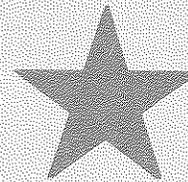


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Statewide



Transportation

Analysis &

Research

MICHIGAN'S STATEWIDE
TRANSPORTATION MODELING SYSTEM

REFERENCE HANDBOOK NO. 3

MINOR ORIGIN & DESTINATION
TRAVEL CHARACTERISTICS
REGION 5

STATEWIDE PROCEDURES SECTION

SEPTEMBER, 1978



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 5**

STATEWIDE PROCEDURES SECTION

SEPTEMBER, 1978

STATE HIGHWAY COMMISSION

PETER B. FLETCHER

Chairman

CARL V. PELLONPAA

Vice Chairman

HANNES MEYERS, JR.

WESTON E. VIVIAN

DIRECTOR

John P. Woodford

TABLE OF CONTENTS

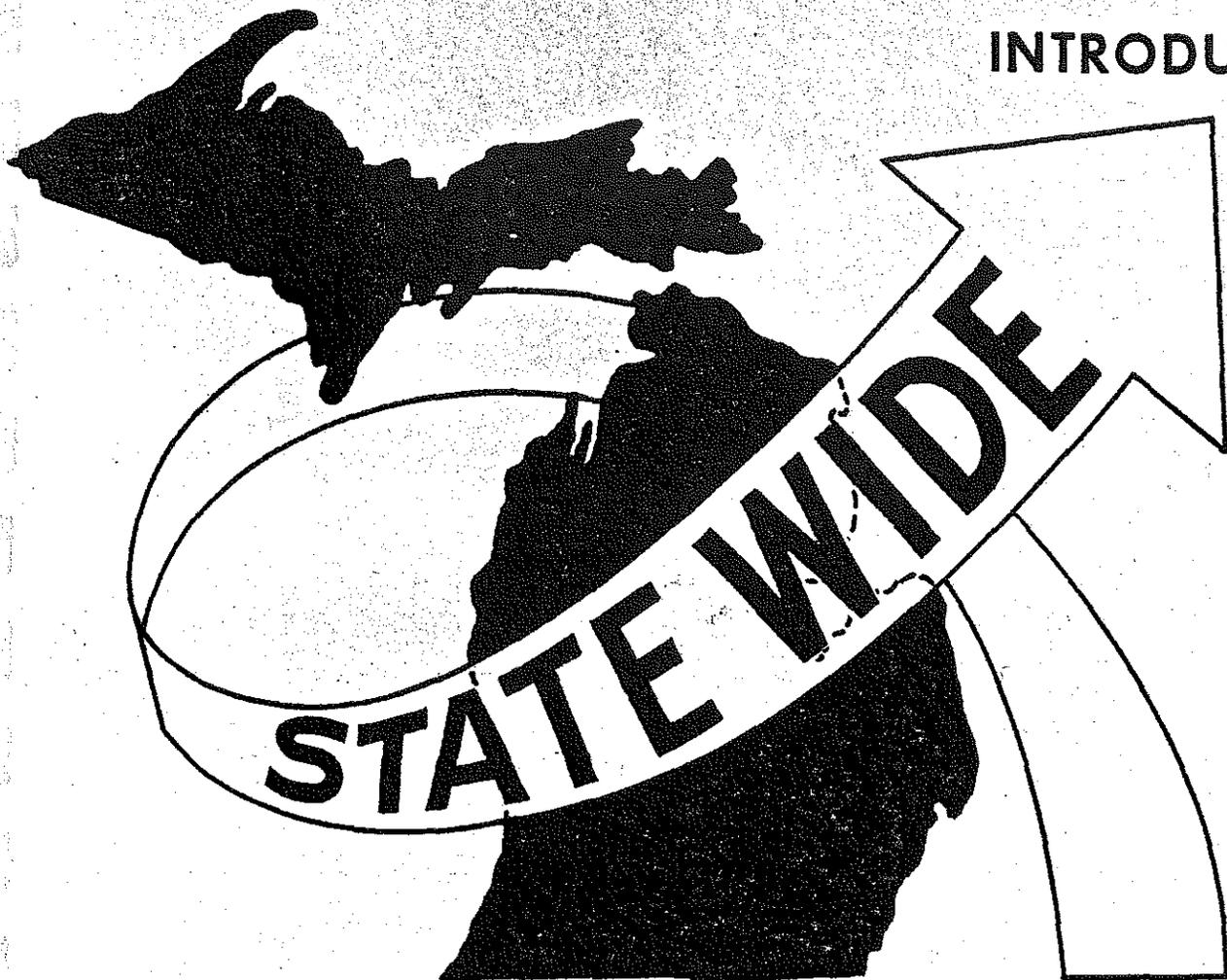
MINOR ORIGIN AND DESTINATION

TRAVEL CHARACTERISTICS

BY: DAVID R SCHADE

INTRODUCTION.	1
SPECIAL INFORMATION	8
STATEWIDE TRIP CHARACTERISTICS.17
REGIONAL TRIP CHARACTERISTICS34
CITY TRIP CHARACTERISTICS44
APPENDIX "A" - EQUIVALENCE LIST55

INTRODUCTION



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

VOLUME XIII-A - MULTI-MODAL MOBILITY AND ACCESSIBILITY ANALYSIS
 VOLUME XIII-B - 1972 STATEWIDE RAIL NETWORK - SUMMARY TABULATIONS
 VOLUME XIII-C - MICHIGAN'S RAIL CROSSING INVENTORY AND ANALYSIS PROCESS
 VOLUME XIII-D - IMPACT OF POPULATION AND ENERGY ON TRANSPORTATION
 NEEDS - A MULTI-MODAL APPROACH
 VOLUME XIV-A - COMMODITY FLOW MATRIX - ANN ARBOR RAILROAD
 VOLUME XIV-B - COMMODITY FLOW MATRIX - PENN CENTRAL RAILROAD
 VOLUME XIV-C - COMMODITY FLOW MATRIX - MICHIGAN RAILROADS 1% SAMPLE
 VOLUME XV-A - RAILROAD FINANCIAL IMPACT ANALYSIS
 VOLUME XV-B - RAILROAD COMMUNITY IMPACT ANALYSIS
 VOLUME XVI - DIAL-A-RIDE
 VOLUME XVII - INTERMODAL IMPACT ANALYSIS - TRUCK AND RAILROAD
 VOLUME XVIII - OUTLINE ANALYSIS PROGRAM

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

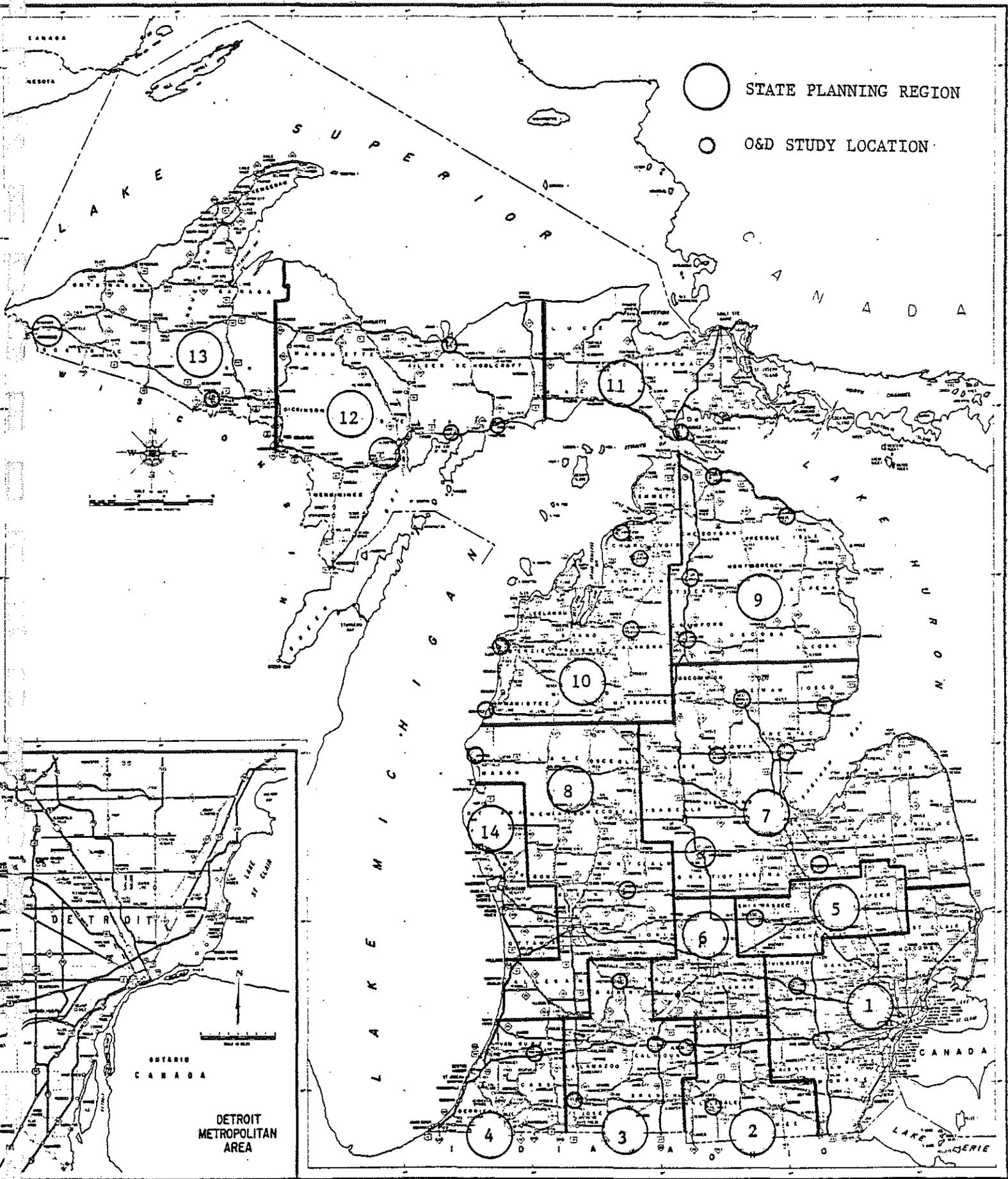
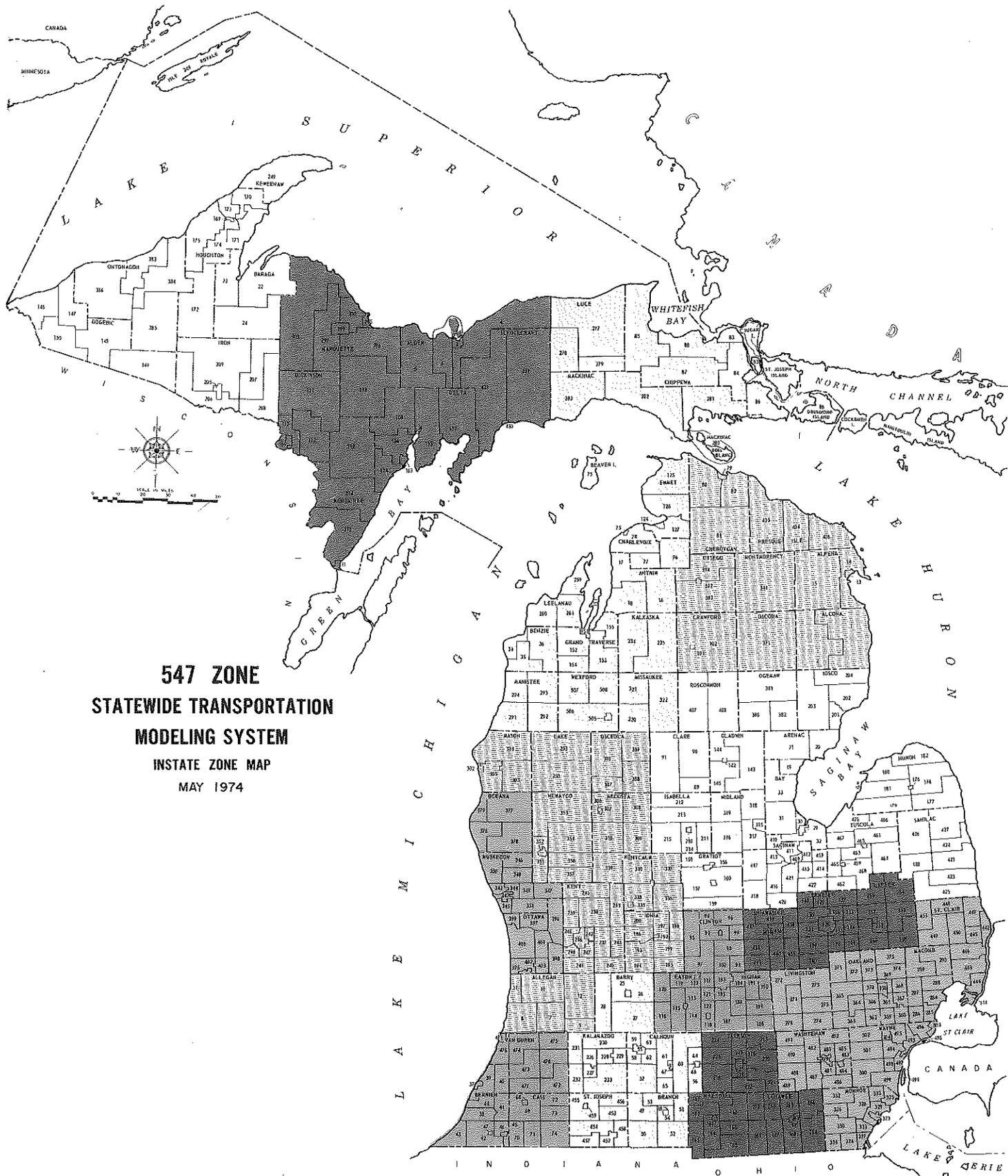


