   32   36   4C   44   48   52   56   60   64   68   72   76   80
          +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+   P.C.   CUM.  A
     10..                                                                                                          0.743  0.743
     20.................                                                                                          13.243 13.985
     30.......................................................................................................   64.975 78.960
     40..........                                                                                                 6.931 85.891
     50.......                                                                                                    4.455 90.347
     60...                                                                                                        1.733 92.079
     70..                                                                                                         0.495 92.574
     8C..                                                                                                         0.743 93.317
     90..                                                                                                         0.495 93.812
    100....                                                                                                       2.723 96.535
    110..                                                                                                         0.495 97.030
    120...                                                                                                        1.485 98.515
    130.                                                                                                          0.248 98.762
    140.                                                                                                          0.000 98.762
    150.                                                                                                          0.000 98.762
    160.                                                                                                          0.371 99.134
    170.                                                                                                          0.124 99.257
    180.                                                                                                          0.000 99.257
    190.                                                                                                          0.000 99.257
    200.                                                                                                          0.248 99.505
    210.                                                                                                          0.000 99.505
    220.                                                                                                          0.000 99.505
    230.                                                                                                          0.000 99.505
    240.                                                                                                          0.000 99.505
    250.                                                                                                          0.000 99.505
    260.                                                                                                          0.000 99.505
    270.                                                                                                          0.000 99.505
    280.                                                                                                          0.000 99.505
    290.                                                                                                          0.000 99.505
    300.                                                                                                          0.000 99.505
    310.                                                                                                          0.000 99.505
    320.                                                                                                          0.000 99.505
    330.                                                                                                          0.000 99.505
    340.                                                                                                          0.248 99.752
    350.                                                                                                          0.000 99.752
    360.                                                                                                          0.000 99.752
    370.                                                                                                          0.124 99.876
    380.                                                                                                          0.000 99.876
    390.                                                                                                          0.000 99.876
    400.                                                                                                          0.000 99.876
    410.                                                                                                          0.000 99.876
    420.                                                                                                          0.000 99.876
    430.                                                                                                          0.000 99.876
    440.                                                                                                          0.000 99.876
    450.                                                                                                          0.124100.000
REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=      808        SUM=    25399.        MEAN=  31.434        VAR=    1135.981        SD= 3


TOTAL TRIPS OVER MAXP    =      0
TOTAL TRIPS OVER 255     =      0
VOLUME TABLE NUMBER      =    202
SKIM TREE NUMBER         =    101
```

```
       0    4    8   12   16   20   24   28   32   36   40   44   48   52   56   60   64   68   72   76   80
       +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+    P.C.    CUM.  A
  10...                                                                                                          1.590    1.590
  20..............                                                                                              11.323   12.913
  30..........................................................................................................  68.321   81.234
  40..........                                                                                                   7.761   88.995
  50.......                                                                                                      4.453   93.448
  60..                                                                                                           0.636   94.084
  70..                                                                                                           0.636   94.720
  80..                                                                                                           0.445   95.165
  90..                                                                                                           0.636   95.802
 100..                                                                                                           0.763   96.565
 110..                                                                                                           0.509   97.074
 120...                                                                                                          1.590   98.664
 130.                                                                                                            0.191   98.855
 140.                                                                                                            0.000   98.855
 150.                                                                                                            0.127   98.982
 160.                                                                                                            0.364   99.246
 170.                                                                                                            0.064   99.109
 180.                                                                                                            0.127   99.237
 190.                                                                                                            3.254   99.491
 200.                                                                                                            0.127   99.618
 210.                                                                                                            0.364   99.682
 220.                                                                                                            0.000   99.682
 230.                                                                                                            0.127   99.809
 240.                                                                                                            0.000   99.809
 250.                                                                                                            0.000   99.809
 260.                                                                                                            0.000   99.809
 270.                                                                                                            0.000   99.809
 280.                                                                                                            0.000   99.809
 290.                                                                                                            0.000   99.809
 300.                                                                                                            0.000   99.809
 310.                                                                                                            0.064   99.873
 320.                                                                                                            0.000   99.873
 330.                                                                                                            0.000   99.873
 340.                                                                                                            0.000   99.873
 350.                                                                                                            0.000   99.873
 360.                                                                                                            0.000   99.873
 370.                                                                                                            0.127  100.000
REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=      1572        SUM=      45660.        MEAN=   29.046        VAR=       737.681        SD=   2
```

```
TOTAL TRIPS OVER MAXP    =        0
TOTAL TRIPS OVER 255     =        0
VOLUME TABLE NUMBER      =      203
SKIM TREE NUMBER         =      101
```

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```
        0    1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19   20
        +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+      P.C.    CUM.  %
    10..                                                                                                           0.146   0.146
    20.....                                                                                                        0.729   0.875
    33..............................................................                                              9.767  10.641
    40...................................                                                                         5.685  16.327
    50.........................                                                                                   4.062  20.408
    60.............                                                                                               2.478  22.886
    70.......                                                                                                     1.166  24.052
    80....................                                                                                        3.644  27.697
    90.....................                                                                                       3.936  31.633
   100.........................................                                                                   9.038  40.671
   110..............                                                                                              2.624  43.294
   120...................................................................                                       13.848  57.143
   130..................                                                                                          3.499  60.641
   140.............                                                                                               2.770  63.411
   150..............                                                                                              2.770  66.181
   160............................                                                                                5.394  71.574
   170..........                                                                                                  2.041  73.615
   180.......                                                                                                     1.458  75.073
   190..................                                                                                          3.790  78.863
   200...................................                                                                         6.851  85.714
   210........                                                                                                    1.603  87.318
   220...                                                                                                         0.437  87.755
   230.....                                                                                                       0.729  88.484
   240...............................                                                                             5.977  94.461
   250.......                                                                                                     1.025  95.481
   260.                                                                                                           0.000  95.481
   270.                                                                                                           0.000  95.481
   280..                                                                                                          0.146  95.627
   290.                                                                                                           0.000  95.627
   300.                                                                                                           0.000  95.627
   310..                                                                                                          0.292  95.918
   320.                                                                                                           0.000  95.918
   330.                                                                                                           0.000  95.918
   340...                                                                                                         0.437  96.356
   350.                                                                                                           0.000  96.356
   360.                                                                                                           0.000  96.356
   370...                                                                                                         0.437  96.356
   380.                                                                                                           0.000  96.793
   390.                                                                                                           0.000  96.793
   400.                                                                                                           0.000  96.793
   410......                                                                                                      1.025  97.813
   420.                                                                                                           0.000  97.813
   430.                                                                                                           0.000  97.813
   440.                                                                                                           0.000  97.813
   450..                                                                                                          0.292  98.105
   460.                                                                                                           0.000  98.105
   470..                                                                                                          0.146  98.251
   480.                                                                                                           0.000  98.251
   490.                                                                                                           0.000  98.251
   500.                                                                                                           0.000  98.251
   510.                                                                                                           0.000  98.251
   520.                                                                                                           0.000  98.251
   530.                                                                                                           0.000  98.251
   540.                                                                                                           0.000  98.251
   550.                                                                                                           0.000  98.251
   560.                                                                                                           0.000  98.251
   570.                                                                                                           0.000  98.251
   580.                                                                                                           0.000  98.251
   590.....                                                                                                       0.729  98.980
   600.                                                                                                           0.000  98.980
   610.                                                                                                           0.000  98.980
   620.                                                                                                           0.000  98.980
   630.                                                                                                           0.000  98.980
   640.                                                                                                           0.000  98.980
   650.                                                                                                           0.000  98.980
   660.                                                                                                           0.000  98.980
   670.                                                                                                           0.000  98.980
   680.                                                                                                           0.000  98.980
   690.                                                                                                           0.000  98.980
   700.                                                                                                           0.000  98.980
   710.                                                                                                           0.000  98.980
   720..                                                                                                          0.146  99.125
   730.                                                                                                           0.000  99.125
   740.                                                                                                           0.000  99.125
   750.....                                                                                                       0.875 100.000
REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=        686        SUM=       91390.        MEAN= 133.222        VAR=       12087.255        SD= 1.

TOTAL TRIPS OVER MAKP    =        6
TOTAL TRIPS OVER 255     =        0
VOLUME TABLE NUMBER      =      204
SKIM TREE NUMBER         =      101
```

```
      0     3     6     9    12    15    18    21    24    27    30    33    36    39    42    45    48    51    54    57    60
      +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+          P.C.    CUM.
 10..                                                                                                                 0.685   0.685
 20...............                                                                                                    8.599   9.193
 30.................................................................................................                 44.010  53.203
 40................                                                                                                   8.460   61.663
 50................                                                                                                   9.193   70.856
 60....                                                                                                               1.760   72.616
 70...                                                                                                                1.369   73.985
 80....                                                                                                               1.614   75.599
 90....                                                                                                               1.516   77.115
100...........                                                                                                        6.112   83.227
110....                                                                                                               1.565   84.792
120..............                                                                                                     8.020   92.812
130..                                                                                                                 0.733   93.545
140...                                                                                                                1.027   94.572
150..                                                                                                                 0.587   95.159
160...                                                                                                                1.271   96.430
170..                                                                                                                 0.782   97.213
180..                                                                                                                 0.342   97.555
190..                                                                                                                 0.391   97.946
200...                                                                                                                1.376   99.322
210.                                                                                                                  0.244   99.267
220.                                                                                                                  0.196   99.462
230.                                                                                                                  0.098   99.560
240.                                                                                                                  0.147   99.707
250.                                                                                                                  0.147   99.853
260.                                                                                                                  0.000   99.853
270.                                                                                                                  0.000   99.853
280.                                                                                                                  0.000   99.853
290.                                                                                                                  0.000   99.853
300.                                                                                                                  0.000   99.853
310.                                                                                                                  0.000   99.853
320.                                                                                                                  0.000   99.853
330.                                                                                                                  0.000   99.853
340.                                                                                                                  0.000   99.853
350.                                                                                                                  0.000   99.853
360.                                                                                                                  0.000   99.853
370.                                                                                                                  0.000   99.853
380.                                                                                                                  0.000   99.853
390.                                                                                                                  0.000   99.853
400.                                                                                                                  0.000   99.853
410.                                                                                                                  0.000   99.853
420.                                                                                                                  0.000   99.853
430.                                                                                                                  0.000   99.853
440.                                                                                                                  0.049   99.902
450.                                                                                                                  0.098  100.000
REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=      2045       SUM=     104906.       MEAN=   51.299       VAR=      2237.244              SD=


TOTAL TRIPS OVER MAXP    =       0
TOTAL TRIPS OVER 255     =       0
VOLUME TABLE NUMBER      =     205
SKIM TREE NUMBER         =     101
```

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```
     0    3    6    9   12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60
     +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+      P.C.    CUM.
 10..                                                                                                            0.711   0.711
 20.................                                                                                             9.567  10.278
 30..................................................................................................          40.91   51.196
 40...........                                                                                                  5.753  56.949
 50......................                                                                                      12.928  69.877
 60.....                                                                                                        2.655  72.527
 70....                                                                                                         1.228  73.756
 80....                                                                                                         1.819  75.566
 90....                                                                                                         1.616  77.182
100........                                                                                                     4.073  81.255
110...                                                                                                          1.487  82.741
120.................                                                                                           10.213  92.954
130....                                                                                                         1.551  94.505
140..                                                                                                           0.776  95.281
150..                                                                                                           0.776  96.057
160...                                                                                                          0.970  97.027
175..                                                                                                           0.517  97.544
180.                                                                                                            0.259  97.802
190..                                                                                                           0.388  98.190
200...                                                                                                          0.970  99.166
210.                                                                                                            0.000  99.163
220.                                                                                                            0.259  99.418
230.                                                                                                            0.000  99.419
240.                                                                                                            0.194  99.612
250.                                                                                                            0.000  99.612
260.                                                                                                            0.000  99.612
270.                                                                                                            0.000  99.612
280.                                                                                                            0.000  99.612
290.                                                                                                            0.000  99.612
300.                                                                                                            0.000  99.612
310.                                                                                                            0.000  99.612
320.                                                                                                            0.000  99.612
330.                                                                                                            0.000  99.612
340.                                                                                                            0.000  99.612
350.                                                                                                            0.000  99.612
360.                                                                                                            0.000  99.612
370.                                                                                                            0.129  99.741
380.                                                                                                            0.000  99.741
390.                                                                                                            0.000  99.741
400.                                                                                                            0.000  99.741
410.                                                                      *                                     0.129  99.871
420.                                                                                                            0.000  99.871
430.                                                                                                            0.000  99.871
440.                                                                                                            0.000  99.871
450.                                                                                                            0.000  99.871
460.                                                                                                            0.000  99.871
470.                                                                                                            0.129 100.000
```

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=      1547        SUM=      80922.        MEAN=  52.309        VAR=      2391.225          SD=  4

TOTAL TRIPS OVER MAXP   =       0
TOTAL TRIPS OVER 255    =       0
VOLUME TABLE NUMBER     =     206
SKIM TREE NUMBER        =     101

TRIP LENGTH FREQUENCY DISTRIBUTION-FRANKENMUTH                                    PAGE

```
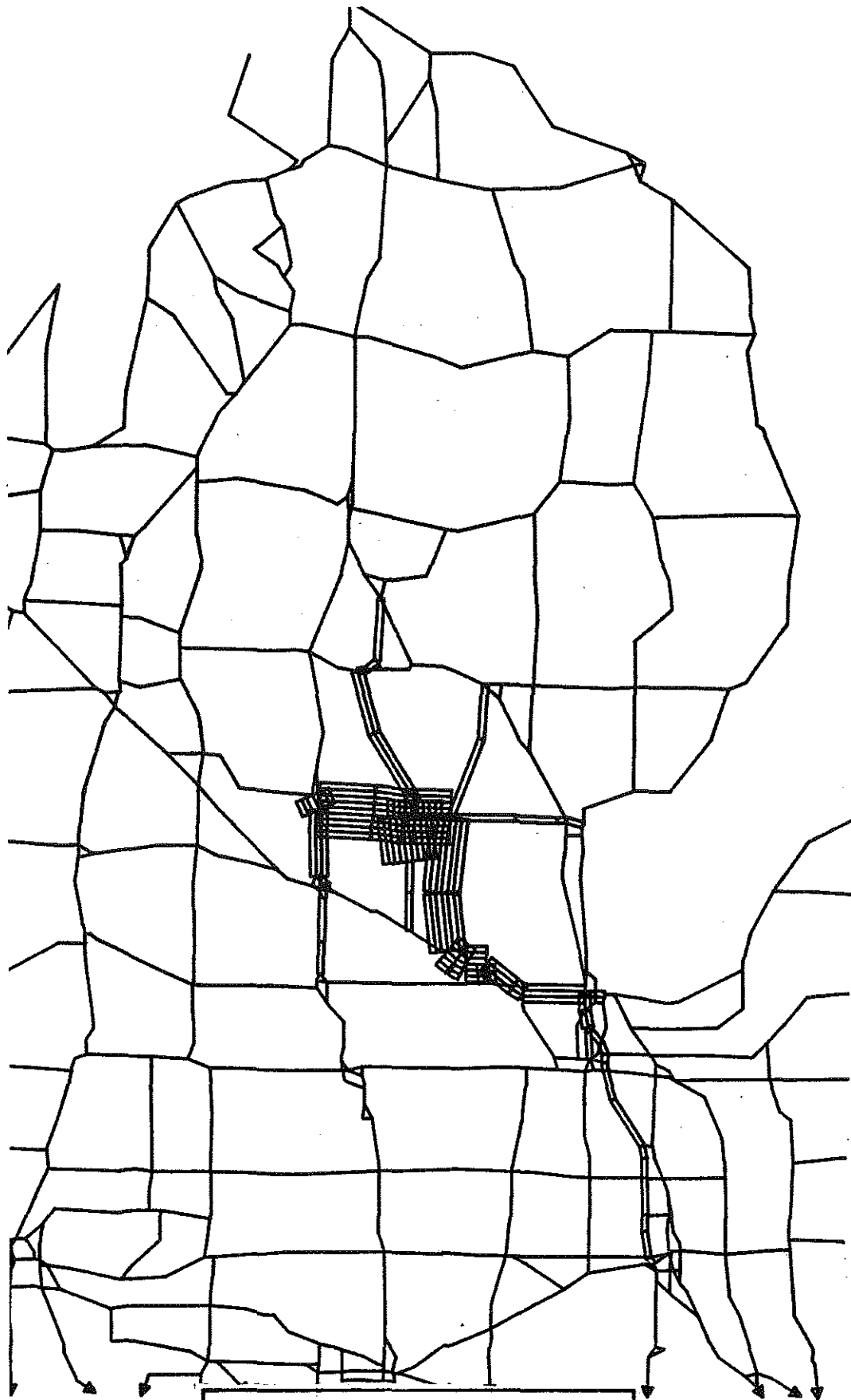     0    3    6    9   12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60        P.C.   CUM.
     +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+        0.877  0.877
  10..                                                                                                            0.877  0.877
  20.................                                                                                             9.404 10.281
  30.................................................................................................            54.684 64.965
  40..............                                                                                                8.526 73.491
  50............                                                                                                  7.711 81.202
  60....                                                                                                          1.728 82.930
  70..                                                                                                            0.667 83.596
  80...                                                                                                           1.132 84.728
  90...                                                                                                           1.044 85.772
 100......                                                                                                        2.904 88.675
 110...                                                                                                           0.921 89.596
 120.........                                                                                                     4.553 94.149
 130..                                                                                                            0.702 94.851
 140..                                                                                                            0.491 95.342
 150..                                                                                                            0.447 95.789
 160..                                                                                                            0.798 96.588
 170..                                                                                                            0.421 97.009
 180.                                                                                                             0.202 97.211
 190..                                                                                                            0.491 97.702
 200..                                                                                                            0.825 98.526
 210.                                                                                                             0.175 98.702
 220.                                                                                                             0.114 98.816
 230.                                                                                                             0.096 98.912
 240..                                                                                                            0.465 99.377
 250.                                                                                                             0.288 99.465
 260.                                                                                                             0.000 99.465
 270.                                                                                                             0.000 99.465
 280.                                                                                                             0.018 99.482
 290.                                                                                                             0.000 99.482
 300.                                                                                                             0.009 99.491
 310.                                                                                                             0.026 99.518
 320.                                                                                                             0.000 99.518
 330.                                                                                                             0.009 99.526
 340.                                                                                                             0.044 99.570
 350.                                                                                                             0.000 99.570
 360.                                                                                                             0.000 99.570
 370.                                                                                                             0.114 99.684
 380.                                                                                                             0.000 99.684
 390.                                                                                                             0.000 99.684
 400.                                                                                                             0.000 99.684
 410.                                                                                                             0.079 99.763
 420.                                                                                                             0.000 99.763
 430.                                                                                                             0.000 99.763
 440.                                                                                                             0.009 99.772
 450.                                                                                                             0.044 99.816
 460.                                                                                                             0.000 99.816
 470.                                                                                                             0.026 99.842
 480.                                                                                                             0.000 99.842
 490.                                                                                                             0.000 99.842
 500.                                                                                                             0.000 99.842
 510.                                                                                                             0.000 99.842
 520.                                                                                                             0.000 99.842
 530.                                                                                                             0.000 99.842
 540.                                                                                                             0.000 99.842
 550.                                                                                                             0.000 99.842
 560.                                                                                                             0.000 99.842
 570.                                                                                                             0.000 99.842
 580.                                                                                                             0.000 99.842
 590.                                                                                                             0.000 99.842
 600.                                                                                                             0.070 99.912
 610.                                                                                                             0.018 99.930
 620.                                                                                                             0.009 99.939
 630.                                                                                                             0.000 99.939
 640.                                                                                                             0.000 99.939
 650.                                                                                                             0.000 99.939
 660.                                                                                                             0.000 99.939
 670.                                                                                                             0.000 99.939
 680.                                                                                                             0.000 99.939
 690.                                                                                                             0.000 99.939
 700.                                                                                                             0.000 99.939
 710.                                                                                                             0.000 99.939
 720.                                                                                                             0.000 99.939
 730.                                                                                                             0.009 99.947
 740.                                                                                                             0.000 99.947
 750.                                                                                                             0.000 99.947
                                                                                                                 0.053 100.000
```

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=    11400      SUM=   497764.      MEAN=   43.664      VAR=   2718.686        SD=

TOTAL TRIPS OVER MAXP   =      6
TOTAL TRIPS OVER 255    =      3
VOLUME TABLE NUMBER     =    207
SKIM TREE NUMBER        =    101

GLADWIN BANDWIDTH

GLADWIN

# EXTERNAL ORIGIN-DESTINATION INTERVIEW

## TERMINAL-TRIP SUMMARY TABLE

## VEHICLE TYPE
----------------------

| CAR W/O TRLR | CAR W/ TRLR | PICK-UP W/O/TRLR | PICK-UP W/ TRLR | SINGLE-UNIT TRUCKS | COMBINATION TRUCKS |
|---|---|---|---|---|---|
| 78.3% | 0.7% | 16.0% | 0.2% | 3.7% | 1.2% |
| 6962 | 62 | 1420 | 17 | 329 | 105 |

## TRIP PURPOSE
----------------------

| WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|
| 31.1% | 19.1% | 26.6% | 3.5% | 12.0% | 7.7% |
| 2769 | 1695 | 2365 | 315 | 1067 | 684 |

## NUMBER IN VEHICLE
----------------------

| 1 | 2 | 3 | 4 | 5 | 6+ |
|---|---|---|---|---|---|
| 50.0% | 28.7% | 11.3% | 5.5% | 2.3% | 2.1% |
| 4444 | 2556 | 1008 | 491 | 209 | 186 |

## VEHICLE GARAGED AT
----------------------

| ORIGIN | DESTIN | OTHER |
|---|---|---|
| 43.8% | 34.6% | 21.6% |
| 3898 | 3077 | 1920 |

TOTAL TRIPS = 8895

MINOR

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE FOR GLADWIN

TRIP PURPOSE

| # IN VEH. | WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|-----------|------|----------|------|----------|---------|-------|
| 1 | 77.1%<br>2134 | 44.2%<br>748 | 34.8%<br>823 | 13.9%<br>44 | 37.3%<br>398 | 43.5%<br>297 |
| 2 | 16.9%<br>467 | 31.4%<br>531 | 38.1%<br>901 | 32.6%<br>103 | 31.4%<br>335 | 32.0%<br>219 |
| 3 | 3.5%<br>97 | 12.6%<br>213 | 15.8%<br>374 | 17.9%<br>56 | 15.6%<br>167 | 14.8%<br>101 |
| 4 | 2.0%<br>56 | 6.6%<br>113 | 6.4%<br>150 | 20.0%<br>63 | 6.7%<br>72 | 5.5%<br>37 |
| 5 | 0.2%<br>6 | 3.7%<br>62 | 2.7%<br>63 | 7.5%<br>24 | 3.4%<br>36 | 2.6%<br>18 |
| 6+ | 0.3%<br>9 | 1.6%<br>27 | 2.3%<br>54 | 8.1%<br>26 | 5.5%<br>58 | 1.7%<br>12 |
| TOTAL | 100%<br>2769 | 100%<br>1695 | 100%<br>2365 | 100%<br>315 | 100%<br>1067 | 100%<br>684 |

TOTAL TERMINAL-TRIPS FOR GLADWIN      =   8895

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE FOR GLADWIN

TRIP PURPOSE

| VEH TYPE | WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|---|
| CAR<br>W/O TRLR | 65.5%<br>1813 | 83.5%<br>1416 | 84.4%<br>1997 | 76.9%<br>242 | 88.9%<br>949 | 79.7%<br>545 |
| CAR<br>W/ TRLR | 0.2%<br>6 | 0.9%<br>15 | 0.1%<br>2 | 7.4%<br>23 | 0.9%<br>9 | 0.9%<br>6 |
| PICK-UP<br>W/O/TRLR | 20.8%<br>576 | 14.3%<br>243 | 14.6%<br>344 | 12.6%<br>40 | 9.2%<br>99 | 17.3%<br>119 |
| PICK-UP<br>W/ TRLR | 0.4%<br>10 | 0.0%<br>0 | 0.1%<br>2 | 0.7%<br>2 | 0.1%<br>1 | 0.3%<br>2 |
| SINGLE-UNIT<br>TRUCKS | 9.4%<br>261 | 1.3%<br>22 | 0.8%<br>20 | 2.5%<br>8 | 0.7%<br>7 | 1.6%<br>11 |
| COMBINATION<br>TRUCKS | 3.7%<br>103 | 0.0%<br>0 | 0.0%<br>0 | 0.0%<br>0 | 0.1%<br>1 | 0.2%<br>1 |
| TOTAL | 100%<br>2769 | 100%<br>1695 | 100%<br>2365 | 100%<br>315 | 100%<br>1067 | 100%<br>684 |

TOTAL TERMINAL-TRIPS FOR GLADWIN          =   8895

