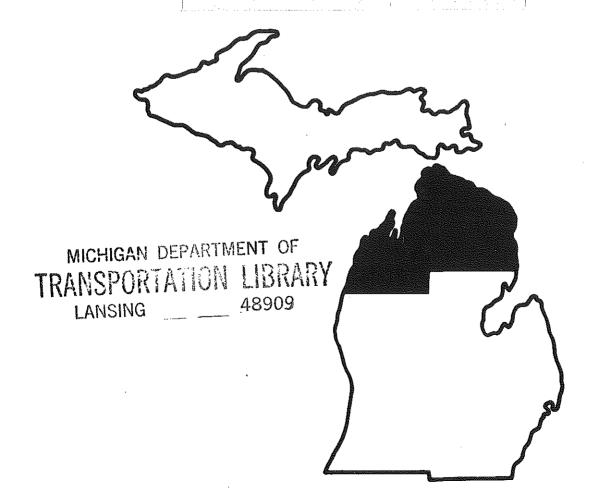
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MICHIGAN DEPARTMENT OF TRANSPORTATION

CADILLAC AREA
WEEKEND ORIGIN & DESTINATION
SURVEY

FACTUAL DATA REPORT

October, 1980



MICHIGAN DEPARTMENT OF TRANSPORTATION

CADILLAC AREA WEEKEND ORIGIN & DESTINATION SURVEY

FACTUAL DATA REPORT

October, 1980

This report represents the findings and/or professional opinions of the Michigan Department of Transportation staff and is not an official opinion of the State Transportation Commission.

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JOHN P. WOODFORD, DIRECTOR

October 15, 1980

Mr. Sam F. Cryderman
Deputy Director
Bureau of Transportation
Planning
Michigan DOT
P.O. Box 30050
Lansing, Michigan 48909

Dear Mr. Cryderman:

The Multi-Regional Planning Division of the Bureau of Transportation Planning has documented the results of the Cadillac Weekend Origin-Destination Survey conducted in 1977. The purpose of this survey was to determine volumes and patterns of traffic on a typical summer weekend in the Cadillac area.

The report was prepared by Patricia A. Eodchick, Transportation Planner Trainee with technical assistance provided by John R. Stone, Transportation Planner. Supervision was provided by Robert M. Kirkbride, Region 10 Coordinator from the North Region Planning Section Managed by John B. Ouderkirk.

Sincerely,

Acting Administrator

Multi-Regional Planning Division

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PREFACE

The results of the Cadillac Area weekend origin and destination survey conducted during late June and early July of 1977 are contained herein. This report presents the expanded and some unexpanded trip data in tabular form as developed from the surveys. It does not in any way intend to speculate, hypothesize or forecast transportation alternatives or plans. It does, however, serve as a tool for those involved in attaining such ends.

A similar weekday survey was also conducted during June and July of 1977. Its results are shown in the Cadillac Area External Origin and Destination Survey - Factual Data Report, February, 1979.

Selected comparisons of the weekend and weekday data are shown in Part IV of this report.

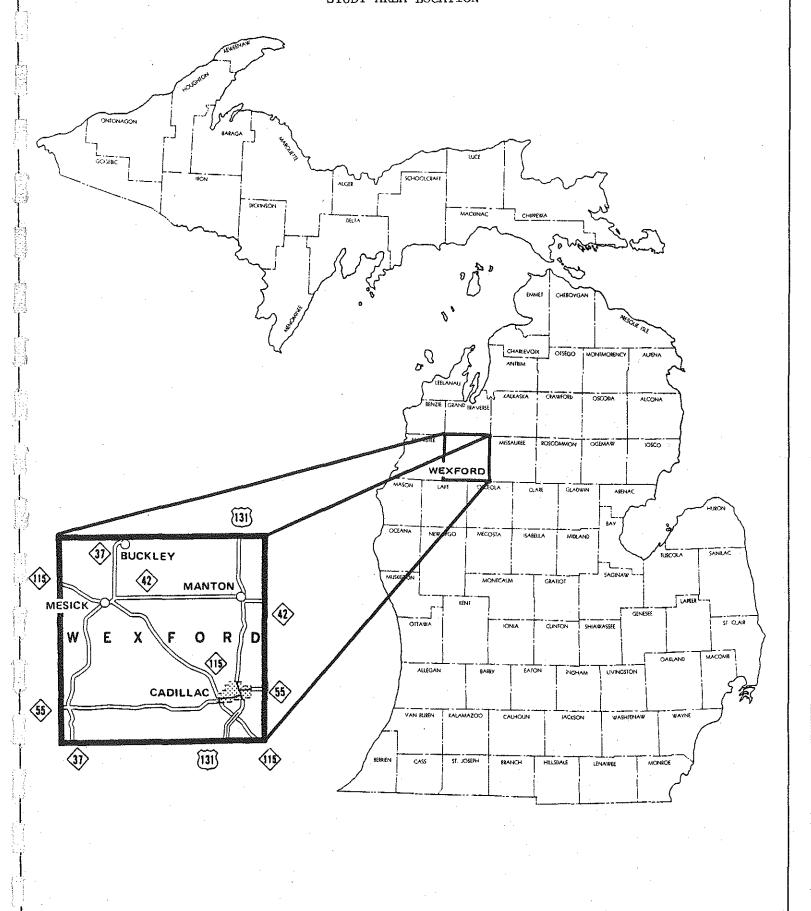
STUDY LOCATION

The city of Cadillac is located in the southeast corner of Wexford County. Its 1970 population was 9,990. Due to the recreational nature of the area, the population increases during the summer months. Increasing interest in winter sports also adds to the seasonal population.

The state trunklines servicing the Cadillac area are US-131 to the north and south, M-55 to the east and West and M-115 running northwest and southeast.

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EXHIBIT A STUDY AREA LOCATION



TERMINOLOGY & DEFINITIONS

The following terms may be mentioned in the context of this report. A brief definition of each should provide a better understanding of the processes and concepts involved in this Origin-Destination Study.

Central Business District The zone or zones comprising the concentrated commercial and retail business center of a city.

Classification Counts A survey of vehicles in which those passing through the study area are placed in categories (passenger cars, single unit trucks, etc.).

Cordon Line An imaginary line around the area under study.

Destination The place where a trip ends.

External Station A point on a route crossing the cordon line at which the drivers of vehicles are interviewed and classification counts are taken.

Origin-Destination Survey A survey of vehicles in which those passing through the study area are stopped and drivers interviewed regarding the origin, destination and purpose of the trip.

Origin The place where a trip begins.

Origin-Destination Zone (Analysis Zone) A basic subdivision of the study area having a single or dominant land use, designed as such for purposes of tabulation and analysis.

Study Area The geographical area selected for the origin and destination study.

Terminal Trip A trip with one end outside the study area and the other inside the study area (beginning or ending at one of the internal analysis zones).

Through Trip

A trip passing through the study area (both ends of the trip outside the cordon line).

Trip One-way travel between an origin and destination.

Trip Ends Each trip has two ends; an origin and a destination.

Trip Length-Average The value that is determined by summing all of the recorded trip lengths and dividing by the number of trips.

Trip Length-Median The value that is determined by dividing the trip length distribution so that an equal number of trips are on either side of it.

PART I

DATA COLLECTION

FIELD PROCEDURE

Field work for the Cadillac Weekend Origin and Destination Survey was conducted during late June and early July of 1977. The purpose of the study was to collect traffic data at six predesignated state trunkline highway stations on a summer weekend in the Cadillac area. The six stations were based on stations surveyed during a previous weekday origin and destination study (Cadillac Area External Origin and Destination Survey, February, 1979).

Prepaid postcards were handed out to persons in vehicles passing through the stations between the hours of 7:00 a.m. and 9:00 p.m. Cards were not given to buses, motorcycles, or bicycles. Persons were asked to complete the survey and mail it as soon as possible. A sample postcard is shown in Appendix A.

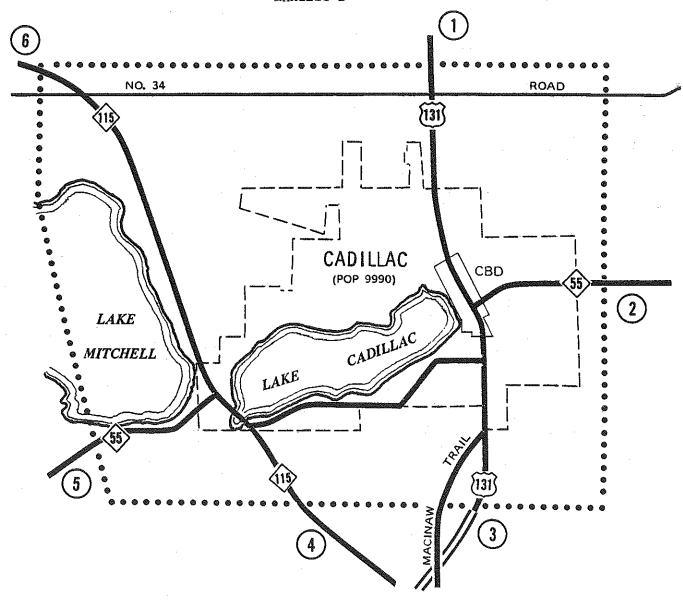
Manual vehicle classification counts were also taken during the survey period (7:00 a.m. to 9:00 p.m.) as well as during the off-hours (9:00 p.m. to 7:00 a.m.). Classification counts are used as control totals to expand survey data to a 24-hour day.

After the field work was completed all data was edited, expanded and processed according to standard origin-destination procedure. The tabular results follow.

CADILLAC

SINGLE STATIONS

STA	TION	ROUTE	LOCATION	· · ·
	1	บร-131	0.3 Mile North of 34 Road	
:	2	M-55	0.1 Mile East of Cadillac East City Limits	
	3	US-131	0.1 Mile South of Mackinaw Trail	
4	4	M-115	0.3 Mile Southeast of M-55	
. !	5	M-55	0.8 Mile West of Northwest Junction of M-115	
. (6	M-115	0.4 Mile Northwest of 34 Road	



CADILLAC AREA STATE TRUNKLINE STATIONS



TABLE 1
TRIP DATA COMPARISON
BY STATION

STATION	24-HOUR VEHICLE CLASSIFICATION ¹	14-HOUR INTERVIEWS	% INTERVIEW	EXPANDED ² VEHICLE TRIPS	EXPANDED AS % OF 24-HOUR CLASSIFICATION
1	8,007	1,733	21.6	8,202	102.4
2	4,832	1,043	21.6	4,811	99.6
3	5,649	1,717	30.4	5,642	99.9
4	8,753	1,870	21.4	8,646	98.8
5	5,301	925	17 .4	5,335	100.6
6	6,036	1,850	30.7	6,020	99.7
TOTAL	38,578	9,138	23.7	38,656	100.2

¹Motorcycles, bicycles and buses have been removed and appear by Station below. These vehicle types are not interviewed and, therefore, cannot be expanded.

	STATION 1	STATION 2	STATION 3	STATION 4	STATION 5	STATION 6	TOTAL
BICYCLES	6	6	0	5	52	6	75
BUSES	23	4	. 17	7	4	12	67
MOTORCYCLES	121	57	117	93	113	38	539
TOTAL	150	67	134	105	169	56	681

²Due to the convention of certain computer programs, expanded vehicle trips may not correspond exactly with 24-hour classification counts. This is a result of truncation and rounding in the cell matrix following expansion.

TABLE 2
EXPANDED VEHICLE TRIPS
BY STATION

(Through, Terminal, Total)

STATION	EXPANDED TRIPS	% OF TOTAL TRAFFIC	TERMINAL TRIPS	% TERMINAL	THROUGH	% THROUGH
1	8,202	21.2	3,519	42.9	4,683	57.1
2	4,811	12.4	3,619	75.2	1,192	24.8
3	5,642	14.6	1,993	35.3	3,649	64.7
4	8,646	22.4	2,237	25.9	6,409	74.1
5	5,335	13.8	3,147	59.0	2,188	41.0
6	6,020	15.6	1,827	30.3	4,193	69.7
TOTAL	38,656	100.0	16,342	42.3	22,314	57.7
ADJUSTED TOTAL ¹	27,500	100.0	16,342	59.4	11,158*	40.6

 $^{^{1}\}text{A}$ through trip is counted both at the station of entrance and exit. To adjust for this double counting it is necessary to half-factor through trips.

^{*}Rounded to nearest whole number after half-factoring.