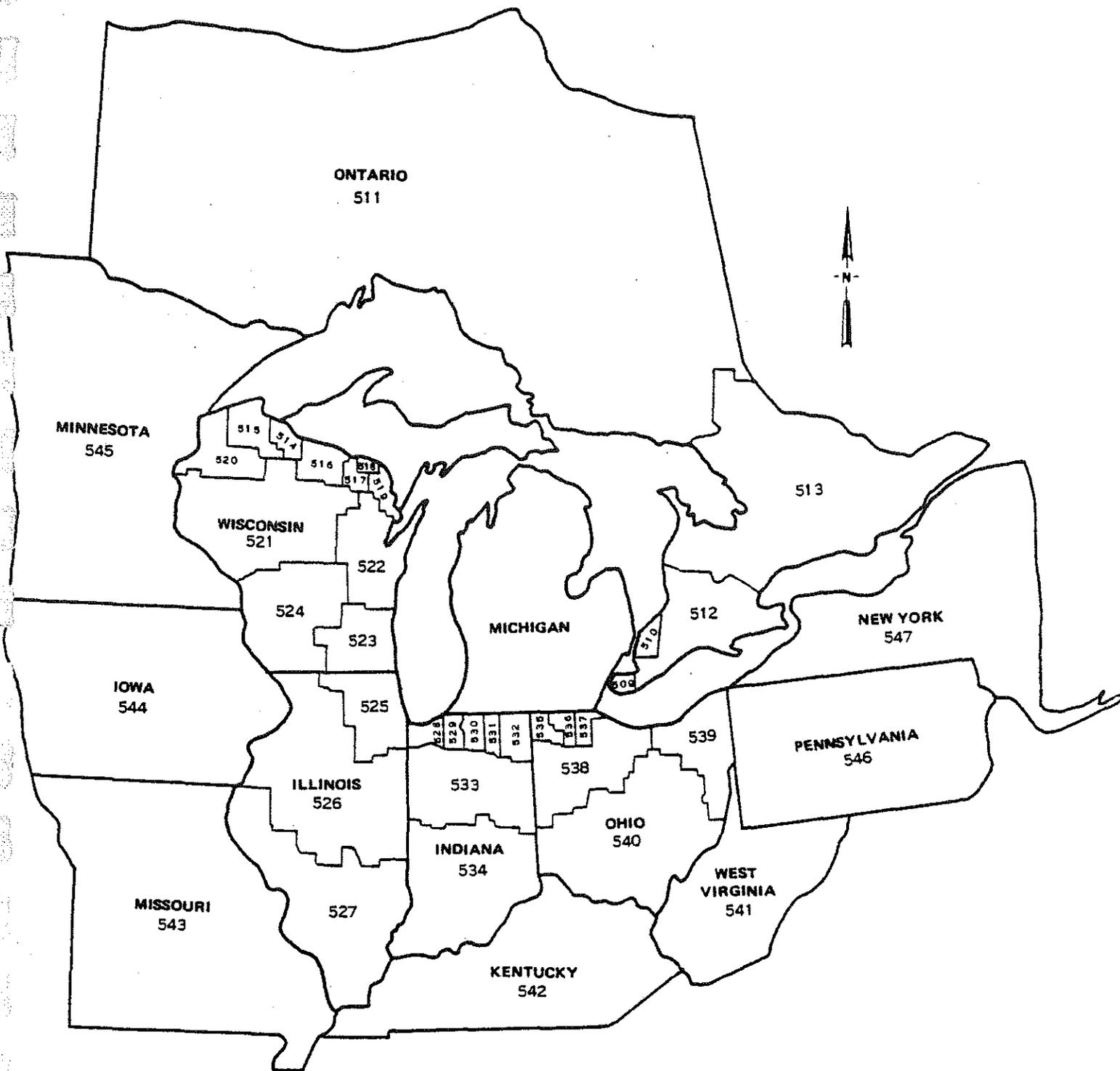
FIGURE 2



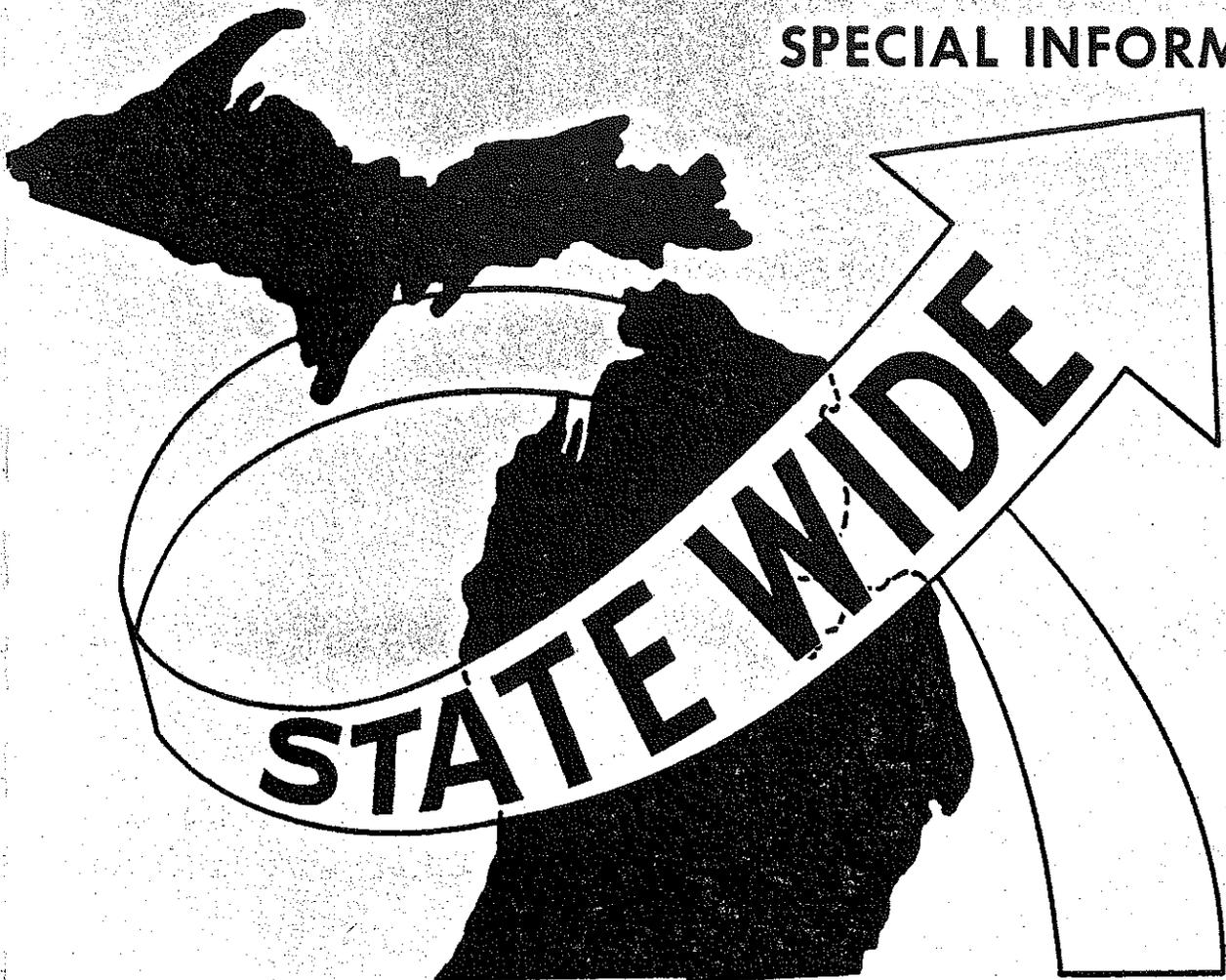
547 ZONE
STATEWIDE TRANSPORTATION
MODELING SYSTEM
INSTATE ZONE MAP
MAY 1974

MICHIGAN'S TRANSPORTATION MODELING SYSTEM

547 ZONE
OUTSTATE ANALYSIS ZONES



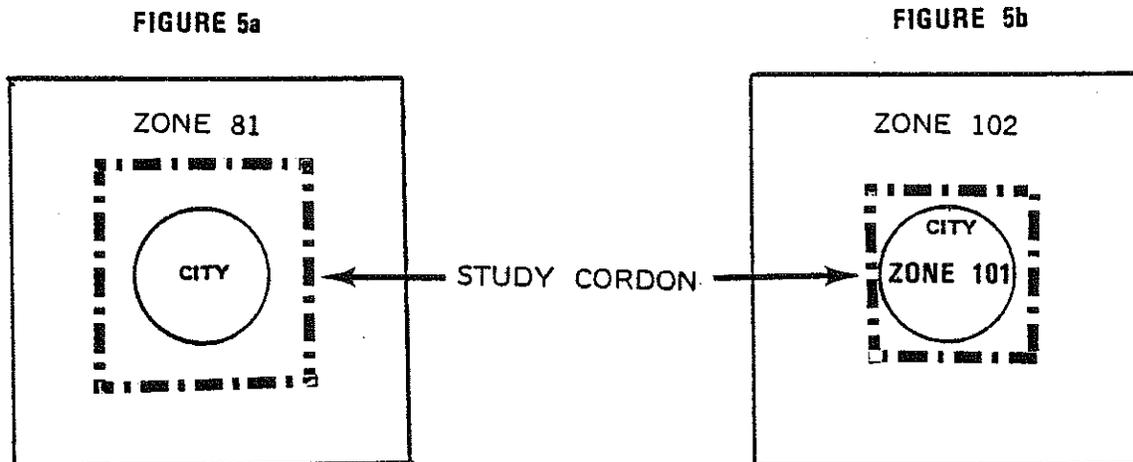
SPECIAL INFORMATION



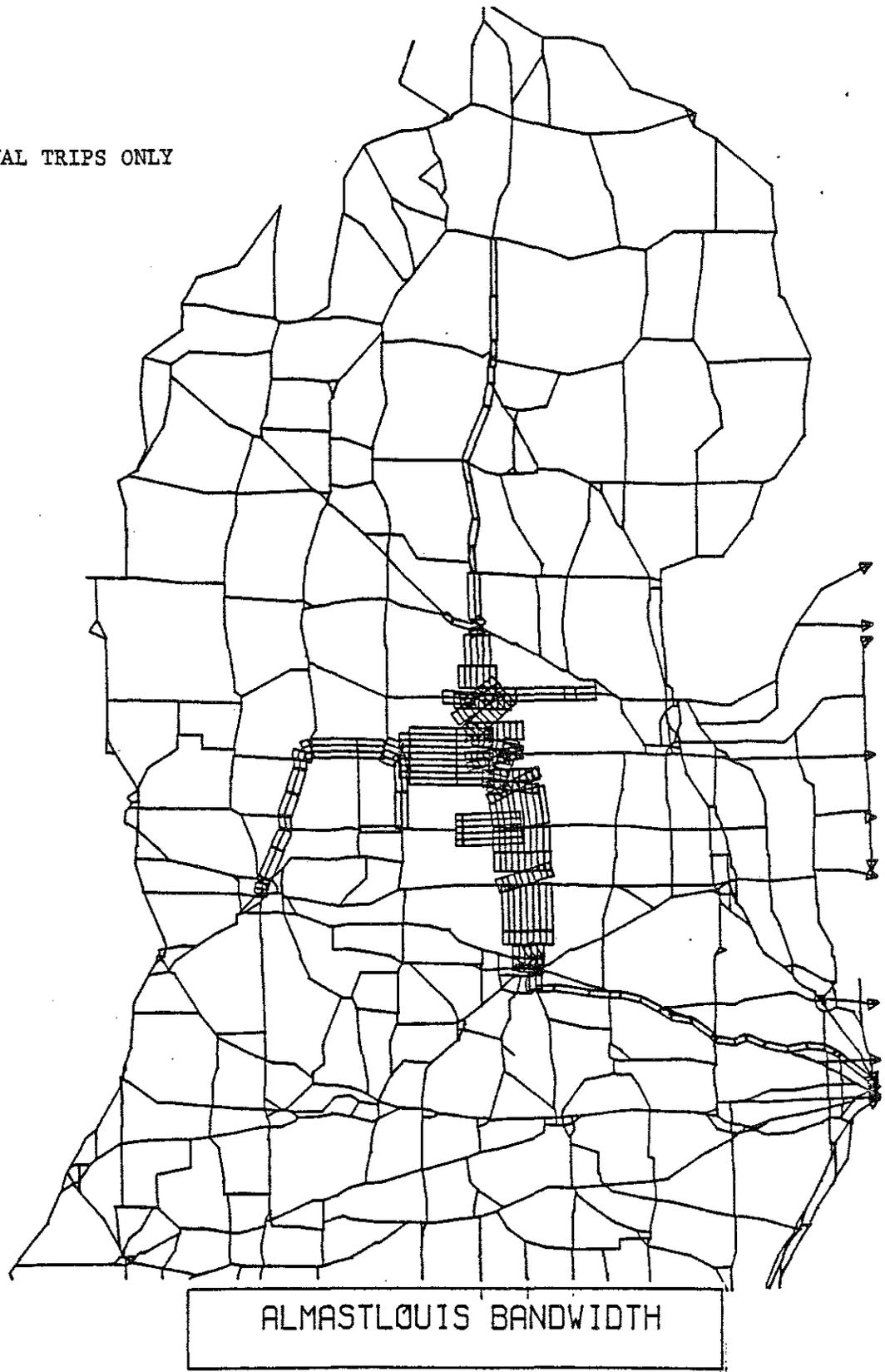
SPECIAL INFORMATION

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.