```
    7FEB78              TRIP LENGTH FREQUENCY DISTRIBUTION-GLADWIN                          PAGE    2

     0    3    6    9   12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60
    +====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+    P.C.   CUM.  ACT
  10.................................................................                                      23,955 23,955
  20......................................................................................               42,939 66,895
  30.                                                                                                      0,108 67,003
  40...............                                                                                        9,726 76,729
  50..............                                                                                         7,925 84,654
  60.............                                                                                          6,773 91,427
  70.....                                                                                                  2,161 93,588
  80......                                                                                                 2,918 96,506
  90..                                                                                                     0,756 97,262
 100.                                                                                                      0,288 97,550
 110.                                                                                                      0,072 97,622
 120..                                                                                                     0,396 98,019
 130..                                                                                                     0,360 98,379
 140.                                                                                                      0,288 98,667
 150..                                                                                                     0,324 98,991
 160.                                                                                                      0,216 99,207
 170.                                                                                                      0,288 99,496
 180.                                                                                                      0,180 99,676
 190.                                                                                                      0,180 99,856
 200.                                                                                                      0,072 99,928
 210.                                                                                                      0,072100,000
REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=    2776        SUM=     76170.        MEAN=  26,718       VAR=      742,653              SD=  27.


TOTAL TRIPS OVER MAXP   =      0
TOTAL TRIPS OVER 255    =      0
VOLUME TABLE NUMBER     =    201
SKIM TREE NUMBER        =    101
```

```
       0    3    6    9   12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60
       +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+          P.C.   CUM.  ACT
   10..........................................................                                                      26.855 26.855
   20.................................................................................                              46.761 73.616
   30.                                                                                                              0.000 73.616
   40.....................                                                                                         10.601 84.217
   50..........                                                                                                     4.594 88.810
   60.........                                                                                                      5.065 93.875
   70...                                                                                                            1.355 95.230
   80...                                                                                                            0.942 96.172
   90.                                                                                                              0.118 96.290
  100.                                                                                                              0.000 96.290
  110.                                                                                                              0.412 96.702
  120..                                                                                                             0.236 96.938
  130..                                                                                                             0.648 97.585
  140.                                                                                                              0.000 97.585
  150.                                                                                                              0.294 97.880
  160.                                                                                                              0.236 98.115
  170..                                                                                                             0.648 98.763
  180.                                                                                                              0.118 98.881
  190..                                                                                                             0.766 99.647
  200.                                                                                                              0.000 99.647
  210.                                                                                                              0.118 99.764
  220.                                                                                                              0.000 99.764
  230.                                                                                                              0.000 99.764
  240.                                                                                                              0.000 99.764
  250.                                                                                                              0.000 99.764
  260.                                                                                                              0.000 99.764
  270.                                                                                                              0.118 99.882
  280.                                                                                                              0.000 99.882
  290.                                                                                                              0.000 99.882
  300.                                                                                                              0.000 99.882
  310.                                                                                                              0.000 99.882
  320.                                                                                                              0.000 99.882
  330.                                                                                                              0.000 99.882
  340.                                                                                                              0.000 99.882
  350.                                                                                                              0.000 99.882
  360.                                                                                                              0.000 99.882
  370.                                                                                                              0.000 99.882
  380.                                                                                                              0.000 99.882
  390.                                                                                                              0.000 99.882
  400.                                                                                                              0.000 99.882
  410.                                                                                                              0.000 99.882
  420.                                                                                                              0.000 99.882
  430.                                                                                                              0.000 99.882
  440.                                                                                                              0.000 99.882
  450.                                                                                                              0.000 99.882
  460.                                                                                                              0.000 99.882
  470.                                                                                                              0.000 99.882
  480.                                                                                                              0.000 99.882
  490.                                                                                                              0.000 99.882
  500.                                                                                                              0.000 99.882
  510.                                                                                                              0.000 99.882
  520.                                                                                                              0.000 99.882
  530.                                                                                                              0.118 100.000
```

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=     1698      SUM=     42712,     MEAN=  25.154        VAR=     1217.456           SD=  34

TOTAL TRIPS OVER MAXP   =       0
TOTAL TRIPS OVER 255    =       0
VOLUME TABLE NUMBER     =     202
SKIM TREE NUMBER        =     101

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```
     0     3     6     9    12    15    18    21    24    27    30    33    36    39    42    45    48    51    54    57    60
     +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+    P.C.    CUM,  ACT
 10..........................................................................                               28,644 28,644
 20...........................................................................................................  56,950 85,594
 30.,                                                                                                           0,127 85,720
 40.............                                                                                               7,098 92,818
 50.,,,,,                                                                                                      2,112 94,930
 60.,,,,                                                                                                       2,450 97,381
 70.,,                                                                                                         0,422 97,803
 80.,,,                                                                                                        0,929 98,733
 90.,                                                                                                          0,042 98,775
100.,                                                                                                          0,042 98,817
110.,,                                                                                                         0,465 99,282
120.,                                                                                                          0,084 99,366
130.,                                                                                                          0,000 99,366
140.,                                                                                                          0,000 99,366
150.,                                                                                                          0,042 99,409
160.,                                                                                                          0,000 99,409
170.,                                                                                                          0,084 99,493
180.,                                                                                                          0,084 99,578
190.,                                                                                                          0,127 99,704
200.,                                                                                                          0,127 99,831
210.,                                                                                                          0,000 99,831
220.,                                                                                                          0,000 99,831
230.,                                                                                                          0,000 99,831
240.,                                                                                                          0,084 99,916
250.,                                                                                                          0,000 99,916
260.,                                                                                                          0,000 99,916
270.,                                                                                                          0,000 99,916
280.,                                                                                                          0,000 99,916
290.,                                                                                                          0,000 99,916
300.,                                                                                                          0,000 99,916
310.,                                                                                                          0,000 99,916
320.,                                                                                                          0,000 99,916
330.,                                                                                                          0,000 99,916
340.,                                                                                                          0,000 99,916
350.,                                                                                                          0,000 99,916
360.,                                                                                                          0,000 99,916
370.,                                                                                                          0,000 99,916
380.,                                                                                                          0,000 99,916
390.,                                                                                                          0,000 99,916
400.,                                                                                                          0,000 99,916
410.,                                                                                                          0,000 99,916
420.,                                                                                                          0,000 99,916
430.,                                                                                                          0,000 99,916
440.,                                                                                                          0,000 99,916
450.,                                                                                                          0,000 99,916
460.,                                                                                                          0,000 99,916
470.,                                                                                                          0,000 99,916
480.,                                                                                                          0,000 99,916
490.,                                                                                                          0,000 99,916
500.,                                                                                                          0,000 99,916
510.,                                                                                                          0,000 99,916
520.,                                                                                                          0,000 99,916
530.,                                                                                                          0,084100,000
REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=    2367      SUM=    43462,      MEAN=  18,362      VAR=    580,861      SD= 24,
```

TOTAL TRIPS OVER MAXP   =       0
TOTAL TRIPS OVER 255    =       0
VOLUME TABLE NUMBER     =     203
SKIM TREE NUMBER        =     101

```
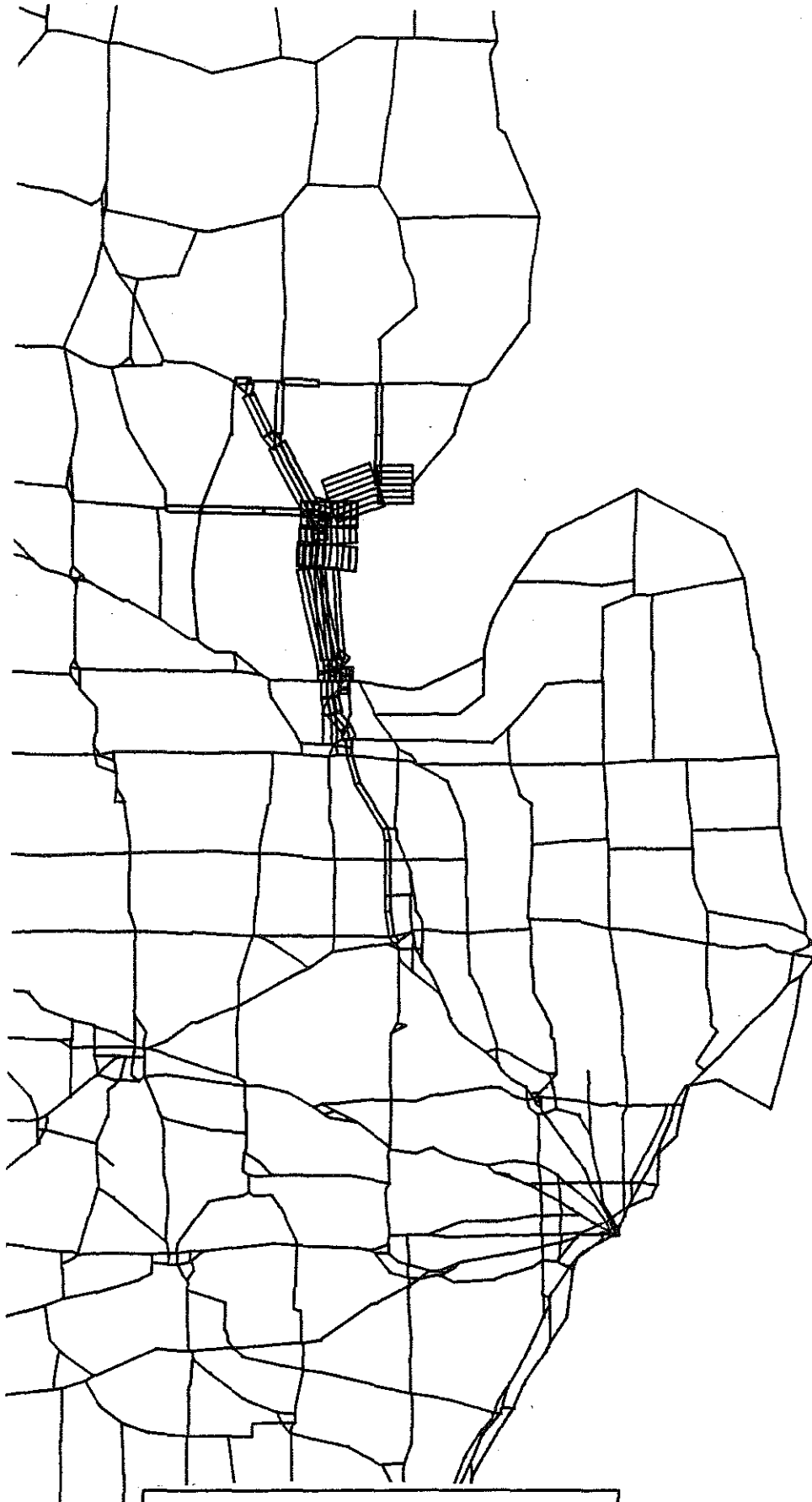       0     2     4     6     8    10    12    14    16    18    20    22    24    26    28    30    32    34    36    38    40
       +....+....+....+....+....+....+....+....+....+....+....+....+....+....+....+....+....+....+....+....+    P.C.   CUM.   AC
  10 ...............................................................................................    24.528 24.528
  20 ..............................................................................................     24.214 48.742
  30 ...                                                                                                 0.629 49.371
  40 ...............................                                                                    6.604 55.975
  50 .....................                                                                              7.233 63.208
  60 ...............                                                                                    2.830 66.038
  70 ......                                                                                             1.572 67.610
  80 ............                                                                                       3.459 71.069
  90 ....                                                                                               1.258 72.327
 100 ...                                                                                                0.629 72.956
 110 .......                                                                                            2.201 75.157
 120 ........                                                                                           2.516 77.673
 130 ...                                                                                                0.943 78.616
 140 ...                                                                                                0.629 79.245
 150 .......                                                                                            2.201 81.447
 160 .........                                                                                          2.830 84.277
 170 ...                                                                                                0.943 85.220
 180 ............                                                                                       3.774 88.994
 190 ................                                                                                   5.031 94.025
 200 ....                                                                                               1.258 95.283
 210 .                                                                                                  0.000 95.283
 220 ..                                                                                                 0.629 95.912
 230 .                                                                                                  0.000 95.912
 240 ..                                                                                                 0.314 96.226
 250 .                                                                                                  0.000 96.226
 260 .                                                                                                  0.000 96.226
 270 ..                                                                                                 0.943 97.170
 280 .                                                                                                  0.000 97.170
 290 ..                                                                                                 0.629 97.799
 300 .                                                                                                  0.000 97.799
 310 .                                                                                                  0.000 97.799
 320 .                                                                                                  0.000 97.799
 330 .                                                                                                  0.000 97.799
 340 .                                                                                                  0.000 97.799
 350 ..                                                                                                 0.314 98.113
 360 .                                                                                                  0.000 98.113
 370 .                                                                                                  0.000 98.113
 380 .                                                                                                  0.000 98.113
 390 .                                                                                                  0.000 98.113
 400 .                                                                                                  0.000 98.113
 410 .                                                                                                  0.000 98.113
 420 .                                                                                                  0.000 98.113
 430 .                                                                                                  0.000 98.113
 440 .                                                                                                  0.000 98.113
 450 .                                                                                                  0.000 98.113
 460 .                                                                                                  0.000 98.113
 470 .                                                                                                  0.000 98.113
 480 .                                                                                                  0.000 98.113
 490 .                                                                                                  0.000 98.113
 500 .                                                                                                  0.000 98.113
 510 .                                                                                                  0.000 98.113
 520 .                                                                                                  0.000 98.113
 530 ..                                                                                                 0.629 98.742
 540 .                                                                                                  0.000 98.742
 550 .                                                                                                  0.000 98.742
 560 .                                                                                                  0.000 98.742
 570 .                                                                                                  0.000 98.742
 580 .                                                                                                  0.000 98.742
 590 .                                                                                                  0.000 98.742
 600 .                                                                                                  0.000 98.742
 610 .                                                                                                  0.000 98.742
 620 .                                                                                                  0.000 98.742
 630 .                                                                                                  0.000 98.742
 640 .                                                                                                  0.000 98.742
 650 .                                                                                                  0.000 98.742
 660 .                                                                                                  0.000 98.742
 670 .                                                                                                  0.000 98.742
 680 .                                                                                                  0.000 98.742
 690 .                                                                                                  0.000 98.742
 700 .                                                                                                  0.000 98.742
 710 .                                                                                                  0.000 98.742
 720 .                                                                                                  0.000 98.742
 730 .                                                                                                  0.000 98.742
 740 .                                                                                                  0.000 98.742
 750 ...                                                                                                1.258 100.000
REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=    318     SUM=   23166.      MEAN= 72.849      VAR=   12256.198          SD= 110
```

TOTAL TRIPS OVER MAXP   =    4
TOTAL TRIPS OVER 255    =    0
VOLUME TABLE NUMBER     =  204
SKIM TREE NUMBER        =  101

```
     0    3    6    9   12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60              P.C.   CUM.  AC
     +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+          27.887 27.887
  10 .............................................................                                                   41.690 69.577
  20 ...............................................................................                                  1.972 71.549
  30 ....                                                                                                            15.211 86.761
  40 .............................                                                                                    3.568 90.329
  50 .......                                                                                                          2.629 92.958
  60 .....                                                                                                            2.347 95.305
  70 .....                                                                                                            1.596 96.901
  80 ....                                                                                                             0.000 96.901
  90 .                                                                                                               0.000 96.901
 100 .                                                                                                               0.094 96.995
 110 .                                                                                                               0.939 97.934
 120 ..                                                                                                              0.000 97.934
 130 .                                                                                                               0.000 97.934
 140 .                                                                                                               0.751 98.685
 150 ..                                                                                                              0.094 98.779
 160 .                                                                                                               0.282 99.061
 170 .                                                                                                               0.188 99.249
 180 .                                                                                                               0.751 100.000
 190 ..
REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=     1065        SUM=    26465.      MEAN=  26.850       VAR=      764.915            SD=  2

TOTAL TRIPS OVER MAXP    =        0
TOTAL TRIPS OVER 255     =        0
VOLUME TABLE NUMBER      =      205
SKIM TREE NUMBER         =      101
```

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```
        0    3    6    9   12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60       P.C.    CUM.   ACTC
        +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+    30.175 30.175
     10.................................................................                                          50.292 80.466
     20...........................................................................................               0.292 80.758
     30.                                                                                                          10.058 90.816
     40...................                                                                                        3.353 94.169
     50.......                                                                                                    3.207 97.376
     60......                                                                                                     0.729 98.105
     70..                                                                                                         0.729 98.834
     80..                                                                                                         0.000 98.834
     90..                                                                                                         0.000 98.834
    100.                                                                                                          0.437 99.271
    110..                                                                                                         0.292 99.563
    120.                                                                                                          0.000 99.563
    130.                                                                                                          0.000 99.563
    140.                                                                                                          0.000 99.563
    150.                                                                                                          0.000 99.563
    160.                                                                                                          0.000 99.563
    170.                                                                                                          0.000 99.563
    180.                                                                                                          0.146 99.708
    190.                                                                                                          0.000 99.708
    200.                                                                                                          0.000 99.708
    210.                                                                                                          0.000 99.708
    220.                                                                                                          0.000 99.708
    230.                                                                                                          0.000 99.708
    240.                                                                                                          0.000 99.708
    250.                                                                                                          0.000 99.708
    260.                                                                                                          0.000 99.708
    270.                                                                                                          0.000 99.708
    280.                                                                                                          0.000 99.708
    290.                                                                                                          0.000 99.708
    300.                                                                                                          0.000 99.708
    310.                                                                                                          0.000 99.708
    320.                                                                                                          0.292 100.000
    330.
REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=      686       SUM=    13284.      MEAN= 19.366       VAR=    582.937       SD= 23.
```

TOTAL TRIPS OVER MAXP   =        0
TOTAL TRIPS OVER 255    =        0
VOLUME TABLE NUMBER     =      206
SKIM TREE NUMBER        =      101