PART II

STRATIFIED STUDY RESULTS

PART II

STRATIFIED STUDY RESULTS

MICHIGAN DEPARTMENT OF TRANSPORTATION LIBRARY LANSING 48909

TOTAL ALL STATIONS

Location:

6 Points on Cordon Line

Classification:

State Trunklines

Total Trips:

27,500

Major Vehicle Type:

Passenger Car 20,673 (75.2%)

Major Trip Purpose:

Vacation 11,780 (42.8%)

Vehicle Occupancy:

Two Persons 10,911 (39.7%)

Trip Distribution:

Terminal: 16,342 (59.4%)

Through:

11,158 (40.6%)

Longest Trip:

17 Hrs. 30 Min.

Average Trip Length:

3 Hrs.

TABLE 3
TOTAL 6 STATIONS

	VEHICLE TYPE						
		% OF	•				
VEHICLE TYPE	VEHICLES	TOTAL	TERMINAL	જુ	THROUGH	%	
Passenger Car	20,673	75.2	12,414	60.0	8,259	40.0	
Passenger Car w/Trailer	1,179	4.3	540	45.8	639	54.2	
Van or Pickup	4,061	14.8	2,644	65.1	1,417	34.9	
Van w/Trailer	646	2.3	279	43.2	367	56.8	
Motor Home	312	1.1	130	41.7	182	58.3	
Other Trucks	629	2.3	335	53.3	294	46.7	
Total	27,500	100.0	16,342	59.4	11,158	40.6	
					:		
	•				•		
	TRIP	PURPOS	E				
		% OF					
TRIP PURPOSE	VEHICLES	TOTAL	TERMINAL	8	THROUGH	બ	
				•			

TRIP PURPOSE	VEHICLES	% OF TOTAL	TERMINAL	Q.	THROUGH	%
Vacation	11,780	42.8	5,006	42.5	6,774	57.5
Work	4,090	14.9	3,229	78.9	861	21.1
Personal Business	3,503	12.7	2,215	63.2	1,288	36.8
Shopping	2,243	8.2	2,185	97.4	58	2.6
Other	4,880	17.7	3,042	62.3	1,838	37.7
No Response	1,004	3.7	665	66.2	339	33.8
Total	27,500	100.0	16,342	59.4	11,158	40.6

VEHICLE OCCUPANCY

VEHICLE OCCUPANCY		% OF				
(# OF PERSONS)	VEHICLE	TOTAL	TERMINAL	86	THROUGH	%
1.	6,415	23.3	4,641	72.3	1,774	27.7
2	10,911	39.7	6,372	58.4	4,539	41.6
3	3,668	13.3	1,950	53.2	1,718	46.8
4	3,751	13.6	1,999	53.3	1,752	46.7
5	1,642	6.0	787	47.9	855	52.1
6	739	2.7	397	53.7	342	46.3
7	204	.7	90	44.1	114	55.9
8	73	.3	38	52.1	35	47.9
No Response	97	.4	68	70.1	29	29.9
Total	27,500	100.0	16,342	59.4	11,158	40.6

STATION 1

US-131 NORTH

Location:

0.3 Mile North of 34 Road

Classification:

State Trunkline

Total Trips:

8,202

Major Vehicle Type:

Passenger Car 5,912 (72.1%)

Major Trip Purpose:

Vacation 3,650 (44.5%)

Vehicle Occupancy:

Two Persons 3,159 (38.5%)

Trip Distribution:

Terminal: 3,519 (42.9%)

Through: 4,683 (57.1%)

Longest Trip:

17 Hrs. 30 Min.

Average Trip:

3 Hrs.

TABLE 4
STATION 1

US-131 NORTH, 0.3 MILES NORTH OF 34 ROAD

VEHICLE TYPE

		% OF				
VEHICLE TYPE	VEHICLES	TOTAL	TERMINAL		THROUGH	%
			<u> </u>			
Passenger Car	5,912	72.1	2,549	43.1	3,363	56.9
Passenger Car w/Trailer	263	3.2	46	17.5	217	82.5
Van or Pickup	1,415	17.3	727	51.4	688	48.6
Van w/Trailer	233	2.8	44	18.9	18 9	81.1
Motor Home	133	1.6	2.7	20.3	106	79.7
Other Trucks	246	3.0	126	51.2	120	48.8
			•			
Total	8,202	100.0	3,519	42.9	4,683	57.1
						•

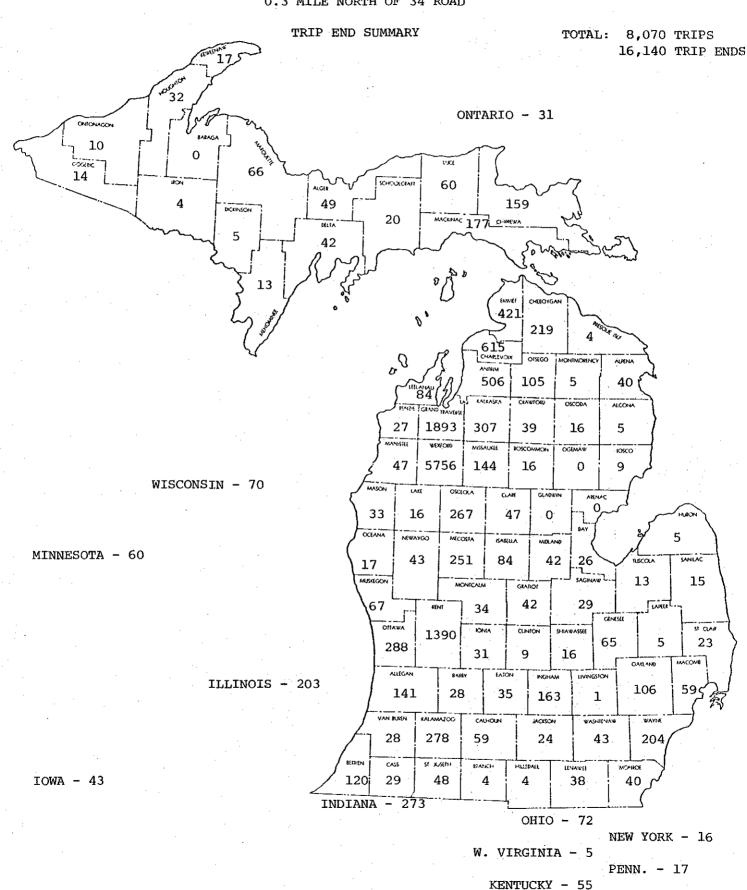
TRIP PURPOSE

		% OF			4.5	
TRIP PURPOSE	VEHICLES	TOTAL	TERMINAL	95	THROUGH	ક
Vacation	3,650	44.5	747	20.5	2,903	79.5
Work	1,544	18.8	1,045	67.7	499	32.3
Personal Business	1,096	13.4	588	53.6	508	46.4
Shopping	532	6.5	529	99.4	3	.6
Other	1,149	14.0	496	43.2	653	56.8
No Response	231	2.8	114	49.4	117	50.6
						- 4 i
Total	8,202	100.0	3,519	42.9	4,683	57.1

VEHICLE OCCUPANCY

VEHICLE OCCUPANCY (# OF PERSONS)		VEHICLES	% OF TOTAL	TERMINAL	કુ	THROUGH	. %
1		2,203	26.9	1,321	60.0	882	40.0
2		3,159	38.5	1,306	41.3	1,853	58.7
3		1,061	12.9	390	36.8	671	63.2
4		1,021	12.4	260	25.5	761	74.5
5	-	477	5.8	146	30.6	331	69.4
6		213	2.6	81	38.0	132	62.0
7		42	.5	4	9.5	38	90.5
. 8	•	5	.1	.0	0	5	100.0
No Response		21	. 3	11	52.4	10	47.6
Total		8,202	100.0	3,519	42.9	4,683	57.1

STATION 1 US-131 NORTH 0.3 MILE NORTH OF 34 ROAD



.. 1.4

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TABLE 5

TRIP LENGTHS

STATION 1

US-131 NORTH

MINUTES		# OF TRIPS		% OF TOTAL
DILMOTED	•	INTED		TOTATI
01-10		. 0		. 0
10-26		1773		22.0
20-30		33		. 4
30-40		271		3.4
40-50		51		.6
50-60	•	123		1.5
60-80	•	745		9.2
80-100		142		1.8
100-120		202		2.5
120-150		380		4.7
150-180		619		7.7
180-210		492		6.1
210-240		729		9.0
240-280		703	-	8.7
280-320		449		5.6
320-370		404		5.0
370-420		220		2.7
420-470		171		2.1
470-520	1 () () () () () ()	163		2.0
520-570		77		1.0
570-620		47		. 6
620-700		107		1.3
700-1000		162		2.0
1000-1050		7		.1
TOTAL		8070*		100.0

Longest Trip 17 Hr. 30 Min. Average Trip Length 3 Hr. Median Trip Length 2 Hr. 48 Min.

^{*}Due to the convention of certain computer programs, some which round off totals and some which truncate totals, there may be a difference in total trips at the same station.

STATION 2

M-55 EAST

Location:

0.1 Mile East of Cadillac East City Limits

Classification:

State Trunkline

Total Trips:

4,811

Major Vehicle Type:

Passenger Car 3,820 (79.4%)

Major Trip Purpose:

Vacation 1,332 (27.7%)

Vehicle Occupancy:

Two Persons 1,864 (38.7%)

Trip Distribution:

Terminal: 3,619 (75.2%)

Through:

1,192 (24.8%)

Longest Trip:

14 Hrs. 48 Min.

Average Trip Length:

40 Min.

TABLE 6

STATION 2

M-55 EAST, 0.1 MILE EAST OF CADILLAC EAST CITY LIMITS

VEHICLE TYPE

VEHICLE TYPE	VEHICLES	% OF TOTAL	TERMINAL	00	THROUGH	; 9 ₈
Passenger Car	3,820	79.4	2,957	77.4	863	22.6
Passenger Car w/Trailer	117	2.4	56	47.9	61	52.1
Van or Pickup	733	15.3	520	70.9	213	29.1
Van w/Trailer	49	1.0	31	63.3	18	36.7
Motor Home	30	6	13	43.3	17	56.7
Other Truck	62	1.3	42	67.7	20	32.3
Total	4,811	100.0	3,619	75.2	1,192	24.8

TRIP PURPOSE

		% OF				
TRIP PURPOSE	VEHICLES	TOTAL	TERMINAL	æ	THROUGH	8
Vacation	1,332	27.7	636	47.7	696	52.3
Work	799	16.6	734	91.9	65	8.1
Personal Business	707	14.7	544	76.9	163	23.1
Shopping	841	17.5	832	98.9	9	1.1
Other	953	19.8	7.25	76.1	228	23.9
No Response	179	3.7	148	82.7	31	17.3
Total	4,811	100.0	3,619	75.2	1,192	24.8

VEHICLE OCCUPANCY

VEHICLE OCCUPANCY		% OF				
(# OF PERSONS)	VEHICLES	TOTAL	TERMINAL	9,	THROUGH	ુક ક
1	1,395	29.0	1,227	88.0	168	12.0
2	1,864	38.7	1, 3 82	74.1	482	25.9
3	528	11.0	368	69.7	160	30.3
4	556	11.6	379	68.2	177	31.8
5	275	5.7	135	49.1	140	50.9
6	121	2.5	68	56.2	53	43.8
7	17	. 4	-11	64.7	6	35.3
8	12	. 2	12	100.0	0	0
No Response	43	. 9	37	86.0	,6	14.0
Total	4,811	100.0	3,619	75.2	1,192	24.8