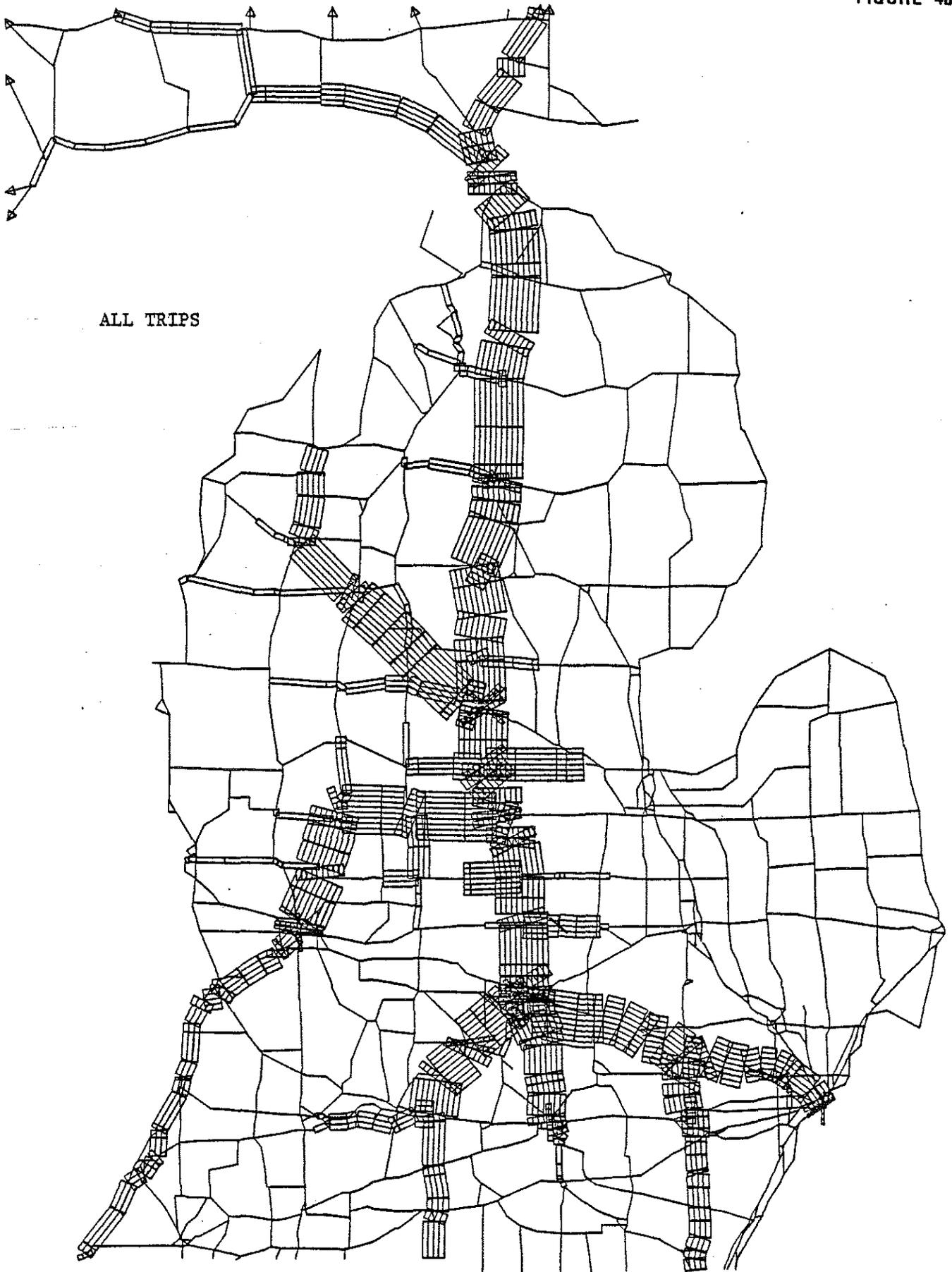
There are some instances where the O&D city is not a statewide model zone in itself, such as in Figure 5a. Generally, this does not present a problem, but the reader should be made aware of it. The trips that go into the study city will be shown as going to the zone that surrounds the city. The ideal 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.



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 summarizes 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

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
34.8%	7.2%	30.5%	3.8%	17.2%	6.6%
4095	848	3595	446	2021	779

PERCENT OF TRIPS

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

MINOR

EXTERNAL ORIGIN-DESTINATION INTERVIEW
 TERMINAL-TRIP SUMMARY TABLE FOR CHEBOYGAN

TRIP PURPOSE

# IN VEH.	WORK	PERS BIZ	SHCP	VACATION	SOC-REC	OTHER
	PERCENT OF TOTAL WORK TRIPS					
1	75.1% ←	43.3%	30.4%	8.6%	29.9%	39.0%
	3075 ←	367	1091	38	604	304
	NUMBER OF TRIPS					
2	16.8%	36.0%	33.1%	40.4%	31.9%	32.2%
	688	306	1191	180	644	251
3	4.7%	11.4%	15.9%	14.5%	14.7%	15.7%
	192	96	570	65	296	123
4	2.4%	4.9%	11.2%	15.3%	10.5%	7.7%
	99	41	402	68	212	60
5	0.5%	2.7%	5.7%	12.0%	5.6%	3.4%
	19	23	205	54	113	27
6+	0.5%	1.7%	3.8%	9.1%	7.5%	1.9%
	22	15	135	41	151	15
TOTAL	100%	100%	100%	100%	100%	100%
	4095	848	3595	446	2021	779

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.

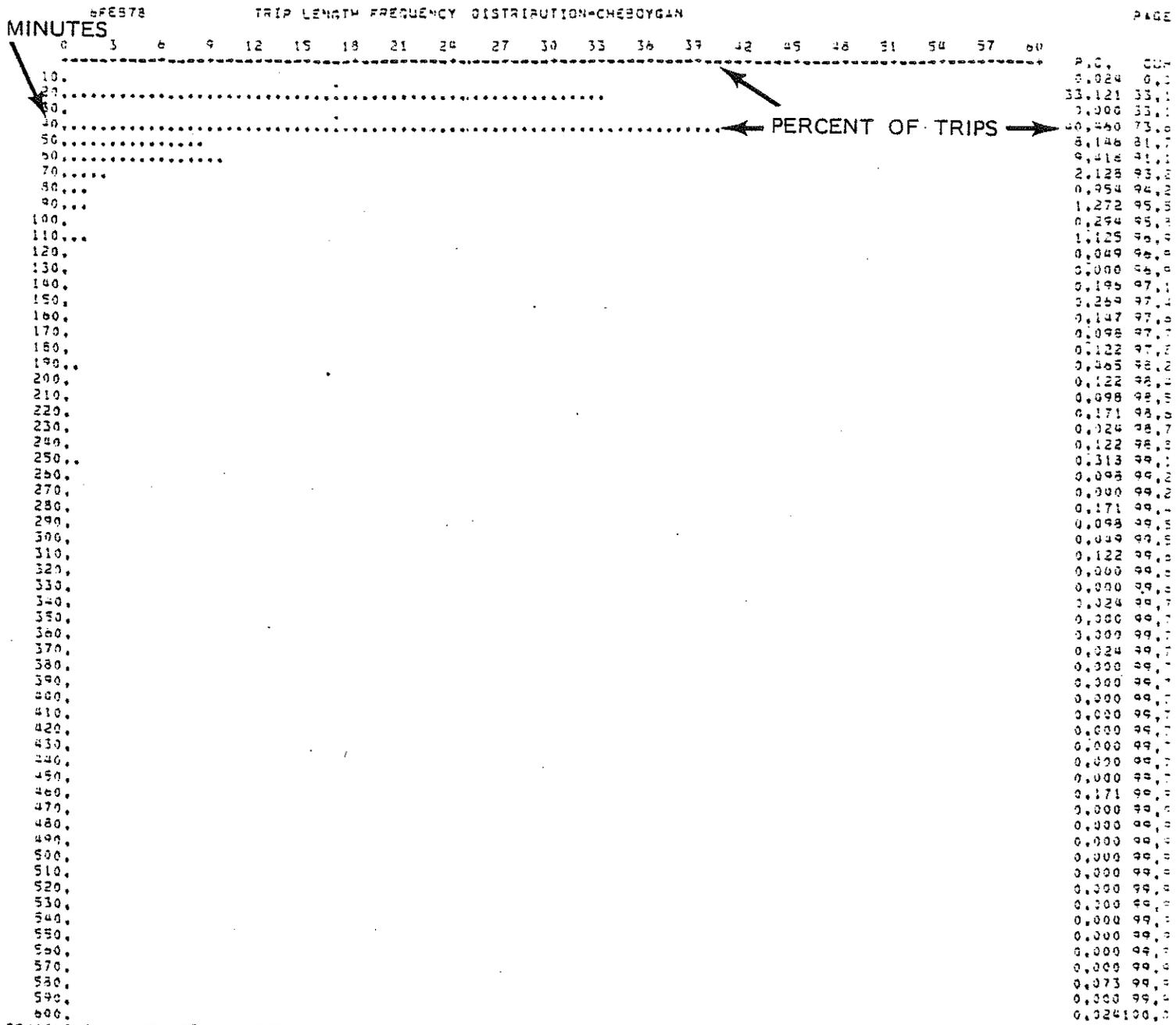
At the bottom left of the TLD, the "volume table number" designates the trip purpose:

- 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



RE-STARTING VALUES ARE ALL ZERO
 NUMBER OF OBSERVATIONS= 4088 SUM= 159647 MEAN= 39.053 VAR= 1504.962 SD= #2.0

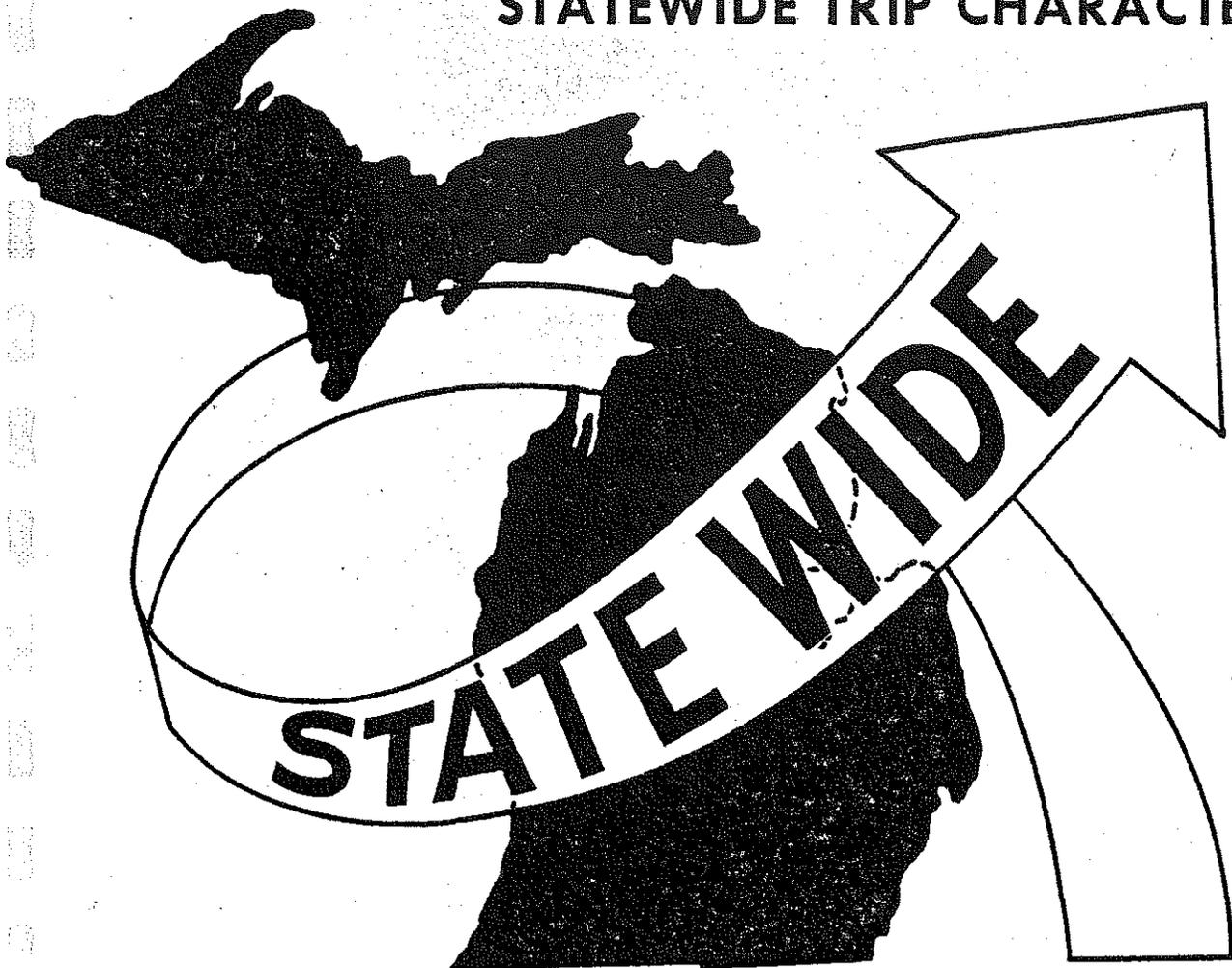
TOTAL TRIPS OVER MAXP = 0
 TOTAL TRIPS OVER 255 = 0
 VOLUME TABLE NUMBER = 201 ← WORK TRIPS
 SKIM TREE NUMBER = 101

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



MINOR

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE

VEHICLE TYPE

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

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.

MINOR
EXTERNAL ORIGIN-DESTINATION INTERVIEW
TERMINAL-TRIP SUMMARY TABLE

TRIP PURPOSE

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

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.

MINOR
EXTERNAL ORIGIN-DESTINATION INTERVIEW
TERMINAL-TRIP SUMMARY TABLE

NUMBER IN VEHICLE

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

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.

MINOR
EXTERNAL ORIGIN-DESTINATION INTERVIEW
TERMINAL-TRIP SUMMARY TABLE

VEHICLE GARAGED AT

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

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.

MINOR

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% 150202	49.5% 19644	38.5% 39042	6.8% 1468	35.5% 29020	42.2% 21831
2	15.1% 28469	31.1% 12354	33.7% 34147	37.9% 8123	33.0% 26925	32.4% 16777
3	3.4% 6354	10.6% 4202	14.0% 14150	17.2% 3690	13.9% 11381	13.1% 6796
4	1.2% 2215	5.3% 2107	7.7% 7821	20.3% 4353	9.3% 7575	7.0% 3617
5	0.4% 697	2.1% 844	3.5% 3544	9.5% 2036	4.3% 3495	3.0% 1554
6+	0.2% 442	1.4% 546	2.6% 2586	8.3% 1770	4.0% 3270	2.3% 1214
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 CATEGORY IN THE REGION. ACTUAL TRIPS BELOW EACH PCT DOES NOT REPRESENT ALL TRAVEL 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-RFC	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 CATEGORY IN THE REGION. ACTUAL TRIPS BELOW EACH PCT DOES NOT REPRESENT ALL TRAVEL IN THE REGION--ONLY THAT INTERVIEWED.