```
     0    3    6    9   12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60
     +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+      P.C.    CUM.   ACT
  10.................................................................                                          26.723  26.723
  20..........................................................................................                 47.138  73.861
  30..                                                                                                          0.348  74.209
  40..............                                                                                              9.766  83.973
  50..........                                                                                                  4.848  88.822
  60.........                                                                                                   4.388  93.210
  70...                                                                                                         1.437  94.646
  80....                                                                                                        1.706  96.352
  90..                                                                                                          0.314  96.667
 100..                                                                                                          0.123  96.790
 110..                                                                                                          0.348  97.138
 120..                                                                                                          0.415  97.553
 130..                                                                                                          0.269  97.823
 140..                                                                                                          0.112  97.935
 150..                                                                                                          0.337  98.272
 160..                                                                                                          0.224  98.496
 170..                                                                                                          0.301  98.799
 180..                                                                                                          0.258  99.057
 190..                                                                                                          0.514  99.574
 200..                                                                                                          0.101  99.675
 210..                                                                                                          0.045  99.719
 220..                                                                                                          0.022  99.742
 230..                                                                                                          0.000  99.742
 240..                                                                                                          0.034  99.776
 250..                                                                                                          0.000  99.776
 260..                                                                                                          0.000  99.776
 270..                                                                                                          0.056  99.832
 280..                                                                                                          0.000  99.832
 290..                                                                                                          0.022  99.854
 300..                                                                                                          0.000  99.854
 310..                                                                                                          0.000  99.854
 320..                                                                                                          0.000  99.854
 330..                                                                                                          0.022  99.877
 340..                                                                                                          0.000  99.877
 350..                                                                                                          0.011  99.888
 360..                                                                                                          0.000  99.888
 370..                                                                                                          0.000  99.888
 380..                                                                                                          0.000  99.888
 390..                                                                                                          0.000  99.888
 400..                                                                                                          0.000  99.888
 410..                                                                                                          0.000  99.888
 420..                                                                                                          0.000  99.888
 430..                                                                                                          0.000  99.888
 440..                                                                                                          0.000  99.888
 450..                                                                                                          0.000  99.888
 460..                                                                                                          0.000  99.888
 470..                                                                                                          0.000  99.888
 480..                                                                                                          0.000  99.888
 490..                                                                                                          0.000  99.888
 500..                                                                                                          0.000  99.888
 510..                                                                                                          0.000  99.888
 520..                                                                                                          0.000  99.888
 530..                                                                                                          0.067  99.955
 540..                                                                                                          0.000  99.955
 550..                                                                                                          0.000  99.955
 560..                                                                                                          0.000  99.955
 570..                                                                                                          0.000  99.955
 580..                                                                                                          0.000  99.955
 590..                                                                                                          0.000  99.955
 600..                                                                                                          0.000  99.955
 610..                                                                                                          0.000  99.955
 620..                                                                                                          0.000  99.955
 630..                                                                                                          0.000  99.955
 640..                                                                                                          0.000  99.955
 650..                                                                                                          0.000  99.955
 660..                                                                                                          0.000  99.955
 670..                                                                                                          0.000  99.955
 680..                                                                                                          0.000  99.955
 690..                                                                                                          0.000  99.955
 700..                                                                                                          0.000  99.955
 710..                                                                                                          0.000  99.955
 720..                                                                                                          0.000  99.955
 730..                                                                                                          0.000  99.955
 740..                                                                                                          0.000  99.955
 750..                                                                                                          0.045 100.000
REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=    8910      SUM=    223259.     MEAN= 25.057      VAR=   1285.152          SD= 35.
```

TOTAL TRIPS OVER MAXP  =     4
TOTAL TRIPS OVER 255   =     0
VOLUME TABLE NUMBER    =   207
SKIM TREE NUMBER       =   101

STANDISH BANDWIDTH

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STANDISH

## EXTERNAL ORIGIN-DESTINATION INTERVIEW

## TERMINAL-TRIP SUMMARY TABLE

## VEHICLE TYPE
------------------

| CAR W/O TRLR | CAR W/ TRLR | PICK-UP W/O/TRLR | PICK-UP W/ TRLR | SINGLE-UNIT TRUCKS | COMBINATION TRUCKS |
|---|---|---|---|---|---|
| 77.2% | 0.6% | 14.9% | 0.2% | 5.7% | 1.5% |
| 6045 | 46 | 1163 | 12 | 445 | 116 |

## TRIP PURPOSE
------------------

| WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|
| 39.1% | 12.2% | 21.7% | 1.3% | 14.8% | 10.8% |
| 3059 | 958 | 1699 | 105 | 1161 | 845 |

## NUMBER IN VEHICLE
------------------

| 1 | 2 | 3 | 4 | 5 | 6+ |
|---|---|---|---|---|---|
| 57.2% | 25.1% | 9.2% | 4.8% | 2.1% | 1.5% |
| 4480 | 1966 | 720 | 376 | 168 | 117 |

## VEHICLE GARAGED AT
------------------

| ORIGIN | DESTIN | OTHER |
|---|---|---|
| 47.2% | 33.8% | 19.0% |
| 3694 | 2647 | 1487 |

TOTAL TRIPS = 7828

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE FOR STANDISH

TRIP PURPOSE

| # IN VEH. | WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|---|
| 1 | 77.2%<br>2362 | 47.7%<br>457 | 45.0%<br>764 | 14.0%<br>15 | 40.5%<br>471 | 48.7%<br>412 |
| 2 | 15.9%<br>485 | 32.8%<br>314 | 29.4%<br>500 | 41.5%<br>44 | 31.6%<br>367 | 30.4%<br>257 |
| 3 | 3.9%<br>119 | 9.9%<br>95 | 13.3%<br>226 | 18.0%<br>19 | 15.1%<br>175 | 10.1%<br>85 |
| 4 | 1.9%<br>58 | 7.1%<br>68 | 6.6%<br>112 | 7.2%<br>8 | 7.0%<br>81 | 5.8%<br>49 |
| 5 | 0.8%<br>24 | 1.6%<br>15 | 3.0%<br>52 | 13.8%<br>15 | 3.1%<br>36 | 3.2%<br>27 |
| 6+ | 0.4%<br>11 | 0.9%<br>8 | 2.6%<br>45 | 5.5%<br>6 | 2.7%<br>32 | 1.8%<br>16 |
| TOTAL | 100%<br>3059 | 100%<br>958 | 100%<br>1699 | 100%<br>105 | 100%<br>1161 | 100%<br>845 |

TOTAL TERMINAL-TRIPS FOR STANDISH      =   7828

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE FOR STANDISH

TRIP PURPOSE

| VEH TYPE | WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|---|
| CAR W/O TRLR | 64.9% 1985 | 82.8% 793 | 82.8% 1407 | 82.3% 87 | 90.8% 1055 | 85.0% 718 |
| CAR W/ TRLR | 0.3% 10 | 0.7% 7 | 0.7% 12 | 7.1% 7 | 0.7% 8 | 0.3% 3 |
| PICK-UP W/O/TRLR | 17.5% 536 | 14.5% 139 | 15.9% 271 | 9.4% 10 | 8.2% 95 | 13.4% 113 |
| PICK-UP W/ TRLR | 0.2% 6 | 0.0% 0 | 0.2% 4 | 1.1% 1 | 0.1% 1 | 0.0% 0 |
| SINGLE-UNIT TRUCKS | 13.4% 410 | 1.8% 17 | 0.4% 7 | 0.0% 0 | 0.2% 2 | 1.1% 9 |
| COMBINATION TRUCKS | 3.7% 112 | 0.2% 2 | 0.0% 0 | 0.0% 0 | 0.1% 1 | 0.2% 2 |
| TOTAL | 100% 3059 | 100% 958 | 100% 1699 | 100% 105 | 100% 1161 | 100% 845 |

TOTAL TERMINAL-TRIPS FOR STANDISH          =   7828

```
        0    3    6    9   12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60        P.C.    CUM.   ACT
        +====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+
 10.....................................................                                                       23.666  23.666
 20.......................................................................................................    42.062  65.728
 30..............                                                                                               7.823  73.552
 40.............                                                                                                6.678  80.229
 50......................                                                                                      13.290  93.519
 60...                                                                                                          1.178  94.697
 70.                                                                                                            0.229  94.926
 80..                                                                                                           0.655  95.581
 90...                                                                                                          1.375  96.956
100.                                                                                                            0.262  97.218
110.                                                                                                            0.065  97.283
120..                                                                                                           0.524  97.807
130.                                                                                                            0.000  97.807
140..                                                                                                           0.556  98.363
150..                                                                                                           0.164  98.527
160..                                                                                                           0.458  98.985
170.                                                                                                            0.098  99.083
180.                                                                                                            0.033  99.116
190.                                                                                                            0.033  99.149
200.                                                                                                            0.196  99.345
210.                                                                                                            0.000  99.345
220.                                                                                                            0.000  99.345
230.                                                                                                            0.098  99.444
240.                                                                                                            0.000  99.444
250.                                                                                                            0.000  99.444
260.                                                                                                            0.000  99.444
270.                                                                                                            0.000  99.444
280.                                                                                                            0.098  99.542
290.                                                                                                            0.000  99.542
300.                                                                                                            0.000  99.542
310.                                                                                                            0.000  99.542
320.                                                                                                            0.000  99.542
330.                                                                                                            0.000  99.542
340.                                                                                                            0.000  99.542
350.                                                                                                            0.000  99.542
360.                                                                                                            0.000  99.542
370.                                                                                                            0.000  99.542
380.                                                                                                            0.000  99.542
390.                                                                                                            0.000  99.542
400.                                                                                                            0.000  99.542
410.                                                                                                            0.033  99.574
420.                                                                                                            0.065  99.640
430.                                                                                                            0.000  99.640
440.                                                                                                            0.000  99.640
450.                                                                                                            0.000  99.640
460.                                                                                                            0.262  99.902
470.                                                                                                            0.000  99.902
480.                                                                                                            0.000  99.902
490.                                                                                                            0.000  99.902
500.                                                                                                            0.000  99.902
510.                                                                                                            0.000  99.902
520.                                                                                                            0.000  99.902
530.                                                                                                            0.000  99.902
540.                                                                                                            0.098 100.000
REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=    3055      SUM=    79470.      MEAN=  26.013      VAR=    1583.213      SD=  39.

TOTAL TRIPS OVER MAXP  =      0
TOTAL TRIPS OVER 255   =      0
VOLUME TABLE NUMBER    =    201
SKIM TREE NUMBER       =    101
```

```
      0     3     6     9    12    15    18    21    24    27    30    33    36    39    42    45    48    51    54    57    60          P.C.   CUM.   AC
      +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
  10..................................................   .    .         .      . .                                                  18,580 18,580
  20.................................................................................................................   ...........  54,593 73,173
  30................................                                                                                                  8,455 81,628
  40.........                                                                                                                         4,280 85,908
  50.............                                                                                                                     7,203 93,111
  60..                                                                                                                               0,626 93,737
  70.                                                                                                                                0,104 93,841
  80...                                                                                                                              0,939 94,781
  90...                                                                                                                              1,357 96,138
 100.                                                                                                                                0,000 96,138
 110..                                                                                                                               0,313 96,451
 120.....                                                                                                                            2,192 98,643
 130.                                                                                                                                0,209 98,652
 140.                                                                                                                                0,209 99,061
 150.                                                                                                                                0,000 99,061
 160..                                                                                                                               0,313 99,374
 170.                                                                                                                                0,000 99,374
 180.                                                                                                                                0,209 99,582
 190.                                                                                                                                0,000 99,582
 200.                                                                                                                                0,209 99,791
 210.                                                                                                                                0,000 99,791
 220.                                                                                                                                0,000 99,791
 230.                                                                                                                                0,104 99,896
 240.                                                                                                                                0,000 99,896
 250.                                                                                                                                0,104 100,000
REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=        958        SUM=     22027,        MEAN=  22,993        VAR=      763,696        SD=  27


TOTAL TRIPS OVER MAXP    =       0
TOTAL TRIPS OVER 255     =       0
VOLUME TABLE NUMBER      =     202
SKIM TREE NUMBER         =     101
```

```
       0    3    6    9   12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60           P.C.   CUM.   AC
       +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
   10.  ...............................................     .      .  .  .                                           27.396 27.396
   20.  ......................................................................................................       52.675 80.071
   30.  .........                                                                                                     4.997 85.068
   40.  .......                                                                                                       2.822 87.889
   50.  ..................                                                                                            9.347 97.237
   60.  ..                                                                                                            0.353 97.590
   70.  .                                                                                                             0.059 97.648
   80.  ..                                                                                                            0.647 98.295
   90.  ..                                                                                                            0.647 98.942
  100.                                                                                                                0.000 98.942
  110.                                                                                                                0.000 98.942
  120.                                                                                                                0.000 98.942
  130.                                                                                                                0.000 98.942
  140.                                                                                                                0.000 98.942
  150.                                                                                                                0.118 99.059
  160.                                                                                                                0.118 99.177
  170.                                                                                                                0.000 99.177
  180.                                                                                                                0.174 99.353
  190.                                                                                                                0.000 99.353
  200.                                                                                                                0.118 99.471
  210.                                                                                                                0.294 99.765
  220.                                                                                                                0.000 99.765
  230.                                                                                                                0.000 99.765
  240.                                                                                                                0.000 99.765
  250.                                                                                                                0.000 99.765
  260.                                                                                                                0.000 99.765
  270.                                                                                                                0.000 99.765
  280.                                                                                                                0.000 99.765
  290.                                                                                                                0.000 99.765
  300.                                                                                                                0.000 99.765
  310.                                                                                                                0.000 99.765
  320.                                                                                                                0.000 99.765
  330.                                                                                                                0.000 99.765
  340.                                                                                                                0.000 99.765
  350.                                                                                                                0.118 99.882
  360.                                                                                                                0.000 99.882
  370.                                                                                                                0.000 99.882
  380.                                                                                                                0.000 99.882
  390.                                                                                                                0.118 100.000
```

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=    1701      SUM=   31873.      MEAN=  18.738      VAR=   694.494          SD=  26

TOTAL TRIPS OVER MAXP   =      0
TOTAL TRIPS OVER 255    =      0
VOLUME TABLE NUMBER     =    203
SKIM TREE NUMBER        =    101

```
        0    2    4    6    8   10   12   14   16   18   20   22   24   26   28   30   32   34   36   38   40
        +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+     P.C.   CUM.   ACT
  10....+...+..+.                .         .          .      .      .   .   .                                  .    4.082   4.082
  20.................................................................................                              27.551  31.633
  30.                                                                                                               0.000  31.633
  40....                                                                                                            1.020  32.653
  50.......................                                                                                         9.184  41.837
  60.........                                                                                                       3.061  44.898
  70.........                                                                                                       4.082  48.980
  80.........                                                                                                       4.082  53.061
  90.........                                                                                                       3.061  56.122
 100....                                                                                                            1.020  57.143
 110......                                                                                                          2.041  59.184
 120..........                                                                                                      4.082  63.265
 130....                                                                                                            1.020  64.286
 140..........                                                                                                      4.082  68.367
 150.................                                                                                               7.143  75.510
 160.................................................                                                              15.306  90.816
 170.                                                                                                               0.000  90.816
 180..........                                                                                                      4.082  94.898
 190.                                                                                                               0.000  94.898
 200....                                                                                                            1.020  95.918
 210.                                                                                                               0.000  95.918
 220.                                                                                                               0.000  95.918
 230....                                                                                                            1.020  96.939
 240....                                                                                                            1.020  97.959
 250.                                                                                                               0.000  97.959
 260.                                                                                                               0.000  97.959
 270.                                                                                                               0.000  97.959
 280.                                                                                                               0.000  97.959
 290.                                                                                                               0.000  97.959
 300.                                                                                                               0.000  97.959
 310.                                                                                                               0.000  97.959
 320.                                                                                                               0.000  97.959
 330.                                                                                                               0.000  97.959
 340.                                                                                                               0.000  97.959
 350.                                                                                                               0.000  97.959
 360.                                                                                                               0.000  97.959
 370.                                                                                                               0.000  97.959
 380.                                                                                                               0.000  97.959
 390.                                                                                                               0.000  97.959
 400.                                                                                                               0.000  97.959
 410.                                                                                                               0.000  97.959
 420.                                                                                                               0.000  97.959
 430.                                                                                                               0.000  97.959
 440.                                                                                                               0.000  97.959
 450.                                                                                                               0.000  97.959
 460.                                                                                                               0.000  97.959
 470.                                                                                                               0.000  97.959
 480.                                                                                                               0.000  97.959
 490.                                                                                                               0.000  97.959
 500.                                                                                                               0.000  97.959
 510.                                                                                                               0.000  97.959
 520.                                                                                                               0.000  97.959
 530.                                                                                                               0.000  97.959
 540.                                                                                                               0.000  97.959
 550.                                                                                                               0.000  97.959
 560.                                                                                                               0.000  97.959
 570.                                                                                                               0.000  97.959
 580.                                                                                                               0.000  97.959
 590....                                                                                                            1.020  98.980
 600.                                                                                                               0.000  98.980
 610.                                                                                                               0.000  98.980
 620.                                                                                                               0.000  98.980
 630.                                                                                                               0.000  98.980
 640.                                                                                                               0.000  98.980
 650....                                                                                                            1.020 100.000
```

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=        98      SUM=      9193.       MEAN=  93.806        VAR=      9760.490            SD=  98.

TOTAL TRIPS OVER MAXP   =        0
TOTAL TRIPS OVER 255    =        0
VOLUME TABLE NUMBER     =      204
SKIM TREE NUMBER        =      101

```
     0    3    6    9   12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60                P.C.   CUM.   ACT
     +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+              28.387 28.387
  10 ..................................................................                                                  48.404 76.790
  20 ..............................................................................................................      5.436 82.226
  30 ..........                                                                                                          3.710 85.936
  40 .......                                                                                                            6.299 92.235
  50 ...........                                                                                                        0.949 93.184
  60 ...                                                                                                                0.863 94.047
  70 ..                                                                                                                 0.173 94.214
  80 .                                                                                                                  2.157 96.376
  90 ....                                                                                                               0.000 96.376
 100 .                                                                                                                  0.086 96.462
 110 .                                                                                                                  0.604 97.066
 120 ..                                                                                                                 0.000 97.066
 130 .                                                                                                                  0.518 97.584
 140 ..                                                                                                                 0.000 97.584
 150 ..                                                                                                                 0.431 98.016
 160 ..                                                                                                                 0.173 98.188
 170 ..                                                                                                                 0.518 98.706
 180 ..                                                                                                                 0.173 98.878
 190 ..                                                                                                                 0.000 98.878
 200 .                                                                                                                  0.000 98.878
 210 .                                                                                                                  0.000 98.878
 220 .                                                                                                                  0.345 99.223
 230 ..                                                                                                                 0.000 99.223
 240 .                                                                                                                  0.000 99.223
 250 .                                                                                                                  0.000 99.223
 260 .                                                                                                                  0.000 99.223
 270 .                                                                                                                  0.000 99.223
 280 .                                                                                                                  0.000 99.223
 290 .                                                                                                                  0.000 99.223
 300 .                                                                                                                  0.000 99.223
 310 .                                                                                                                  0.000 99.223
 320 .                                                                                                                  0.000 99.223
 330 .                                                                                                                  0.000 99.223
 340 .                                                                                                                  0.431 99.655
 350 ..                                                                                                                 0.000 99.655
 360 .                                                                                                                  0.000 99.655
 370 .                                                                                                                  0.000 99.655
 380 .                                                                                                                  0.086 99.741
 390 .                                                                                                                  0.000 99.741
 400 .                                                                                                                  0.000 99.741
 410 .                                                                                                                  0.000 99.741
 420 .                                                                                                                  0.000 99.741
 430 .                                                                                                                  0.000 99.741
 440 .                                                                                                                  0.000 99.741
 450 .                                                                                                                  0.086 99.827
 460 .                                                                                                                  0.000 99.827
 470 .                                                                                                                  0.000 99.827
 480 .                                                                                                                  0.086 99.914
 490 .                                                                                                                  0.000 99.914
 500 .                                                                                                                  0.000 99.914
 510 .                                                                                                                  0.086 100.000
 520 .
 530 .
```

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=    1159        SUM=      28523.      MEAN=  24.610       VAR=    1968.281       SD= 44.

TOTAL TRIPS OVER MAXP  =     0
TOTAL TRIPS OVER 255   =     0
VOLUME TABLE NUMBER    =   205
SKIM TREE NUMBER      =   101

```
    0    3    6    9   12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60
    +====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+    P.C.   CUM.  ACT
 10.........................................................................                               25.355 25.355
 20.............................................................................................           46.919 72.275
 30...............................................                                                          7.701 79.976
 40.............                                                                                            5.332 85.308
 50.................                                                                                       10.782 96.090
 60..                                                                                                       0.829 96.919
 70..                                                                                                       0.474 97.393
 80..                                                                                                       0.000 97.393
 90..                                                                                                       0.592 97.986
100.                                                                                                        0.118 98.104
110.                                                                                                        0.000 98.104
120..                                                                                                       0.355 98.460
130.                                                                                                        0.000 98.460
140.                                                                                                        0.000 98.460
150..                                                                                                       0.829 99.289
160..                                                                                                       0.592 99.882
170.                                                                                                        0.118 100.000
REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=        844        SUM=      17600.       MEAN=  20.853       VAR=        507.832             SD=  22.
```

```
TOTAL TRIPS OVER MAXP    =        0
TOTAL TRIPS OVER 255     =        0
VOLUME TABLE NUMBER      =      206
SKIM TREE NUMBER         =      101
```