STATION 2
M-55 EAST
0.1 MILE EAST OF CADILLAC EAST CITY LIMITS

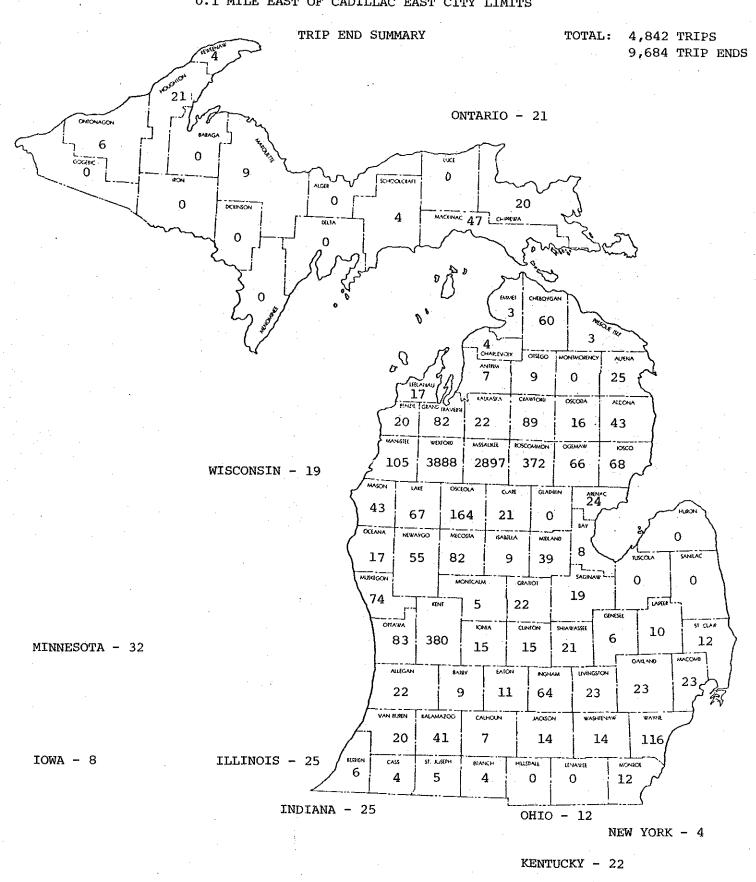


TABLE 7

TRIP LENGTHS

STATION 2

M-55 WEST

MINUTES		# OF TRIPS	% OF TOTAL
01-10		1,1	.2
10-20		185	3.8
20-30		21,20	43.7
30-40		135	2.8
40-50		18	. 4
50-60	•	516	10.7
60-80		90	1.9
80-100		108	2.2
100-120		203	4.2
120-150	•	330	6.8
150-180		292	6.0
180-210		196	4.0
210-240		168	3.5
240-280		160	3.3
280-320		91	1.9
320-370		63	1.3
370-420		13	.3
420-470		18	. 4
470-520		9	.2
520-570		48	1.0
570-620		4	.1
620-700		24	.5
700-800		19	. 4
800-890		21	. 4
TOTAL		4842*	100.0

Longest Trip	14	Hr.	48	Min.
Average Trip Length			40	Min.
Median Trip Length			4.0	Min.

^{*}Due to the convention of certain computer programs, some which round off totals and some which truncate totals, there may be a difference in total trips at the same station.

STATION 3

US-131 SOUTH

Location: 0.2 Mile South of Mackinaw Trail

Classification: State Trunkline

Total Trips: 5,642

Major Vehicle Type Passenger Car 4,278 (75.9%)

Major Trip Purpose: Vacation 2,777 (49.2%)

Vehicle Occupancy: Two Persons 2,433 (43.1%)

Trip Distribution: Terminal: 1,993 (35.3%)

Through: 3,649 (64.7%)

Longest Trip: 17 Hrs. 30 Min.

Average Trip Length: 3 Hrs. 15 Min.

TABLE 8

STATION 3

US-131 SOUTH, 0.2 MILES SOUTH OF MACKINAW TRAIL

VEHICLE TYPE

		% OF				
VEHICLE TYPE	VEHICLES	TOTAL	TERMINAL	Q	THROUGH	. 8
Passenger Car	4,278	75.9	1,544	36.1	2,734	63.9
Passenger Car w/Trailer	209	3.7	64	30.6	145	69.4
Van or Pickup	802	14.2	307	38.3	495	61.7
Van w/Trailer	.171	3.0	46	26.9	125	73.1
Motor Home	62	1.1	12	19.4	50	80.6
Other Truck	120	2.1	20	16.7、	100	83.3
Total	5,642	100.0	1,993	35.3	3,649	64.7

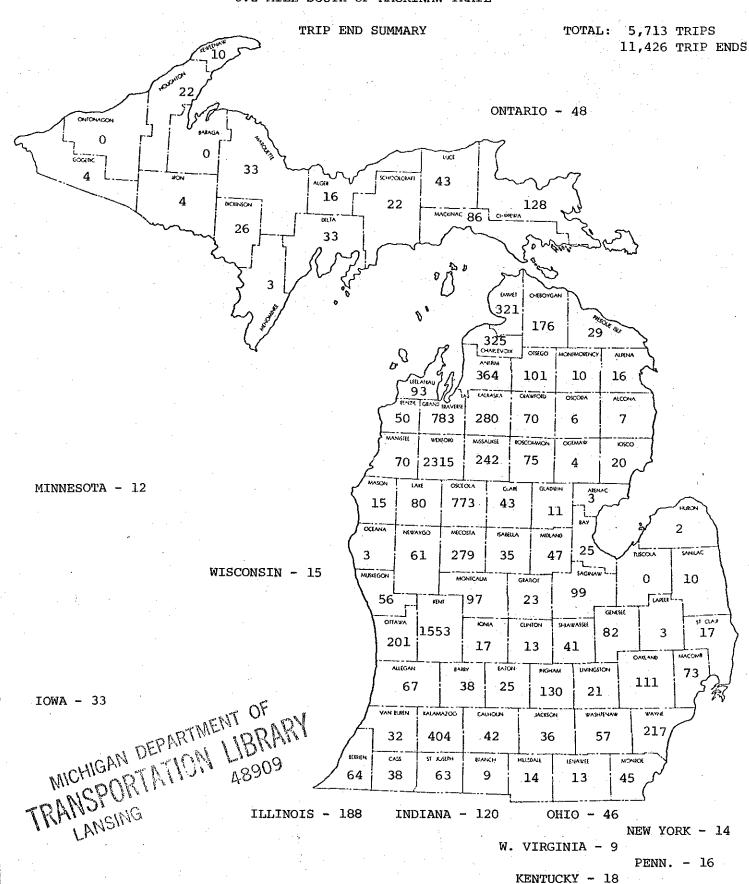
TRIP PURPOSE

		% OF				
TRIP PURPOSE	VEHICLES	TOTAL	TERMINAL	8	THROUGH	છ
Vacation	2,777	49.2	713	25.7	2,064	74.3
Work	346	6.1	147	42.5	199	57.5
Personal Business	824	14.6	285	34.6	539	65.4
Shopping	144	2.6	139	96.5	. 5	3.5
Other	1,397	24.8	667	47.7	730	52.3
No Response	154	2.7	42	27.3	112	72.7
Total	5,642	100.0	1,993	35.3	3,649	64.7

VEHICLE OCCUPANCY

VEHICLE OCCUPANCY		% OF				
(# OF PERSONS)	VEHICLES	TOTAL	TERMINAL	8	THROUGH	9
1	802	14.2	311	38.8	491	61.2
2	2,433	43.1	867	35.6	1,566	64.4
3 4	896 918	15.9 16.3	334 310	37.3 33.8	562 608	62.7 66.2
5	353	6.3	95	26.9	258	73.1
6	143	2.5	44	30.8	99	69.2
7	58.	1.0	13	22.4	45	77.6
8	29	• 5	19	65.5	10	34.5
No Response	10	. 2	0 .	0	10	100.0
Total	5,642	100.0	1,993	35.3	3,649	64.7

STATION 3 US-131 SOUTH 0.2 MILE SOUTH OF MACKINAW TRAIL



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TABLE 9

TRIP LENGTHS

STATION 3

US-131 SOUTH

MINUTES	# OF TRIPS	% OF TOTAL
01-10	0	0
10-20	67	1.2
20-30	14	.2
30-40	394	6.9
40-50	203	3.5
50-60	202	3.5
60-80	95	1.7
80-100	65	1.1
100-120	204	3.6
120-150	741	13.0
150-180	637	11.1
180-210	484	8.5
210-240	687	12.0
240-280	660	11.6
280-320	363	6.3
320-370	285	5.0
370-420	148	2.6
420-470	139	2.4
470-520	118	2.1
520-570	32	.6
570-620	30	.5
620-700	75	1.3
700-1000	67	1.2
1000-1050	3	.1

Longest Trip	17	Hr.	30	Min.
Average Trip Length	3	Hr.	15	Min.
Median Trip Length	3	Hr.	30	Min.

^{*}Due to the convention on certain computer programs, some which round off totals and some which truncate totals, there may be a difference in total trips at the same station.

STATION 4

M-115 SOUTH

Location: 0.3 Miles Southeast of M-55

Classification: State Trunkline

Total Trips: 8,646

Major Vehicle Type: Passenger Car 6,501 (75.2%)

Major Trip Purpose: Vacation 5,847 (67.6%)

Vehicle Occupancy: Two Persons 3,615 (41.8%)

Trip Distribution: Terminal: 2,237 (25.9%)

Through: 6,409 (74.1%)

Longest Trip: 17 Hrs. 18 Min.

Average Trip Length: 3 Hrs. 48 Min.

TABLE 10

STATION 4

M-115 SOUTH, 0.3 MILES SOUTHEAST OF M-55

	VEHI	CLE TYP	Ė	-		
		% OF				
VEHICLE TYPE	VEHICLES	TOTAL	TERMINAL	00	THROUGH	a _o
Passenger Car	6,501	75.2	1,623	25.0	4,878	75.0
Passenger Car w/Trailer	726	8.4	236	32.5	490	67.5
Van or Pickup	842	9.7	236	28.0	606	72.0
Van w/Trailer	259	3.0	60	23.2	199	76.8
Motor Home	166	1.9	55	33.1	111	66.9
Other Truck	152	1.8	27	17.8	125	82.2
Tota1	8,646	100.0	2,237	25.9	6,409	74.1
	g e w					
	TRIP	PURPOS	E			
					٠.	
		% OF	. •		•	
TRIP PURPOSE	VEHICLES	TOTAL	TERMINAL	Q.	THROUGH	%
Vacation	5,847	67.6	1,528	26.1	4,319	73.9
Work	310	3.6	84	27.1	226	72.9
Personal Business	748	8.7	122	16.3	626	83.7
Shopping	64	.7	30	46.9	34	53.1
Other	1,455	16.8	409	28.1	1,046	71.9
No Response	222	2.6	64	28.8	158	71.2
A contract of the contract of				•		

VEHICLE OCCUPANCY

100.0

2,237

25.9

74.1

6,409

8,646

Total

VEHICLE OCCUPANCY (# OF PERSONS)	VEHICLES	% OF TOTAL	TERMINAL	%	THROUGH	0,0
1	1,014	11.7	227	22.4	7 87	77.6
2	3,615	41.8	905	25.0	2,710	75.0
3	1,414	16.4	348	24.6	1,066	75.4
4	1,471	17.0	489	33.2	982	66.8
5	756	8.7	170	22.5	586	77.5
6	260	3.0	71	27.3	189	72.7
7	80	.9	13	16.2	67	83.8
8	22	.3	7	31.8	15	68.2
No Response	14	. 2	7	50.0	7	50.0
Total	8,646	100.0	2,237	25.9	6,409	74.1

STATION 4 M-115 SOUTH 0.3 MILES SOUTHEAST OF M-55

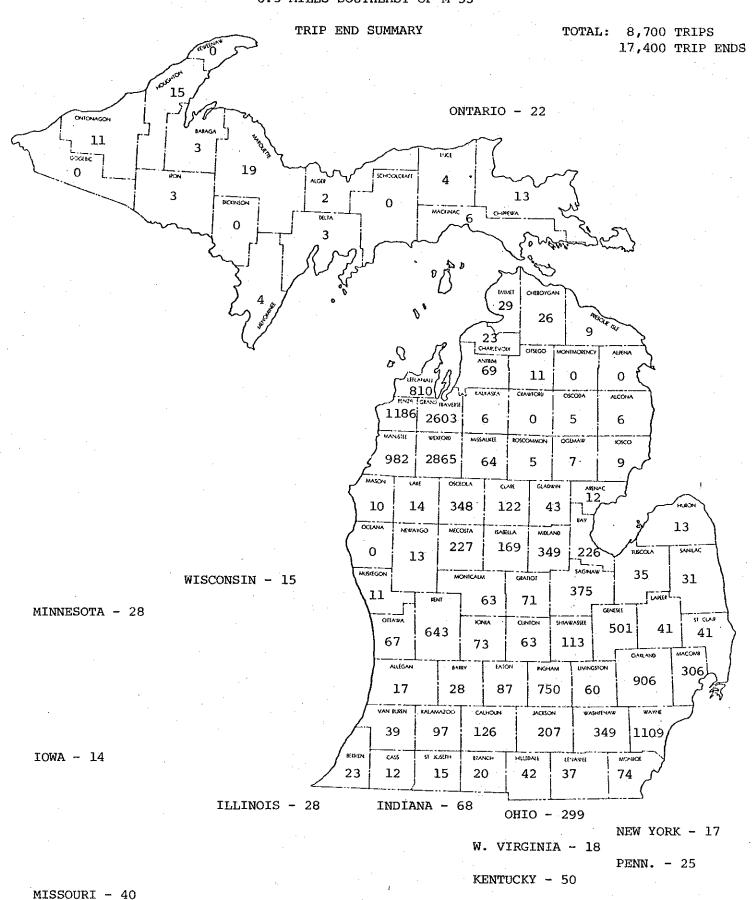


TABLE 11

TRIP LENGTHS

STATION 4

M-115 SOUTH

And the second s	# OF	% OF
MINUTES	TRIPS	TOTAL
01-10	0	0
10-20	39	. 4
20-30	20	. 2
30-40	152	1.7
40-50	41.	. 4
50-60	95	1.1
60-80	119	1.4
80-100	167	1.9
100-120	265	3.0
120-150	763	8.8
150-180	1093	12.6
180-210	789	9.1
210-240	1533	17.6
240-280	1684	19.3
280-320	1173	13.5
320-370	327	3.8
370-420	182	2.1
420-470	33	. 4
470-520	. 8	.1
520-470	40	.5
570-620	15	.2
620-700	77	.9
700-1000	80	.9
1000-1040	5	.1
	_	
TOTAL	8700*	100.0

Longest Trip 17 Hr. 18 Min. Average Trip Length 4 Hr. Median Trip Length 3 Hr. 48 Min.