1MAR78 TRIP LENGTH FREQUENCY DISTRIBUTION-TOT

	P.C.	CUM.	ACTUAL
10	17.038	17.038	11407
20	31.897	48.735	59561
30	16.806	65.541	31474
40	13.458	79.199	25578
50	7.157	86.356	13403
60	3.848	90.204	7208
70	1.948	92.153	3649
80	1.561	93.714	2924
90	1.170	94.885	2192
100	0.837	95.721	1192
110	0.906	96.627	1701
120	0.591	97.218	1107
130	0.399	97.617	748
140	0.232	97.849	434
150	0.214	98.063	407
160	0.372	98.435	242
170	0.140	98.575	274
180	0.148	98.723	324
190	0.173	98.896	253
200	0.135	99.031	141
210	0.075	99.106	104
220	0.088	99.194	141
230	0.133	99.327	259
240	0.075	99.402	114
250	0.138	99.540	104
260	0.001	99.541	54
270	0.059	99.600	110
280	0.030	99.630	57
290	0.022	99.652	41
300	0.038	99.690	71
310	0.028	99.718	49
320	0.024	99.742	25
330	0.034	99.776	64
340	0.011	99.787	21
350	0.010	99.797	18
360	0.014	99.811	27
370	0.004	99.815	7
380	0.011	99.826	20
390	0.008	99.834	15
400	0.036	99.870	98
410	0.012	99.882	22
420	0.015	99.897	28
430	0.017	99.914	31
440	0.008	99.922	12
450	0.011	99.933	20
460	0.003	99.936	5
470	0.004	99.940	6
480	0.008	99.948	15
490	0.002	99.950	3
500	0.008	99.958	15
510	0.006	99.964	11
520	0.003	99.967	5
530	0.005	99.972	10
540	0.001	99.973	2
550	0.000	99.973	0
560	0.001	99.974	1
570	0.001	99.975	5
580	0.002	99.977	3
590	0.001	99.978	1
600	0.001	99.979	5
610	0.005	99.984	2
620	0.000	99.984	0
630	0.000	99.984	0
640	0.000	99.984	0
650	0.002	99.986	4
660	0.000	99.986	17

MINING VALUES ARE ALL ZERO
 NUMBER OF OBSERVATIONS= 197270 SUM= 6066433 MEAN= 32.393 VAR= 1745.297 SD= 41.784

L TRIPS OVER MAXP = 17
 L TRIPS OVER 255 = 0
 ME 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																						4.900	89.092	191
60																						3.007	92.099	118
70																						1.540	93.639	60
80																						1.108	94.747	43
90																						0.812	95.559	32
100																						0.487	96.047	19
110																						0.787	96.834	31
120																						0.370	97.204	14
130																						0.279	97.483	11
140																						0.188	97.671	7
150																						0.218	97.889	6
160																						0.520	98.409	20
170																						0.140	98.549	5
180																						0.119	98.668	4
190																						0.165	98.833	6
200																						0.137	98.970	5
210																						0.108	99.078	4
220																						0.094	99.172	3
230																						0.061	99.233	2
240																						0.049	99.282	1
250																						0.049	99.331	1
260																						0.071	99.402	2
270																						0.089	99.491	3
280																						0.036	99.527	1
290																						0.023	99.550	1
300																						0.053	99.603	2
310																						0.020	99.623	1
320																						0.028	99.651	1
330																						0.025	99.676	1
340																						0.028	99.704	1
350																						0.025	99.729	1
360																						0.000	99.729	0
370																						0.020	99.749	1
380																						0.005	99.754	0
390																						0.005	99.759	0
400																						0.005	99.764	0
410																						0.006	99.770	0
420																						0.018	99.788	0
430																						0.013	99.801	0
440																						0.005	99.806	0
450																						0.005	99.811	0
460																						0.010	99.821	0
470																						0.020	99.841	0
480																						0.008	99.849	0
490																						0.000	99.849	0
500																						0.010	99.859	0
510																						0.005	99.864	0
520																						0.005	99.869	0
530																						0.006	99.875	0
540																						0.006	99.881	0
550																						0.000	99.881	0
560																						0.005	99.886	0
570																						0.005	99.891	0
580																						0.013	99.904	0
590																						0.008	99.912	0
600																						0.006	99.918	0
610																						0.000	99.918	0
620																						0.005	99.923	0
630																						0.005	99.928	0
640																						0.005	99.933	0
650																						0.005	99.938	0
660																						0.008	99.946	0
670																						0.003	99.949	0
680																						0.005	99.954	0
690																						0.005	99.959	0
700																						0.000	99.959	0
710																						0.005	99.964	0
720																						0.015	99.979	0
730																						0.003	99.982	0
740																						0.008	99.990	0
750																						0.005	99.995	0
760																						0.000	99.995	0
770																						0.000	99.995	0
780																						0.000	99.995	0
790																						0.005	100.000	0

MINING VALUES ARE ALL ZERO
 NUMBER OF OBSERVATIONS= 39410 SUM= 1105781 MEAN= 29.581 VAR= 1678.346 SD= 40.966

L TRIPS OVER MAXP * 2
 L TRIPS OVER 255 * 0
 THE TABLE NUMBER * 202
 TREE NUMBER * 191

PERS.BUSINESS TRIPS

INART8 TRIP LENGTH FREQUENCY DISTRIBUTION-TOT

TRIP LENGTH	FREQUENCY	P.C.	CUM.	ACTUAL
0	20.469	20.469	21022
2	37.583	58.052	37022
4	15.472	73.524	15570
6	12.236	85.760	12310
8	4.805	90.565	4832
10	2.457	93.022	2471
12	0.927	93.949	932
14	1.000	94.949	1087
16	0.554	95.503	558
18	0.263	95.766	269
20	0.862	96.628	867
22	0.288	96.916	290
24	0.281	97.197	281
26	0.215	97.412	215
28	0.064	97.476	64
30	0.199	97.675	199
32	0.063	97.738	63
34	0.125	97.863	125
36	0.180	98.043	180
38	0.106	98.149	106
40	0.093	98.242	93
42	0.067	98.309	67
44	0.178	98.487	178
46	0.090	98.577	90
48	0.093	98.670	93
50	0.201	98.871	201
52	0.075	98.946	75
54	0.089	99.035	89
56	0.023	99.058	23
58	0.079	99.137	79
60	0.063	99.200	63
62	0.022	99.222	22
64	0.084	99.306	84
66	0.010	99.316	10
68	0.013	99.329	13
70	0.010	99.339	10
72	0.042	99.381	42
74	0.005	99.386	5
76	0.022	99.408	22
78	0.011	99.419	11
80	0.000	99.419	0
82	0.012	99.431	12
84	0.008	99.439	8
86	0.023	99.462	23
88	0.018	99.480	18
90	0.017	99.497	17
92	0.001	99.498	1
94	0.003	99.501	3
96	0.008	99.509	8
98	0.013	99.522	13
100	0.001	99.523	1
102	0.011	99.534	11
104	0.008	99.542	8
106	0.002	99.544	2
108	0.008	99.552	8
110	0.008	99.560	8
112	0.000	99.560	0
114	0.000	99.560	0
116	0.001	99.561	1
118	0.001	99.562	1
120	0.002	99.564	2
122	0.008	99.572	8
124	0.001	99.573	1
126	0.003	99.576	3
128	0.002	99.578	2
130	0.000	99.578	0
132	0.000	99.578	0
134	0.001	99.579	1
136	0.001	99.580	1
138	0.000	99.580	0
140	0.000	99.580	0
142	0.002	99.582	2
144	0.000	99.582	0
146	0.000	99.582	0
148	0.000	99.582	0
150	0.000	99.582	0
152	0.000	99.582	0
154	0.000	99.582	0
156	0.000	99.582	0
158	0.000	99.582	0
160	0.000	99.582	0
162	0.000	99.582	0
164	0.000	99.582	0
166	0.000	99.582	0
168	0.000	99.582	0
170	0.000	99.582	0
172	0.000	99.582	0
174	0.000	99.582	0
176	0.000	99.582	0
178	0.000	99.582	0
180	0.000	99.582	0
182	0.000	99.582	0
184	0.000	99.582	0
186	0.000	99.582	0
188	0.000	99.582	0
190	0.000	99.582	0
192	0.000	99.582	0
194	0.000	99.582	0
196	0.000	99.582	0
198	0.000	99.582	0
200	0.000	99.582	0

INIB VALUES ARE ALL ZERO
 ER OF OBSERVATIONS= 100035 SUM= 2816970. MEAN= 27.992 VAR= 1603.356 SD= 40.042

L TRIPS OVER MAXP = 6
 L TRIPS OVER 25% = 0
 MC TABLE NUMBER = 203
 TREE NUMBER = 101

SHOPPING TRIPS

1M4R7B TRIP LENGTH FREQUENCY DISTRIBUTION-TOT

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	P.C.	CUM.	ACTUAL
10																						5.083	5.083	119
20																						8.715	14.398	182
30																						5.592	19.990	117
40																						12.167	32.157	255
50																						3.342	35.499	70
60																						7.838	43.137	160
70																						2.565	45.702	53
80																						5.507	51.209	115
90																						4.105	55.313	86
100																						1.836	57.149	38
110																						3.280	60.429	68
120																						1.778	62.207	37
130																						2.207	64.415	46
140																						1.754	66.169	36
150																						0.862	67.051	18
160																						2.532	69.583	53
170																						1.440	71.023	30
180																						1.411	72.434	29
190																						1.874	74.308	39
200																						1.383	75.690	29
210																						1.545	77.235	32
220																						0.658	77.893	13
230																						1.526	79.419	32
240																						1.235	80.653	25
250																						1.216	81.869	25
260																						1.769	83.638	37
270																						1.492	85.130	31
280																						0.987	86.117	20
290																						0.853	86.970	17
300																						1.125	88.095	23
310																						0.968	89.063	20
320																						0.866	89.929	16
330																						1.087	90.956	22
340																						0.234	91.190	4
350																						0.462	91.652	9
360																						0.319	91.971	6
370																						0.420	92.391	8
380																						0.277	92.667	5
390																						0.319	92.987	6
400																						0.296	93.282	5
410																						0.287	93.569	5
420																						0.486	94.036	10
430																						0.365	94.391	6
440																						1.025	95.366	21
450																						0.267	95.633	5
460																						0.191	95.820	4
470																						0.343	96.167	7
480																						0.324	96.491	6
490																						0.200	96.691	4
500																						0.176	96.868	3
510																						0.234	97.101	4
520																						0.391	97.492	6
530																						0.038	97.530	1
540																						0.391	97.921	6
550																						0.186	98.107	3
560																						0.136	98.246	2
570																						0.143	98.389	3
580																						0.033	98.422	1
590																						0.110	98.532	2
600																						0.024	98.555	1
610																						0.243	98.799	5
620																						0.095	98.894	2
630																						0.091	98.985	1
640																						0.029	99.013	1
650																						0.024	99.037	1
660																						0.016	99.046	1
670																						0.200	99.247	4
680																						0.010	99.256	1
690																						0.119	99.375	2
700																						0.057	99.433	1
710																						0.010	99.442	1
720																						0.029	99.471	1
730																						0.057	99.528	1
740																						0.057	99.585	1
750																						0.415	100.000	6

MINING VALUES ARE ALL ZERO
 NO. OF OBSERVATIONS = 21975 SUM = 2821726 MEAN = 134.528 VAR = 20258.872 SD = 142.333

L TRIPS OVER MAXP * 87
 L TRIPS OVER 255 * 0
 ME TABLE NUMBER * 204
 TREE NUMBER * 101

VACATION TRIPS

1-4-75 TRIP LENGTH FREQUENCY DISTRIBUTION-TOT

TRIP LENGTH	FREQUENCY	P.C.	CUM.	ACTUAL
10	1	0.001	0.001	1
20	1	0.001	0.002	1
30	1	0.001	0.003	1
40	1	0.001	0.004	1
50	1	0.001	0.005	1
60	1	0.001	0.006	1
70	1	0.001	0.007	1
80	1	0.001	0.008	1
90	1	0.001	0.009	1
100	1	0.001	0.010	1
110	1	0.001	0.011	1
120	1	0.001	0.012	1
130	1	0.001	0.013	1
140	1	0.001	0.014	1
150	1	0.001	0.015	1
160	1	0.001	0.016	1
170	1	0.001	0.017	1
180	1	0.001	0.018	1
190	1	0.001	0.019	1
200	1	0.001	0.020	1
210	1	0.001	0.021	1
220	1	0.001	0.022	1
230	1	0.001	0.023	1
240	1	0.001	0.024	1
250	1	0.001	0.025	1
260	1	0.001	0.026	1
270	1	0.001	0.027	1
280	1	0.001	0.028	1
290	1	0.001	0.029	1
300	1	0.001	0.030	1
310	1	0.001	0.031	1
320	1	0.001	0.032	1
330	1	0.001	0.033	1
340	1	0.001	0.034	1
350	1	0.001	0.035	1
360	1	0.001	0.036	1
370	1	0.001	0.037	1
380	1	0.001	0.038	1
390	1	0.001	0.039	1
400	1	0.001	0.040	1
410	1	0.001	0.041	1
420	1	0.001	0.042	1
430	1	0.001	0.043	1
440	1	0.001	0.044	1
450	1	0.001	0.045	1
460	1	0.001	0.046	1
470	1	0.001	0.047	1
480	1	0.001	0.048	1
490	1	0.001	0.049	1
500	1	0.001	0.050	1
510	1	0.001	0.051	1
520	1	0.001	0.052	1
530	1	0.001	0.053	1
540	1	0.001	0.054	1
550	1	0.001	0.055	1
560	1	0.001	0.056	1
570	1	0.001	0.057	1
580	1	0.001	0.058	1
590	1	0.001	0.059	1
600	1	0.001	0.060	1
610	1	0.001	0.061	1
620	1	0.001	0.062	1
630	1	0.001	0.063	1
640	1	0.001	0.064	1
650	1	0.001	0.065	1
660	1	0.001	0.066	1
670	1	0.001	0.067	1
680	1	0.001	0.068	1
690	1	0.001	0.069	1
700	1	0.001	0.070	1
710	1	0.001	0.071	1
720	1	0.001	0.072	1
730	1	0.001	0.073	1
740	1	0.001	0.074	1
750	1	0.001	0.075	1
760	1	0.001	0.076	1
770	1	0.001	0.077	1
780	1	0.001	0.078	1
790	1	0.001	0.079	1
800	1	0.001	0.080	1
810	1	0.001	0.081	1
820	1	0.001	0.082	1
830	1	0.001	0.083	1
840	1	0.001	0.084	1
850	1	0.001	0.085	1
860	1	0.001	0.086	1
870	1	0.001	0.087	1
880	1	0.001	0.088	1
890	1	0.001	0.089	1
900	1	0.001	0.090	1
910	1	0.001	0.091	1
920	1	0.001	0.092	1
930	1	0.001	0.093	1
940	1	0.001	0.094	1
950	1	0.001	0.095	1
960	1	0.001	0.096	1
970	1	0.001	0.097	1
980	1	0.001	0.098	1
990	1	0.001	0.099	1
1000	1	0.001	0.100	1