```
      0    3    6    9    12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60
     +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
  10 .......................................................
  20 ...........................................................................................
  30 ...............
  40 ............
  50 .................
  60 ..
  70 ..
  80 ..
  90 ...
 100 .
 110 .
 120 ..
 130 .
 140 ..
 150 ..
 160 ..
 170 .
 180 .
 190 .
 200 .
 210 .
 220 .
 230 .
 240 .
 250 .
 260 .
 270 .
 280 .
 290 .
 300 .
 310 .
 320 .
 330 .
 340 .
 350 .
 360 .
 370 .
 380 .
 390 .
 400 .
 410 .
 420 .
 430 .
 440 .
 450 .
 460 .
 470 .
 480 .
 490 .
 500 .
 510 .
 520 .
 530 .
 540 .
 550 .
 560 .
 570 .
 580 .
 590 .
 600 .
 610 .
 620 .
 630 .
 640 .
 650 .
```

| | P.C. | CUM. |
|---|---|---|
| 10 | 24.491 | 24.491 |
| 20 | 47.191 | 71.683 |
| 30 | 6.820 | 78.503 |
| 40 | 4.888 | 83.391 |
| 50 | 10.326 | 93.717 |
| 60 | 0.883 | 94.600 |
| 70 | 0.345 | 94.946 |
| 80 | 0.589 | 95.534 |
| 90 | 1.267 | 96.801 |
| 100 | 0.128 | 96.929 |
| 110 | 0.102 | 97.031 |
| 120 | 0.653 | 97.684 |
| 130 | 0.038 | 97.722 |
| 140 | 0.371 | 98.093 |
| 150 | 0.269 | 98.362 |
| 160 | 0.563 | 98.925 |
| 170 | 0.077 | 99.002 |
| 180 | 0.205 | 99.207 |
| 190 | 0.038 | 99.245 |
| 200 | 0.141 | 99.386 |
| 210 | 0.064 | 99.450 |
| 220 | 0.000 | 99.450 |
| 230 | 0.115 | 99.565 |
| 240 | 0.013 | 99.578 |
| 250 | 0.013 | 99.591 |
| 260 | 0.000 | 99.591 |
| 270 | 0.000 | 99.591 |
| 280 | 0.038 | 99.629 |
| 290 | 0.000 | 99.629 |
| 300 | 0.000 | 99.629 |
| 310 | 0.000 | 99.629 |
| 320 | 0.000 | 99.629 |
| 330 | 0.000 | 99.629 |
| 340 | 0.000 | 99.629 |
| 350 | 0.090 | 99.718 |
| 360 | 0.000 | 99.718 |
| 370 | 0.000 | 99.718 |
| 380 | 0.000 | 99.718 |
| 390 | 0.038 | 99.757 |
| 400 | 0.000 | 99.757 |
| 410 | 0.013 | 99.770 |
| 420 | 0.026 | 99.795 |
| 430 | 0.000 | 99.795 |
| 440 | 0.000 | 99.795 |
| 450 | 0.000 | 99.795 |
| 460 | 0.102 | 99.898 |
| 470 | 0.013 | 99.912 |
| 480 | 0.000 | 99.910 |
| 490 | 0.000 | 99.910 |
| 500 | 0.013 | 99.923 |
| 510 | 0.000 | 99.923 |
| 520 | 0.000 | 99.923 |
| 530 | 0.013 | 99.936 |
| 540 | 0.038 | 99.974 |
| 550 | 0.000 | 99.974 |
| 560 | 0.000 | 99.974 |
| 570 | 0.000 | 99.974 |
| 580 | 0.000 | 99.974 |
| 590 | 0.013 | 99.987 |
| 600 | 0.000 | 99.987 |
| 610 | 0.000 | 99.987 |
| 620 | 0.000 | 99.987 |
| 630 | 0.000 | 99.987 |
| 640 | 0.000 | 99.987 |
| 650 | 0.013 | 100.000 |

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=    7815      SUM=   188686.      MEAN=  24.144      VAR=   1402.773      SD= 37.

TOTAL TRIPS OVER MAXP  =      0
TOTAL TRIPS OVER 255   =      0
VOLUME TABLE NUMBER    =    207
SKIM TREE NUMBER       =    101

TAWAS BANDWIDTH

TAWAS

## EXTERNAL ORIGIN-DESTINATION INTERVIEW

## TERMINAL-TRIP SUMMARY TABLE

### VEHICLE TYPE

| CAR W/O TRLR | CAR W/ TRLR | PICK-UP W/O/TRLR | PICK-UP W/ TRLR | SINGLE-UNIT TRUCKS | COMBINATION TRUCKS |
|---|---|---|---|---|---|
| 81.1% | 1.5% | 12.0% | 0.5% | 4.0% | 0.9% |
| 9810 | 182 | 1456 | 62 | 481 | 106 |

### TRIP PURPOSE

| WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|
| 30.3% | 9.1% | 23.2% | 6.7% | 23.6% | 7.1% |
| 3669 | 1100 | 2803 | 809 | 2851 | 864 |

### NUMBER IN VEHICLE

| 1 | 2 | 3 | 4 | 5 | 6+ |
|---|---|---|---|---|---|
| 47.0% | 28.2% | 10.8% | 7.2% | 3.3% | 3.5% |
| 5681 | 3407 | 1309 | 875 | 404 | 421 |

### VEHICLE GARAGED AT

| ORIGIN | DESTIN | OTHER |
|---|---|---|
| 39.4% | 31.9% | 28.6% |
| 4771 | 3863 | 3463 |

TOTAL TRIPS = 12097

# MINOR

## EXTERNAL ORIGIN-DESTINATION INTERVIEW
## TERMINAL-TRIP SUMMARY TABLE FOR TAWAS

### TRIP PURPOSE

| # IN VEH. | WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|---|
| 1 | 78.9%<br>2896 | 45.5%<br>500 | 36.8%<br>1032 | 10.0%<br>81 | 30.0%<br>855 | 36.7%<br>317 |
| 2 | 16.0%<br>585 | 33.9%<br>373 | 33.9%<br>951 | 34.2%<br>277 | 32.4%<br>923 | 34.5%<br>298 |
| 3 | 3.5%<br>127 | 11.4%<br>125 | 13.1%<br>368 | 18.2%<br>147 | 15.2%<br>432 | 12.7%<br>110 |
| 4 | 1.2%<br>45 | 5.8%<br>63 | 9.4%<br>262 | 18.4%<br>149 | 10.1%<br>288 | 7.8%<br>68 |
| 5 | 0.3%<br>13 | 2.1%<br>23 | 3.6%<br>102 | 9.7%<br>79 | 5.4%<br>155 | 3.7%<br>32 |
| 6+ | 0.1%<br>3 | 1.5%<br>16 | 3.1%<br>88 | 9.5%<br>77 | 7.0%<br>199 | 4.5%<br>39 |
| TOTAL | 100%<br>3669 | 100%<br>1100 | 100%<br>2803 | 100%<br>809 | 100%<br>2851 | 100%<br>864 |

TOTAL TERMINAL-TRIPS FOR TAWAS          = 12097

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE FOR TAWAS

TRIP PURPOSE

| VEH TYPE | WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|---|
| CAR<br>W/O TRLR | 62.8%<br>2302 | 87.7%<br>965 | 90.0%<br>2524 | 79.5%<br>643 | 90.9%<br>2591 | 90.8%<br>784 |
| CAR<br>W/ TRLR | 0.4%<br>16 | 1.4%<br>16 | 0.7%<br>21 | 9.5%<br>77 | 1.6%<br>45 | 0.8%<br>7 |
| PICK-UP<br>W/O/TRLR | 23.0%<br>843 | 9.8%<br>108 | 7.9%<br>222 | 4.9%<br>40 | 6.4%<br>184 | 6.8%<br>59 |
| PICK-UP<br>W/ TRLR | 1.1%<br>40 | 0.0%<br>0 | 0.2%<br>5 | 1.0%<br>8 | 0.2%<br>7 | 0.2%<br>1 |
| SINGLE-UNIT<br>TRUCKS | 10.0%<br>368 | 1.0%<br>11 | 1.0%<br>27 | 5.1%<br>41 | 0.8%<br>22 | 1.4%<br>12 |
| COMBINATION<br>TRUCKS | 2.7%<br>99 | 0.0%<br>0 | 0.1%<br>3 | 0.0%<br>0 | 0.1%<br>4 | 0.0%<br>0 |
| TOTAL | 100%<br>3669 | 100%<br>1100 | 100%<br>2803 | 100%<br>809 | 100%<br>2851 | 100%<br>864 |

TOTAL TERMINAL-TRIPS FOR TAWAS  = 12097

```
        0    2    4    6    8   10   12   14   16   18   20   22   24   26   28   30   32   34   36   38   40
        +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+    P.C.    CUM.  A
   10...............................                                                                             12.007  12.007
   20.....................................................................                                       25.565  37.571
   30..........................................................                                                  20.964  58.535
   40...........................................................                                                 21.454  79.989
   50..........                                                                                                   3.784  83.773
   60........                                                                                                     3.185  86.959
   70....                                                                                                         1.171  88.130
   80.....                                                                                                        2.151  90.280
   90..........                                                                                                   3.430  93.711
  100......                                                                                                       2.124  95.834
  110..                                                                                                           0.381  96.216
  120.                                                                                                            0.136  96.352
  130..                                                                                                           0.272  96.624
  140...                                                                                                          0.790  97.414
  150.                                                                                                            0.082  97.495
  160.                                                                                                            0.136  97.631
  170..                                                                                                           0.327  97.958
  180..                                                                                                           0.245  98.203
  190..                                                                                                           0.436  98.639
  200..                                                                                                           0.218  98.857
  210...                                                                                                          0.626  99.483
  220.                                                                                                            0.000  99.483
  230.                                                                                                            0.109  99.592
  240.                                                                                                            0.000  99.592
  250.                                                                                                            0.163  99.755
  260.                                                                                                            0.000  99.755
  270.                                                                                                            0.000  99.755
  280.                                                                                                            0.054  99.809
  290.                                                                                                            0.000  99.809
  300.                                                                                                            0.000  99.809
  310.                                                                                                            0.000  99.809
  320.                                                                                                            0.027  99.837
  330.                                                                                                            0.000  99.837
  340.                                                                                                            0.000  99.837
  350.                                                                                                            0.000  99.837
  360.                                                                                                            0.000  99.837
  370.                                                                                                            0.000  99.837
  380.                                                                                                            0.000  99.837
  390.                                                                                                            0.000  99.837
  400.                                                                                                            0.000  99.837
  410.                                                                                                            0.000  99.837
  420.                                                                                                            0.054  99.891
  430.                                                                                                            0.000  99.891
  440.                                                                                                            0.000  99.891
  450.                                                                                                            0.000  99.891
  460.                                                                                                            0.082  99.973
  470.                                                                                                            0.000  99.973
  480.                                                                                                            0.000  99.973
  490.                                                                                                            0.000  99.973
  500.                                                                                                            0.000  99.973
  510.                                                                                                            0.000  99.973
  520.                                                                                                            0.000  99.973
  530.                                                                                                            0.000  99.973
  540.                                                                                                            0.000  99.973
  550.                                                                                                            0.000  99.973
  560.                                                                                                            0.027 100.000
```

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=      3673        SUM=    132766.       MEAN=  36.146        VAR=     1531.622        SD=

```
TOTAL TRIPS OVER MAXP   =       0
TOTAL TRIPS OVER 255    =       0
VOLUME TABLE NUMBER     =     201
SKIM TREE NUMBER        =     101
```

```
        0    2    4    6    8   10   12   14   16   18   20   22   24   26   28   30   32   34   36   38   40
        +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+          P.C.   CUM.   A
     10..............................                                                                                   9.182   9.182
     20.................................................................                                               23.818  33.000
     30.....................................................                                                           19.091  52.091
     40.........................................................................                                       25.727  77.818
     50..........                                                                                                       3.727  81.545
     60.........                                                                                                        3.273  84.818
     70...                                                                                                              0.636  85.455
     80......                                                                                                           1.909  87.364
     90......                                                                                                           2.182  89.545
    100........                                                                                                         2.636  92.182
    110.                                                                                                                0.182  92.364
    120.                                                                                                                0.091  92.455
    130.                                                                                                                0.091  92.545
    140.....                                                                                                            1.636  94.182
    150...                                                                                                              0.636  94.818
    160..                                                                                                               0.545  95.364
    170..                                                                                                               0.545  95.909
    180.                                                                                                                0.182  96.091
    190...                                                                                                              0.818  96.909
    200....                                                                                                             1.000  97.909
    210....                                                                                                             1.273  99.182
    220..                                                                                                               0.364  99.545
    230.                                                                                                                0.000  99.545
    240.                                                                                                                0.000  99.545
    250.                                                                                                                0.182  99.727
    260.                                                                                                                0.000  99.727
    270.                                                                                                                0.000  99.727
    280.                                                                                                                0.000  99.727
    290.                                                                                                                0.000  99.727
    300.                                                                                                                0.000  99.727
    310.                                                                                                                0.000  99.727
    320.                                                                                                                0.000  99.727
    330.                                                                                                                0.000  99.727
    340.                                                                                                                0.000  99.727
    350.                                                                                                                0.000  99.727
    360.                                                                                                                0.000  99.727
    370.                                                                                                                0.000  99.727
    380.                                                                                                                0.000  99.727
    390.                                                                                                                0.000  99.727
    400.                                                                                                                0.000  99.727
    410.                                                                                                                0.000  99.727
    420..                                                                                                               0.273 100.000
REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=      1100        SUM=     46450.      MEAN=   42.227        VAR=       2244.556             SD=  47


TOTAL TRIPS OVER MAXP    =        0
TOTAL TRIPS OVER 255     =        0
VOLUME TABLE NUMBER      =      202
SKIM TREE NUMBER         =      101
```

```
       0    2    4    6    8   10   12   14   16   18   20   22   24   26   28   30   32   34   36   38   40
       +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+    P.C.   CUM. A.
   10.................................................                                                          15.319 15.319
   20........................................................................................................  31.493 46.812
   30..............................................................                                            17.207 64.019
   40..................................................................................                        25.900 89.918
   50.......                                                                                                    2.250 92.198
   60....                                                                                                       1.140 93.338
   70...                                                                                                        0.891 94.229
   80....                                                                                                       1.033 95.262
   90....                                                                                                       1.069 96.331
  100...                                                                                                        0.606 96.936
  110.                                                                                                          0.000 96.936
  120..                                                                                                         0.249 97.186
  130.                                                                                                          0.107 97.292
  140...                                                                                                        0.606 97.898
  150.                                                                                                          0.000 97.898
  160..                                                                                                         0.249 98.147
  170.                                                                                                          0.143 98.295
  180.                                                                                                          0.143 98.432
  190.                                                                                                          0.000 98.432
  200..                                                                                                         0.356 98.789
  210...                                                                                                        0.606 99.394
  220.                                                                                                          0.000 99.394
  230.                                                                                                          0.000 99.394
  240.                                                                                                          0.000 99.394
  250.                                                                                                          0.178 99.572
  260.                                                                                                          0.071 99.644
  270.                                                                                                          0.000 99.644
  280.                                                                                                          0.143 99.786
  290.                                                                                                          0.000 99.786
  300.                                                                                                          0.000 99.786
  310.                                                                                                          0.000 99.786
  320.                                                                                                          0.000 99.786
  330.                                                                                                          0.000 99.786
  340.                                                                                                          0.000 99.786
  350.                                                                                                          0.000 99.786
  360.                                                                                                          0.000 99.786
  370.                                                                                                          0.000 99.786
  380.                                                                                                          0.000 99.786
  390.                                                                                                          0.000 99.786
  400.                                                                                                          0.000 99.786
  410..                                                                                                         0.000 99.786
  420..                                                                                                         0.214100.000
```

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=    2807      SUM=     82745.     MEAN= ˙29.478      VAR=     1284.093       SD= 3

```
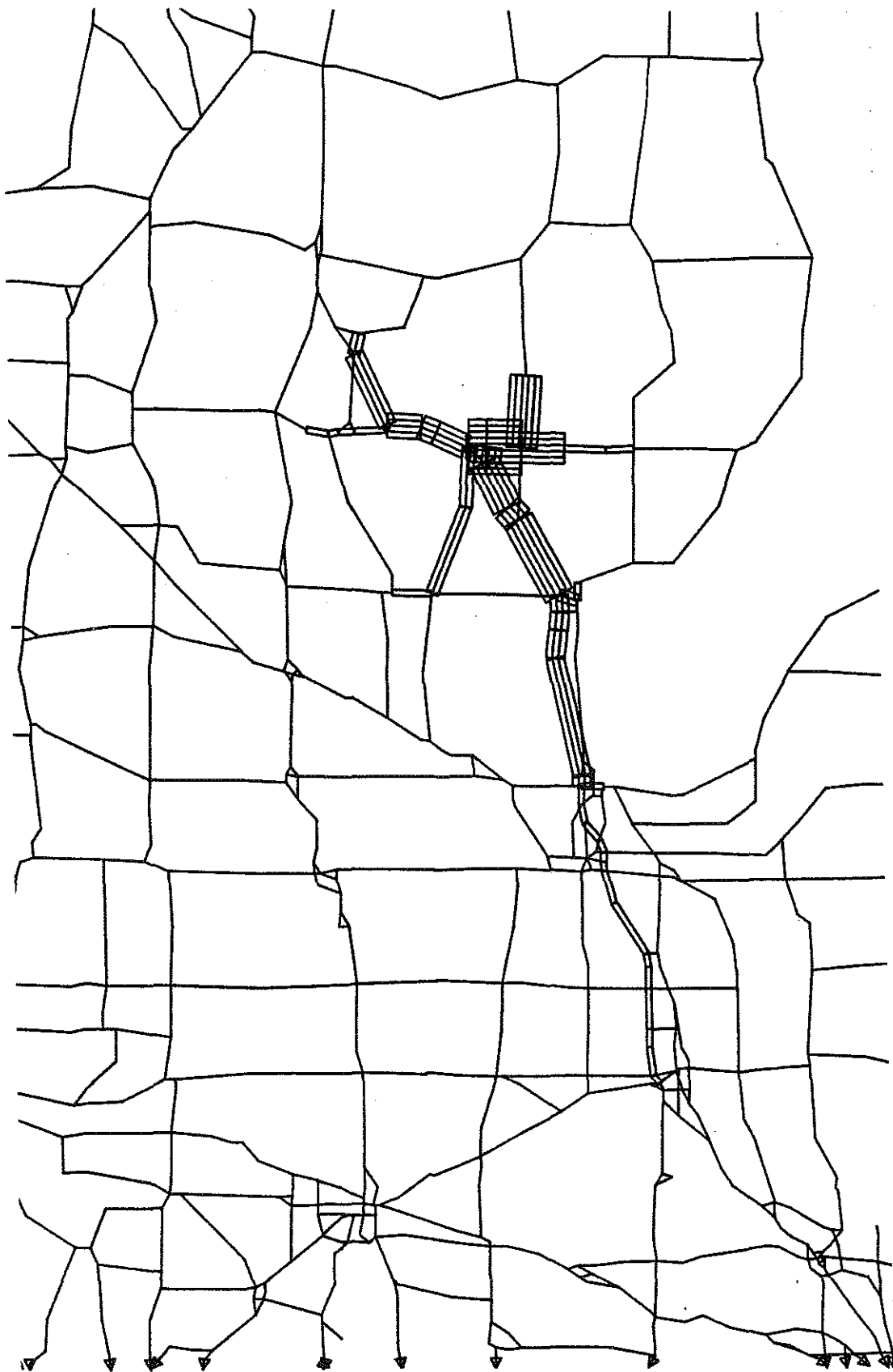TOTAL TRIPS OVER MAXP    =       0
TOTAL TRIPS OVER 255     =       0
VOLUME TABLE NUMBER      =     203
SKIM TREE NUMBER         =     101
```

```
     0    1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19   20
     +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+      P.C.    CUM.  A
  10 .........                                                                                                   1.840   1.840
  20 .........................................................                                                  11.656  13.497
  30 ...................................................................                                        13.865  27.362
  40 .............................................................                                              12.515  39.877
  50 ..............                                                                                              2.822  42.699
  60 .......                                                                                                     1.227  43.926
  70 ...........                                                                                                 1.963  45.890
  80 ............                                                                                                2.331  48.221
  90 ......................                                                                                      4.908  53.129
 100 ...................................                                                                         7.239  60.368
 110 .....                                                                                                       0.982  61.350
 120 ......                                                                                                      1.104  62.454
 130 ........                                                                                                    1.350  63.804
 140 ..............................                                                                              6.258  70.061
 150 ........                                                                                                    1.595  71.656
 160 ...                                                                                                         0.491  72.147
 170 .............                                                                                               2.577  74.724
 180 ..........                                                                                                  1.840  76.564
 190 .........                                                                                                   1.718  78.282
 200 .......                                                                                                     1.472  79.755
 210 ...................................................                                                        10.429  90.184
 220 .....                                                                                                       0.859  91.043
 230 .....                                                                                                       0.859  91.902
 240 .....                                                                                                       0.982  92.883
 250 ..........                                                                                                  1.840  94.724
 260 .....                                                                                                       0.859  95.583
 270 ..                                                                                                          0.245  95.828
 280 ...                                                                                                         0.368  96.196
 290 .....                                                                                                       0.736  96.933
 300 ...                                                                                                         0.368  97.301
 310 .                                                                                                           0.000  97.301
 320 .                                                                                                           0.000  97.301
 330 ...                                                                                                         0.368  97.669
 340 ..                                                                                                          0.245  97.914
 350 ...                                                                                                         0.491  98.405
 360 ..                                                                                                          0.245  98.650
 370 ..                                                                                                          0.245  98.896
 380 .                                                                                                           0.000  98.896
 390 .                                                                                                           0.000  98.896
 400 .                                                                                                           0.000  98.896
 410 .                                                                                                           0.000  98.896
 420 .                                                                                                           0.000  98.896
 430 .                                                                                                           0.000  98.896
 440 .                                                                                                           0.000  98.896
 450 .                                                                                                           0.000  98.896
 460 .                                                                                                           0.000  98.896
 470 ..                                                                                                          0.245  99.141
 480 .                                                                                                           0.000  99.141
 490 .                                                                                                           0.000  99.141
 500 .                                                                                                           0.000  99.141
 510 .                                                                                                           0.000  99.141
 520 .                                                                                                           0.000  99.141
 530 .                                                                                                           0.000  99.141
 540 .                                                                                                           0.000  99.141
 550 .                                                                                                           0.000  99.141
 560 .                                                                                                           0.000  99.141
 570 .                                                                                                           0.000  99.141
 580 .                                                                                                           0.000  99.141
 590 .                                                                                                           0.000  99.141
 600 .                                                                                                           0.000  99.141
 610 .                                                                                                           0.000  99.141
 620 .                                                                                                           0.000  99.141
 630 ...                                                                                                         0.491  99.632
 640 .                                                                                                           0.000  99.632
 650 .                                                                                                           0.000  99.632
 660 .                                                                                                           0.000  99.632
 670 .                                                                                                           0.000  99.632
 680 .                                                                                                           0.000  99.632
 690 .                                                                                                           0.000  99.632
 700 .                                                                                                           0.000  99.632
 710 .                                                                                                           0.000  99.632
 720 .                                                                                                           0.000  99.632
 730 .                                                                                                           0.000  99.632
 740 .                                                                                                           0.000  99.632
 750 ...                                                                                                         0.368 100.000
```

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=        815        SUM=       86616.        MEAN= 106.277        VAR=       10119.075              SD= 1

TOTAL TRIPS OVER MAXP    =        3
TOTAL TRIPS OVER 255     =        9
VOLUME TABLE NUMBER      =      204
SKIM TREE NUMBER         =      101