^{*}Due to the convention of certain computer programs, some which round off totals and some which truncate totals, there may be a difference in total trips at the same station.

STATION 5

M-55 WEST

Location: 0.8 Mile West of Northwest Junction

of M-115

Classification: State Trunkline

Total Trips: 5,335

Major Vehicle Type: Passenger Car 4,118 (77.2%)

Major Trip Purpose: Vacation 2,546 (47.7%)

Vehicle Occupancy: Two Persons 2,055 (38.5%)

Trip Distribution: Terminal: 3,147 (59.0%)

Through: 2,188 (41.0%)

Longest Trip: 15 Hrs. 18 Min.

Average Trip Length: 2 Hrs. 36 Min.

TABLE 12

STATION 5

M-55 WEST, 0.8 MILES WEST OF NORTHWEST JUNCTION OF M-115

VEHICLE TYPE

VEHICLE TYPE		VEHICLES	% OF TOTAL	TERMINAL	ok	THROUGH	્ર
Passenger Car		4,118	77.2	2,488	60.4	1,630	39.6
Passenger Car	w/Trailer	253	4.7	123	48.6	130	51.4
Van or Pickup		685	12.9	418	61.0	267	39.0
Van w/Trailer		1.50	2.8	83	55.3	67	44.7
Motor Home		44	.8	14	31.8	30	68.2
Other Trucks		85	1.6	21	24.7	64	75.3
Total		5,335	100.0	3,147	59.0	2,188	41.0

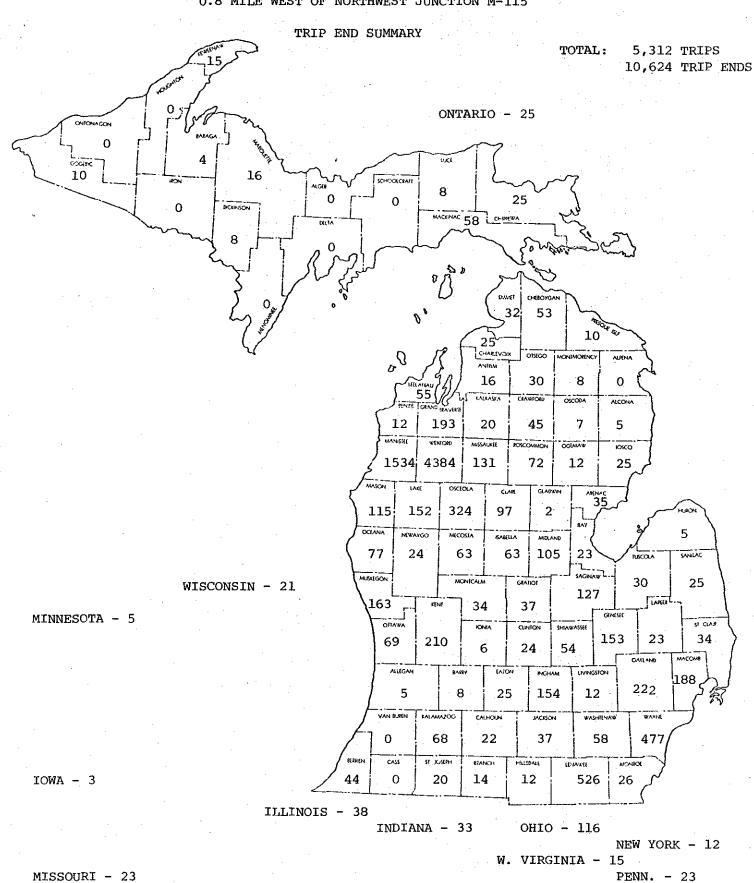
TRIP PURPOSE

		% OF				
TRIP PURPOSE	VEHICLES	TOTAL	TERMINAL	8	THROUGH	g _o
Vacation	2,546	47.7	1,179	46.3	1,367	53.7
Work	641	12.0	498	77.7	143	22.3
Personal Business	633	11.9	402	63.5	231	36.5
Shopping	426	8.0	386	90.6	40	9.4
Other	881	16.5	531	60.3	350	39.7
No Response	208	3.9	151	72.6	57	27.4
Total	5,335	100.0	3,147	59.0	2,188	41.0

VEHICLE OCCUPANCY

VEHICLE OCCUPANCY		% OF			•	
(# OF PERSONS)	VEHICLES	TOTAL	TERMINAL	ę;	THROUGH	gio .
1	1,028	19.3	767	74.6	261	25.4
2	2,055	38.5	1,262	61.4	793	38.6
3	688	12.9	321	46.7	367	53.3
4	875	16.4	453	51.8	422	48.2
5	361	6.8	189	52.4	172	47.6
6	206	3.9	118	57.3	88	42.7
7	. 75	1.4	28	37.3	47	62.7
8	30	.5	0	0	30	100.0
No Response	17	.3	9	52.9	8	47.1
Total	5,335	100.0	3,147	59.0	2,188	41.0

STATION 5 M-55 WEST 0.8 MILE WEST OF NORTHWEST JUNCTION M-115



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TABLE 13

TRIP LENGTHS

STATION 5

M-55 WEST

	1 00	0.00
MTNIIII	# OF	% OF
MINUTES	TRIPS	TOTAL
01-10	18	.3
10-20	947	17.8
20-30	63	1.2
30-40	267	5.0
40-50	197	3.7
50-60	48	.9
60-80	323	6.1
80-100	156	2.9
100-120	259	4.9
120-150	531	10.0
150-180	415	7.8
180-210	301	5.7
210-240	517	9.7
240-280	490	9.2
280-320	376	7.1
320-370	128	2.4
370-420	72	1.4
420-470	24	•5
470-520	40	.8
520-570	37	. 7
370-620	25	.5
620-700	44	. 8
700-920	34	.6
TOTAL	5312	* 100.0

Longest Trip	15	Hr.	18	Min.
Average Trip Length	2	Hr.	18	Min.
Median Trip Length	2	Hr.	36	Min.

^{*}Due to the convention of certain computer programs, some which round off totals and some which truncate totals, there may be a difference in trip totals at the same station.

STATION 6

M-115 NORTH

Classification: State Trunkline

Total Trips: 6,020

Major Vehicle Type: Passenger Car 4,303 (71.4%)

Major Trip Purpose: Vacation 2,402 (39.8%)

Vehicle Occupancy: Two Persons 2,323 (38.6%)

Trip Distribution: Terminal: 1,827 (30.3%)

Through: 4,193 (69.7%)

0.4 Mile Northwest of 34 Road

Longest Trip: 16 Hrs. 42 Min.

Average Trip Length: 3 Hrs.

Location:

TABLE 14

STATION 6

M-115 NORTH, 0.4 MILES NORTHWEST OF 34 ROAD

VEHICLE TYPE

VERTON E MADE	trantat no	% OF	######################################		minoridu	
VEHICLE TYPE	VEHICLES	TOTAL	TERMINAL	6	THROUGH	ક
Passenger Car	4,303	71.4	1,253	29.1	3,050	70.9
Passenger Car w/Trailer	250	4.2	15	6.0	235	94.0
Van or Pickup	1,000	16.6	436	43.6	564	56.4
Van w/Trailer	150	2.5	15	10.0	135	90.0
Motor Home	59	1.0	9	15.3	50	84.7
Other Trucks	258	4.3	99	38.4	159	61.6
Total	6,020	100.0	1,827	30.3	4,193	69.7

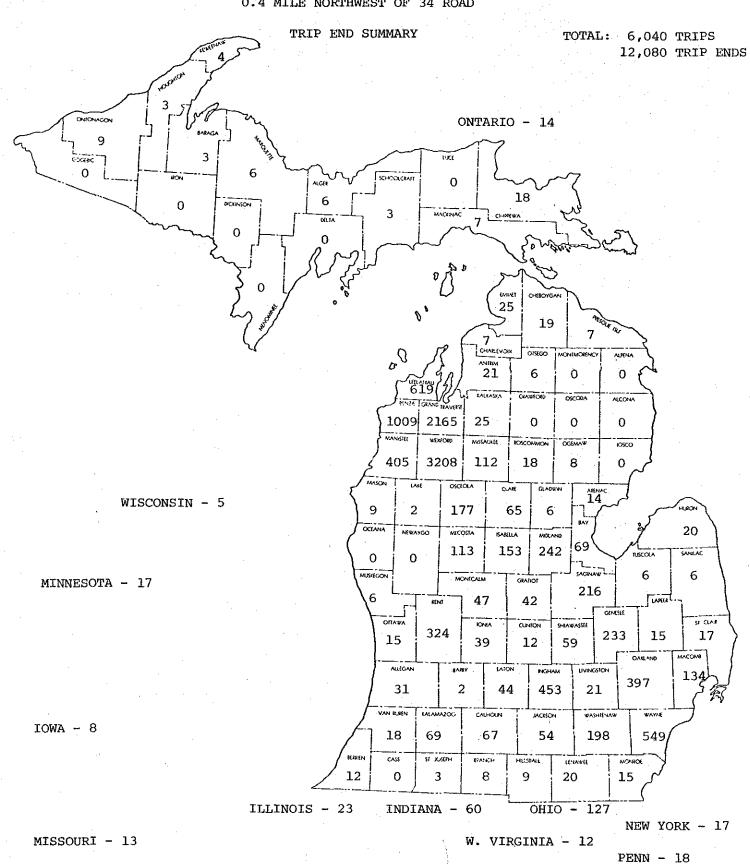
TRIP PURPOSE

		% OF				
TRIP PURPOSE	VEHICLES	TOTAL	TERMINAL	8	THROUGH	Dio.
Vacation	2,402	39.8	203	8.5	2,199	91.5
Work	1,310	21.8	721	55.0	589	45.0
Personal Business	782	13.0	274	35.0	508	65.0
Shopping	293	4.9	269	91.8	24	8.2
Other	884	14.7	214	24.2	670	75.8
No Response	349	5.8	146	41.8	203	58.2
Total	6,020	100.0	1,827	30.3	4,193	69.7

VEHICLE OCCUPANCY

VEHICLE OCCUPANCY		% OF			5 - F	
(# OF PERSONS)	VEHICLES	TOTAL	TERMINAL	o _b	THROUGH	8
1	1.747	29.0	788	45.1	959	54.9
2	2,323	38.6	650	28.0	1,673	72.0
3	799	13.3	189	23.7	610	76.3
4	662	11.0	108	16.3	554	83.7
5	274	4.6	52	19.0	222	81.0
6	138	2.3	15	10.9	123	89.1
7	46	.7	21	45.7	25	54.3
8	9	.1	0	. 0	9	100.0
No Response	22	. 4	4	18.2	18	81.8
Total	6,020	100.0	1,827	30.3	4,193	69.7

STATION 6 M-115 NORTH 0.4 MILE NORTHWEST OF 34 ROAD



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TABLE 15

TRIP LENGTHS

STATION 6

M-115 NORTHWEST

		# OF	% OF
MINUTES		TRIPS	TOTAL
01-10		4	.1
10-20		463	7.7
20-30		25	. 4
30-40		603	10.0
40-50		23	. 4
50-60		139	2.3
60-80		447	7.4
80-100		137	2.3
100-120	•	166	2.7
120-150		245	4.1
150-180		526	8.7
180-210	•	516	8.5
210-240		763	12.6
240-280		719	11.9
280-320		809	13.4
320-370		210	3.5
370-420		89	1.5
420-470		22	. 4
470-520		9	.1
520-570		17	
570-620		6	.3 .1
620-700		66	1.1
700-800		9	.1
800-970		27	
000-370		21	. 4
TOTAL	4	6040*	100.0

Longest Trip 16 Hr. 42 Min. Average Trip Length 3 Hr. Median Trip Length 3 Hr. 6 Min.