MINIMUM VALUES ARE ALL ZERO
 NUMBER OF OBSERVATIONS = 41968 SUM = 3028356 MEAN = 37.430 VAR = 3367.270 SD = 58.028

L TRIPS OVER 445 * 19
 L TRIPS OVER 245 * 0
 ME TABLE NUMBER * 205
 TREE NUMBER * 101

OTHER SOC. OR REC. TRIPS

14ART8 TRIP LENGTH FREQUENCY DISTRIBUTION-FOT

TRIP LENGTH	F.C.	CUM.	ACTUAL
10	20.460	20.460	1050
20	35.123	55.583	1803
30	15.978	71.561	820
40	11.242	82.803	577
50	5.050	87.853	259
60	2.807	90.659	144
70	1.313	91.972	87
80	1.190	93.162	61
90	0.846	94.005	43
100	0.510	94.516	26
110	0.795	95.310	40
120	0.871	96.181	44
130	0.547	96.728	28
140	0.251	96.979	12
150	0.259	97.235	13
160	0.545	97.784	28
170	0.146	97.932	7
180	0.179	98.111	9
190	0.208	98.319	10
200	0.185	98.504	5
210	0.185	98.689	5
220	0.082	98.771	4
230	0.156	98.927	8
240	0.107	99.034	5
250	0.175	99.209	9
260	0.109	99.318	5
270	0.105	99.423	5
280	0.047	99.470	2
290	0.082	99.552	4
300	0.045	99.597	2
310	0.027	99.624	1
320	0.029	99.653	1
330	0.058	99.711	3
340	0.019	99.730	1
350	0.025	99.755	1
360	0.014	99.769	1
370	0.031	99.800	1
380	0.019	99.819	1
390	0.010	99.829	1
400	0.014	99.843	1
410	0.016	99.859	1
420	0.019	99.878	1
430	0.021	99.899	1
440	0.039	99.938	2
450	0.012	99.950	1
460	0.008	99.958	1
470	0.021	99.979	1
480	0.019	99.998	1
490	0.012	100.010	1
500	0.018	100.028	1
510	0.018	100.046	1
520	0.008	100.054	1
530	0.008	100.062	1
540	0.008	100.070	1
550	0.008	100.078	1
560	0.000	100.078	1
570	0.004	100.082	1
580	0.008	100.090	1
590	0.000	100.090	1
600	0.002	100.092	1
610	0.008	100.100	1
620	0.010	100.110	1
630	0.000	100.110	1
640	0.002	100.112	1
650	0.014	100.126	1
660	0.000	100.126	1
670	0.012	100.138	1
680	0.000	100.138	1
690	0.002	100.140	1
700	0.010	100.150	1
710	0.000	100.150	1
720	0.004	100.154	1
730	0.008	100.162	1
740	0.002	100.164	1
750	0.000	100.164	1

MINIMUM VALUES ARE ALL ZERO
 EP OF OBSERVATIONS= 51345 SUM= 1622116 MEAN= 31.592 VAR= 2262.102 SD= 47.562

L TRIPS OVER MAXP * 3
 L TRIPS OVER 255 * 0
 ME TABLE NUMBER * 206
 TRIP NUMBER * 101

ALL OTHER TRIPS

1MAR78 TRIP LENGTH FREQUENCY DISTRIBUTION-TOT

TRIP LENGTH	FREQ	P.C.	CUM.	ACTUAL
0	10	16.026	16.026	66621
2	20	33.044	51.070	158793
4	30	48.773	66.843	75798
6	40	64.458	79.301	59866
8	50	80.181	84.963	27302
10	60	95.861	88.453	16674
12	70	111.541	90.005	7750
14	80	127.221	91.628	7512
16	90	142.901	92.715	5315
18	100	158.581	93.330	2891
20	110	174.261	94.441	5308
22	120	189.941	95.265	3000
24	130	205.621	95.509	2424
26	140	221.301	95.896	1567
28	150	236.981	96.140	1173
30	160	252.661	96.620	2310
32	170	268.341	96.823	972
34	180	284.021	97.037	1029
36	190	299.701	97.322	1173
38	200	315.381	97.529	966
40	210	331.061	97.699	815
42	220	346.741	97.813	549
44	230	362.421	98.033	1057
46	240	378.101	98.179	702
48	250	393.781	98.361	676
50	260	409.461	98.553	921
52	270	425.141	98.697	692
54	280	440.821	98.778	591
56	290	456.501	98.975	464
58	300	472.181	99.177	490
60	310	487.861	99.380	399
62	320	503.541	99.530	337
64	330	519.221	99.627	417
66	340	534.901	99.746	136
68	350	550.581	99.824	233
70	360	566.261	99.920	125
72	370	581.941	99.974	260
74	380	597.621	99.999	118
76	390	613.301	99.927	137
78	400	628.981	99.954	129
80	410	644.661	99.971	80
82	420	660.341	99.910	189
84	430	676.021	99.936	123
86	440	691.701	99.918	393
88	450	707.381	99.863	123
90	460	723.061	99.898	105
92	470	738.741	99.898	157
94	480	754.421	99.721	114
96	490	770.101	99.740	91
98	500	785.781	99.759	69
100	510	801.461	99.760	102
102	520	817.141	99.807	129
104	530	832.821	99.813	26
106	540	848.501	99.813	122
108	550	864.181	99.853	72
110	560	879.861	99.863	48
112	570	895.541	99.873	46
114	580	911.221	99.860	31
116	590	926.901	99.866	30
118	600	942.581	99.893	21
120	610	958.261	99.908	74
122	620	973.941	99.916	15
124	630	989.621	99.922	11
126	640	1005.301	99.922	12
128	650	1020.981	99.932	16
130	660	1036.661	99.934	7
132	670	1052.341	99.927	63
134	680	1068.021	99.949	6
136	690	1083.701	99.957	40
138	700	1099.381	99.962	22
140	710	1115.061	99.964	3
142	720	1130.741	99.964	10
144	730	1146.421	99.972	16
146	740	1162.101	99.972	21
148	750	1177.781	99.972	134

MINING VALUES ARE ALL ZERO
 EP OF OBSERVATIONS# 480547 SUM# 17521382 MEAN# 16.261 VAR# 3294.507 SD# 57.396

L TRIPS OVER MAXP = 134
 L TRIPS OVER 255 = 0
 ME TABLE NUMBER = 207
 TREE NUMBER = 101

TOTAL TRIPS

MINOR ORIGIN AND DESTINATION STUDIES

MEAN TRIP LENGTHS BY PURPOSE

REGION 1

<u>TRIP PURPOSE</u>	<u>MINUTES</u>	<u>PERCENT OF TOTAL TRIPS</u>
1	26	41
2	21	11
3	18	19
4	119	1
5	22	17
6	20	12
ALL	23	

REGION 2

<u>TRIP PURPOSE</u>	<u>MINUTES</u>	<u>PERCENT OF TOTAL TRIPS</u>
1	27	48
2	25	7
3	20	20
4	197	0
5	22	12
6	25	13
ALL	25	

REGION 3

<u>TRIP PURPOSE</u>	<u>MINUTES</u>	<u>PERCENT OF TOTAL TRIPS</u>
1	25	47
2	20	7
3	18	18
4	149	1
5	24	15
6	25	12
ALL	24	

<u>TRIP PURPOSE</u>
1 WORK
2 PERS. BUSINESS
3 SHOPPING
4 VACATION
5 OTHER SOC. OR REC.
6 ALL OTHER

REGION 4

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

REGION 5

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

REGION 7

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

REGION 8

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

REGION 9

<u>TRIP PURPOSE</u>	<u>MINUTES</u>	<u>PERCENT OF TOTAL TRIPS</u>
1	34	33
2	35	7
3	47	28
4	136	7
5	52	16
6	47	8
ALL	49	

REGION 10

<u>TRIP PURPOSE</u>	<u>MINUTES</u>	<u>PERCENT OF TOTAL TRIPS</u>
1	31	36
2	29	8
3	23	20
4	92	7
5	31	20
6	26	10
ALL	33	

REGION 11

<u>TRIP PURPOSE</u>	<u>MINUTES</u>	<u>PERCENT OF TOTAL TRIPS</u>
1	51	19
2	50	4
3	48	12
4	125	36
5	76	19
6	52	10
ALL	82	

REGION 12

<u>TRIP PURPOSE</u>	<u>MINUTES</u>	<u>PERCENT OF TOTAL TRIPS</u>
1	58	33
2	51	8
3	45	23
4	201	7
5	64	21
6	53	8
ALL	65	

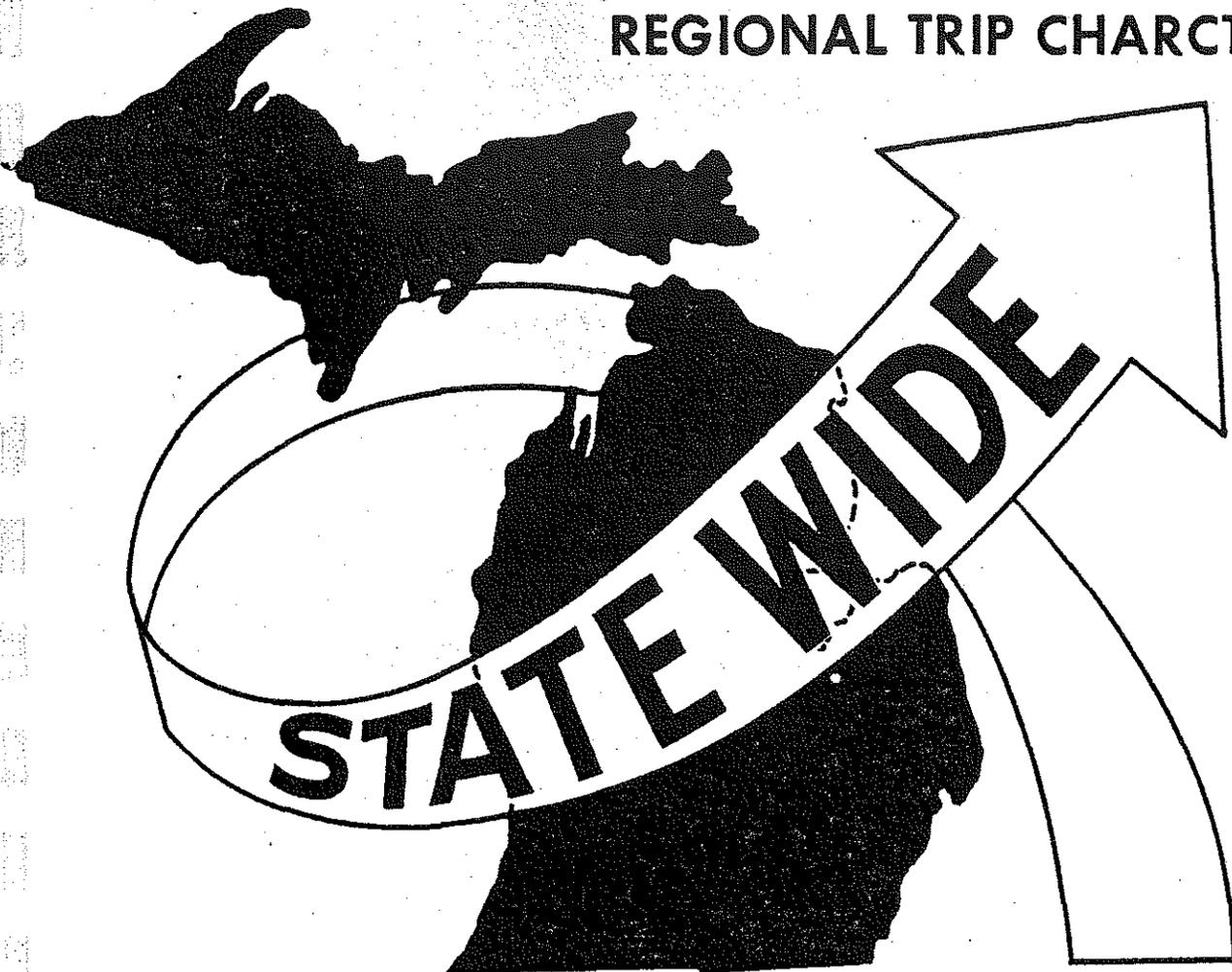
REGION 13

<u>TRIP PURPOSE</u>	<u>MINUTES</u>	<u>PERCENT OF TOTAL TRIPS</u>
1	42	30
2	35	7
3	24	24
4	179	7
5	40	21
6	37	12
ALL	46	

STATEWIDE AVERAGE

<u>TRIP PURPOSE</u>	<u>MINUTES</u>	<u>PERCENT OF TOTAL TRIPS</u>
1	32	39
2	30	8
3	28	21
4	135	4
5	37	17
6	32	11
ALL	36	

REGIONAL TRIP CHARACTERISTICS



REGION 5

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
77.6%	0.4%	15.3%	0.2%	4.2%	2.4%
22200	100	4390	54	1192	675

TRIP PURPOSE

WORK	PERS BIZ	SHOP	VACATION	SOC-REC	OTHER
51.9%	9.3%	14.5%	0.2%	12.9%	11.1%
14847	2662	4160	71	3693	3179

NUMBER IN VEHICLE

1	2	3	4	5	6+
65.9%	22.4%	6.9%	3.1%	1.0%	0.7%
18855	6399	1982	882	290	204

VEHICLE GARAGED AT

ORIGIN	DESTIN	OTHER
50.0%	39.4%	10.5%
14319	11277	3015

TOTAL TRIPS = 28612

MINOR

EXTERNAL ORIGIN-DESTINATION INTERVIEW

TERMINAL-TRIP SUMMARY TABLE FOR REGION 5

TRIP PURPOSE

# IN VEH.	WORK	PERS BIZ	SHOP	VACATION	SOC-REC	OTHER
1	83.4% 12376	51.5% 1372	43.3% 1799	19.9% 14	46.9% 1733	49.1% 1561
2	12.6% 1868	31.7% 843	35.6% 1479	52.1% 37	32.8% 1212	30.2% 960
3	2.8% 411	9.8% 261	12.5% 518	19.3% 14	10.4% 384	12.4% 394
4	1.0% 144	4.6% 122	5.5% 228	8.7% 6	5.8% 213	5.3% 168
5	0.2% 24	1.4% 37	2.4% 99	0.0% 0	2.3% 85	1.4% 44
6+	0.2% 24	1.0% 27	0.8% 35	0.0% 0	1.8% 66	1.6% 51
TOTAL	100% 14847	100% 2662	100% 4160	100% 71	100% 3693	100% 3179

TOTAL TERMINAL-TRIPS FOR ALL STUDIES IN REGION = 28612

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.