```
         0    2    4    6    8   10   12   14   16   18   20   22   24   26   28   30   32   34   36   38   40
         +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+      P.C.    CUM.  A
    10....................................                                                                          9.372   9.372
    20..................................................................................................           31.114  42.506
    30..................................................                                                          15.725  58.231
    40.......................................................                                                     17.866  76.097
    50........                                                                                                     2.738  78.835
    60.......                                                                                                      2.317  81.151
    70.....                                                                                                        1.404  82.555
    80....                                                                                                         1.369  83.924
    90.........                                                                                                    3.299  87.224
   100..........                                                                                                   3.791  91.014
   110..                                                                                                           0.246  91.260
   120..                                                                                                           0.562  91.822
   130.                                                                                                            0.140  91.962
   140.......                                                                                                      2.492  94.454
   150..                                                                                                           0.421  94.875
   160..                                                                                                           0.211  95.086
   170..                                                                                                           0.316  95.402
   180..                                                                                                           0.527  95.928
   190...                                                                                                          0.667  96.595
   200...                                                                                                          0.702  97.297
   210.....                                                                                                        1.790  99.087
   220.                                                                                                            0.140  99.228
   230.                                                                                                            0.070  99.298
   240.                                                                                                            0.035  99.333
   250.                                                                                                            0.140  99.473
   260.                                                                                                            0.035  99.509
   270.                                                                                                            0.000  99.509
   280.                                                                                                            0.000  99.509
   290.                                                                                                            0.074  99.579
   300.                                                                                                            0.035  99.614
   310.                                                                                                            0.000  99.614
   320.                                                                                                            0.000  99.614
   330.                                                                                                            0.035  99.649
   340.                                                                                                            0.000  99.649
   350.                                                                                                            0.035  99.684
   360.                                                                                                            0.000  99.684
   370.                                                                                                            0.000  99.684
   380.                                                                                                            0.000  99.684
   390.                                                                                                            0.000  99.684
   400.                                                                                                            0.000  99.684
   410.                                                                                                            0.000  99.684
   420.                                                                                                            0.140  99.824
   430.                                                                                                            0.000  99.824
   440.                                                                                                            0.000  99.824
   450.                                                                                                            0.000  99.824
   460.                                                                                                            0.000  99.824
   470.                                                                                                            0.000  99.824
   480.                                                                                                            0.000  99.824
   490.                                                                                                            0.000  99.824
   500.                                                                                                            0.000  99.824
   510.                                                                                                            0.000  99.824
   520.                                                                                                            0.000  99.824
   530.                                                                                                            0.000  99.824
   540.                                                                                                            0.000  99.824
   550.                                                                                                            0.000  99.824
   560.                                                                                                            0.000  99.824
   570.                                                                                                            0.000  99.824
   580.                                                                                                            0.000  99.824
   590.                                                                                                            0.000  99.824
   600.                                                                                                            0.000  99.824
   610.                                                                                                            0.070  99.895
   620.                                                                                                            0.000  99.895
   630.                                                                                                            0.035  99.930
   640.                                                                                                            0.000  99.930
   650.                                                                                                            0.000  99.930
   660.                                                                                                            0.000  99.930
   670.                                                                                                            0.000  99.930
   680.                                                                                                            0.000  99.930
   690.                                                                                                            0.000  99.930
   700.                                                                                                            0.000  99.930
   710.                                                                                                            0.000  99.930
   720.                                                                                                            0.000  99.930
   730.                                                                                                            0.000  99.930
   740.                                                                                                            0.070 100.000
```

REMAINING VALUES ARE ALL ZERO

NUMBER OF OBSERVATIONS=   2849      SUM=    121662.      MEAN=  42.701      VAR=    3052.601      SD=  55

```
TOTAL TRIPS OVER MAXP   =      0
TOTAL TRIPS OVER 255    =      0
VOLUME TABLE NUMBER     =    205
SKIM TREE NUMBER        =    101
```

```
        0     2     4     6     8    10    12    14    16    18    20    22    24    26    28    30    32    34    36    38    40
        +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+          P.C.   CUM.   A
 10.....................................                                                                               12.326 12.326
 20...................................................................................                                 27.674 40.000
 30...............................................................                                                     17.907 57.907
 40....................................................................................                               25.930 83.837
 50............                                                                                                         3.837 87.674
 60....                                                                                                                 1.395 89.070
 70...                                                                                                                  0.698 89.767
 80.....                                                                                                                1.512 91.279
 90........                                                                                                             2.674 93.953
100....                                                                                                                 1.395 95.349
110..                                                                                                                   0.349 95.698
120...                                                                                                                  0.698 96.395
130..                                                                                                                   0.581 96.977
140..                                                                                                                   0.581 97.558
150..                                                                                                                   0.349 97.907
160.                                                                                                                    0.000 97.907
170..                                                                                                                   0.233 98.140
180.                                                                                                                    0.116 98.256
190..                                                                                                                   0.349 98.605
200..                                                                                                                   0.581 99.186
210..                                                                                                                   0.233 99.419
220.                                                                                                                    0.000 99.419
230.                                                                                                                    0.000 99.419
240.                                                                                                                    0.000 99.419
250.                                                                                                                    0.000 99.419
260.                                                                                                                    0.000 99.419
270.                                                                                                                    0.000 99.419
280.                                                                                                                    0.000 99.419
290..                                                                                                                   0.233 99.651
300.                                                                                                                    0.000 99.651
310.                                                                                                                    0.000 99.651
320.                                                                                                                    0.000 99.651
330.                                                                                                                    0.000 99.651
340.                                                                                                                    0.000 99.651
350.                                                                                                                    0.000 99.651
360.                                                                                                                    0.000 99.651
370.                                                                                                                    0.000 99.651
380.                                                                                                                    0.000 99.651
390.                                                                                                                    0.000 99.651
400.                                                                                                                    0.000 99.651
410.                                                                                                                    0.000 99.651
420.                                                                                                                    0.116 99.767
430.                                                                                                                    0.000 99.767
440..                                                                                                                   0.233 100.000
```

RENAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=      860       SUM=      29674.       MEAN=  34.505       VAR=      1659.117           SD=  4(

TOTAL TRIPS OVER MAXP   =        3
TOTAL TRIPS OVER 255    =        0
VOLUME TABLE NUMBER     =      206
SKIM TREE NUMBER        =      101

-97-

```
     0    2    4    6    8   10   12   14   16   18   20   22   24   26   28   30   32   34   36   38   40
     +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+     P.C.    CUM.   A
  10 ...................................                                                                      11.236  11.236
  20 .....................................................................................                    27.776  39.012
  30 ....................................................                                                     17.994  57.006
  40 ...............................................................                                          21.745  78.751
  50 ...........                                                                                               3.123  81.874
  60 .......                                                                                                   2.255  84.129
  70 ....                                                                                                      1.132  85.261
  80 .....                                                                                                     1.652  86.913
  90 ........                                                                                                  2.784  89.698
 100 .......                                                                                                   2.503  92.201
 110 ..                                                                                                        0.281  92.482
 120 ..                                                                                                        0.364  92.845
 130 ..                                                                                                        0.281  93.126
 140 .....                                                                                                     1.578  94.704
 150 ..                                                                                                        0.314  95.018
 160 ..                                                                                                        0.231  95.250
 170 ..                                                                                                        0.446  95.696
 180 ..                                                                                                        0.380  96.076
 190 ..                                                                                                        0.504  96.580
 200 ..                                                                                                        0.545  97.125
 210 ....                                                                                                      1.586  98.711
 220 .                                                                                                         0.124  98.835
 230 .                                                                                                         0.107  98.942
 240 .                                                                                                         0.074  99.017
 250 ..                                                                                                        0.264  99.281
 260 .                                                                                                         0.083  99.364
 270 .                                                                                                         0.017  99.380
 280 .                                                                                                         0.074  99.455
 290 .                                                                                                         0.083  99.537
 300 .                                                                                                         0.033  99.570
 310 .                                                                                                         0.000  99.570
 320 .                                                                                                         0.009  99.579
 330 .                                                                                                         0.033  99.612
 340 .                                                                                                         0.017  99.628
 350 .                                                                                                         0.041  99.670
 360 .                                                                                                         0.017  99.686
 370 .                                                                                                         0.017  99.703
 380 .                                                                                                         0.000  99.703
 390 .                                                                                                         0.000  99.703
 400 .                                                                                                         0.000  99.703
 410 .                                                                                                         0.000  99.703
 420 .                                                                                                         0.132  99.835
 430 .                                                                                                         0.000  99.835
 440 .                                                                                                         0.017  99.851
 450 .                                                                                                         0.000  99.851
 460 .                                                                                                         0.025  99.876
 470 .                                                                                                         0.017  99.893
 480 .                                                                                                         0.000  99.893
 490 .                                                                                                         0.000  99.893
 500 .                                                                                                         0.000  99.893
 510 .                                                                                                         0.000  99.893
 520 .                                                                                                         0.000  99.893
 530 .                                                                                                         0.000  99.893
 540 .                                                                                                         0.000  99.893
 550 .                                                                                                         0.000  99.893
 560 .                                                                                                         0.008  99.901
 570 .                                                                                                         0.000  99.901
 580 .                                                                                                         0.000  99.901
 590 .                                                                                                         0.000  99.901
 600 .                                                                                                         0.000  99.901
 610 .                                                                                                         0.017  99.917
 620 .                                                                                                         0.000  99.917
 630 .                                                                                                         0.041  99.959
 640 .                                                                                                         0.000  99.959
 650 .                                                                                                         0.000  99.959
 660 .                                                                                                         0.000  99.959
 670 .                                                                                                         0.000  99.959
 680 .                                                                                                         0.000  99.959
 690 .                                                                                                         0.000  99.959
 700 .                                                                                                         0.000  99.959
 710 .                                                                                                         0.000  99.959
 720 .                                                                                                         0.000  99.959
 730 .                                                                                                         0.000  99.959
 740 .                                                                                                         0.017  99.975
 750 .                                                                                                         0.025 100.000
REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=    12104     SUM=    499913.     MEAN=   41.301     VAR=      2812.867     SD=  53
```

TOTAL TRIPS OVER MAXP =   5
TOTAL TRIPS OVER 255 =   0
VOLUME TABLE NUMBER =  207
SKIM TREE NUMBER  =  101

WBRANCH BANDWIDTH

# EXTERNAL ORIGIN-DESTINATION INTERVIEW

## TERMINAL-TRIP SUMMARY TABLE

## VEHICLE TYPE

| CAR<br>W/O TRLR | CAR<br>W/ TRLR | PICK-UP<br>W/O/TRLR | PICK-UP<br>W/ TRLR | SINGLE-UNIT<br>TRUCKS | COMBINATION<br>TRUCKS |
|---|---|---|---|---|---|
| 73.9% | 1.0% | 18.7% | 0.5% | 3.9% | 2.0% |
| 9066 | 120 | 2291 | 59 | 484 | 251 |

## TRIP PURPOSE

| WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|
| 37.3% | 9.5% | 24.5% | 2.2% | 14.1% | 12.4% |
| 4573 | 1161 | 3011 | 271 | 1728 | 1527 |

## NUMBER IN VEHICLE

| 1 | 2 | 3 | 4 | 5 | 6+ |
|---|---|---|---|---|---|
| 53.5% | 26.9% | 9.8% | 5.6% | 2.3% | 1.9% |
| 6567 | 3300 | 1197 | 693 | 287 | 228 |

## VEHICLE GARAGED AT

| ORIGIN | DESTIN | OTHER |
|---|---|---|
| 41.2% | 34.4% | 24.3% |
| 5061 | 4226 | 2985 |

TOTAL TRIPS = 12271

MINOR

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE FOR WBRANCH

TRIP PURPOSE

| # IN VEH. | WORK | PERS BIZ | SHCP | VACATION | SOC-REC | OTHER |
|-----------|------|----------|------|----------|---------|-------|
| 1 | 79.4%<br>3632 | 42.5%<br>494 | 38.5%<br>1159 | 6.0%<br>16 | 35.9%<br>620 | 42.3%<br>647 |
| 2 | 15.2%<br>694 | 35.2%<br>409 | 34.8%<br>1049 | 41.7%<br>113 | 31.1%<br>538 | 32.6%<br>497 |
| 3 | 4.0%<br>182 | 12.4%<br>144 | 12.9%<br>388 | 19.5%<br>53 | 13.5%<br>234 | 12.9%<br>197 |
| 4 | 0.9%<br>40 | 6.1%<br>71 | 8.4%<br>252 | 15.5%<br>42 | 10.8%<br>186 | 6.6%<br>101 |
| 5 | 0.4%<br>19 | 2.7%<br>32 | 2.5%<br>77 | 10.0%<br>27 | 4.1%<br>71 | 4.0%<br>61 |
| 6+ | 0.1%<br>7 | 1.0%<br>11 | 2.9%<br>88 | 7.2%<br>20 | 4.6%<br>79 | 1.5%<br>23 |
| TOTAL | 100%<br>4573 | 100%<br>1161 | 100%<br>3011 | 100%<br>271 | 100%<br>1728 | 100%<br>1527 |

TOTAL TERMINAL-TRIPS FOR WBRANCH          = 12271

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE FOR WBRANCH

TRIP PURPOSE

| VEH TYPE | WORK | PERS BIZ | SHOP | VACATION | SOC-REC | OTHER |
|---|---|---|---|---|---|---|
| CAR W/O TRLR | 57.3%<br>2620 | 81.3%<br>944 | 82.7%<br>2490 | 82.3%<br>223 | 87.0%<br>1503 | 84.3%<br>1287 |
| CAR W/ TRLR | 0.6%<br>27 | 1.1%<br>13 | 1.0%<br>31 | 7.7%<br>21 | 0.8%<br>13 | 1.0%<br>15 |
| PICK-UP W/O/TRLR | 26.7%<br>1219 | 16.8%<br>195 | 14.9%<br>448 | 8.0%<br>22 | 11.4%<br>197 | 13.8%<br>210 |
| PICK-UP W/ TRLR | 0.6%<br>27 | 0.1%<br>1 | 0.5%<br>15 | 0.9%<br>3 | 0.5%<br>8 | 0.3%<br>4 |
| SINGLE-UNIT TRUCKS | 9.5%<br>435 | 0.4%<br>5 | 0.9%<br>27 | 1.0%<br>3 | 0.4%<br>7 | 0.5%<br>8 |
| COMBINATION TRUCKS | 5.4%<br>245 | 0.2%<br>2 | 0.0%<br>1 | 0.0%<br>0 | 0.0%<br>0 | 0.2%<br>2 |
| TOTAL | 100%<br>4573 | 100%<br>1161 | 100%<br>3011 | 100%<br>271 | 100%<br>1728 | 100%<br>1527 |

TOTAL TERMINAL-TRIPS FOR WBRANCH          = 12271

```
        0      3      6      9     12     15     18     21     24     27     30     33     36     39     42     45     48     51     54     57     60
        +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+            P.C.    CUM.   AC
     10.                                                                                                                   0.000   0.000
     20............................................................................................................      47.065  47.065
     30...................................................                                                               19.010  66.075
     40..............                                                                                                     8.016  74.091
     50..................                                                                                                10.753  84.845
     60.....                                                                                                              2.365  87.210
     70.........                                                                                                          4.862  92.072
     80.....                                                                                                              2.453  94.525
     90..                                                                                                                 0.350  94.875
    100..                                                                                                                 0.438  95.313
    110..                                                                                                                 0.197  95.510
    120..                                                                                                                 0.858  96.368
    130..                                                                                                                 0.416  96.781
    140.                                                                                                                  0.110  96.890
    150.                                                                                                                  0.241  97.131
    160.                                                                                                                  0.110  97.240
    170.                                                                                                                  0.416  97.657
    180.                                                                                                                  0.197  97.854
    190..                                                                                                                 0.657  98.511
    200.                                                                                                                  0.350  98.861
    210..                                                                                                                 0.022  98.883
    220..                                                                                                                 0.394  99.277
    230.                                                                                                                  0.044  99.321
    240.                                                                                                                  0.131  99.452
    250.                                                                                                                  0.197  99.650
    260.                                                                                                                  0.000  99.650
    270.                                                                                                                  0.175  99.825
    280.                                                                                                                  0.000  99.825
    290.                                                                                                                  0.044  99.869
    300.                                                                                                                  0.000  99.869
    310.                                                                                                                  0.000  99.869
    320.                                                                                                                  0.022  99.890
    330.                                                                                                                  0.000  99.890
    340.                                                                                                                  0.000  99.890
    350.                                                                                                                  0.000  99.890
    360.                                                                                                                  0.000  99.890
    370.                                                                                                                  0.000  99.890
    380.                                                                                                                  0.000  99.890
    390.                                                                                                                  0.000  99.890
    400.                                                                                                                  0.000  99.890
    410.                                                                                                                  0.000  99.890
    420.                                                                                                                  0.000  99.890
    430.                                                                                                                  0.000  99.890
    440.                                                                                                                  0.044  99.934
    450.                                                                                                                  0.000  99.934
    460.                                                                                                                  0.000  99.934
    470.                                                                                                                  0.000  99.934
    480.                                                                                                                  0.044  99.978
    490.                                                                                                                  0.000  99.978
    500.                                                                                                                  0.000  99.978
    510.                                                                                                                  0.000  99.978
    520.                                                                                                                  0.000  99.978
    530.                                                                                                                  0.000  99.978
    540.                                                                                                                  0.000  99.978
    550.                                                                                                                  0.000  99.978
    560.                                                                                                                  0.000  99.978
    570.                                                                                                                  0.000  99.978
    580.                                                                                                                  0.000  99.978
    590.                                                                                                                  0.000  99.978
    600.                                                                                                                  0.000  99.978
    610.                                                                                                                  0.000  99.978
    620.                                                                                                                  0.000  99.978
    630.                                                                                                                  0.000  99.978
    640.                                                                                                                  0.000  99.978
    650.                                                                                                                  0.000  99.978
    660.                                                                                                                  0.000  99.978
    670.                                                                                                                  0.000  99.978
    680.                                                                                                                  0.000  99.978
    690.                                                                                                                  0.000  99.978
    700.                                                                                                                  0.000  99.978
    710.                                                                                                                  0.000  99.978
    720.                                                                                                                  0.000  99.978
    730.                                                                                                                  0.000  99.978
    740.                                                                                                                  0.000  99.978
    750.                                                                                                                  0.022 100.000
```

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=      4566      SUM=   157863.      MEAN=  34.578      VAR=    1615.316            SD=  40

TOTAL TRIPS OVER MAXP    =      1
TOTAL TRIPS OVER 255     =      0
VOLUME TABLE NUMBER      =    201
SKIM TREE NUMBER         =    101