^{*}Due to the convention of certain computer programs, some which round off totals and some which truncate totals, there may be a difference in trip totals at the same station.

PART III

SUPPLEMENTAL UNEXPANDED DATA RESULTS

CADILLAC WEEKEND POSTCARD SURVEY QUESTIONS

The Cadillac Weekend Postcard Survey asked three questions in addition to standard origin-destination study questions (see form Appendix A). The following pages present responses to those questions in relation to trip purpose. It should be noted that due to conventions of computer programs used to process this data, these numbers cannot be given in expanded form. The totals are raw data taken from the postcards and compiled with no expansion factors. A "No Response" column was added for those cards returned with no reply to the corresponding question.

Question six from the postcard survey asks, "What response best describes your stay in this northern area of the state?" The four responses were:

- 1. One day or less
- 2. 2-4 days
- 3. 5 days or more
- 4. local resident

Table 17 shows that 45.6% of all trips were vacation trips with 47.5% of those vacation trips staying 2-4 days. Eighty-four percent of total shopping trips were generated by local residents.

Question seven asks, "Have you just stopped, or will you briefly stop in Cadillac for food, gas, lodging, etc.?" The responses were yes or no. The data again shows that 45.7% of total responses were vacation trips. Of that total, 49.3% had just stopped or will stop in Cadillac. While the majority of vacation trips went through Station 4, only 43.2% said they had stopped, or will stop in Cadillac. At Stations 1 and 3 however, 52.5% and 53% respectively, of vacation trips made brief stops in Cadillac. At Station 2,57.3%, and 63.7% at Station 5, responded with yes they had stopped or will stop.

The final question on the postcard survey asks, "If the driving costs of this trip were to double, would you:

MICHIGAN DEPARTMENT OF TRANSPORTATION LIBRARY LANSING 48909

- 1. Continue to make this trip as usual
- 2. Not make trip as often
- 3. Car/van pool with others
- 4. Shift to public transportation (bus, train if available)
- 5. Probably not make this trip
- 6. Don't know

Of all trips responding, 45.8% were vacation trips with 33% of those trips saying they would not make the trip as often. Twenty-seven percent said they would continue to make the trip as usual and only 1.3% of the vacation trips would shift to public transportation. Note that 34.4% of those who didn't respond to the trip purpose would still make that trip as usual.

Work trip responses show that 3.9% would car or van pool with others and 2.3% would shift to public transportation. Of the shopping trips, 42.8% would not make the trip as often if driving costs were to double.

It may be noted that the average statewide gas prices for late June and early July of 1977 were 65.7 cents per gallon for regular and 68.7 cents per gallon for no lead. $^{\rm l}$

¹AAA travel information center statistics. The average statewide price per gallon for the year 1977 was 64.9 cents and 67.5 cents for regular and no lead respectively.

TABLE 16

TOTAL ALL STATIONS

POSTCARD SURVEY
QUESTION 6
TOTAL ALL STATIONS

WHAT RESPONSE BEST DESCRIBES THE LENGTH OF YOUR STAY IN THIS NORTHERN AREA OF THE STATE?

	VACATION	WORK	PERSONAL BUSINESS	SHOPPING	OTHER	NO RESPONSE	TOTAL
ONE DAY OR LESS				<u> </u>		·	
Number of Responses	541	169	273	48	411	24	1466
Percent Trip Purpose	10.4	10.9	17.7	6.1	21.2	6.4	12.9
2 TO 4 DAYS		**************************************	*				
Number of Responses	2462	167	278	32	500	133	3572
Percent Trip Purpose	47.5	10.8	17.9	4.2	25.8	35.6	31.4
5 DAYS OR MORE							
Number of Responses	1569	95	74	44	131	57	1970
Percent Trip Purpose	30.3	6.1	4.8	5.6	6.8	15.4	17.3
LOCAL RESIDENT							
Number of Responses	535	1095	899	636	843	147	4155
Percent Trip Purpose	10.3	70.8	58.2	81.4	43.5	39.4	36.6
NO RESPONSE							
Number of Responses	79	21	21	21	51	12	205
Percent Trip Purpose	1.5	1.4	1.4	2.7	2.7	3.2	1.8
TOTAL							
Total All Station Responses	5186	1547	1545	781	1936	373	11368
Percent Total of all Stations	45.6	13.6	13.6	6.9	17.0	3.3	100

TABLE 17
POSTCARD SURVEY QUESTION 7
TOTAL ALL STATIONS

TOTAL ALL STATIONS

HAVE YOU JUST STOPPED, OR WILL YOU BRIEFLY STOP IN CADILLAC FOR FOOD, LODGING, GAS, ETC.?

	YE:	5	NO		NO RESPONSE			
	# OF RESPONSES	% TRIP PURPOSE	# OF RESPONSES	% TRIP PURPOSE	# OF RESPONSES	% TRIP PURPOSES	TOTAL	% TOTAL
VACATION	2568	49.3	2475	47.6	163	3.1	5206	45.7
WORK	593	38.3	665	42.9	292	18.8	1550	13.6
PERSONAL BUSINESS	713	45.9	688	44.3	152	9.8	1553	13.6
SHOPPING	452	57.9	189	24.2	140	17.9	781	6.8
OTHER	891	45.9	879	45.4	168	8.7	1938	17.0
NO RESPONSE	197	52.5	141	37.6	37	9.9	375	3.3
TOTAL	5414	47.5	5037	44.2	952	8.3	11403	100.0

TABLE 18

TOTAL ALL STATIONS

POSTCARD SURVEY QUESTION 8 TOTAL ALL STATIONS

IF DRIVING COSTS WERE TO DOUBLE WOULD YOU:

	VACATION	WORK	PERSONAL BUSINESS	SHOPPING	OTHER	NO RESPONSE	TOTAL
CONTINUE TO MAKE TRIP AS USUAL							
Number of Responses	1423	882	587.	193	741	129	3955
Percent Trip Purpose	27.1	56.8	37.7	24.7	38.2	34.4	
NOT MAKE TRIP AS OFTEN	· · · · · · · · · · · · · · · · · · ·		or and and an		<u> </u>		
Number of Responses	1734	148	410	334	435	109	3170
Percent Trip Purpose	33.0	9.5	26.4	42.8	22.4	29.1]
CAR/VAN POOL WITH OTHERS							
Number of Responses	104	60	24	11	73	7	279
Percent Trip Purpose	2.0	3.9	1.5	1.4	3.8	1.9	
SHIFT TO RUBLIC TRANSPORTATION							
Number of Responses	68	35	35	11	35	9	193
Percent Trip Purpose	1.3	2.3	2.3	1.4	1.8	2.4	
PROBABLY NOT MAKE TRIP							
Number of Responses	1115	68	218	104	278	50	1833
Percent Trip Purpose	21.3	4.4	14.0	13.3	14.3	13.3	
DON'T KNOW							
Number of Responses	628	252	217	93	248	35	1473
Percent Trip Purpose	12.0	16.2	13.9	11.9	12.8	9.3	
NO RESPONSE	/-				}	<u> </u>	
Number of Responses	171/	107	65	35	130	36	544
Percent Trip Purpose	3,⁄3	6.9	4.2	4.5	6.7	9.6	
TOTAL				4.7	· · · · · · · · · · · · · · · · · · ·		
Total All Station Responses	5243	1552	1556	781	1940	375	11447
Percent Total of all Stations	45.8	13.6	13.6	. 6.8	16.9	3.3	100.0

TABLE 19

WHAT RESPONSE BEST DESCRIBES THE LENGTH OF YOUR STAY IN THIS NORTHERN AREA OF THE STATE?

<u> </u>		i	1	· · · · · · · · · · · · · · · · · · ·		1	
	VACATION	WORK	PERSONAL BUSINESS	SHOPPING	OTHER	NO RESPONSE	TOTAL
ONE DAY OR LESS	~~~~~~~~~~~~		<u></u>				111111.07.744.7
Number of Responses	92	57	40	9	47	4	249
Percent Total at Station	4.4	2.7	1.9	0.4	2.2	0.2	11.8
Percent Trip Purpose	10.1	13.6	13.6	6.1	17.2	6.5	
2 TO 4 DAYS			t	· · · · · · · · · · · · · · · · · · ·			
Number of Responses	415	36	36	0	62	21	5 7 0
Percent Total at Station	19.7	1.7	1.7	0.0	3.0	1.0	27.1
Percent Trip Purpose	45.8	8.6	12.2	0.0	22.6	33.9	
5 DAYS OR MORE							
Number of Responses	292	21	20	9	23	10	375
Percent Total at Station	13.9	1.0	1.0	0.4	1.1	0.5	17.9
Percent Trip.Purpose	32.2	5.0	6.8	6.1	8.4	16.1	
LOCAL RESIDENT							
Number of Responses	93	298	193	125	131	26	866
Percent Total at Station	4.4	14.2	9.2	5.9	6.3	1.2	41.2
Percent Trip Purpose	10.3	71.3	65.4	85.1	47.8	41.9	
NO RESPONSE	<u> </u>		*****				
Number of Responses	15	6	6	4	11	1	43
Percent Total at Station	0.7	0.3	0.3	0.2	0.5	0.0	2.0
Percent Trip Purpose	1.6	1.5	2.0	2.7	4.0	1.6	
				<u></u>			
TOTAL	***************************************						
Total All Station Responses	907	418	295	147	274	62	2103
Percent Total of Station	43.1	19.9	14.1	7.0	13.0	2.9	100.0
1			_ 1	1.		L	

STATION 1 TOTAL: 2,103

TABLE 20

WHAT RESPONSE BEST DESCRIBES
THE LENGTH OF YOUR STAY IN
THIS NORTHERN AREA OF THE
STATE?

	VACATION	WORK	PERSONAL BUSINESS	SHOPPING	OTHER	NO RESPONSE	TOTAL
ONE DAY OR LESS	Ţ						,
Number of Responses	51	14	29	14	42	2	152
Percent Total at Station	3.8	1.1	2.1	1.1	3.1	0.1	11.3
Percent Trip Purpose	15.2	6.0	12.0	6.2	15.6	4.7	
2 TO 4 DAYS	****						
Number of Responses	123	5	24	10	43	12	217
Percent Total at Station	9.1	0.4	1.8	0.7	3.2	0.9	16.1
Percent Trip Purpose	36.6	2.1	10.0	4.4	15.9	28.6	
5 DAYS OR MORE							
Number of Responses	55	5	5	9	7	2	83
Percent Total at Station	4.0	0.4	0.4	0.7	0.5	0.1	6.1
Percent Trip Purpose	16.4	2.1	2.04	4.0	2.6	4.8	
LOCAL RESIDENT	· · · · · · · · · · · · · · · · · · ·						
Number of Responses	98	204	181	184	172	23	862
Percent Total at Station	7.3	15.1	13.4	13.6	12.7	1.7	63.8
Percent Trip Purpose	29.2	86.8	75.1	81.0	63.7	54.8	
NO RESPONSE						<u></u>	· · · · · · · · · · · · · · · · · · ·
Number of Responses	9	7	2	10	6	3	37
Percent Total at Station	0.7	0.5	0.1	0.7	0.4	0.3	2.7
Percent Trip Purpose	2.6	3.0	0.8	4.4	2.2	7.1	
TOTAL							
Total All Station Responses	336	235	241	227	270	42	1351
Percent Total of Station	24.9	17.4	17.8	16.8	20.0	3.1	100.0

STATION 2 TOTAL: 1,351

TABLE 21

WHAT RESPONSE BEST DESCRIBES
THE LENGTH OF YOUR STAY IN
THIS NORTHERN AREA OF THE
STATE?