MINOR

EXTERNAL ORIGIN=DESTINATION INTERVIEW
 TERMINAL=TRIP SUMMARY TABLE FOR REGION 5

TRIP PURPOSE

VEH TYPE	WORK	PERS BIZ	SHOP	VACATION	SOC=REC	OTHER
CAR W/O TRLR	68.3% 10144	87.4% 2326	84.7% 3523	80.8% 57	90.3% 3336	88.5% 2814
CAR W/ TRLR	0.1% 14	0.5% 13	0.7% 30	2.2% 2	0.5% 17	0.8% 24
PICK-UP W/O/TRLR	19.4% 2883	11.3% 301	13.5% 563	14.1% 10	8.8% 324	9.7% 310
PICK-UP W/ TRLR	0.3% 39	0.1% 2	0.1% 5	0.0% 0	0.0% 2	0.2% 7
SINGLE-UNIT TRUCKS	7.4% 1101	0.7% 20	0.8% 34	2.9% 2	0.4% 14	0.6% 21
COMBINATION TRUCKS	4.5% 667	0.0% 0	0.1% 5	0.0% 0	0.0% 0	0.1% 4
TOTAL	100% 14847	100% 2662	100% 4160	100% 71	100% 3693	100% 3179

TOTAL TERMINAL=TRIPS FOR ALL STUDIES IN REGION = 28612

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.

23FEB78

TRIP LENGTH FREQUENCY DISTRIBUTION-REGS

TRIP LENGTH	FREQUENCY	P.C.	CUM.	ACTUAL
10	0	0.464	0.464	3
20	0	21.998	22.462	4
30	0	30.385	52.847	5
40	0	22.052	74.899	6
50	0	14.876	89.775	7
60	0	2.874	92.649	8
70	0	1.124	93.774	9
80	0	1.117	94.891	10
90	0	0.963	95.854	11
100	0	0.323	96.177	12
110	0	1.690	97.866	13
120	0	0.532	98.398	14
130	0	0.128	98.526	15
140	0	0.232	98.758	16
150	0	0.276	99.034	17
160	0	0.101	99.135	18
170	0	0.074	99.209	19
180	0	0.088	99.297	20
190	0	0.144	99.441	21
200	0	0.027	99.468	22
210	0	0.040	99.508	23
220	0	0.155	99.663	24
230	0	0.027	99.690	25
240	0	0.020	99.710	26
250	0	0.013	99.723	27
260	0	0.020	99.743	28
270	0	0.047	99.790	29
280	0	0.013	99.803	30
290	0	0.000	99.803	31
300	0	0.000	99.803	32
310	0	0.000	99.803	33
320	0	0.047	99.850	34
330	0	0.034	99.884	35
340	0	0.000	99.884	36
350	0	0.000	99.884	37
360	0	0.000	99.884	38
370	0	0.034	99.918	39
380	0	0.000	99.918	40
390	0	0.000	99.918	41
400	0	0.027	99.945	42
410	0	0.000	99.945	43
420	0	0.000	99.945	44
430	0	0.000	99.945	45
440	0	0.013	99.958	46
450	0	0.061	99.999	47
460	0	0.000	99.999	48
470	0	0.000	99.999	49
480	0	0.000	99.999	50
490	0	0.000	99.999	51
500	0	0.000	99.999	52
510	0	0.007	100.000	53

REMAINING VALUES ARE ALL ZERO
 NUMBER OF OBSERVATIONS= 14856 SUM= 523509 MEAN= 35.239 VAR= 900.929 SD= 30.315
 TOTAL TRIPS OVER HAXP = 0
 TOTAL TRIPS OVER 255 = 0
 LUME TABLE NUMBER = 201
 IM TREE NUMBER = 101

23FEB78

TRIP LENGTH FREQUENCY DISTRIBUTION-REGS

PAGE 3

	0	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60	P.C.	CUM.	ACTUAL					
10..																					0.488	0.488						
20..																					27.269	27.757						
30..																					40.623	68.380	1					
40..																					16.054	84.434						
50..																					8.927	93.361						
60..																					1.500	94.861						
70..																					0.975	95.836						
80..																					0.975	96.812						
98..																					0.638	97.449						
100.																					0.225	97.674						
110..																					0.750	98.425						
120.																					0.113	98.537						
130.																					0.150	98.687						
140..																					0.300	98.987						
150..																					0.375	99.362						
160..																					0.375	99.737						
170.																					0.075	99.812						
180.																					0.113	99.925						
190.																					0.000	99.925						
200.																					0.000	99.925						
210.																					0.000	99.925						
220.																					0.075	100.000						
MAINING VALUES ARE ALL ZERO																													
NUMBER OF OBSERVATIONS=	2666																					SUM=	79154.	MEAN=	29.690	VAR=	460.739	SD=	21.465
TOTAL TRIPS OVER MAXP =	0																												
TOTAL TRIPS OVER 255 =	0																												
VOLUME TABLE NUMBER =	202																												
WIN TREE NUMBER =	101																												

23FEB78

TRIP LENGTH FREQUENCY DISTRIBUTION-REGS

PAGE 4

	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.....																					1.444	1.444	
20.....																					34.504	35.948	14
30.....																					36.237	72.185	15
40.....																					15.520	87.705	6
50.....																					9.962	97.666	4
60...																					0.818	98.484	
70..																					0.457	98.941	
80..																					0.217	99.158	
90..																					0.217	99.374	
100.																					0.000	99.374	
110..																					0.357	99.731	
120.																					0.048	99.779	
130.																					0.000	99.779	
140.																					0.144	99.924	
150.																					0.000	99.924	
160.																					0.000	99.924	
170.																					0.000	99.924	
180.																					0.000	99.924	
190.																					0.000	99.924	
200.																					0.000	99.924	
210.																					0.000	99.924	
220.																					0.048	99.972	
230.																					0.000	99.972	
240.																					0.000	99.972	
250.																					0.000	99.972	
260.																					0.000	99.972	
270.																					0.048	100.000	

MAINING VALUES ARE ALL ZERO

NUMBER OF OBSERVATIONS= 4156 SUM= 109231. MEAN= 26.263 VAR= 212.984 SD= 14.594

TOTAL TRIPS OVER MAXP = 0
TOTAL TRIPS OVER 255 = 0
PLUME TABLE NUMBER = 203
LINK TREE NUMBER = 101

23FE878

TRIP LENGTH FREQUENCY DISTRIBUTION-PEGS

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	P-C.	CUM.	ACTUAL	
10.																					0.000	0.000		
20.																						6.944	6.944	
30.																						2.778	9.722	
40.																						2.778	12.500	
50.																						5.556	18.056	
60.																						2.778	20.833	
70.																						2.778	23.611	
80.																						0.000	23.611	
90.																						0.000	23.611	
100.																						1.389	25.000	
110.																						8.333	33.333	
120.																						0.000	33.333	
130.																						6.944	40.278	
140.																						13.889	54.167	
150.																						0.000	54.167	
160.																						2.778	56.944	
170.																						0.000	56.944	
180.																						0.000	56.944	
190.																						2.778	59.722	
200.																						0.000	59.722	
210.																						4.167	63.889	
220.																						2.778	66.667	
230.																						2.778	69.444	
240.																						2.778	72.222	
250.																						0.000	72.222	
260.																						2.778	75.000	
270.																						0.000	75.000	
280.																						0.000	75.000	
290.																						0.000	75.000	
300.																						0.000	75.000	
310.																						2.778	77.778	
320.																						4.167	81.944	
330.																						0.000	81.944	
340.																						1.389	83.333	
350.																						0.000	83.333	
360.																						2.778	86.111	
370.																						0.000	86.111	
380.																						0.000	86.111	
390.																						0.000	86.111	
400.																						5.556	91.667	
410.																						2.778	94.444	
420.																						0.000	94.444	
430.																						0.000	94.444	
440.																						0.000	94.444	
450.																						0.000	94.444	
460.																						0.000	94.444	
470.																						0.000	94.444	
480.																						0.000	94.444	
490.																						2.778	97.222	
500.																						0.000	97.222	
510.																						0.000	97.222	
520.																						0.000	97.222	
530.																						0.000	97.222	
540.																						0.000	97.222	
550.																						0.000	97.222	
560.																						0.000	97.222	
570.																						0.000	97.222	
580.																						0.000	97.222	
590.																						0.000	97.222	
600.																						0.000	97.222	
610.																						0.000	97.222	
620.																						0.000	97.222	
630.																						0.000	97.222	
640.																						0.000	97.222	
650.																						0.000	97.222	
660.																						0.000	97.222	
670.																						0.000	97.222	
680.																						0.000	97.222	
690.																						0.000	97.222	
700.																						1.389	98.611	
710.																						1.389	100.000	

REMAINING VALUES ARE ALL ZERO
 NUMBER OF OBSERVATIONS= 72 SUM= 13867 MEAN= 192.597 VAR= 22552.333 SD= 150.174
 TOTAL TRIPS OVER MAXP = 3
 TOTAL TRIPS OVER 255 = 0
 LUMP TABLE NUMBER = 204
 IN TREE NUMBER = 101

23FEB78

TRIP LENGTH FREQUENCY DISTRIBUTION-REGS

PAGE 6

	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..																						0.488	0.488	1
20..																					31.679	32.167	116
30..																				37.293	69.460	137
40..																			10.062	79.523	37
50..																		10.686	90.209	39
60..																	2.034	92.243	7
70..																0.976	93.219	3
80..															1.166	94.386	4
90..														0.949	95.335	3
100..													0.515	95.850	1
110..												1.329	97.179	4
120..											0.679	97.857	2
130..										0.244	98.101	
140..									0.108	98.210	
150..								0.298	98.508	1
160..							0.244	98.752	
170..						0.298	99.051	1
180..					0.163	99.215	
190..				0.325	99.539	1
200..			0.054	99.593	
210..		0.054	99.647	
220..		0.108	99.756	
230..		0.000	99.756	
240..		0.000	99.756	
250..		0.027	99.783	
260..		0.000	99.783	
270..		0.000	99.783	
280..		0.000	99.783	
290..		0.000	99.783	
300..		0.000	99.783	
310..		0.000	99.783	
320..		0.054	99.837	
330..		0.027	99.864	
340..		0.027	99.892	
350..		0.000	99.892	
360..		0.000	99.892	
370..		0.000	99.892	
380..		0.000	99.892	
390..		0.000	99.892	
400..		0.000	99.892	
410..		0.054	99.946	
420..		0.000	99.946	
430..		0.000	99.946	
440..		0.000	99.946	
450..		0.000	99.946	
460..		0.000	99.946	
470..		0.054	100.000	

REMAINING VALUES ARE ALL ZERO
 NUMBER OF OBSERVATIONS= 5667 SUM= 119229. MEAN= 32.338 VAR= 984.349 SD= 31.374
 TOTAL TRIPS OVER MAXP = 0
 TOTAL TRIPS OVER 255 = 0
 PLUME TABLE NUMBER = 205
 LIM TREE NUMBER = 101

23FEB78

TRIP LENGTH FREQUENCY DISTRIBUTION-REGS

PAGE 7

	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	P.C.	CUM.	ACTUA	
10...																						0.723	0.723		
20...																							32.128	32.851	
30...																							36.761	69.612	
40...																							12.606	82.218	
50...																							12.575	94.793	
60...																							0.888	95.681	
70...																							0.440	96.121	
80...																							0.566	96.687	
90...																							0.472	97.159	
100...																							0.692	97.851	
110...																							0.786	98.637	
120...																							0.126	98.763	
130...																							0.189	98.952	
140...																							0.126	99.078	
150...																							0.126	99.204	
160...																							0.126	99.330	
170...																							0.063	99.393	
180...																							0.000	99.393	
190...																							0.157	99.550	
200...																							0.000	99.550	
210...																							0.063	99.613	
220...																							0.063	99.676	
230...																							0.000	99.676	
240...																							0.000	99.676	
250...																							0.063	99.739	
260...																							0.000	99.739	
270...																							0.000	99.739	
280...																							0.000	99.739	
290...																							0.000	99.739	
300...																							0.000	99.739	
310...																							0.000	99.739	
320...																							0.000	99.739	
330...																							0.094	99.833	
340...																							0.000	99.833	
350...																							0.000	99.833	
360...																							0.000	99.833	
370...																							0.094	99.927	
380...																							0.063	100.000	