```
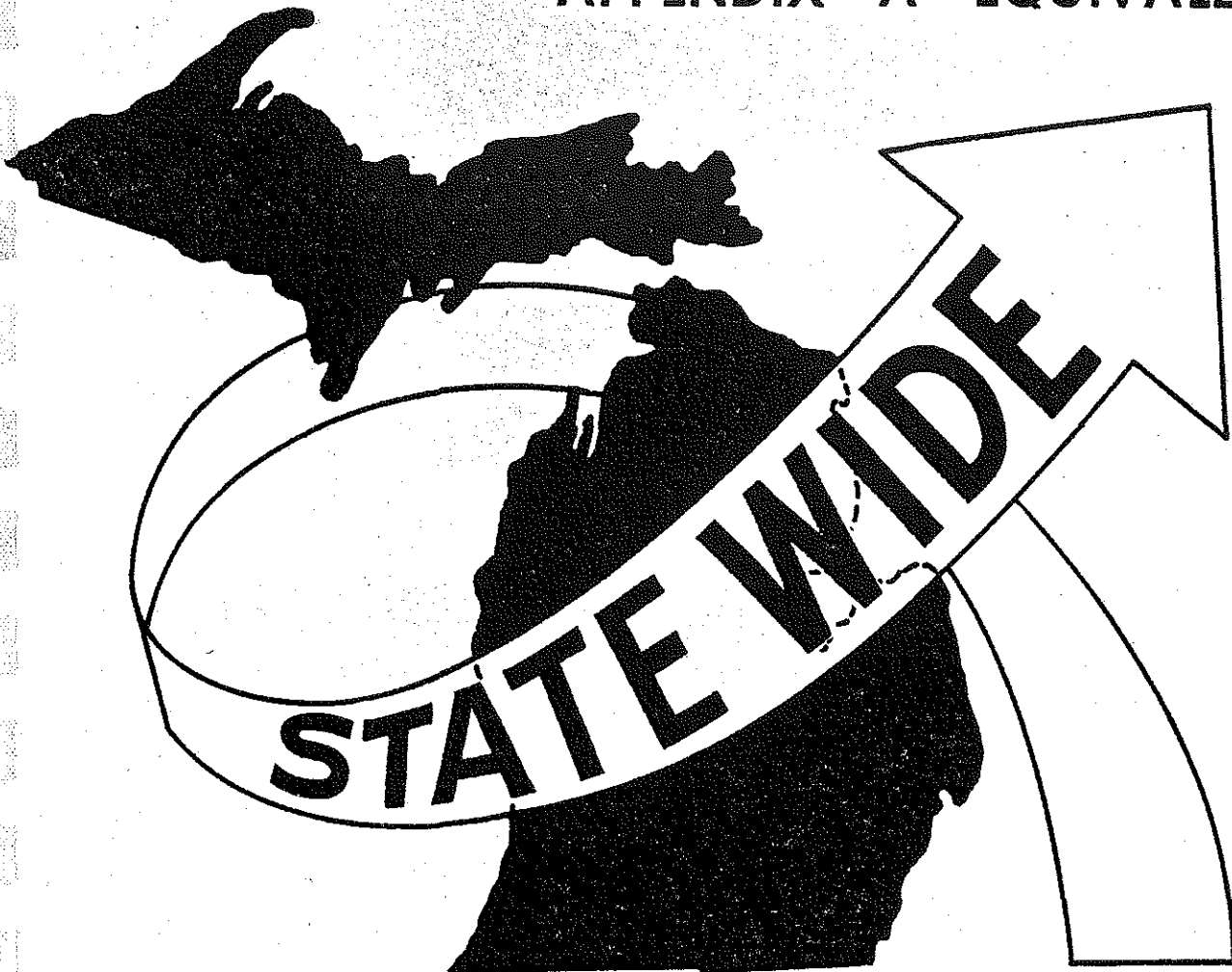     0   2   4   6   8  10  12  14  16  18  20  22  24  26  28  30  32  34  36  38  40
     +---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+       P.C.   CUM.   ACTU
 10. +                                                                                     0,000  0,000
 20. ..................................................................................   34,635 34,635
 30. ...............................................................................      25,434 60,069
 40. ..................................................                                   12,674 72,743
 50. ..........................                                                           12,500 85,243
 60. ......                                                                                1,736 86,979
 70. ..............                                                                        6,076 93,056
 80. ....                                                                                  0,521 93,576
 90. ...                                                                                   1,042 94,618
100. ..                                                                                    0,260 94,878
110. ..                                                                                    0,260 95,139
120. ...                                                                                   0,868 96,007
130. ..                                                                                    0,260 96,267
140. ..                                                                                    0,347 96,615
150. .                                                                                     0,087 96,701
160. ..                                                                                    0,260 96,962
170. ...                                                                                   0,521 97,483
180. ...                                                                                   0,608 98,090
190. ...                                                                                   0,608 98,698
200. ...                                                                                   6,781 99,479
210. .                                                                                     0,000 99,479
220. ..                                                                                    0,434 99,913
230. .                                                                                     0,000 99,913
240. .                                                                                     0,000 99,913
250. .                                                                                     0,000 99,913
260. .                                                                                     0,087 100,000
```

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS= 1152     SUM= 42498.     MEAN= 36,856     VAR= 1236,588     SD= 35,5

TOTAL TRIPS OVER MAXP   =       8
TOTAL TRIPS OVER 255    =       0
VOLUME TABLE NUMBER     =     202
SKIM TREE NUMBER        =     101

```
  21FE878              TRIP LENGTH FREQUENCY DISTRIBUTION=WBRANCH                                    PAGE   6

   0    3    6    9   12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60
   +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+     P.C.   CUM.  ACTU
 10.                                                                                                         0.000   0.000
 20.................................................................................................         44.285  44.285
 30...............................................................                                           24.558  68.844
 40.....................                                                                                     9.797  78.640
 50..................                                                                                        12.529  91.170
 60..                                                                                                        0.300  91.469
 70.....                                                                                                     2.966  94.435
 80..                                                                                                        0.500  95.435
 90.                                                                                                         0.133  95.568
100..                                                                                                        0.400  95.968
110..                                                                                                        0.233  96.201
120..                                                                                                        0.433  96.634
130.                                                                                                         0.200  96.834
140.                                                                                                         0.200  97.034
150.                                                                                                         0.033  97.068
160..                                                                                                        0.367  97.434
170.                                                                                                         0.267  97.701
180..                                                                                                        0.400  98.101
190..                                                                                                        0.367  98.467
200..                                                                                                        0.666  99.134
210.                                                                                                         0.067  99.200
220..                                                                                                        0.400  99.600
230.                                                                                                         0.100  99.700
240.                                                                                                         0.000  99.700
250.                                                                                                         0.067  99.767
260.                                                                                                         0.033  99.800
270.                                                                                                         0.033  99.833
280.                                                                                                         0.000  99.833
290.                                                                                                         0.000  99.833
300.                                                                                                         0.000  99.833
310.                                                                                                         0.000  99.833
320.                                                                                                         0.067  99.900
330.                                                                                                         0.033  99.933
340.                                                                                                         0.000  99.933
350.                                                                                                         0.000  99.933
360.                                                                                                         0.000  99.933
370.                                                                                                         0.033  99.967
380.                                                                                                         0.000  99.967
390.                                                                                                         0.000  99.967
400.                                                                                                         0.033 100.000
REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=    3001        SUM=    96642,        MEAN=  32.203        VAR=      1249.008        SD=  35.3

TOTAL TRIPS OVER MAXP   =        0
TOTAL TRIPS OVER 255    =        0
VOLUME TABLE NUMBER     =      203
SKIM TREE NUMBER        =      101
```

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```
     0    1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19   20
     +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
                                                                                                          P.C.    CUM.  AC'
 10. .                                                                                                     0.000   0.000
 20. ................................................................................                     10.305  10.305
 30. ...............................................................................                      11.069  21.374
 41. .......................................................                                               8.015  29.389
 50. ..................................................                                                    8.779  38.168
 60. ................................................                                                      6.489  44.656
 70. ..............................                                                                        3.817  48.473
 80. ...........................................                                                           5.725  54.198
 90. .....                                                                                                 0.763  54.962
100. ...                                                                                                   0.382  55.344
110. .....                                                                                                 0.763  56.107
120. ...........................................                                                           5.725  61.832
130. ...                                                                                                   0.382  62.214
140. .......                                                                                               1.145  63.359
150. ...                                                                                                   0.382  63.740
160. .................................................                                                     6.489  70.229
170. ........................................                                                              4.198  74.427
180. ...............                                                                                       1.908  76.336
190. .....................................................................                                 9.924  86.260
200. ................                                                                                      2.290  88.550
210. ........                                                                                              1.145  89.695
220. .....                                                                                                 0.763  90.458
230. ................                                                                                      2.672  93.130
240. .                                                                                                     0.000  93.130
250. ...                                                                                                   0.382  93.511
260. .......                                                                                               1.145  94.656
270. ..........                                                                                            1.527  96.183
280. ...                                                                                                   0.382  96.565
290. .                                                                                                     0.000  96.565
300. .                                                                                                     0.000  96.565
310. .                                                                                                     0.000  96.565
320. ...                                                                                                   0.382  96.947
330. ...                                                                                                   0.382  97.328
340. .                                                                                                     0.000  97.328
350. .                                                                                                     0.000  97.328
360. .                                                                                                     0.000  97.328
370. .                                                                                                     0.000  97.328
380. .                                                                                                     0.000  97.328
390. .                                                                                                     0.000  97.328
400. .                                                                                                     0.000  97.328
410. .                                                                                                     0.000  97.328
420. .                                                                                                     0.000  97.328
430. .                                                                                                     0.000  97.328
440. .                                                                                                     0.000  97.328
450. .                                                                                                     0.000  97.328
460. .                                                                                                     0.000  97.328
470. .                                                                                                     0.000  97.328
480. .                                                                                                     0.000  97.328
490. .                                                                                                     0.000  97.328
500. .                                                                                                     0.000  97.328
510. ...                                                                                                   0.382  97.710
520. .                                                                                                     0.000  97.710
530. .                                                                                                     0.000  97.710
540. .                                                                                                     0.000  97.710
550. .                                                                                                     0.000  97.710
560. .                                                                                                     0.000  97.710
570. .                                                                                                     0.000  97.710
580. .                                                                                                     0.000  97.710
590. .                                                                                                     0.000  97.710
600. .                                                                                                     0.000  97.710
610. .                                                                                                     0.000  97.710
620. .                                                                                                     0.000  97.710
630. .                                                                                                     0.000  97.710
640. .                                                                                                     0.000  97.710
650. .                                                                                                     0.000  97.710
660. .                                                                                                     0.000  97.710
670. .                                                                                                     0.000  97.710
680. .                                                                                                     0.000  97.710
690. .                                                                                                     0.000  97.710
700. .                                                                                                     0.000  97.710
710. .                                                                                                     0.000  97.710
720. .                                                                                                     0.000  97.710
730. .                                                                                                     0.000  97.710
740. .                                                                                                     0.000  97.710
750. ............                                                                                          2.290 100.000
```

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=    262      SUM=    30525.      MEAN= 116.508      VAR=   15400.435              SD= 124.

TOTAL TRIPS OVER MAXP  =      6
TOTAL TRIPS OVER 255   =      0
VOLUME TABLE NUMBER    =    204
SKIM TREE NUMBER       =    101

```
        0    3    6    9   12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60
        +====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+====+      P.C.    CUM.   ACTU
    10.                                                                                                          0.000   0.000
    20..........................................................................................                42.542  42.542
    30.................................................................................                         25.453  68.195
    40..............                                                                                             7.487  75.682
    50..............                                                                                            10.041  85.723
    60....                                                                                                       1.683  87.406
    70......                                                                                                     2.728  90.133
    80...                                                                                                        0.987  91.120
    90..                                                                                                         0.580  91.701
   100..                                                                                                         0.638  92.339
   110..                                                                                                         0.348  92.687
   120...                                                                                                        1.393  94.080
   130.                                                                                                          0.174  94.254
   140.                                                                                                          0.174  94.428
   150.                                                                                                          0.290  94.719
   160..                                                                                                         0.638  95.357
   170..                                                                                                         0.522  95.879
   180..                                                                                                         0.754  96.634
   190...                                                                                                        1.103  97.737
   200...                                                                                                        1.161  98.897
   210.                                                                                                          0.058  98.955
   220.                                                                                                          0.232  99.187
   230.                                                                                                          0.000  99.187
   240.                                                                                                          0.116  99.304
   250.                                                                                                          0.058  99.362
   260.                                                                                                          0.058  99.420
   270.                                                                                                          0.116  99.536
   280.                                                                                                          0.000  99.536
   290.                                                                                                          0.000  99.536
   300.                                                                                                          0.000  99.536
   310.                                                                                                          0.000  99.536
   320.                                                                                                          0.058  99.594
   330.                                                                                                          0.058  99.652
   340.                                                                                                          0.000  99.652
   350.                                                                                                          0.000  99.652
   360.                                                                                                          0.000  99.652
   370.                                                                                                          0.000  99.652
   380.                                                                                                          0.000  99.652
   390.                                                                                                          0.000  99.652
   400.                                                                                                          0.000  99.652
   410.                                                                                                          0.000  99.652
   420.                                                                                                          0.000  99.652
   430.                                                                                                          0.000  99.652
   440.                                                                                                          0.000  99.652
   450.                                                                                                          0.000  99.652
   460.                                                                                                          0.000  99.652
   470.                                                                                                          0.000  99.652
   480.                                                                                                          0.000  99.652
   490.                                                                                                          0.000  99.652
   500.                                                                                                          0.000  99.652
   510.                                                                                                          0.174  99.826
   520.                                                                                                          0.000  99.826
   530.                                                                                                          0.000  99.826
   540.                                                                                                          0.000  99.826
   550.                                                                                                          0.000  99.826
   560.                                                                                                          0.058  99.884
   570.                                                                                                          0.058  99.942
   580.                                                                                                          0.058 100.000
REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=    1723      SUM=     66444,      MEAN=  38,563      VAR=    2618,673          SD=  51,1

TOTAL TRIPS OVER MAXP  =      0
TOTAL TRIPS OVER 255   =      0
VOLUME TABLE NUMBER    =    205
SKIM TREE NUMBER       =    101
```

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```
       0    3    6    9   12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60        P.C.   CUM.  ACTU
       +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+        0.000   0.000
  10.                                                                                                                0.000   0.000
  20.....................................................................................................          47.101  47.101
  30.............................................................                                                   20.863  67.964
  40.....................                                                                                            9.881  77.846
  50..................                                                                                              10.738  88.603
  60...                                                                                                              0.922  89.526
  70.......                                                                                                          3.887  93.412
  80....                                                                                                             1.845  95.257
  90..                                                                                                              0.395  95.652
 100.                                                                                                                0.000  95.652
 110.                                                                                                                0.066  95.718
 120...                                                                                                              0.922  96.640
 130..                                                                                                               0.329  96.970
 140.                                                                                                                0.066  97.036
 150.                                                                                                                0.132  97.167
 160.                                                                                                                0.198  97.365
 170..                                                                                                               0.329  97.694
 180..                                                                                                               0.527  98.221
 190..                                                                                                               0.988  99.209
 200.                                                                                                                0.000  99.209
 210.                                                                                                                0.000  99.209
 220.                                                                                                                0.198  99.407
 230.                                                                                                                0.198  99.605
 240.                                                                                                                0.000  99.605
 250.                                                                                                                0.000  99.605
 260.                                                                                                                0.066  99.671
 270.                                                                                                                0.066  99.736
 280.                                                                                                                0.000  99.736
 290.                                                                                                                0.000  99.736
 300.                                                                                                                0.000  99.736
 310.                                                                                                                0.000  99.736
 320.                                                                                                                0.000  99.736
 330.                                                                                                                0.000  99.736
 340.                                                                                                                0.000  99.736
 350.                                                                                                                0.000  99.736
 360.                                                                                                                0.000  99.736
 370.                                                                                                                0.066  99.802
 380.                                                                                                                0.000  99.802
 390.                                                                                                                0.000  99.802
 400.                                                                                                                0.132  99.934
 410.                                                                                                                0.000  99.934
 420.                                                                                                                0.000  99.934
 430.                                                                                                                0.000  99.934
 440.                                                                                                                0.000  99.934
 450.                                                                                                                0.000  99.934
 460.                                                                                                                0.000  99.934
 470.                                                                                                                0.000  99.934
 480.                                                                                                                0.000  99.934
 490.                                                                                                                0.000  99.934
 500.                                                                                                                0.000  99.934
 510.                                                                                                                0.066 100.000
```

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS=      1516      SUM=      50027.      MEAN=  32.956      VAR=      1487.197      SD=   38.5

TOTAL TRIPS OVER MAXP   =        0
TOTAL TRIPS OVER 255    =        0
VOLUME TABLE NUMBER     =      206
SKIM TREE NUMBER        =      101