	VACATION	WORK	PERSONAL BUSINESS	SHOPPING	OTHER	NO RESPONSE	TOTAL
ONE DAY OR LESS							
Number of Responses	131	6	67	7	121	6	338
Percent Total at Station	6.6	0.3	3.4	0.4	6.0	0.3	17.0
Percent Trip Purpose	13.1	5.1	24.4	12.1	24.7	10.0	
2 TO 4 DAYS							
Number of Responses	550	33	87	1	150	23	844
Percent Total at Station	27.5	1.7	4.4	0.0	7.5	1.1	42.2
Percent Trip Purpose	55.1	28.2	31.6	1.7	30.7	38.3	
5 DAYS OR MORE							
Number of Responses	185	15	14	2	35	11	262
Percent Total at Station	9.3	0.8	0.7	0.1	1.7	0.5	13.1
Percent Trip Purpose	18.5	12.8	5.1	3.4	7.2	18.3	
LOCAL RESIDENT						· · · · · · · · · · · · · · · · · · ·	
Number of Responses	116	60	104	47	165	18	510
Percent Total at Station	5.8	3.0	5.2	2.4	8.2	0.9	25.5
Percent Trip Purpose	11.6	51.3	37.8	81.1	33.7	30.0	
NO RESPONSE							
Number of Responses	17	3	3	1	18	2	44
Percent Total at Station	0.9	0.2	0.1	0.0	0.9	0.1	2.2
Percent Trip Purpose	1.7	2.6	1.1	1.7	3.7	3.4	
TOTAL							· · · · · · · · · · · · · · · · · · ·
Total All Station Responses	999	117	275	58	489	60	1998
Percent Total of Station	50.0	5.9	13.8	2.9	24.4	3.0	100.0

STATION 3 TOTAL: 1,998

TABLE 22

WHAT RESPONSE BEST DESCRIBES THE LENGTH OF YOUR STAY IN THIS NORTHERN AREA OF THE STATE?

			<u></u>				
	VACATION	WORK	PERSONAL BUSINESS	SHOPPING	OTHER	NO RESPONSE	TOTAL
ONE DAY OR LESS			·				
Number of Responses	170	1.0	57	5	128	6	376
Percent Total at Station	7.4	0.4	2.5	0.2	5.6	0.3	16.4
Percent Trip Purpose	11.2	11.6	24.2	19.2	34.6	12.8	
2 TO 4 DAYS			· · · · · · · · · · · · · · · · · · ·				
Number of Responses	654	27	67	4	102	23	877
Percent Total at Station	28.6	1.2	2.9	0.2	4.5	1.0	38.4
Percent Trip Purpose	42.9	31.4	28.4	15.5	27.6	48.9	
5 DAYS OR MORE			· · · · · · · · · · · · · · · · · · ·				
Number of Responses	592	10	23	l	30	12	668
Percent Total at Station	25.9	0.4	1.0	0.0	1.3	0.5	29.1
Percent Trip Purpose	38.8	11.6	9.7	3.8	8.1	25.6	
LOCAL RESIDENT							
Number of Responses	96	39	86	15	106	5	347
Percent Total at Station	4.2	1.7	3.8	0.7	4.6	0.2	15.2
Percent Trip Purpose	6.3	45.4	36.4	57.7	28.6	10.6	
NO RESPONSE				······································			
Number of Responses	12	0	3	1	4	1	21
Percent Total at Station	0.5	0.0	0.1	0.0	0.2	0.1	0.9
Percent Trip Purpose	0.8	0.0	1.3	3.8	1.1	2.1	4
MOD3.T	**************************************						
TOTAL			<u> </u>				
Total All Station Responses	1524	86	236	26	370	47	2289
Percent Total of Station	66.6	3.8	10.3	1.1	16.2	2.0	100.0

STATION 4 TOTAL: 2,289

TABLE 23

WHAT RESPONSE BEST DESCRIBES
THE LENGTH OF YOUR STAY IN
THIS NORTHERN AREA OF THE
STATE?

	VACATION	WORK	PERSONAL BUSINESS	SHOPPING	OTHER	NO RESPONSE	TOTAL
ONE DAY OR LESS							
Number of Responses	62	16	30	4	37	3	152
Percent Total at Station	4.2	1.1	2.0	0.3	2.5	0.2	10.3
Percent Trip Purpose	10.8	7.6	14.3	2.0	17.1	6.1	
2 TO 4 DAYS				<u> </u>			
Number of Responses .	231	6	14	13	43	11	318
Percent Total at Station	15.8	0.4	1.0	0.9	2.9	0.8	21.8
Percent Trip Purpose	40.2	2.9	6.7	6.3	19.9	22.5	
5 DAYS OR MORE			······································			· · · · · · · · · · · · · · · · · · ·	
Number of Responses	195	6	3	16	13	8	241
Percent Total at Station	13.3	0.4	0.2	1.1	0.9	0.6	16.5
Percent Trip Purpose	33.9	2.9	1.4	7.8	6.0	16.3	
LOCAL RESIDENT			·			<u> </u>	
Number of Responses	79	180	160	170	121	24	734
Percent Total at Station	5.4	12.3	10.9	11.6	8.3	1.6	50.1
Percent Trip Purpose	13.7	86.1	76.2	82.9	56.1	49.0	
NO RESPONSE							
Number of Responses	8	1	3	2	2	3	19
Percent Total at Station	0.6	0.1	0.2	0.1	0.1	0.2	1.3
Percent Trip Purpose	1.4	0.5	1.4	1.0	0.9	6.1	
TOTAL					***************************************		
Total All Station Responses	575	209	210	205	216	49	1464
Percent Total of Station	39.3	14.3	14.3	14.0	14.8	3.3	100.0

STATION 5 TOTAL 1,464

TABLE 24

WHAT RESPONSE BEST DESCRIBES THE LENGTH OF YOUR STAY IN THIS NORTHERN AREA OF THE STATE?

	VACATION	WORK	PERSONAL BUSINESS	SHOPPING	OTHER	NO RESPONSE	TOTAL
ONE DAY OR LESS		·			·		
Number of Responses	35	66	50	9	.36	3	199
Percent Total at Station	1.6	3.1	2.3	0.4	1.7	0.1	9.2
Percent Trip Purpose	4.1	13.7	17.4	7.6	11.4	2.6	
2 TO 4 DAYS							
Number of Responses	489	60	50	4	100	43	746
Percent Total at Station	22.6	2.8	2.3	0.2	4.6	2.0	34.5
Percent Trip Purpose	57.9	12.5	17.4	3.4	31.5	38.1	
5 DAYS OR MORE							
Number of Responses	250	38	9	7	23	14	341
Percent Total at Station	11.6	1.8	0.4	0.3	1.1	0.6	15.8
Percent Trip Purpose	29.6	7.9	3.1	5.9	7.3	12.4	İ
LOCAL RESIDENT			- t				
Number of Responses	53	314	175	95	148	51	836
Percent Total at Station	2.4	14.5	8.1	4.4	6.8	2.4	38.6
Percent Trip Purpose	6.3	65.1	60.7	80.5	46.7	45.1	
NO RESPONSE					M. M.	<u> </u>	······································
Number of Responses	18	4	4	3	10	2	41
Percent Total at Station	0.8	0.2	0.2	0.1	0.5	0.1	1.9
Percent Trip Purpose	2.1	0.8	1.4	2.6	3.1	1.8	
TOTAL					······································		
Total All Station Responses	845	482	288	118	317	113	2163
Percent Total of Station	39.1	22.3	13.3	5.4	14.7	5.2	100.0

STATION 6 TOTAL: 2,163

HAVE YOU JUST STOPPED, OR WILL YOU BRIEFLY STOP IN CADILLAC FOR FOOD, LODGING, GAS, ETC.?

							·				
		YES			NO		N	O RESPONSE			
Scott	RESPONSES	% TOTAL AT STATION	% TRIP PURPOSE	RESPONSES	% TOTAL AT STATION	% TRIP PURPOSE	RESPONSES	% TOTAL AT STATION	% TRIP PURPOSE	TOTAL	% TOTAL OF STATION
STATION 1					^	pa sa zm. z " i	.				ATION 1 .: 2,111
VACATION WORK PERSONAL BUSINESS SHOPPING OTHER NO RESPONSE	480 196 152 95 143 38	22.7 9.3 7.2 4.5 6.8 1.8	52.5 46.7 51.9 64.6 52.0 61.3	398 145 108 31 99 20	18.8 6.9 5.1 1.5 4.7 0.9	43.6 34.5 36.7 21.1 36.0 32.3	36 79 33 21 33 4	1.7 3.7 1.6 1.0 1.6 0.2	3.9 18.8 11.4 14.3 12.0 6.4	914 420 293 147 275 62	43.3 19.9 13.9 7.0 13.0 2.9
STATION 2											ATION 2 L: 1,353
VACATION WORK PERSONAL BUSINESS SHOPPING OTHER NO RESPONSE TOTAL	192 82 129 127 134 24	14.2 6.0 9.5 9.4 9.9 1.8	57.3 34.8 52.9 56.2 49.6 57.1	118 102 89 52 97 7	8.7 7.5 6.6 3.8 7.2 0.6	35.2 43.2 36.5 23.0 35.9 16.7	25 52 26 47 39 11	1.9 3.8 1.9 3.5 2.9 0.8	7.5 22.0 10.6 20.8 14.5 26.2	335 236 244 226 270 42	24.8 17.4 18.0 16.7 20.0 3.1
STATION 3							·	marco de MARIA Capacida de Calendario de Calendario de Calendario de Calendario de Calendario de Calendario de	nandi <u>da pangka kanasa</u>		TION 3 : 1,995
VACATION WORK PERSONAL BUSINESS SHOPPING OTHER NO RESPONSE	524 49 137 42 258 29	26.3 2.4 6.9 2.1 12.9 1.5	53.0 41.9 49.1 71.2 52.7 47.5	438 55 123 8 201 28	21.9 2.7 6.2 0.4 10.1 1.4	44.3 47.0 44.1 13.6 41.0 45.9	27 13 19 9 31 4	1.4 0.7 . 1.0 0.4 1.5 0.2	2.7 11.1 6.8 15.2 6.3 6.6	989 117 279 59 490 61	49.5 5.9 14.0 2.9 24.6 3.1
TOTAL	1,039	52.1		853	42.7		103	5.2			

POSTCARD SURVEY QUESTION 7

TABLE 26

STATIONS 4, 5, & 6

POSTCARD SURVEY QUESTION 7 TABLE 26
HAVE YOU JUST STOPPED, OR WILL YOU BRIEFLY STOP IN CADILLAC FOR FOOD, LODGING, GAS, ETC.?

	,			,	···						
		YES			NO		N	O RESPONSE			
	RESPONSES	% TOTAL AT STATION	% TRIP PURPOSE	1	% TOTAL AT STATION	% TRIP PURPOSE	RESPONSES	% TOTAL AT STATION	% TRIP	TOTAL	% TOTAL OF STATION
STATION 4											TION 4 2,303
VACATION WORK PERSONAL BUSINESS SHOPPING OTHER NO RESPONSE TOTAL	663 28 88 13 144 20	28.8 1.2 3.8 0.6 6.2 0.9	43.2 32.6 37.0 50.0 38.9 42.5	841 45 134 11 208 24	36.5 2.0 5.8 0.5 9.0 1.0	54.7 52.3 56.3 42.3 56.2 51.1	32 13 16 2 18 3	1.4 0.6 0.7 0.1 0.8 0.1	2.1 15.1 6.7 7.7 4.9 6.4	1,536 86 238 26 370 47	66.7 3.7 10.3 1.1 16.2 2.0
STATION 5				·							ATION 5 .: 1,461
VACATION WORK PERSONAL BUSINESS SHOPPING OTHER NO RESPONSE TOTAL	364 57 80 108 93 27	24.9 3.9 5.5 7.4 6.4 1.8	63.7 27.1 38.1 52.7 43.0 55.1	180 85 94 59 90 13	12.3 5.8 6.4 4.1 6.2 0.9	31.5 40.5 44.8 28.8 41.7 26.5	27 68 36 38 33 9	1.8 4.6 2.5 2.6 2.3 0.6	4.8 32.4 17.1 18.5 15.3 18.4	571 210 210 205 216 49	39.1 14.4 14.4 14.0 14.8 3.3
STATION 6		,	·								TION 6
VACATION WORK PERSONAL BUSINESS SHOPPING OTHER NO RESPONSE TOTAL	345 181 127 67 119 59	15.8 8.3 5.8 3.1 5.5 2.7	40.1 37.6 43.9 56.8 37.5 51.7	500 233 140 28 184 49	22.9 10.7 6.4 1.3 8.4 2.3	58.1 48.4 48.5 23.7 58.0 43.0	16 67 22 23 14 6	0.7 3.1 1.0 1.1 0.6 0.3	1.8 14.0. 7.6 19.5 4.5. 5.3	861 481 289 118 317 114	39.5 22.1 13.3 5.4 14.5 5.2