REMAINING VALUES ARE ALL ZERO

NUMBER OF OBSERVATIONS= 3181 SUM= 94090. MEAN= 29.579 VAR= 700.522 SD= 26.467

TOTAL TRIPS OVER MAXP = 0
TOTAL TRIPS OVER 255 = 3
LUME TABLE NUMBER = 206
IN TREE NUMBER = 101

23FEB78

TRIP LENGTH FREQUENCY DISTRIBUTION-REGS

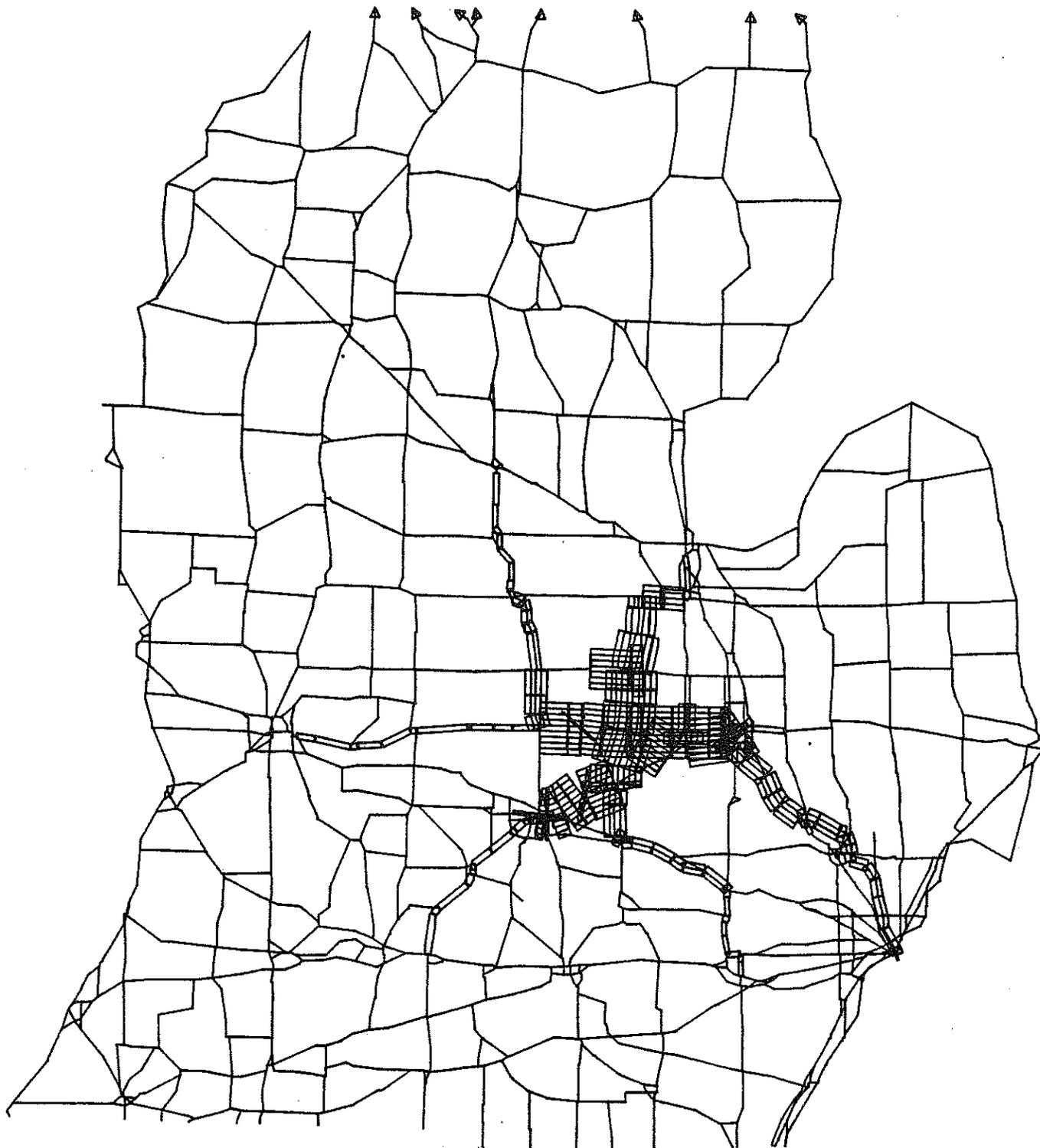
PAGE 5

TRIP LENGTH	P.C.	CUM.	ACTUAL
0			
2			
4			
6			
8			
10			
12			
14			
16			
18			
20			
22			
24			
26			
28			
30			
32			
34			
36			
38			
40			
10...	0.839	0.839	
20.....	26.841	27.680	
30.....	33.729	61.000	
40.....	17.991	78.991	
50.....	12.789	91.691	
60.....	2.118	93.808	
70....	0.922	94.731	
80....	0.916	95.646	
90....	0.765	96.411	
100..	0.335	96.747	
110....	1.275	98.022	
120..	0.395	98.417	
130.	0.150	98.567	
140..	0.217	98.784	
150..	0.231	99.015	
160.	0.140	99.154	
170.	0.091	99.245	
180.	0.077	99.322	
190.	0.143	99.465	
200.	0.021	99.486	
210.	0.045	99.532	
220.	0.122	99.654	
230.	0.021	99.675	
240.	0.017	99.693	
250.	0.017	99.710	
260.	0.017	99.727	
270.	0.031	99.759	
280.	0.007	99.766	
290.	0.000	99.766	
300.	0.000	99.766	
310.	0.007	99.773	
320.	0.052	99.825	
330.	0.021	99.846	
340.	0.007	99.853	
350.	0.000	99.853	
360.	0.007	99.860	
370.	0.021	99.881	
380.	0.007	99.889	
390.	0.000	99.889	
400.	0.028	99.917	
410.	0.014	99.931	
420.	0.000	99.931	
430.	0.007	99.938	
440.	0.031	99.970	
450.	0.000	99.970	
460.	0.000	99.970	
470.	0.007	99.977	
480.	0.000	99.977	
490.	0.007	99.984	
500.	0.000	99.984	
510.	0.000	99.984	
520.	0.000	99.984	
530.	0.000	99.984	
540.	0.000	99.984	
550.	0.000	99.984	
560.	0.000	99.984	
570.	0.000	99.984	
580.	0.000	99.984	
590.	0.000	99.984	
600.	0.000	99.984	
610.	0.000	99.984	
620.	0.000	99.984	
630.	0.000	99.984	
640.	0.000	99.984	
650.	0.000	99.984	
660.	0.000	99.984	
670.	0.000	99.984	
680.	0.000	99.984	
690.	0.000	99.984	
700.	0.000	99.984	

REMAINING VALUES ARE ALL ZERO
 NUMBER OF OBSERVATIONS= 29618 SUM= 939085 MEAN= 32.014 VAR= 678.542 SD= 29.641
 TOTAL TRIPS OVER MAXP = 0
 TOTAL TRIPS OVER 255 = 0
 PLUME TABLE NUMBER = 207
 LIM TREE NUMBER = 101

**CITY TRIP CHARACTERISTICS
BY ALPHA NAME**





ØWØSSØ BANDWIDTH

OWOSSO

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
77.6% 22200	0.4% 100	15.3% 4390	0.2% 54	4.2% 1192	2.4% 675

TRIP PURPOSE

WORK	PERS BIZ	SHOP	VACATION	SOC=REC	OTHER
51.9% 14847	9.3% 2662	14.5% 4160	0.2% 71	12.9% 3693	11.1% 3179

NUMBER IN VEHICLE

1	2	3	4	5	6+
65.9% 18855	22.4% 6399	6.9% 1982	3.1% 882	1.0% 290	0.7% 204

VEHICLE GARAGED AT

ORIGIN	DESTIN	OTHER
50.0% 14319	39.4% 11277	10.5% 3015

TOTAL TRIPS = 28612

MINOR

EXTERNAL ORIGIN-DESTINATION INTERVIEW
 TERMINAL-TRIP SUMMARY TABLE FOR OWOSSO

TRIP PURPOSE

# IN VEH.	WORK	PERS BIZ	SHOP	VACATION	SOC-REC	OTHER
1	83.4% 12376	51.5% 1372	43.3% 1799	19.9% 14	46.9% 1733	49.1% 1561
2	12.6% 1868	31.7% 843	35.6% 1479	52.1% 37	32.8% 1212	30.2% 960
3	2.8% 411	9.8% 261	12.5% 518	19.3% 14	10.4% 384	12.4% 394
4	1.0% 144	4.6% 122	5.5% 228	8.7% 6	5.8% 213	5.3% 168
5	0.2% 24	1.4% 37	2.4% 99	0.0% 0	2.3% 85	1.4% 44
6+	0.2% 24	1.0% 27	0.8% 35	0.0% 0	1.8% 66	1.6% 51
TOTAL	100% 14847	100% 2662	100% 4160	100% 71	100% 3693	100% 3179

TOTAL TERMINAL-TRIPS FOR OWOSSO = 28612

MINOR

EXTERNAL ORIGIN-DESTINATION INTERVIEW
 TERMINAL-TRIP SUMMARY TABLE FOR OWOSSO

TRIP PURPOSE

VEH TYPE	WORK	PERS BIZ	SHOP	VACATION	SOC-REC	OTHER
CAR W/O TRLR	68.3% 10144	87.4% 2326	84.7% 3523	80.8% 57	90.3% 3336	88.5% 2814
CAR W/ TRLR	0.1% 14	0.5% 13	0.7% 30	2.2% 2	0.5% 17	0.8% 24
PICK-UP W/O/TRLR	19.4% 2883	11.3% 301	13.5% 563	14.1% 10	8.8% 324	9.7% 310
PICK-UP W/ TRLR	0.3% 39	0.1% 2	0.1% 5	0.0% 0	0.0% 2	0.2% 7
SINGLE-UNIT TRUCKS	7.4% 1101	0.7% 20	0.8% 34	2.9% 2	0.4% 14	0.6% 21
COMBINATION TRUCKS	4.5% 667	0.0% 0	0.1% 5	0.0% 0	0.0% 0	0.1% 4
TOTAL	100% 14847	100% 2662	100% 4160	100% 71	100% 3693	100% 3179

TOTAL TERMINAL-TRIPS FOR OWOSSO = 28612

7FEB78

TRIP LENGTH FREQUENCY DISTRIBUTION=0W0SS0

PAGE 2

0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	P.C.	CUM.	
10	..																					0.464	0.464
20																					21.998	22.462
30																				30.385	52.847
40																			22.052	74.899
50																		14.878	89.775
60																	2.874	92.649
70																1.128	93.778
80															1.117	94.891
90														0.983	95.874
100													0.323	96.177
110												1.490	97.666
120											0.532	98.198
130										0.128	98.326
140									0.202	98.528
150								0.276	98.804
160							0.101	98.905
170						0.074	99.179
180					0.088	99.266
190				0.148	99.414
200			0.027	99.441
210		0.040	99.482
220		0.155	99.637
230		0.027	99.663
240		0.020	99.684
250		0.013	99.697
260		0.020	99.717
270		0.047	99.764
280		0.013	99.778
290		0.000	99.778
300		0.000	99.778
310		0.000	99.778
320		0.047	99.825
330		0.034	99.859
340		0.000	99.859
350		0.000	99.859
360		0.000	99.859
370		0.034	99.892
380		0.000	99.892
390		0.027	99.919
400		0.000	99.919
410		0.000	99.919
420		0.000	99.919
430		0.013	99.933
440		0.001	99.993
450		0.000	99.993
460		0.000	99.993
470		0.000	99.993
480		0.000	99.993
490		0.000	99.993
500		0.000	99.993
510		0.007100	100.000

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS= 14456

SUM= 523509, MEAN= 35,239, VAR= 900,929, SD= 30

TOTAL TRIPS OVER MAXP = 0
TOTAL TRIPS OVER 255 = 0
VOLUME TABLE NUMBER = 201
SKIM TREE NUMBER = 11

YFEB78

TRIP LENGTH FREQUENCY DISTRIBUTION-040880

PAGE 3

	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..																							0.488	0.488																								
20..																								27.269	27.757																							
30..																								48.623	68.380																							
40..																								16.054	84.434																							
50..																								8.927	93.361																							
60..																								1.500	94.861																							
70..																								0.975	95.836																							
80..																								0.975	96.812																							
90..																								0.838	97.649																							
100..																								0.225	97.874																							
110..																								0.750	98.625																							
120..																								0.113	98.737																							
130..																								0.150	98.887																							
140..																								0.300	99.187																							
150..																								0.375	99.562																							
160..																								0.375	99.937																							
170..																								0.075	99.612																							
180..																								0.113	99.725																							
190..																								0.000	99.725																							
200..																								0.000	99.725																							
210..																								0.000	99.725																							
220..																								0.075	100.000																							
REMAINING VALUES ARE ALL ZERO																																																
NUMBER OF OBSERVATIONS#																							2666																									
SUM#																								79154.																								
MEAN#																									29.690																							
VAR#																										460.739																						
SUM#																																															30# 21	
TOTAL TRIPS OVER MAXP #																																																0
TOTAL TRIPS OVER 255 #																																																0
VOLUME TABLE NUMBER #																																																202
SKIM TREE NUMBER #																																																101

7FEB78

TRIP LENGTH FREQUENCY DISTRIBUTION-DWOSSO

PAGE 4

0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	P. C.	CUM.	AT	
10																						1.444	1.444	
20																						34.504	35.948	
30																						36.237	72.185	
40																						15.520	87.705	
50																						9.962	97.666	
60																						0.818	98.484	
70																						0.457	98.941	
80																						0.217	99.158	
90																						0.217	99.374	
100																						0.000	99.374	
110																						0.337	99.711	
120																						0.048	99.759	
130																						0.000	99.759	
140																						0.144	99.904	
150																						0.000	99.904	
160																						0.000	99.904	
170																						0.000	99.904	
180																						0.000	99.904	
190																						0.000	99.904	
200																						0.000	99.904	
210																						0.000	99.904	
220																						0.048	99.952	
230																						0.000	99.952	
240																						0.000	99.952	
250																						0.000	99.952	
260																						0.000	99.952	
270																						0.048	100.000	

REMAINING VALUES ARE ALL ZERO
 NUMBER OF OBSERVATIONS# 4156 SUM# 109231, MEAN# 26,283 VAR# 212,984 SD# 14.59

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

7FEB78

TRIP LENGTH FREQUENCY DISTRIBUTION-OWOSSO

	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.																							6.944	6.944	
30.																							2.778	9.722	
40.																							2.778	12.500	
50.																							5.556	18.056	
60.																							2.778	20.833	
70.																							2.778	23.611	
80.																							0.000	23.611	
90.																							0.000	23.611	
100.																							1.389	25.000	
110.																							8.333	33.333	
120.																							0.000	33.333	
130.																							6.944	40.278	
140.																							13.889	54.167	
150.																							0.000	54.167	
160.																							2.778	56.944	
170.																							0.000	56.944	
180.																							0.000	56.944	
190.																							2.778	59.722	
200.																							0.000	59.722	
210.																							4.167	63.889	
220.																							2.778	66.667	
230.																							2.778	69.444	
240.																							2.778	72.222	
250.																							0.000	72.222	
260.																							2.778	75.000	
270.																							0.000	75.000	
280.																							0.000	75.000	
290.																							0.000	75.000	
300.																							0.000	75.000	
310.																							2.778	77.778	
320.																							4.167	81.944	
330.																							0.000	81.944	
340.																							1.389	83.333	
350.																							0.000	83.333	
360.																							2.778	86.111	
370.																							0.000	86.111	
380.																							0.000	86.111	
390.																							0.000	86.111	
400.																							5.556	91.667	
410.																							2.778	94.444	
420.																							0.000	94.444	
430.																							0.000	94.444	
440.																							0.000	94.444	
450.																							0.000	94.444	
460.																							0.000	94.444	
470.																							0.000	94.444	
480.																							0.000	94.444	
490.																							2.778	97.222	
500.																							0.000	97.222	
510.																							0.000	97.222	
520.																							0.000	97.222	
530.																							0.000	97.222	
540.																							0.000	97.222	
550.																							0.000	97.222	
560.																							0.000	97.222	
570.																							0.000	97.222	
580.																							0.000	97.222	
590.																							0.000	97.222	
600.																							0.000	97.222	
610.																							0.000	97.222	
620.																							0.000	97.222	
630.																							0.000	97.222	
640.																							0.000	97.222	
650.																							0.000	97.222	
660.																							0.000	97.222	
670.																							0.000	97.222	
680.																							0.000	97.222	
690.																							1.389	98.611	
700.																							1.389	100.000	