```
     0    3    6    9   12   15   18   21   24   27   30   33   36   39   42   45   48   51   54   57   60
     +----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+----+
```

|  |  | P.C. | CUM. | ACTU |
|---|---|---|---|---|
| 10. | . | 0.000 | 0.000 | |
| 20. | ....................................................................................... | 43.790 | 43.790 | |
| 30. | ........................................... | 21.977 | 65.767 | |
| 40. | ................. | 9.049 | 74.816 | |
| 50. | ..................... | 11.209 | 86.025 | |
| 60. | .... | 1.735 | 87.760 | |
| 70. | ........ | 4.066 | 91.826 | |
| 80. | ... | 1.579 | 93.405 | |
| 90. | .. | 0.409 | 93.814 | |
| 100. | . | 0.385 | 94.199 | |
| 110. | . | 0.229 | 94.428 | |
| 120. | ... | 0.941 | 95.369 | |
| 130. | .. | 0.303 | 95.672 | |
| 140. | . | 0.180 | 95.852 | |
| 150. | . | 0.172 | 96.024 | |
| 160. | .. | 0.409 | 96.433 | |
| 170. | .. | 0.475 | 96.907 | |
| 180. | .. | 0.442 | 97.349 | |
| 190. | .. | 0.684 | 98.233 | |
| 200. | .. | 0.581 | 98.814 | |
| 210. | . | 0.057 | 98.871 | |
| 220. | .. | 0.360 | 99.231 | |
| 230. | . | 0.123 | 99.354 | |
| 240. | . | 0.065 | 99.419 | |
| 250. | . | 0.106 | 99.525 | |
| 260. | . | 0.057 | 99.583 | |
| 270. | . | 0.131 | 99.714 | |
| 280. | . | 0.008 | 99.722 | |
| 290. | . | 0.016 | 99.738 | |
| 300. | . | 0.000 | 99.738 | |
| 310. | . | 0.000 | 99.738 | |
| 320. | . | 0.041 | 99.779 | |
| 330. | . | 0.025 | 99.804 | |
| 340. | . | 0.000 | 99.804 | |
| 350. | . | 0.000 | 99.804 | |
| 360. | . | 0.000 | 99.804 | |
| 370. | . | 0.016 | 99.820 | |
| 380. | . | 0.000 | 99.820 | |
| 390. | . | 0.000 | 99.820 | |
| 400. | . | 0.025 | 99.845 | |
| 410. | . | 0.000 | 99.845 | |
| 420. | . | 0.000 | 99.845 | |
| 430. | . | 0.000 | 99.845 | |
| 440. | . | 0.016 | 99.861 | |
| 450. | . | 0.000 | 99.861 | |
| 460. | . | 0.000 | 99.861 | |
| 470. | . | 0.000 | 99.861 | |
| 480. | . | 0.016 | 99.877 | |
| 490. | . | 0.000 | 99.877 | |
| 500. | . | 0.000 | 99.877 | |
| 510. | . | 0.041 | 99.918 | |
| 520. | . | 0.000 | 99.918 | |
| 530. | . | 0.000 | 99.918 | |
| 540. | . | 0.000 | 99.918 | |
| 550. | . | 0.000 | 99.918 | |
| 560. | . | 0.008 | 99.926 | |
| 570. | . | 0.008 | 99.935 | |
| 580. | . | 0.008 | 99.943 | |
| 590. | . | 0.000 | 99.943 | |
| 600. | . | 0.000 | 99.943 | |
| 610. | . | 0.000 | 99.943 | |
| 620. | . | 0.000 | 99.943 | |
| 630. | . | 0.000 | 99.943 | |
| 640. | . | 0.000 | 99.943 | |
| 650. | . | 0.000 | 99.943 | |
| 660. | . | 0.000 | 99.943 | |
| 670. | . | 0.000 | 99.943 | |
| 680. | . | 0.000 | 99.943 | |
| 690. | . | 0.000 | 99.943 | |
| 700. | . | 0.000 | 99.943 | |
| 710. | . | 0.000 | 99.943 | |
| 720. | . | 0.000 | 99.943 | |
| 730. | . | 0.000 | 99.943 | |
| 740. | . | 0.000 | 99.943 | |
| 750. | . | 0.057 | 100.000 | |

REMAINING VALUES ARE ALL ZERO

NUMBER OF OBSERVATIONS= 12222    SUM= 443959.    MEAN= 36.325    VAR= 2055.997    SD= 45.

TOTAL TRIPS OVER MAXP  =    7
TOTAL TRIPS OVER 255   =    0
VOLUME TABLE NUMBER   =  207
SKIM TREE NUMBER      =  101

# APPENDIX "A"-EQUIVALENCE LIST

| ZONE | COUNTY | TOWNSHIP OR CITY |
|------|--------|------------------|
| 001 | ALCONA | ALCONA, CALEDONIA, GREENBUSH, GUSTIN, HARRISVILLE, HAWES, HAYNES, MIKADO. |
| 002 | ALCONA | CURTIS, MILLEN, MITCHELL. |
| 003 | ALGER | MUNISING(CITY). |
| 004 | ALGER | BURT, MUNISING. |
| 005 | ALGER | LIMESTONE, MATHIAS, ONOTA, ROCK RIVER. |
| 006 | ALGER | AU TRAIN, GRAND ISLAND. |
| 007 | ALLEGAN | ALLEGAN, CHESHIRE, TROWBRIDGE, VALLEY. |
| 008 | ALLEGAN | CASCO, CLYDE, GANGES, LEE. |
| 009 | ALLEGAN | GUNPLAIN, OTSEGO. |
| 010 | ALLEGAN | FILLMORE, HEATH, MANLIUS, MONTEREY, OVERISEL, SALEM. |
| 011 | ALLEGAN | LAKETOWN, SAUGATUCK. |
| 012 | ALLEGAN | DORR, HOPKINS, LEIGHTON, MARTIN, WATSON, WAYLAND. |
| 013 | ALPENA | ALPENA(CITY). |
| 014 | ALPENA | ALPENA, SANBORN. |
| 015 | ALPENA | GREEN, LONG RAPIDS, MAPLE RIDGE, OSSINEKE, WELLINGTON, WILSON. |
| 016 | ANTRIM | CHESTONIA, JORDAN, MANCELONA, STAR, WARNER. |
| 017 | ANTRIM | BANKS, CENTRAL LAKE, ECHO, TORCH LAKE. |
| 018 | ANTRIM | CUSTER, ELK RAPIDS, FOREST HOME, HELENA, KEARNEY, MILTON. |
| 019 | ARENAC | LINCOLN, STANDISH. |
| 020 | ARENAC | AU GRES, SIMS, TURNER, WHITNEY. |
| 021 | ARENAC | ADAMS, ARENAC, CLAYTON, DEEP RIVER, MASON, MOFFATT. |
| 022 | BARAGA | ARVON, LANSE. |
| 023 | BARAGA | BARAGA. |
| 024 | BARAGA | COVINGTON, SPURR. |
| 025 | BARRY | HASTINGS(CITY). |
| 026 | BARRY | CARLTON, CASTLETON, HASTINGS, IRVING, RUTLAND, WOODLAND. |
| 027 | BARRY | ASSYRIA, BALTIMORE, BARRY, HOPE, JOHNSTOWN, MAPLE GROVE. |
| 028 | BARRY | ORANGEVILLE, PRAIRIEVILLE, THORNAPPLE, YANKEE SPRINGS. |
| 029 | BAY | BAY CITY. |
| 030 | BAY | BANGOR. |
| 031 | BAY | BEAVER, KAWKAWLIN, MONITOR, WILLIAMS. |
| 032 | BAY | FRANKENLUST, HAMPTON, MERRITT, PORTSMOUTH. |
| 033 | BAY | FRASER, GARFIELD, GIBSON, MT. FOREST, PINCONNING. |
| 034 | BENZIE | CRYSTAL LAKE, LAKE. |
| 035 | BENZIE | BENZONIA, BLAINE, GILMORE, JOYFIELD, WELDON. |
| 036 | BENZIE | ALMIRA, COLFAX, HOMESTEAD, INLAND, PLATTE. |
| 037 | BERRIEN | BENTON HARBOR(CITY),ST.JOE(CITY). |
| 038 | BERRIEN | BARODA, LAKE, ORONOKO. |
| 039 | BERRIEN | BENTON, HAGAR, ST. JOSEPH. |
| 040 | BERRIEN | BAINBRIDGE, COLOMA, WATERVLIET. |
| 041 | BERRIEN | BERRIEN, PIPESTONE. |
| 042 | BERRIEN | BERTRAND, BUCHANAN, GALIEN, WEESAW. |
| 043 | BERRIEN | CHIKAMING, NEW BUFFALO, THREE OAKS. |
| 044 | BERRIEN | LINCOLN, ROYALTON, SODUS. |
| 045 | BERRIEN | NILES(CITY). |
| 046 | BERRIEN | NILES. |
| 047 | BERRIEN | BUCHANAN(CITY). |

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048 BRANCH          COLDWATER(CITY).
049 BRANCH          BATAVIA, MATTESON, SHERWOOD.
050 BRANCH          BETHEL, BRONSON, GILEAD, NOBLE.
051 BRANCH          BUTLER, QUINCY.
052 BRANCH          ALGANSEE, CALIFORNIA, KINDERHOOK, OVID.
053 BRANCH          GIRARD, UNION.
054 BRANCH          COLDWATER.

055 CALHOUN         BATTLE CREEK(CITY).
056 CALHOUN         ALBION, HOMER.
057 CALHOUN         ATHENS, BURLINGTON, LEROY, NEWTON.
058 CALHOUN         BATTLE CREEK.
059 CALHOUN         BEDFORD.
060 CALHOUN         CLARENCE, CLARENDON, ECKFORD, LEE, MARENGO,
061 CALHOUN         CONVIS, FREDONIA, MARSHALL.
062 CALHOUN         EMMETT.
063 CALHOUN         PENNFIELD.
064 CALHOUN         SHERIDAN.
065 CALHOUN         TEKONSHA.
066 CALHOUN         ALBION(CITY).
067 CALHOUN         MARSHALL(CITY).

068 CASS            DOWAGIAC(CITY).
069 CASS            LA GRANGE, POKAGON, SILVER CREEK, WAYNE.
070 CASS            HOWARD, MILTON.
071 CASS            JEFFERSON, ONTWA.
072 CASS            MARCELLUS, VOLINIA.
073 CASS            NEWBERG, PENN.
074 CASS            CALVIN, MASON, PORTER.

075 CHARLEVOIX      CHARLEVOIX(CITY), PEAINE, ST. JAMES.
076 CHARLEVOIX      BOYNE VALLEY, CHANDLER, HUDSON, MELROSE.
077 CHARLEVOIX      SOUTH ARM, WILSON.
078 CHARLEVOIX      BAY, CHARLEVOIX, EVANGELINE, EVELINE, HAYES, MARION,
                    NORWOOD.

079 CHEBOYGAN       CHEBOYGAN.
080 CHEBOYGAN       BEAUGRAND, BURT, HEBRON, INVERNESS, MACKINAW, MULLETT,
                    MUNRO.
081 CHEBOYGAN       ELLIS, FOREST, KOEHLER, MENTOR, NUNDA, TUSCARORA, WALKER,
                    WAVERLY, WILMOT.
082 CHEBOYGAN       ALOHA, BENTON, GRANT.

083 CHIPPEWA        SAULT STE. MARIE, SUGAR ISLAND.
084 CHIPPEWA        BRUCE, PICKFORD.
085 CHIPPEWA        CHIPPEWA, HULBERT, WHITEFISH.
086 CHIPPEWA        DETOUR, DRUMMOND, RABER.
087 CHIPPEWA        KINROSS, RUDYARD, TROUT LAKE.
088 CHIPPEWA        BAY MILLS, DAFTER, SUPERIOR.

089 CLARE           GRANT, SHERIDAN.
090 CLARE           ARTHUR, FRANKLIN, FROST, HAMILTON, HATTON, HAYES.
091 CLARE           FREEMAN, GARFIELD, GREENWOOD, LINCOLN, REDDING, SUMMERFIELD,
                    SURREY, WINTERFIELD.

092 CLINTON         ST. JOHNS(CITY).
093 CLINTON         BATH.
094 CLINTON         BENGAL, BINGHAM, ESSEX.
095 CLINTON         DALLAS, LEBANON, WESTPHALIA.
096 CLINTON         DUPLAIN, GREENBUSH.
097 CLINTON         EAGLE, RILEY, WATERTOWN.
098 CLINTON         OLIVE, VICTOR.
099 CLINTON         OVID.             -111-
100 CLINTON         DEWITT.
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101 CRAWFORD       GRAYLING(CITY).
102 CRAWFORD       BEAVER CREEK, FREDERIC, GRAYLING, LOVELLS, MAPLE FOREST,
                   SOUTH BRANCH.

103 DELTA          ESCANABA(CITY).
104 DELTA          BARK RIVER, FORD RIVER.
105 DELTA          BAY DE NOC, ENSIGN, MASONVILLE.
106 DELTA          ESCANABA, WELLS.
107 DELTA          FAIRBANKS, GARDEN, NAHMA.
108 DELTA          BALDWIN, BRAMPTON, CORNELL, MAPLE RIDGE.

109 DICKINSON      IRON MOUNTAIN(CITY).
110 DICKINSON      BREITUNG.
111 DICKINSON      BREEN, FELCH, SAGOLA, WEST BRANCH.
112 DICKINSON      NORWAY, WAUCEDAH.

113 EATON          CHARLOTTE(CITY).
114 EATON          BENTON, BROOKFIELD, EATON.
115 EATON          CARMEL, CHESTER, WALTON.
116 EATON          BELLEVUE, KALAMO.
117 EATON          DELTA.
118 EATON          EATON RAPIDS, HAMLIN.
119 EATON          ONEIDA, ROXAND.
120 EATON          SUNFIELD, VERMONTVILLE.
121 EATON          WINDSOR.
122 EATON          EATON RAPIDS(CITY).
123 EATON          GRAND LEDGE(CITY).

124 EMMET          PETOSKEY(CITY).
125 EMMET          BLISS, CARP LAKE, CROSS VILLAGE, CENTER, MCKINLEY, READMOND,
                   WAWATAM.
126 EMMET          FRIENDSHIP, LITTLEFIELD, LITTLE TRAVERSE, MAPLE RIVER,
                   PLEASANT VIEW, WEST TRAVERSE.
127 EMMET          BEAR CREEK, RESORT, SPRINGVALE.

128 GENESEE        FLINT(CITY).
129 GENESEE        VIENNA.
130 GENESEE        FLUSHING, MT MORRIS.
131 GENESEE        CLAYTON, FLINT.
132 GENESEE        GRAND BLANC.
133 GENESEE        BURTON(CITY).
134 GENESEE        DAVISON.
135 GENESEE        RICHFIELD.
136 GENESEE        GENESEE.
137 GENESEE        FOREST, THETFORD.
138 GENESEE        MONTROSE.
139 GENESEE        GAINES, MUNDY.
140 GENESEE        ARGENTINE, FENTON,
141 GENESEE        ATLAS.

142 GLADWIN        GLADWIN(CITY).
143 GLADWIN        BENTLEY, BILLINGS, BOURRET, BUTMAN, CLEMENT, GRIM, HAY,
                   SECORD, SHERIDAN, TOBACCO.
144 GLADWIN        GLADWIN, SAGE, SHERMAN.
145 GLADWIN        BEAVERTON, BUCKEYE, GROUT.

146 GOGEBIC        IRONWOOD.
147 GOGEBIC        WAKEFIELD.
148 GOGEBIC        MARENISCO.
149 GOGEBIC        WATERSMEET.
150 GOGEBIC        BESSEMER, ERWIN.

151 GRAND TRAVERSE TRAVERSE CITY(CITY)ANDPENINSULA.
152 GRAND TRAVERSE BLAIR, GARFIELD, GREEN LAKE, LONG LAKE.
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153 GRAND TRAVERSE EAST BAY, FIFE LAKE, PARADISE, UNION,
154 GRAND TRAVERSE GRANT, MAYFIELD.
155 GRAND TRAVERSE ACME, WHITEWATER.

156 GRATIOT          ALMA(CITY).
157 GRATIOT          ARCADA, EMERSON, HAMILTON, LAFAYETTE, NORTH STAR, NEW HAVEN,
                     NEWARK, SUMNER.
158 GRATIOT          BETHANY, PINE RIVER, SEVILLE, WHEELER.
159 GRATIOT          ELBA, FULTON, NORTH SHADE, WASHINGTON.
160 GRATIOT          ITHACA(CITY).

161 HILLSDALE        HILLSDALE(CITY).
162 HILLSDALE        ALLEN, FAYETTE.
163 HILLSDALE        AMBOY, RANSOM, WRIGHT.
164 HILLSDALE        CAMBRIA, HILLSDALE, WOODBRIDGE.
165 HILLSDALE        CAMDEN, READING.
166 HILLSDALE        JEFFERSON, PITTSFORD.
167 HILLSDALE        LITCHFIELD, MOSCOW, SCIPO.
168 HILLSDALE        ADAMS, SOMERSET, WHEATLAND.

169 HOUGHTON         HOUGHTON(CITY).
170 HOUGHTON         CALUMET, OSCEOLA, SCHOOLCRAFT.
171 HOUGHTON         CHASSELL, TORCH LAKE
172 HOUGHTON         DUNCAN, LAIRD.
173 HOUGHTON         FRANKLIN, HANCOCK, QUINCY.
174 HOUGHTON         PORTAGE.
175 HOUGHTON         ADAMS, ELM RIVER, STANTON,

176 HURON            BAD AXE(CITY).
177 HURON            BINGHAM, PARIS, SAND BEACH, SHERMAN.
178 HURON            BLOOMFIELD, LINCOLN, RIBICON, SIGEL, VERONA.
179 HURON            BROOKFIELD, GRANT, SEBEWAING, SHERIDAN,
180 HURON            CASEVILLE, CHANDLER, LAKE, MCKINLEY, MEADE.
181 HURON            COLFAX, FAIRHAVEN, OLIVER, WINSOR,
182 HURON            DWIGHT, GORE, HUME, HURON, PORT AUSTIN, POINT AUX BARQUES.

183 INGHAM           LANSING(CITY),E.LANSING(CITY).
184 INGHAM           MERIDIAN,
185 INGHAM           DELHI.
186 INGHAM           ALAIEDON, VEVAY.
187 INGHAM           AURELIUS, LESLIE, ONONDAGA.
188 INGHAM           BUNKER HILL, STOCKBRIDGE.
189 INGHAM           INGHAM, WHITE OAK.
190 INGHAM           LEROY, LOCKE.
191 INGHAM           WHEATFIELD, WILLIAMSTON.

192 IONIA            IONIA(CITY).
193 IONIA            BERLIN, BOSTON.
194 IONIA            CAMPBELL, ODESSA.
195 IONIA            DANBY, SEBEWA.
196 IONIA            EASTON, KEENE.
197 IONIA            IONIA, RONALD.
198 IONIA            LYONS, NORTH PLAINS.
199 IONIA            ORANGE, PORTLAND.
200 IONIA            ORLEANS, OTISCO.

201 IOSCO            ALABASTER, TAWAS.
202 IOSCO            AU SABLE, BALDWIN, WILBER.
203 IOSCO            BURLEIGH, GRANT, PLAINFIELD, RENO, SHERMAN.
204 IOSCO            OSCODA.

205 IRON             IRON RIVER(CITY).
206 IRON             STAMBAUGH.
207 IRON             CRYSTAL FALLS.
208 IRON             MANSFIELD, MASTODON.
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209 IRON          DATES, HEMATITE, IRON RIVER.

210 ISABELLA      MT PLEASANT.
211 ISABELLA      CHIPPEWA, COE.
212 ISABELLA      COLDWATER, GILMORE, VERNON, WISE.
213 ISABELLA      DENVER, ISABELLA, NOTTAWA, SHERMAN.
214 ISABELLA      LINCOLN, UNION.
215 ISABELLA      BROOMFIELD, DEERFIELD, FREMONT, ROLLAND.

216 JACKSON       JACKSON(CITY).
217 JACKSON       SUMMIT.
218 JACKSON       CONCORD, HANOVER, PULASKI, SPRING ARBOR.
219 JACKSON       BLACKMAN, RIVES.
220 JACKSON       GRASS LAKE, LEONI.
221 JACKSON       NAPOLEON, NORVELL.
222 JACKSON       COLUMBIA, LIBERTY.
223 JACKSON       PARMA, SANDSTONE.
224 JACKSON       SPRINGPORT, TOMKINS.
225 JACKSON       HENRIETTA, WATERLOO.

226 KALAMAZOO     KALAMAZOO.
227 KALAMAZOO     PORTAGE.
228 KALAMAZOO     COMSTOCK.
229 KALAMAZOO     CHARLESTON.
230 KALAMAZOO     COOPER, RICHLAND, ROSS.
231 KALAMAZOO     ALAMO, OSHTEMO.
232 KALAMAZOO     PRAIRIE RONDE, TEXAS.
233 KALAMAZOO     BRADY, CLIMAX, PAVILION, SCHOOLCRAFT, WAKESHMA.

234 KALKASKA      BOARDMAN, CLEARWATER, KALKASKA, ORANGE, RAPID RIVER,
                  SPRINGFIELD.
235 KALKASKA      BEAR LAKE, BLUE LAKE, COLD SPRINGS, EXCELSIOR, GARFIELD,
                  OLIVER.

236 KENT          GRAND RAPIDS(CITY).
237 KENT          ADA, CASCADE.
238 KENT          ALGOMA, CANNON, COURTLAND, PLAINFIELD.
239 KENT          ALPINE, SPARTA.
240 KENT          BOWNE, CALEDONIA.
241 KENT          BYRON, GAINES.
242 KENT          GRAND RAPIDS.
243 KENT          GRATTAN, OAKFIELD, SPENCER.
244 KENT          LOWELL, VERGENNES.
245 KENT          NELSON, SOLON, TYRONE.
246 KENT          WALKER.
247 KENT          KENTWOOD.
248 KENT          WYOMING(CITY).

249 KEWEENAW      ALLOUEZ, EAGLE HARBOR, GRANT, HOUGHTON, SHERMAN.

250 LAKE          CHASE, CHERRY VALLEY, LAKE, PINORA, PLEASANT PLAIN,
                  SWEETWATER, WEBBER, YATES.
251 LAKE          DOVER, EDEN, ELK, ELLSWORTH, NEWKIRK, PEACOCK, SAUBLE.

252 LAPEER        LAPEER(CITY).
253 LAPEER        ARCADIA, ATTICA, GOODLAND.
254 LAPEER        BURLINGTON, BURNSIDE, NORTH BRANCH.
255 LAPEER        DEERFIELD, MARATHON, RICH.
256 LAPEER        ELBA, HADLEY, METAMORA.
257 LAPEER        LAPEER, MAYFIELD, OREGON.
258 LAPEER        ALMONT, DRYDEN, IMLAY.

259 LEELANAU      LEELANAU, LELAND, SUTTONS BAY
260 LEELANAU      CLEVELAND, EMPIRE, GLEN ARBOR, KASSON.
261 LEELANAU      BINGHAM, CENTERVILLE, ELMWOOD, SOLON.
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262 LENAWEE        ADRIAN(CITY).
263 LENAWEE        ADRIAN, FRANKLIN.
264 LENAWEE        BLISSFIELD, DEERFIELD, OGDEN, PALMYRA, RIGA.
265 LENAWEE        CAMBRIDGE, ROME.
266 LENAWEE        CLINTON, MACON, RAISIN, RIDGEWAY, TECUMSEH.
267 LENAWEE        DOVER, SENECA.
268 LENAWEE        FAIRFIELD, MADISON.
269 LENAWEE        HUDSON, MEDINA.
270 LENAWEE        ROLLIN, WOODSTOCK.

271 LIVINGSTON     HOWELL, MARION.
272 LIVINGSTON     COHOCTAH, CONWAY, HANDY, IOSCO.
273 LIVINGSTON     DEERFIELD, HARTLAND, OCEOLA, TYRONE.
274 LIVINGSTON     GREEN OAK, HAMBURG.
275 LIVINGSTON     BRIGHTON, GENOA.
276 LIVINGSTON     PUTNAM, UNADILLA.

277 LUCE           MCMILLAN.
278 LUCE           COLUMBUS, LAKEFIELD.
279 LUCE           PENTLAND.

280 MACKINAC       BOIS BLANC ISLAND, ST.IGNACE(CITY).
281 MACKINAC       CLARK, MARQUETTE, ST IGNACE.