TABLE 27

IF DRIVING COSTS WERE TO DOUBLE WOULD YOU:

	VACATION	WORK	PERSONAL BUSINESS	SHOPPING	OTHER	NO RESPONSE	TOTAL
CONTINUE TO MAKE TRIPS AS USUAL							
Number of Responses	249	259	116	31	110	20	785
Percent Total at Station	11.7	12.2	5.5	1.5	5.2	0.9	37.0
Percent Trip Purpose	27.1	61.5	39.3	21.1	40.0	32.3	J
NOT MAKE TRIP AS OFTEN							
Number of Responses	275	39	68	62	54	16	514
Percent Total at Station	13.0	1.8	3.2	2.9	2.6	0.8	24.3
Percent Trip Purpose	29.9	9.3	23.1	42.2	19.6	25.8	
CAR/VAN POOL WITH OTHERS							·
Number of Responses	16	16	4	3	2	2	43
Percent Total at Station	0.8	0.8	0.2	0.1	0.1	0.1	2.1
Percent Trip Purpose	1.7	3.8	1.4	2.0	0.7	3.2	
SHIFT TO PUBLIC TRANSPORTATION							
Number of Responses	13	10	3	3	3	2	34
Percent Total at Station	0.6	0.5	0.1	0.1	0.1	0.1	1.5
Percent Trip Purpose	1.4	2.4	1.0	2.0	1.1	3.2	
PROBABLY NOT MAKE TRIP							
Number of Responses	220	17	44	24	50	11	366
Percent Total at Station	10.4	0.8	2.1	1.1	2.4	0.5	17.3
Percent Trip Purpose	23.9	4.0	14.9	16.3	18.2	17.7	[
DON'T KNOW							
Number of Responses	114	64	50	20	28	6	282
Percent Total at Station	5.4	3.0	2.4	0.9	1.3	0.3	13.3
Percent Trip Purpose	12.4	15.2	16.9	13.7	10.2	9.7	
NO RESPONSE							
Number of Responses	32	16	10	4	28	5	95
Percent Total at Station	1.5	0.8	0.5	0.2	1.3	0.2	4.5
Percent Trip Purpose	3.6	3.8	3.4	2.7	10.2	8.1	
TOTAL						- 	<u> </u>
Total Station Responses	919	421	295	147	275	62	2119
Percent Total of Station	43.4	19.9	13.9	6.9	13.0	2.9	100.0

STATION 1 TOTAL: 2,119

TABLE 28

IF DRIVING COSTS WERE TO DOUBLE WOULD YOU:

POSTCARD SURVEY QUESTION 8 STATION 2

	VACATION	WORK	PERSONAL BUSINESS	SHOPPING	OTHER	NO RESPONSE	TOTAL
CONTINUE TO MAKE TRIPS AS USUAL						<u> </u>	
Number of Responses	85	130	91	42	116	17	481
Percent Total at Station	6.2	9.6	6.7	3.1	8.5	1.3	35.4
Percent Trip Purpose	24.9	55.2	37.3	18.5	43.0	40.5	
NOT MAKE TRIP AS OFTEN			y				
Number of Responses	104	14	66	117	54	10	365
Percent Total at Station	7.6	1.0	4.9	8.6	4.0	0.7	26.8
Percent Trip Purpose	30.5	5.9	27.0	51.5	20.0	23.8	
CAR/VAN POOL WITH OTHERS							
Number of Responses	15	14	6	3	13	0	51
Percent Total at Station	1.1	1.1	0.4	0.2	1.0	0.0	3.8
Percent Trip Purpose	4.4	5.9	2.5	1.3	4.8	0.0	
SHIFT TO PUBLIC TRANSPORTATION							
Number of Responses	5	6	3	4	2	0	20
Percent Total at Station	0.4	0.4	0.2	0.3	0.2	0.0	1.5
Percent Trip Purpose	1.5	2.5	1.2	1.8	0.7	0.0	
PROBABLY NOT MAKE TRIP			,				.
Number of Responses	78	10	41	33	50	7	219
Percent Total at Station	5.7	0.8	3.0	2.4	3.7	0.5	16.1
Percent Trip Purpose	22.9	4.2	16.8	14.5	18.5	16.7	
DON'T KNOW							
Number of Responses	39	39	28	17	22	4	149
Percent Total at Station	2.9	2.9	2.0	1.2	1.6	0.3	10.9
Percent Trip Purpose	11.4	16.5	11.5	7.5	8.2	9.5	
NO RESPONSE						1	,
Number of Responses	15	23	9	11	13	4	75
Percent Total at Station	1.1	1.7	0.7	0.8	0.9	0.3	5.5
Percent Trip Purpose	4.4	9.8	3.7	4.9	4.8	9.5	<u> </u>
TOTAL	1 T		· · · · · · · · · · · · · · · · · · ·			<u> </u>	<u>r </u>
Total Station Responses	341	236	244	227	270	42	1360
Percent Total of Station	25.1	17.3	17.9	16.7	19.9	3.1	100.0

STATION 2 TOTAL: 1,360

TABLE 29

IF DRIVING COSTS WERE TO DOUBLE WOULD YOU:

POSTCARD SURVEY QUESTION 8 STATION 3

	VACATION	WORK	PERSONAL BUSINESS	SHOPPING	OTHER	NO RESPONSE	TOTAL
CONTINUE TO MAKE TRIPS AS USUAL							
Number of Responses	259	63	98	12	183	24	639
Percent Total at Station	12.9	3.1	4.9	0.6	9.1	1.2	31.8
Percent Trip Purpose	25.8	53.8	35.1	20.3	37.3	39.4	
NOT MAKE TRIP AS OFTEN		d	<u> </u>	<u></u>		<u></u>	
Number of Responses	324	19	82	23	124	17	589
Percent Total at Station	16.1	1.0	4.1	1.1	6.2	0.8	29.3
Percent Trip Purpose	32.2	16.2	29.4	39.0	25.2	27.9	
CAR/VAN POOL WITH OTHERS							
Number of Responses	19	5	2	1	20	1	48
Percent Total at Station	0.9	0.2	0.1	0.1	1.0	0.1	2.4
Percent Trip Purpose	1.9	4.3	0.7	1.7	4.1	1.6	
SHIFT TO PUBLIC TRANSPORTATION							
Number of Responses	18	3	7	0	5	2	35
Percent Total at Station	0.9	0.2	0.3	0.0	0.2	0.1	1.7
Percent Trip Purpose	1.8	2.6	2.5	0.0	1.0	3.3	
PROBABLY NOT MAKE TRIP							
Number of Responses	217	3	43	13	67	8	351
Percent Total at Station	10.8	0.2	2.1	0.6	3.3	0.4	17.4
Percent Trip Purpose	21.6	2.6	15.4	22.0	13.6	13.1	<u> </u>
DON'T KNOW			· · · · · · · · · · · · · · · · · · ·				
Number of Responses	127	16	35	8	7 0	3	259
Percent Total at Station	6.3	0.8	1.7	0.4	3.5	0.2	12.9
Percent Trip Purpose	12.6	13.7	12.6	13.6	14.3	4.9	
NO RESPONSE			·				
Number of Responses	41	8	1.2	2	22	6	91
Percent Total at Station	2.0	0.4	0.6	0.1	1.1	0.3	4.5
Percent Trip Purpose	4.1	6.8	4.3	3.4	4.5	9.8	<u> </u>
TOTAL							
Total Station Responses	1005	117	279	59	491	61	2012
Percent Total of Station	50.0	5.8	13.9	2.9	24.4	3.0	100.0

STATION 3 TOTAL: 2,012

IF DRIVING COSTS WERE TO DOUBLE WOULD YOU:

	VACATION	WORK	PERSONAL BUSINESS	SHOPPING	OTHER	NO RESPONSE	TOTAL
CONTINUE TO MAKE TRIPS AS USUAL	,						
Number of Responses	421	33	87	9	121	9	680
Percent Total at Station	18.3	1.4	3.8	0.4	5.2	0.4	29.5
Percent Trip Purpose	27.4	38.4	36.6	34.7	32.7	19.1)
NOT MAKE TRIP AS OFTEN			·*·····························				··········
Number of Responses	533	13	65	6	88	17	722
Percent Total at Station	23.1	0.6	2.8	0.3	3.8	0.7	31.3
Percent Trip Purpose	34.7	15.1	27.3	23.1	23.8	36.1	
CAR/VAN POOL WITH OTHERS							
Number of Responses	32	2	6	1	19	2	62
Percent Total at Station	1.4	0.1	0.3	0.0	0.8	0.1	2.7
Percent Trip Purpose	2.1	2.3	2.5	3.8	5.1	4.3	
SHIFT TO PUBLIC TRANSPORTATION							
Number of Responses	16	3] 11	1	15	2	48
Percent Total at Station	0.7	0.1	0.5	0.0	0.7	0.1	2.1
Percent Trip Purpose	1.1	3.5	4.6	3.8	4.1	4.3	
PROBABLY NOT MAKE TRIP							
Number of Responses	320	12	37	4	41	11	425
Percent Total at Station	13.9	0.5	1.6	0.2	1.8	0.5	18.5
Percent Trip Purpose	20.8	14.0	15.6	15.4	11.1	23.4	
DON'T KNOW							
Number of Responses	185	13	26	4	60	3	291
Percent Total at Station	8.0	0.6	1.1	0.2	2.6	0.1	12.6
Percent Trip Purpose	12.0	15.1	10.9	15.4	16.2	6.4	
NO RESPONSE			· · · · · · · · · · · · · · · · · · ·				
Number of Responses	29	10	6	ī	26	3	75
Percent Total at Station	1.3	0.4	0.3	0.1	1.1	0.1	3.3
Percent Trip Purpose	1.9	11.6	2.5	3.8	7.0	6.4	
TOTAL							
Total Station Responses	1536	86	238	26	370	47	2303
Percent Total of Station	66.7	3.7	10.3	1.1	16.1	2.1	100.0

STATION 4 TOTAL: 2,303

TABLE 31

IF DRIVING COSTS WERE TO DOUBLE WOULD YOU:

POSTCARD SURVEY QUESTION 8 STATION 5

	VACATION	WORK	PERSONAL BUSINESS	SHOPPING	OTHER	NO RESPONSE	TOTAL
CONTINUE TO MAKE TRIPS AS USUAL		-					
Number of Responses	156	138	78 -	74	7 3	16	535
Percent Total at Station	10.6	9.5	5.3	5.0	5.0	1.1	36.5
Percent Trip Purpose	27.1	65.7	37.0	36.1	33.8	32.7	
NOT MAKE TRIP AS OFTEN						<u> </u>	,
Number of Responses	158	12	66	75	42	16	369
Percent Total at Station	10.8	0.8	4.4	5.1	2.9	1.1	25.1
Percent Trip Purpose	27.4	5.7	31.3	36.6	19.4	32.7	
CAR/VAN POOL WITH OTHERS							
Number of Responses	7	7	1 1	1	10	0	26
Percent Total at Station	0.5	0.5.	0.1	0.1	0.7	0.0	1.9
Percent Trip Purpose	1.2	3.3	0.4	0.5	4.7	0.0	
SHIFT TO PUBLIC TRANSPORTATION		<u> </u>	· · · · · · · · · · · · · · · · · · ·				
Number of Responses	5	4	3	2	6 .) 0	20
Percent Total at Station	0.3	0.3	0.2	0.1	0.4	0.0	1.3
Percent Trip Purpose	0.9	1.9	1.4	1.0	2.8	0.0	
PROBABLY NOT MAKE TRIP							
Number of Responses	156	5	13	20	37	8	239
Percent Total at Station	10.6	0.3	0.9	1.4	2.5	0.6	16.3
Percent Trip Purpose	27.1	2.4	6.2	9.7	17.1	16.3	
DON'T KNOW			,				
Number of Responses	71	27	43	19	30	5	195
Percent Total at Station	4.8	1.8	2.9	1.3	2.1	0.4	13.3
Percent Trip Purpose	12.3	12.9	20.3	9.3	13.9	10.2	
NO RESPONSE							
Number of Responses	23	17	7	14	18	4	83
Percent Total at Station	1.5	1.2	0.5	0.9	1.2	0.3	5.6
Percent Trip Purpose	4.0	8.1	3.3	6.8	8.3	8.1	
TOTAL							
Total Station Responses	576	210	211	205	216	49	1467
Percent Total of Station	39.3	14.3	14.4	14.0	14.7	3.3	100.0

STATION 5 TOTAL: 1,467

TABLE 32

IF DRIVING COSTS WERE TO DOUBLE WOULD YOU:

POSTCARD SURVEY QUESTION 8 STATION 6

	VACATION	WORK	PERSONAL BUSINESS	SHOPPING	OTHER	NO RESPONSE	TOTAL
CONTINUE TO MAKE TRIPS AS USUAL							
Number of Responses	253	259	117	25	138	43	835
Percent Total at Station	11.6	11.8	5.4	1.1	6.3	2.0	38.2
Percent Trip Purpose	29.2	53.7	40.5	21.4	43.4	37.7	
NOT MAKE TRIP AS OFTEN							
Number of Responses	340	51	63	51	73	33	611
Percent Total at Station	15.6	2.4	2.9	2.3	3.3	1.5	28.0
Percent Trip Purpose	39.3	10.6	21.8	43.6	23.0	28.9	<u> </u>
CAR/VAN POOL WITH OTHERS							
Number of Responses	15	16	5	2	9	2	49
Percent Total at Station	0.7	0.7	0.2	0.1	0.4	0.1	2.2
Percent Trip Purpose	1.7	3.3	1.7	1.7	2.8	1.8	
SHIFT TO PUBLIC TRANSPORTATION							
Number of Responses	11	9	8	1	4	3	. 36
Percent Total at Station	0.5	0.4	0.4	0.0	0.2	0.1	1.6
Percent Trip Purpose	1.3	1.9	2.8	0.8	1.3	2.6	
PROBABLY NOT MAKE TRIP	***************************************						
Number of Responses	124	21	40	10	33	5	233
Percent Total at Station	5.7	1.0	1.8	0.5	1.5	0.2	10.7
Percent Trip Purpose	14.3	4.4	13.8	8.5	10.4	4.4	
DON'T KNOW							
Number of Responses	92	93	35	25	38	14	297
Percent Total at Station	4.2	4.3	1.6	1.2	1.7	0.6	13.6
Percent Trip Purpose	10.6	19.3	12.1	21.4	11.9	12.3	
NO RESPONSE	· · · · · · · · · · · · · · · · · · ·				<u> </u>		
Number of Responses	31	33	21	3	23	14	125
Percent Total at Station	1.4	1.5	1.0	0.1	1.1	0.6	5.7
Percent Trip Purpose	3.6	6.8	7.3	2.6	7.2	12.3	[
TOTAL							
Total Station Responses	866	482	289	117	318	1.14	2186
Percent Total of Station	39.6	22.1	13.2	5.4	14.5	5.2	100.0

STATION 6 TOTAL: 2,186

PART IV

COMPARISON DATA WEEKDAY & WEEKEND 1977 The following pages show comparison data between the 1977 Cadillac area weekday and weekend surveys. While the weekend study involved six stations on the three major trunklines in the study area, the weekday study has a total of 13 stations including the area's major county roads. Data for the comparisons in this report therefore involve only those six stations related to the weekend study. The station numbers for both studies identify the same station locations.

The total number of trips for the weekday and weekend study was 22,961 and 27,500 respectively. Weekend traffic increased over weekday traffic 19.8%. Terminal trips for the weekday were 73.4% of the total traffic while weekend terminal trips were 59.4% of total traffic.

Further analysis compares the percent terminal traffic to percent through traffic at the individual trunkline stations. For example, weekday traffic on US-131 was 8,745 trips, with 74.9% of them being terminal trips. Weekend traffic, however, increased to 9,768 trips on US-131 with 56.4% being terminal trips.

Other tables show total, terminal and through trips for M-55 and M-115.

Weekday and weekend data in relation to trip purpose and vehicle type are also given. The number of weekend trips for vacation purposes was 18,554 while only 4,414 trips were vacation trips during the weekday. A comparison of work trips indicates that 12,536 of the weekday traffic was for work purposes. Weekend work trips totaled 4,950. Both weekday and weekend vehicle types were predominantly passenger cars (20,632/weekday - 28,932/weekend).

TABLE 34

WEEKEND/WEEKDAY VEHICLE TYPE & TRIP PURPOSE COMPARISONS*

AND TOTAL MANAGEMENT	TOI	ral.	TERM	INAL	THROUGH				
VEHICLE TYPE	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND			
Passenger Car	20,632	28,932	12,382	12,414	8,250	16,518			
Passenger Car w/Trailer	633	1,818	197	540	436	1,278			
Panel or Pickup	4,687	ļ	3,060		1,627	1			
Van or Pickup		5,477		2,644	•	2,833			
Panel or Pickup w/Trailer	315		89		226				
Van or Pickup w/Trailer		1,012		279		733			
Motor Home		494		130	ļ	364			
Other Single Unit Trucks	1,324		710		614				
Combination Trucks w/Trailer	1,483		405		1,078				
Other Trucks		923		. 335		588			

TRIP PURPOSE	TO.	ral.	TERM	INAL	THRO	DUGH
TRIP PURPOSE.	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND
Vacation	4,414	18,554	841	5,006	3,573	13,548
Work	12,536	4,950	7,996	3,229	4,540	1,721
Personal Business	1,988	4,790	1,356	2,215	632	2,575
Shopping	2,800	2,300	2,620	2,185	180	115
Other & All Other	3,090	6,719	1,930	3,042	1,160	3,677
Other Social or Recreation	4,246		2,100		2,146	
No Response	,	1,343		665		678

^{*}Vehicle Occupancy comparisons are not given due to no vehicle occupancy data from weekday study.

TABLE 33

1977 WEEKDAY & WEEKEND COMPARATIVE DATA BY STATION

		W E	EEKDA	Y		WEEKEND									
STATION	TOTAL	TERMINAL	% TERMINAL	THROUGH	% THROUGH	TOTAL	TERMINAL	% TERMINAL	THROUGH	% THROUGH					
1	5580	3457	62.0	2123	38.0	8202	3519	42.9	4683	57.1					
2	4912	4034	82.1	878	17.9	4811	3619	75.2	1192	24.8					
3	5361	3092	57.7	2269	42.3	5642	1993	35.3	3649	64.7					
4	4735	1236	26.1	3499	73.9	8646	2237	25.9	6409	74.1					
5	4272	3129	73.2	1143	26.8	5335	3147	59.0	2188	41.0					
6	4214	1895	45.0	2319	55.0	6020	1827	30.3	4193	69.7					
						1		1							
TOTAL	22961	16843	73.4	6118*	26.6	27500	16342	59.4	11158*	40.6					

NORTH-SOUTH US-131

		W E	EEKDA	Y		WEEKEND									
STATION	TOTAL	TERMINAL	% TERMINAL	THROUGH	% THROUGH	TOTAL	TERMINAL	% TERMINAL	THROUGH	% THROUGH					
1 3	5580 5361	3457 3092	62.0 57.7	2123 2269	38.0 42.3	8202 5642	3519 1993	42.9 35.3	4683 3649	57.1 64.7					
TOTAL	8745	6549	74.9	2196*	25.1	9768	5512	56.4	4256*	43.6					

EAST-WEST M-55

		WI	EEKDA	Y		WEEKEND									
STATION	TOTAL	TERMINAL	% TERMINAL	THROUGH	% THROUGH	TOTAL	TERMINAL.	% TERMINAL	THROUGH	% THROUGH					
2 5	4912 4272	4034 3129	82.1 73.2	878 1143	17.9 26.8	4811 5335		75.2 59.0	1192 2188	24.8 41.0					
TOTAL	8174	7163	87.6	1011*	12.4	8456	6766	80.0	1690*	20.0					

NORTH-SOUTH M-115

		W I	EEKDA	Y		WEEKEND								
STATION	TOTAL	TERMINAL	% TERMINAL	THROUGH	% THROUGH	TOTAL	TERMINAL	% TERMINAL	THROUGH	% THROUGH				
4 6	4735 4214	1236 1895	26.1 45.0	3499 2 31 9	73.9 55.0	8646 6020	1	25.9 30.3	6409 4193	74.1 69.7				
TOTAL	6040	3131	51.8	2909*	48.2	9365	4064	43.4	5301*	56.6				

APPENDIX A

MOTORIST SURVEY SUMMER 1977

Dear Motorist:

The Department of State Highways and Transportation is conducting a survey as part of a study for northern lower Michigan. Surveys like this are essential for us to determine whether improvements to your transportation system are necessary. Your cooperation in this survey will therefore help us make these decisions.

In order to minimize inconvenience to you, a prepaid justicard is attached. Please complete this form, detach and mail as soon as conveniently possible. Your name is not required.

This survey card relates specifically to this trip. If you have received more than one card, please fill out each one as it relates to that trip.



Thank you for your cooperation,

MICHIGAN DEPARTMENT OF STATE HIGHWAYS AND TRANSPORTATION

1708 (N 4,'77)

FIRST CLASS Lansing; Mich.

BUSINESS REPLY MAIL NO POSTAGE STAMP NECESSARY IF MAILED IN THE UNITED STATES

POSTAGE WILL BE PAID BY

MICHIGAN DEPT. OF STATE HIGHWAYS & TRANSPORTATION

Bureau of Transportation Planning North Region Planning Section P. O. Box 30050 Lansing, Michigan 48909

Permit No. 1312



1708-R (N 4/77)

WHERE DID THIS TRID RECIND

5. Probably not make this trip

6. Don't know

PLEASE WRITE IN OR CIRCLE ONLY ONE RESPONSE FOR EACH QUESTION

	THE PLANT DEPT.		
		CITY	STATE
2.	WHERE WILL THIS TRIP END?	CITY	STATE
3.	TYPE OF VEHICLE USED? 1. Passenger Car 3. Panel, Van or Pickup 5. Motor Home	 Passenger Car with Panel, Van or Pickt Other Truck 	
4.	HOW MANY PERSONS ARE IN THIS 1 2 3 4 5 6 7		
5.	WHAT IS THE PURPOSE OF THIS 7 1. Recreation—Vacation 2. W 5. Other (Explain)	Work 3. Personal Busin	ess 4. Shoppin
6.	WHAT RESPONSE BEST DESCRIBE STATE? 1 day or less 2-4		
7.	HAVE YOU JUST STOPPED, OR FOOD, GAS, LODGING, ETC.?		IN CADILLAC FOR
8.	1. Continue to make this trip as usu 2. Not make trip as often 3. Car/Van Pool with others 4. Shift to public teachers	al	ULD YOU:

ST OF IN GAN DEPARTMENT OF STATE HIGHWAYS AND TRANSPORTATION

MANUAL VEHICLE CLASSIFICATION

O-D 9 (Rev. 10/73)

	ROUTE_			LOCATIO	N DESCR	RIPTION_						CITY
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	EODU	COUNTY	STATEWIDE STA. NO.		YEAR	MONTH	DATE	2.4	0~D	1	SEQ	
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DAY OF WEEK: Col. 17 Sunday 1 Thursday 5 Cordon Line Station 2 Monday 2 Friday 6 Screen Line Station 1 Tuesday 3 Saturday 7 Single Station 3 Wednesday 4 S. W. Winter Class. 4

DIRECTION OF TRAVEL: Cols. 23 - 24

Northbound	01	Westbound	07
Northeastbound	02	Northwestbound	- 08:
Eastbound	03	North - South (2-Way)	09
Southeastbound	04	East - West (2-Way)	10
Southbound	05	Northeast - Southwest (2-Way)	11
Southwestbound	06	Northwest - Southeast (2-Way)	12

TIME ENDING: Cols. 25 - 28

HOUR Cols. 25 – 26	MIN. Cols. 27 – 28
01	0,5
02	13
12:	0.0)
1.5	15
23	45
	Cols. 25 – 26 01 02 tc. 12 tc. 15

TRUCK IDENTIFICATION

Panel and Pickup (2 axle, 4 tire)

Light 2-axle, 4-tire trucks of less than one ton rated capacity, including:

- a. Panel and pickups standard type, including mini-vans (Ford Econoline, Volkswagon, etc.)
- b. Pickup trucks carrying a cab high (sleeper style) camper.

All Other Single Unit Trucks

Heavy 2-axles or more (dual tires or super singles) equal to or greater than one ton rated capacity, including:

- a. All multistop or standup delivery trucks (primarily designed for moving rural and urban goods.)
- b. All large 4-tire trucks with flatbed, dump or other heavy cargo bodies.
- c. Pickups and panels, having heavy truck type hubs or axles, or are noticably larger and longer than the standard type.
- d. Heavy 2-axle trucks with a higher than cab camper body.
- e. Truck tractor without trailer.

Truck Combinations

Truck and/or truck tractor (power unit) pulling semi-trailer or full trailer combinations.