REMAINING VALUES ARE ALL ZERO
 NUMBER OF OBSERVATIONS# 72 SUM# 13867 MEAN# 192.597 VAR# 22552.333 SD# 150

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

7FEB78 TRIP LENGTH FREQUENCY DISTRIBUTION-0X0830

TRIP LENGTH	FREQUENCY	P.C.	CUM. A.
0	0.488	0.488
10	31.679	32.167
20	37.293	69.460
30	10.062	79.523
40	10.066	90.209
50	2.034	92.243
60	0.976	93.219
70	1.166	94.386
80	0.949	95.335
90	0.515	95.850
100	1.329	97.179
110	0.678	97.857
120	0.244	98.101
130	0.108	98.210
140	0.298	98.508
150	0.244	98.752
160	0.298	99.051
170	0.163	99.213
180	0.325	99.539
190	0.054	99.593
200	0.054	99.647
210	0.108	99.756
220	0.000	99.756
230	0.000	99.756
240	0.027	99.783
250	0.000	99.783
260	0.000	99.783
270	0.000	99.783
280	0.000	99.783
290	0.000	99.783
300	0.000	99.783
310	0.000	99.783
320	0.054	99.837
330	0.027	99.864
340	0.027	99.892
350	0.000	99.892
360	0.000	99.892
370	0.000	99.892
380	0.000	99.892
390	0.000	99.892
400	0.000	99.892
410	0.054	99.946
420	0.000	99.946
430	0.000	99.946
440	0.000	99.946
450	0.000	99.946
460	0.000	99.946
470	0.054	100.000

REMAINING VALUES ARE ALL ZERO
 NUMBER OF OBSERVATIONS= 3667 SUM= 119229 MEAN= 32.336 VAR= 964.349 SD= 3

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

7FEB78

TRIP LENGTH FREQUENCY DISTRIBUTION-0W0SS0

PAGE 7

TRIP LENGTH	FREQUENCY	P.C.	CUM.	A
0			
2			
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40			
10	0.723	0.723	
20	32.128	32.851	
30	38.751	69.632	
40	12.606	82.238	
50	12.575	94.813	
60	0.880	95.693	
70	0.440	96.133	
80	0.566	96.699	
90	0.072	97.171	
100	0.692	97.862	
110	0.766	98.628	
120	0.126	98.754	
130	0.189	98.943	
140	0.126	99.069	
150	0.126	99.195	
160	0.126	99.321	
170	0.063	99.384	
180	0.000	99.384	
190	0.157	99.541	
200	0.000	99.541	
210	0.063	99.604	
220	0.063	99.667	
230	0.000	99.667	
240	0.000	99.667	
250	0.063	99.730	
260	0.000	99.730	
270	0.000	99.730	
280	0.000	99.730	
290	0.000	99.730	
300	0.000	99.730	
310	0.000	99.730	
320	0.094	99.824	
330	0.000	99.824	
340	0.000	99.824	
350	0.000	99.824	
360	0.000	99.824	
370	0.094	99.918	
380	0.063	100.000	

REMAINING VALUES ARE ALL ZERO
 NUMBER OF OBSERVATIONS= 3181 SUM= 94090 MEANS 29.579 VAR= 700.522 SD= 26.469

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

7FEB78

TRIP LENGTH FREQUENCY DISTRIBUTION=ONOSSO

PAGE 8

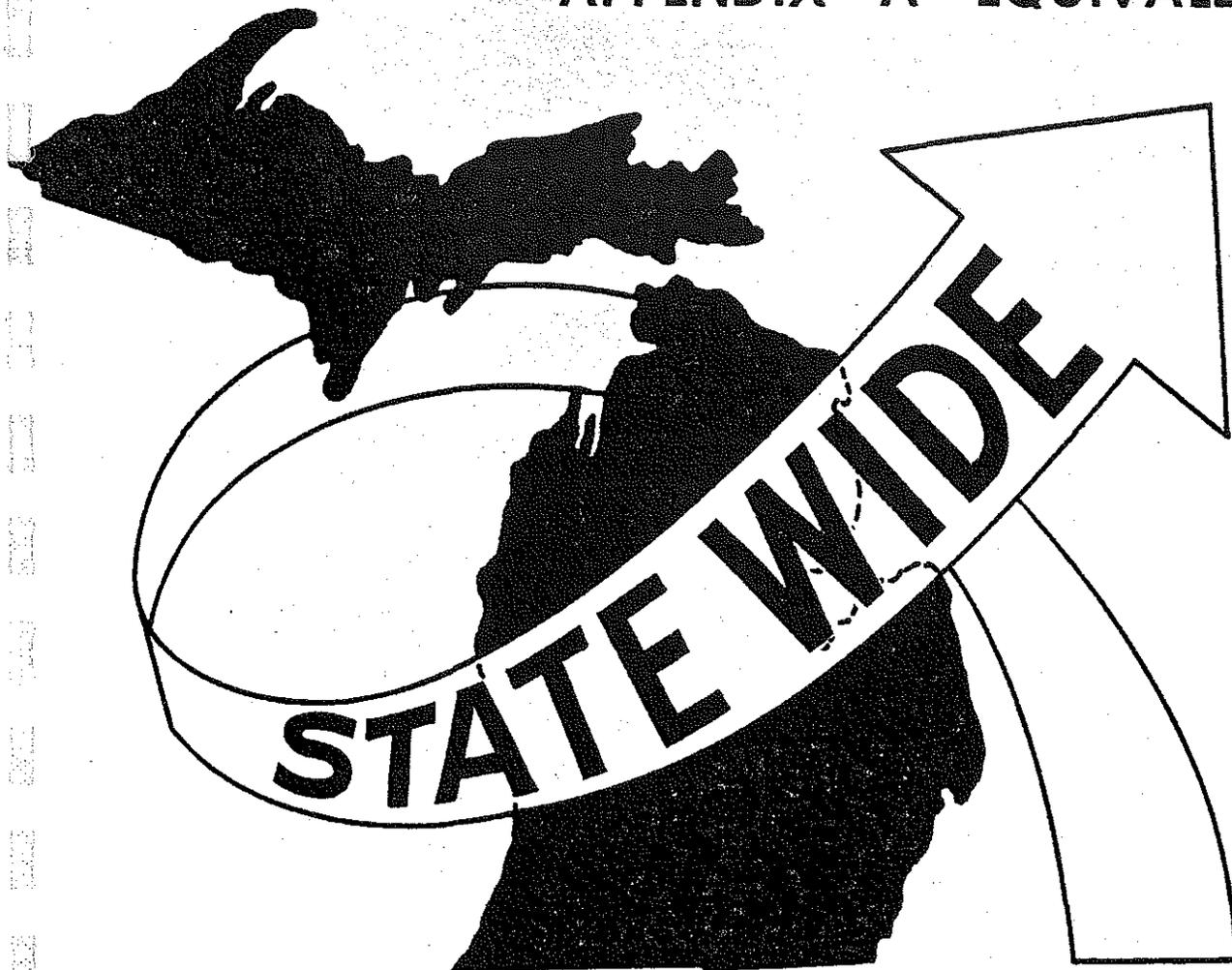
0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	P.C.	CUM.	AC
10																					0.839	0.839	
20																					26.841	27.680	
30																					33.720	61.400	
40																					17.901	79.301	
50																					12.789	91.891	
60																					2.118	94.008	
70																					0.922	94.931	
80																					0.916	95.846	
90																					0.765	96.611	
100																					0.335	96.947	
110																					1.275	98.222	
120																					0.395	98.617	
130																					0.150	98.767	
140																					0.217	98.984	
150																					0.231	99.215	
160																					0.180	99.395	
170																					0.091	99.486	
180																					0.077	99.563	
190																					0.103	99.666	
200																					0.021	99.687	
210																					0.045	99.732	
220																					0.122	99.854	
230																					0.021	99.875	
240																					0.017	99.892	
250																					0.017	99.909	
260																					0.031	99.940	
270																					0.007	99.947	
280																					0.000	99.947	
290																					0.000	99.947	
300																					0.000	99.947	
310																					0.007	99.954	
320																					0.052	99.986	
330																					0.021	99.986	
340																					0.007	99.993	
350																					0.000	99.993	
360																					0.007	99.993	
370																					0.028	99.988	
380																					0.007	99.995	
390																					0.000	99.995	
400																					0.028	99.993	
410																					0.014	99.937	
420																					0.000	99.937	
430																					0.007	99.944	
440																					0.031	99.976	
450																					0.000	99.976	
460																					0.000	99.976	
470																					0.007	99.983	
480																					0.000	99.983	
490																					0.007	99.990	
500																					0.000	99.990	
510																					0.003	99.993	
520																					0.000	99.993	
530																					0.000	99.993	
540																					0.000	99.993	
550																					0.000	99.993	
560																					0.000	99.993	
570																					0.000	99.993	
580																					0.000	99.993	
590																					0.000	99.993	
600																					0.000	99.993	
610																					0.000	99.993	
620																					0.000	99.993	
630																					0.000	99.993	
640																					0.000	99.993	
650																					0.000	99.993	
660																					0.000	99.993	
670																					0.000	99.993	
680																					0.000	99.993	
690																					0.003	99.997	
700																					0.003	100.000	

REMAINING VALUES ARE ALL ZERO
NUMBER OF OBSERVATIONS= 28618

SUM= 939080, MEAN= 32.814, VAR= 678,542, SD= 26.238

TOTAL TRIPS OVER MAXP = 0
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, GRENBUSH, 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, SPURF.
025	BARRY	HASTINGS(CITY).
026	BARRY	CARLTON, CASTLETON, HASTINGS, IRVING, RUTLAND, WOODLAND.
027	BARRY	ASSYRIA, BALTIMORE, BАРPY, HOPE, JOHNSTOWN, MAPLE GROVE.
028	BARRY	ORANGEVILLE, PRAIRIEVILLE, THORNAPPLE, YANKEE SPRINGS.
029	RAY	BAY CITY.
030	RAY	BANGOR.
031	RAY	BEAVER, KAWKAWLIN, MONITOR, WILLIAMS.
032	RAY	FRANKENLUST, HAMPTON, MERRITT, PORTSMOUTH.
033	RAY	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, DRONOKO.
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).

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, FABER.
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, LEBAMON, WESTPHALIA.
096 CLINTON	DUPLAIN, GREENRUSH.
097 CLINTON	EAGLE, RILEY, WATERTOWN.
098 CLINTON	OLIVE, VICTOR.
099 CLINTON	OVID.
100 CLINTON	DEWITT.

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.

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, SFVILLE, 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, SEBWAING, 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, WILPER.
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, MASTCOON.

209 IRON DATES, HEMATITE, IRON RIVER.

210 ISABELLA MT PLEASANT.
 211 ISABELLA CHIPPEWA, COF.
 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, LIRERTY.
 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, OSHTMO.
 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, FLMWOOD, SOLON.

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),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).

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.
320	MISSAUKEE	LAKE, REEDER, RICHLAND, RIVERSIDE.
321	MISSAUKEE	BLOOMFIELD, CALDWELL, FOREST, PIONEER.
322	MISSAUKEE	AETNA, BUTTERFIELD, CLAM UNION, ENTERPRISE, HOLLAND, NORWICH, WEST BRANCH.
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.
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.
341	MONTMORENCY	ALBERT, AVERY, BRILEY, HILLMAN, LOUD, MONTMORENCY, RUST, VIENNA.
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.
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.

371 OAKLAND	HOLLY, ROSE.
372 OAKLAND	GROVELAND, SPRINGFIELD.
373 OAKLAND	BRANDON, INDEPENDENCE.
374 OAKLAND	OAKLAND, ORION.
375 OAKLAND	ADDISON, OXFORD.
376 OCEANA	BENONA, CLAYBANKS, SHELBY.
377 OCEANA	COLFAX, CRYSTAL, ELBRIDGE, HART, LEAVITT, WEARE.
378 OCEANA	FERRY, GRANT, GREENWOOD, NEWFIELD, OTTO.
379 OCEANA	GOLDEN, PENTWATER.
380 OGEMAW	EDWARDS, HORTON, OGEMAW, WEST BRANCH.
381 OGEMAW	CUMMING, FOSTER, GOODAR, HILL, KLACKING, ROSE.
382 OGEMAW	CHURCHILL, LOGAN, MILLS, RICHLAND.
383 ONTONAGON	ONTONAGON.
384 ONTONAGON	BOHEMIA, GREENLAND, ROCKLAND.
385 ONTONAGON	HAIGHT, INTERIOR, MCMILLAN, STANNARD.
386 ONTONAGON	BERGLAND, CARP LAKE, MATCHWOOD.
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.
391 OSCODA	BIG CREEK, CLINTON, COMINS, ELMER, GREENWOOD, MENTOR.
392 OTSEGO	GAYLORD(CITY).
393 OTSEGO	BAGLEY, CHARLTON, CHESTER, HAYES, OTSEGO LAKE.
394 OTSEGO	CORWITH, DOVER, ELMIRA, LIVINGSTON.
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.
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.
407 ROSCOMMON	DENTON, GERRISH, LAKE, LYON, MARKEY, ROSCOMMON.
408 ROSCOMMON	AU SABLE, BACKUS, HIGGINS, NESTER, RICHFIELD.
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.
423 SANILAC	BUEL, ELK, LEXINGTON.

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, COTTRELLVILLE.
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

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), HYANDOTTE(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

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

ZONE STATE

COUNTY

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, TREMPLEAU, WOOD.
522	WISCONSIN	BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC,

MENOMINEE, MCINTO, 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, MCLFAN, MENARD, MERCER,
 MOULTRIE, OGLE, PEORIA, PIATT, PUTNAM, ROCK ISLAND,
 SANGAMON, STARK, STEPHENSON, TAZEVELL, VERMILION, WARREN,
 WHITESIDE, WOODFORD.
 527 ILLINOIS ADAMS, ALEXANDER, BOND, BROWN, CALHOUN, CASS, CLARK, CLAY,
 FAYETTE, FRANKLIN, GALLATIN, GREENE, HAMILTON, HANCOCK,
 CLINTON, CRAWFORD, CUMPERLAND, 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, GRANGE, OWEN, PARKE, PERRY,
 PIKE, POSEY, PUTNAM, RIPLEY, RUSH, SCOTT, SHELBY, SPENCER,
 SULLIVAN, SWITZERLAND, UNION, VANDEBURGH, 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

541 NORTH CAROLINA, VIRGINIA, WEST 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.