282 MACKINAC       BREVORT, HENDRICKS, HUDSON, MORAN.
283 MACKINAC       GARFIELD, NEWTON, PORTAGE.

284 MACOMB         CLINTON, HARRISON.
285 MACOMB         ST CLAIR SHORES(CITY)E.DET(CITY),ROSEVILLE(CITY).
286 MACOMB         WARREN(CITY).
287 MACOMB         SHELBY.
288 MACOMB         CHESTERFIELD, MACOMB.
289 MACOMB         BRUCE, RAY, WASHINGTON.
290 MACOMB         ARMADA, LENOX, RICHMOND.

291 MANISTEE       BROWN, FILER, MANISTEE, STRONACH.
292 MANISTEE       DICKSON, NORMAN.
293 MANISTEE       CLEON, MAPLE GROVE, MARILLA, SPRINGDALE.
294 MANISTEE       ARCADIA, BEAR LAKE, ONEKAMA, PLEASANTON.

295 MARQUETTE      MARQUETTE(CITY).
296 MARQUETTE      CHOCOLAY, RICHMOND, SANDS, SKANDIA, WEST BRANCH.
297 MARQUETTE      ELY, ISHPEMING, TILDEN.
298 MARQUETTE      EWING, FORSYTH, TURIN, WELLS.
299 MARQUETTE      ISHPEMING(CITY).
300 MARQUETTE      MARQUETTE, NEGAUNEE.
301 MARQUETTE      CHAMPION, HUMBOLDT, MICHIGAMME, POWELL, REPUBLIC.

302 MASON          LUDINGTON(CITY).
303 MASON          BRANCH, CUSTER, EDEN, LOGAN.
304 MASON          FREESOIL, GRANT, HAMLIN, MEADE, SHERIDAN, SHERMAN, VICTORY.
305 MASON          AMBER, PERE MARQUETTE, RIVERTON, SUMMIT.

306 MECOSTA        BIG RAPIDS(CITY).
307 MECOSTA        BIG RAPIDS, COLFAX, GRANT, GREEN.
308 MECOSTA        CHIPPEWA, FORK, MARTINY, SHERIDAN.
309 MECOSTA        HINTON, MILLBROOK, MORTON, WHEATLAND.
310 MECOSTA        AETNA, AUSTIN, DEERFIELD, MECOSTA.

311 MENOMINEE      MENOMINEE(CITY).
312 MENOMINEE      HARRIS, MEYER, SPALDING.
313 MENOMINEE      INGALLSTON, LAKE, MELLEN, MENOMINEE, STEPHENSON.
314 MENOMINEE      CEDARVILLE, DAGGETT, FAITHORN, GOURLEY, HOLMES, NADEAU.

315 MIDLAND        MIDLAND(CITY).
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| 316 MIDLAND | GREENDALE, JASPER, LEE, PORTER. | |
| 317 MIDLAND | HOMER, INGERSOLL, MIDLAND, MT. HALEY. | |
| 318 MIDLAND | HOPE, LARKIN, LINCOLN, MILLS. | |
| 319 MIDLAND | EDENVILLE, GENEVA, JEROME, WARREN. | |

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| 320 MISSAUKEE | LAKE, REEDER, RICHLAND, RIVERSIDE, |
| 321 MISSAUKEE | BLOOMFIELD, CALDWELL, FOREST, PIONEER. |
| 322 MISSAUKEE | AETNA, BUTTERFIELD, CLAM UNION, ENTERPRISE, HOLLAND, NORWICH, WEST BRANCH, |

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| 323 MONROE | MONROE(CITY). |
| 324 MONROE | BEDFORD. |
| 325 MONROE | BERLIN. |
| 326 MONROE | DUNDEE. |
| 327 MONROE | ERIE. |
| 328 MONROE | EXETER, RAISINVILLE. |
| 329 MONROE | FRENCHTOWN, MONROE. |
| 330 MONROE | IDA, SUMMERFIELD. |
| 331 MONROE | LASALLE. |
| 332 MONROE | LONDON, MILAN. |
| 333 MONROE | ASH. |
| 334 MONROE | WHITEFORD. |

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| 335 MONTCALM | GREENVILLE. |
| 336 MONTCALM | BLOOMER, BUSHNELL, CRYSTAL, EVERGREEN. |
| 337 MONTCALM | DAY, FERRIS, HOME, RICHLAND. |
| 338 MONTCALM | EUREKA, FAIRPLAIN, MONTCALM, SIDNEY. |
| 339 MONTCALM | MAPLE VALLEY, PIERSON, REYNOLDS, WINFIELD. |
| 340 MONTCALM | BELVIDERE, CATO, DOUGLASS, PINE. |

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| 341 MONTMORENCY | ALBERT, AVERY, BRILEY, HILLMAN, LOUD, MONTMORENCY, RUST, VIENNA, |

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| 342 MUSKEGON | MUSKEGON(CITY). |
| 343 MUSKEGON | LAKETON. |
| 344 MUSKEGON | MUSKEGON. |
| 345 MUSKEGON | NORTON SHORES. |
| 346 MUSKEGON | BLUE LAKE, HOLTON. |
| 347 MUSKEGON | CASNOVIA, MOORLAND. |
| 348 MUSKEGON | CEDAR CREEK, DALTON. |
| 349 MUSKEGON | EGELSTON. |
| 350 MUSKEGON | FRUITLAND, MONTAGUE, WHITE RIVER, WHITEHALL. |
| 351 MUSKEGON | FRUITPORT, RAVENNA, SULLIVAN. |

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| 352 NEWAGO | FREMONT(CITY). |
| 353 NEWAGO | BARTON, BEAVER, DENVER, HOME, LILLEY, MERRILL, MONROE, NORWICH, TROY. |
| 354 NEWAGO | BIG PRAIRIE, EVERETT, GOODWELL, LINCOLN, SHERMAN, WILCOX. |
| 355 NEWAGO | BRIDGETON, DAYTON, SHERIDAN. |
| 356 NEWAGO | BROOKS, CROTON, GARFIELD. |
| 357 NEWAGO | ASHLAND, ENSLEY, GRANT. |
| 358 OAKLAND | PONTIAC(CITY). |
| 359 OAKLAND | SOUTHFIELD. |
| 360 OAKLAND | ROYAL OAK TWP. AND THE FOLLOWING CITIES) BERKLEY, CLAWSON, FERNDALE, HAZEL PARK, HUNTINGTON WOODS, MADISON HEIGHTS, OAK PARK, PLEASANT RIDGE. |
| 361 OAKLAND | BLOOMFIELD. |
| 362 OAKLAND | FARMINGTON. |
| 363 OAKLAND | LYON. |
| 364 OAKLAND | COMMERCE. |
| 365 OAKLAND | HIGHLAND, MILFORD, WHITE LAKE. |
| 366 OAKLAND | WEST BLOOMFIELD. |
| 367 OAKLAND | TROY(CITY). |
| 368 OAKLAND | AVON. |
| 369 OAKLAND | PONTIAC. |

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| 371 | OAKLAND | HOLLY, ROSE. |
| 372 | OAKLAND | GROVELAND, SPRINGFIELD. |
| 373 | OAKLAND | BRANDON, INDEPENDENCE. |
| 374 | OAKLAND | OAKLAND, ORION. |
| 375 | OAKLAND | ADDISON, OXFORD. |
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| 376 | OCEANA | BENONA, CLAYBANKS, SHELBY. |
| 377 | OCEANA | COLFAX, CRYSTAL, ELBRIDGE, HART, LEAVITT, WEARE. |
| 378 | OCEANA | FERRY, GRANT, GREENWOOD, NEWFIELD, OTTO. |
| 379 | OCEANA | GOLDEN, PENTWATER. |
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| 380 | OGEMAW | EDWARDS, HORTON, OGEMAW, WEST BRANCH. |
| 381 | OGEMAW | CUMMING, FOSTER, GOODAR, HILL, KLACKING, ROSE. |
| 382 | OGEMAW | CHURCHILL, LOGAN, MILLS, RICHLAND. |
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| 383 | ONTONAGON | ONTONAGON. |
| 384 | ONTONAGON | BOHEMIA, GREENLAND, ROCKLAND. |
| 385 | ONTONAGON | HAIGHT, INTERIOR, MCMILLAN, STANNARD. |
| 386 | ONTONAGON | BERGLAND, CARP LAKE, MATCHWOOD. |
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| 387 | OSCEOLA | HERSEY, RICHMOND. |
| 388 | OSCEOLA | EVART, ORIENT, OSCEOLA, SYLVAN. |
| 389 | OSCEOLA | HARTWICK, HIGHLAND, MARION, MIDDLE BRANCH. |
| 390 | OSCEOLA | BURDELL, CEDAR, LEROY, LINCOLN, ROSE LAKE, SHERMAN. |
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| 391 | OSCODA | BIG CREEK, CLINTON, COMINS, ELMER, GREENWOOD, MENTOR. |
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| 392 | OTSEGO | GAYLORD(CITY). |
| 393 | OTSEGO | BAGLEY, CHARLTON, CHESTER, HAYES, OTSEGO LAKE. |
| 394 | OTSEGO | CORWITH, DOVER, ELMIRA, LIVINGSTON. |
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| 395 | OTTAWA | HOLLAND(CITY). |
| 396 | OTTAWA | CHESTER, TALLMADGE, WRIGHT. |
| 397 | OTTAWA | CROCKERY, POLKTON. |
| 398 | OTTAWA | GEORGETOWN, JAMESTOWN. |
| 399 | OTTAWA | SPRING LAKE. |
| 400 | OTTAWA | GRAND HAVEN, OLIVE, PORT SHELDON, ROBINSON. |
| 401 | OTTAWA | ALLENDALE, BLENDON |
| 402 | OTTAWA | HOLLAND, PARK. |
| 403 | OTTAWA | ZEELAND. |
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| 404 | PRESQUE ISLE | BELKNAP, BISMARCK, METZ, MOLTKE, ROGERS. |
| 405 | PRESQUE ISLE | ALLIS, BEARINGER, CASE, NORTH ALLIS, OCQUEOC. |
| 406 | PRESQUE ISLE | KRAKOW, POSEN, PRESQUE ISLE, PULAWSKI. |
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| 407 | ROSCOMMON | DENTON, GERRISH, LAKE, LYON, MARKEY, ROSCOMMON. |
| 408 | ROSCOMMON | AU SABLE, BACKUS, HIGGINS, NESTER, RICHFIELD. |
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| 409 | SAGINAW | SAGINAW(CITY). |
| 410 | SAGINAW | TITTABAWASSEE. |
| 411 | SAGINAW | CARROLLTON, KOCHVILLE, SAGINAW. |
| 412 | SAGINAW | BUENA VISTA, ZILWAUKEE. |
| 413 | SAGINAW | THOMAS. |
| 414 | SAGINAW | FRANKENMUTH. |
| 415 | SAGINAW | BRIDGEPORT. |
| 416 | SAGINAW | JAMES, ST. CHARLES, SWAN CREEK. |
| 417 | SAGINAW | FREMONT, JONESFIELD, LAKEFIELD, RICHLAND. |
| 418 | SAGINAW | BRADY, BRANT, CHAPIN, MARION. |
| 419 | SAGINAW | BLUMFIELD |
| 420 | SAGINAW | CHESANING, MAPLE GROVE. |
| 421 | SAGINAW | ALBEE, SPAULDING. |
| 422 | SAGINAW | BIRCH RUN, TAYMOUTH. |
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| 423 | SANILAC | BUEL, ELK, LEXINGTON. |

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424 SANILAC       BRIDGEHAMPTON, CUSTER, FORESTER.
425 SANILAC       FLYNN, FREMONT, MAPLE VALLEY, SPEAKER, WORTH.
426 SANILAC       ARGYLE, AUSTIN, EVERGREEN, GREENLEAF, LAMOTTE, MOORE.
427 SANILAC       DELAWARE, MARION, MINDEN, WHEATLAND.
428 SANILAC       ELMER, MARLETTE.
429 SANILAC       SANILAC, WASHINGTON, WATERTOWN.

430 SCHOOLCRAFT   MANISTIQUE(CITY).
431 SCHOOLCRAFT   HIAWATHA, INWOOD, THOMPSON.
432 SCHOOLCRAFT   DOYLE, GERMFASK, MANISTIQUE, MUELLER, SENEY.

433 SHIAWASSEE    OWOSSO(CITY).
434 SHIAWASSEE    BENNINGTON, SCIOTA.
435 SHIAWASSEE    BURNS, VERNON.
436 SHIAWASSEE    CALEDONIA.
437 SHIAWASSEE    FAIRFIELD, MIDDLEBURY, OWOSSO.
438 SHIAWASSEE    HAZELTON, VENICE.
439 SHIAWASSEE    NEW HAVEN, RUSH.
440 SHIAWASSEE    ANTRIM, SHIAWASSEE.
441 SHIAWASSEE    PERRY, WOODHULL.

442 ST CLAIR      FORT GRATIOT, PORT HURON.
443 ST CLAIR      CASCO, CHINA, EAST CHINA, IRA.
444 ST CLAIR      CLAY, COTTRELLVILE.
445 ST CLAIR      KIMBALL.
446 ST CLAIR      COLUMBUS, ST CLAIR.
447 ST CLAIR      BURTCHVILLE, CLYDE, GRANT.
448 ST CLAIR      BROCKWAY, GREENWOOD.
449 ST CLAIR      BERLIN, EMMETT, RILEY.
450 ST CLAIR      KENOCKEE, WALES.
451 ST CLAIR      LYNN, MUSSEY.

452 ST JOSEPH     STURGIS.
453 ST JOSEPH     COLON, NOTTAWA.
454 ST JOSEPH     CONSTANTINE, FLORENCE, SHERMAN.
455 ST JOSEPH     FABIUS, FLOWERFIELD, LOCKPORT, PARK.
456 ST JOSEPH     LEONIDAS, MENDON.
457 ST JOSEPH     MOTTVILLE, WHITE PIGEON.
458 ST JOSEPH     BURR OAK, FAWN RIVER.
459 ST JOSEPH     THREE RIVERS(CITY).

460 TUSCOLA       CARO.
461 TUSCOLA       ALMER, ELLINGTON, NOVESTA.
462 TUSCOLA       ARBELA, MILLINGTON.
463 TUSCOLA       INDIANFIELDS, JUNIATA.
464 TUSCOLA       DAYTON, KINGSTON, KOYLTON, WELLS.
465 TUSCOLA       DENMARK, TUSCOLA.
466 TUSCOLA       ELKLAND, ELMWOOD.
467 TUSCOLA       FAIRGROVE, GILFORD.
468 TUSCOLA       FREMONT, VASSAR, WATERTOWN.
469 TUSCOLA       VASSAR(CITY).
470 TUSCOLA       AKRON, COLUMBIA, WISNER.

471 VAN BUREN     SOUTH HAVEN(CITY).
472 VAN BUREN     ANTWERP, DECATUR, PORTER.
473 VAN BUREN     ARLINGTON, HARTFORD, LAWRENCE.
474 VAN BUREN     BANGOR, COLUMBIA, GENEVA.
475 VAN BUREN     BLOOMINGDALE, PINE GROVE.
476 VAN BUREN     COVERT, SOUTH HAVEN.
477 VAN BUREN     HAMILTON, KEELER.
478 VAN BUREN     ALMENA, PAW PAW, WAVERLY.

479 WASHTENAW     ANN ARBOR(CITY).
480 WASHTENAW     ANN ARBOR.
481 WASHTENAW     PITTSFIELD
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482 WASHTENAW     SCIO, WEBSTER.
483 WASHTENAW     YPSILANTI(CITY).
484 WASHTENAW     YPSILANTI.
485 WASHTENAW     SUPERIOR.
486 WASHTENAW     AUGUSTA, YORK.
487 WASHTENAW     LODI, SALINE.
488 WASHTENAW     BRIDGEWATER, FREEDOM, SHARON.
489 WASHTENAW     MANCHESTER.
490 WASHTENAW     LIMA, SYLVAN.
491 WASHTENAW     DEXTER, LYNDON.
492 WASHTENAW     NORTHFIELD, SALEM.

493 WAYNE         DETROIT(PART 1 OF 3), EAST OF LIVERNOIS, WEST OF JOHN R,
                  SOUTH AND WEST OF EAST GRAND BLVD.
494 WAYNE         DEARBORN(CITY).
495 WAYNE         DETROIT(PART 2 OF 3), WEST OF LIVERNOIS, NORTH OF TIREMAN.
496 WAYNE         DETROIT (PART 3 OF 3), EAST OF JOHN R, EAST OF OAKLAND,
                  NORTH AND EAST OF EAST GRAND BLVD.
497 WAYNE         ALLEN PARK(CITY), ECORSE(CITY), LINCOLN PARK(CITY),
                  MELVINDALE(CITY), RIVER ROUGE(CITY), SOUTHGATE(CITY),
                  WYANDOTTE(CITY).
498 WAYNE         TAYLOR(CITY).
499 WAYNE         BROWNSTOWN, GROSSE ISLE, HURON.
500 WAYNE         ROMULUS, SUMPTER, VAN BUREN.
501 WAYNE         CANTON.
502 WAYNE         NORTHVILLE, PLYMOUTH.
503 WAYNE         GROSSE PTE(CITY), GROSSE PTE FARMS(CITY),
                  GROSSE PTE PARK(CITY), GROSSE PTE SHORES(CITY)
                  GROSSE PTE WOODS(CITY), HARPER WOODS(CITY).
504 WAYNE         REDFORD.

505 WEXFORD       CADILLAC(CITY).
506 WEXFORD       BOON, CHERRY GROVE, CLAM LAKE, HARING, HENDERSON,
                  SOUTH BRANCH, SELMA, SLAGLE.
507 WEXFORD       ANTIOCH, HANOVER, SPRINGVILLE, WEXFORD.
508 WEXFORD       CEDAR CREEK, COLFAX, GREENWOOD, LIBERTY,


ZONE PROVINCE     MAJOR CITIES WITHIN ZONE
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509 ONTARIO       LEAMINGTON, TILBURY, WINDSOR.
510 ONTARIO       SARNIA.
511 ONTARIO       FORT FRANCES, KENORA, SAULT STE. MARIE, SUDBURY, TIMMINS.
512 ONTARIO       CHATHAM, GODERICH, HAMILTON, KITCHNER, LONDON,
                  NIAGARA FALLS, WALLACEBURG.
513 ONTARIO       KINGSTON, OTTAWA, PEMBROKE, STURGEON FALLS, TORONTO.


ZONE STATE        COUNTY
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514 WISCONSIN     IRON.
515 WISCONSIN     ASHLAND, BAYFIELD.
516 WISCONSIN     ONEIDA, VILAS.
517 WISCONSIN     FOREST.
518 WISCONSIN     FLORENCE.
519 WISCONSIN     MARINETTE.
520 WISCONSIN     BURNETT, DOUGLAS, SAWYER, WASHBURN.
521 WISCONSIN     BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON,
                  LANGLADE, LINCOLN, MARATHON, PEPIN, PIERCE, POLK, PORTAGE,
                  PRICE, RUSK, ST CROIX, TAYLOR, TREMPEALEAU, WOOD,
522 WISCONSIN     BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC,
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MENOMINEE, OCONTO, OUTAGAMIE, SHAWANO, SHEBOYGAN, WAUPACA, WINNEBAGO.

523 WISCONSIN
DANE, DODGE, JEFFERSON, KENOSHA, MILWAUKEE, OZAUKEE, RACINE, ROCK, WALWORTH, WASHINGTON, WAUKESHA.

524 WISCONSIN
ADAMS, COLUMBIA, CRAWFORD, GRANT, GREEN, GREEN LAKE, IOWA, JUNEAU, LA CROSSE, LAFAYETTE, MARQUETTE, MONROE, RICHLAND, SAUK, VERNON, WAUSHARA.

525 ILLINOIS
BOONE, COOK, DE KALB, DU PAGE, GRUNDY, KANE, KENDALL, LAKE, MCHENRY, WILL, WINNEBAGO.

526 ILLINOIS
BUREAU, CARROLL, CHAMPAIGN, CHRISTIAN, COLES, DE WITT, DOUGLAS, EDGAR, FORD, FULTON, HENDERSON, HENRY, IROQUOIS, JO DAVIESS, KANKAKEE, KNOX, LA SALLE, LEE, LIVINGSTON, LOGAN, MACON, MARSHALL, MASON, MCLEAN, MENARD, MERCER, MOULTRIE, OGLE, PEORIA, PIATT, PUTNAM, ROCK ISLAND, SANGAMON, STARK, STEPHENSON, TAZEWELL, VERMILION, WARREN, WHITESIDE, WOODFORD.

527 ILLINOIS
ADAMS, ALEXANDER, BOND, BROWN, CALHOUN, CASS, CLARK, CLAY, FAYETTE, FRANKLIN, GALLATIN, GREENE, HAMILTON, HANCOCK, CLINTON, CRAWFORD, CUMBERLAND, EDWARDS, EFFINGHAM. HARDIN, JACKSON, JASPER, JEFFERSON, JERSEY, JOHNSON, LAWRENCE, MACOUPIN, MADISON, MARION, MASSAC, MCDONOUGH, MONROE, MONTGOMERY, MORGAN, PERRY, PIKE, POPE, PULASKI, RANDOLPH, RICHLAND, SALINE, SCHUYLER, SCOTT, SHELBY, ST CLAIR, UNION, WABASH, WASHINGTON, WAYNE, WHITE, WILLIAMSON.

528 INDIANA
LAKE, PORTER.

529 INDIANA
LAPORTE, STARKE.

530 INDIANA
MARSHALL, ST JOSEPH.

531 INDIANA
ELKHART, KOSCIUSKO.

532 INDIANA
ALLEN, DE KALB, LAGRANGE, NOBLE, STEUBEN, WHITLEY.

533 INDIANA
ADAMS, BENTON, BLACKFORD, BOONE, CARROLL, CASS, CLINTON, DELAWARE, FOUNTAIN, FULTON, GRANT, HENRY, HOWARD, HUNTINGTON, JASPER, JAY, MADISON, MIAMI, MONTGOMERY, NEWTON, PULASKI, RANDOLPH, TIPPECANOE, TIPTON, WABASH, WARREN, WAYNE, WELLS, WHITE.

534 INDIANA
BARTHOLOMEW, BROWN, CLARK, CLAY, CRAWFORD, DAVIESS, DEARBORN, DECATUR, DUBOIS, FAYETTE, FLOYD, FRANKLIN, GIBSON, GREENE, HAMILTON, HANCOCK, HARRISON, HENDRICKS, JACKSON, JEFFERSON, JENNINGS, JOHNSON, KNOX, LAWRENCE, MARION, MARTIN, MONROE, MORGAN, OHIO, ORANGE, OWEN, PARKE, PERRY, PIKE, POSEY, PUTNAM, RIPLEY, RUSH, SCOTT, SHELBY, SPENCER, SULLIVAN, SWITZERLAND, UNION, VANDERBURGH, VERMILLION, VIGO, WARRICK, WASHINGTON.

535 OHIO
DEFIANCE, WILLIAMS.

536 OHIO
FULTON, HENRY.

537 OHIO
LUCAS, WOOD.

538 OHIO
ALLEN, AUGLAIZE, CRAWFORD, DARKE, ERIE, HANCOCK, HARDIN, HURON, LOGAN, MARION, MERCER, OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA, SHELBY, VAN WERT, WYANDOT.

539 OHIO
ASHTABULA, BELMONT, CARROLL, COLUMBIANA, COSHOCTON, CUYAHOGA, DELAWARE, FAIRFIELD, FRANKLIN, GEAUGA, HAMILTON, HARRISON, JACKSON, JEFFERSON, LAKE, LORAIN, MAHONING, MEDINA, PORTAGE, STARK, SUMMIT, TRUMBULL, WARREN, WASHINGTON.

540 OHIO
ADAMS, ASHLAND, ATHENS, BROWN, BUTLER, CHAMPAIGN, CLARK, CLERMONT, CLINTON, FAYETTE, GALLIA, GREENE, GUERNSEY, HIGHLAND, HOCKING, HOLMES, KNOX, LAWRENCE, LICKING, MADISON, MEIGS, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PIKE, PREBLE, RICHLAND, ROSS, SCIOTO, TUSCARAWAS, UNION, VINTON, WAYNE.

| ZONE | STATE |
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| 541 | NORTH CAROLINA, VIRGINIA, WFST VIRGINIA. |
| 542 | ALABAMA, FLORIDA, GEORGIA, KENTUCKY, SOUTH CAROLINA, TENNESSEE. |
| 543 | ARIZONA, ARKINSAW, KANSAS, LOUISIANA, MISSISSIPPI, MISSOURI. NEW MEXICO, OKLAHOMA, TEXAS. |
| 544 | CALIFORNIA, COLORADO, HAWAII, IDAHO, IOWA, NEBRASKA, NEVADA. OREGON, UTAH, WYOMING. |
| 545 | ALASKA, MINNESOTA, MONTANA, NORTH DAKOTA, SOUTH DAKOTA, WASHINGTON. |
| 546 | DISTRICT OF COLUMBIA, DELAWARE, MARYLAND, NEW JERSEY, PENNSYLVANIA. |
| 547 | CONNECTICUT, MAINE, MASSACHUSETTS, NEW HAMPSHIRE, NEW YORK, RHODE ISLAND, VERMONT. |