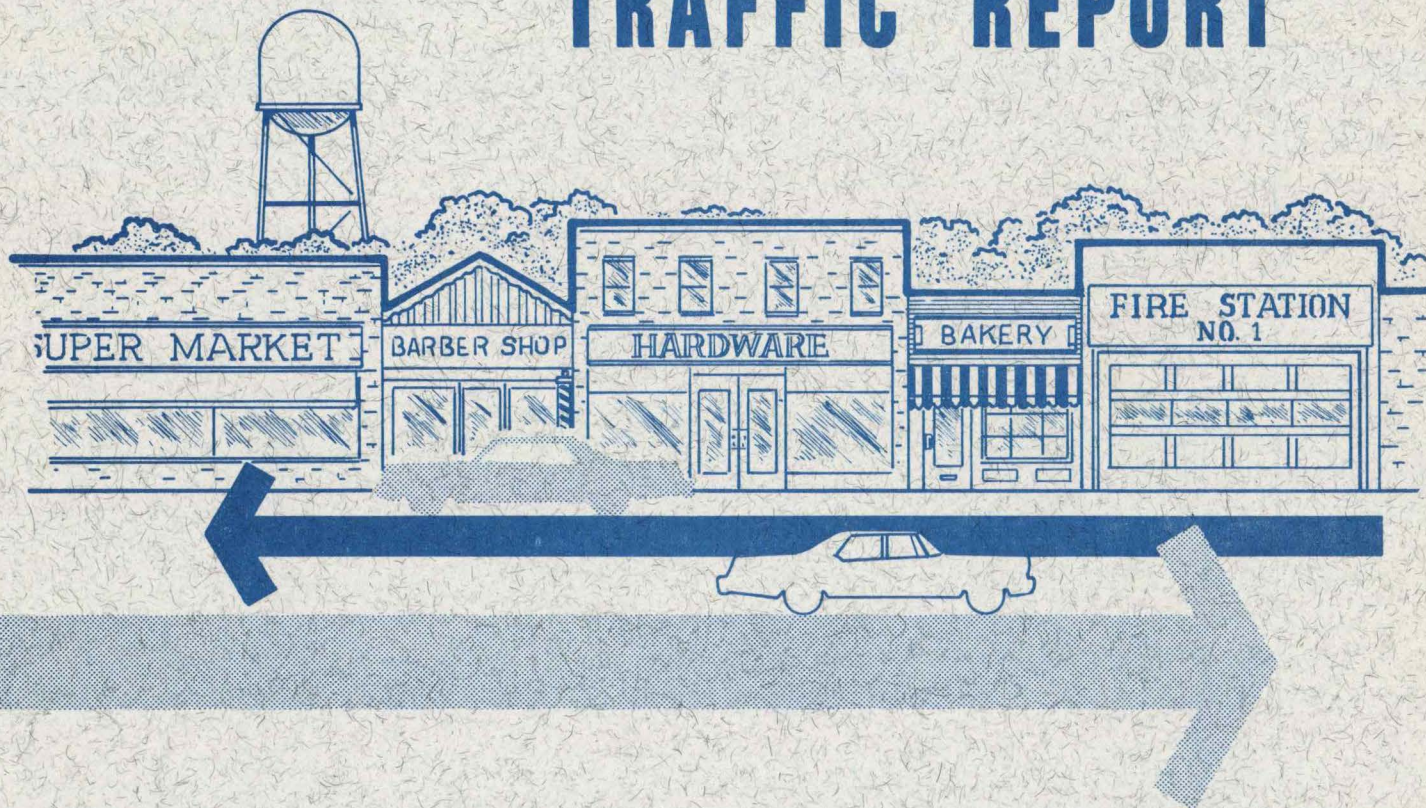


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STORM LAKE

ORIGIN and DESTINATION TRAFFIC REPORT



IOWA

SUMMER 1967

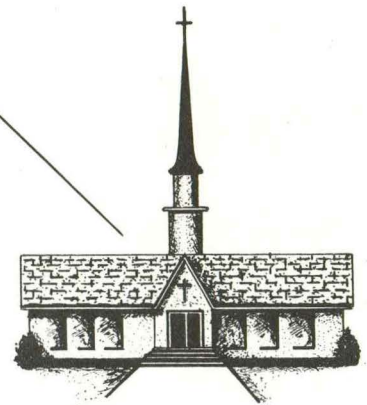
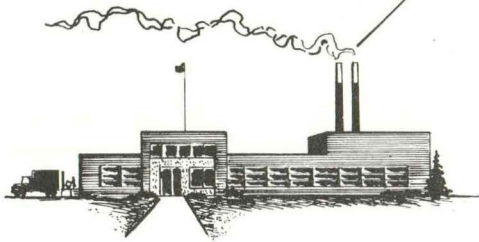
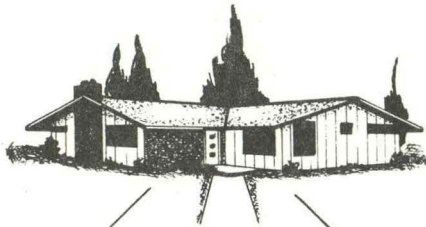
State of Iowa

STORM LAKE

Origin and Destination
Traffic Study

Data Gathered Summer 1967

Published May 1968



PREPARED BY

HIGHWAY PLANNING SURVEYS DEPARTMENT

DIVISION OF PLANNING

IOWA STATE HIGHWAY COMMISSION

IN COOPERATION WITH THE

UNITED STATES DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

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INTRODUCTION

During the summer of 1967, the Iowa State Highway Commission, in cooperation with the United States Bureau of Public Roads, conducted an external origin and destination traffic survey in Storm Lake, Iowa. The purpose of this survey was to determine the total number and type of vehicles entering or leaving the study area and to obtain origin and destination data from a representative sample of those vehicles.

In order to accurately evaluate traffic conditions, it is first essential that accurate and complete data be obtained. The purpose of this report is to summarize this data and to present the findings of the survey in a manner which will implement the determination of traffic needs, and thereby provide a sound basis for street and highway planning.

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DEFINITIONS OF TECHNICAL TERMS

Central Business District	The major business district of a city
Code Station	A location on a minor road at the point where it crosses the cordon line and at which no interviews were taken
Cordon Line	A hypothetical line determined by the location of traffic interview stations and used to delimit the area under study
Destination	The location of the objective of a trip
Desire Line	A straight line between the point of origin and point of destination without regard to routes of travel
External Local Trip	A trip having <u>either</u> origin or destination within the study area and which passes through only one interview station in the cordon line enroute to its destination
External Through Trip	A trip having <u>neither</u> origin nor destination within the study area but which passes through it enroute to its destination
Internal Trip	A trip having both origin and destination within the study area
Interview Station	A location at which vehicle drivers are stopped and interviewed
Origin	The location from which a driver started a trip
Study Area	The total area enclosed by a cordon line of interview stations
Traffic	The total number of vehicles passing a given point
Trip	The one-way travel between point of origin and point of destination



Significant Facts



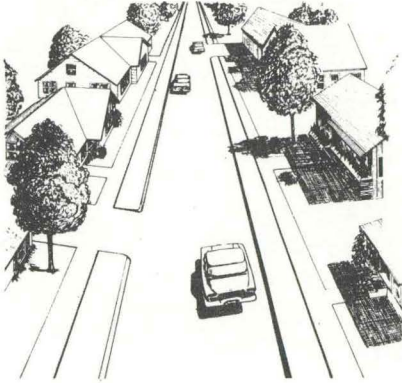
Part One

FIGURE 1-1

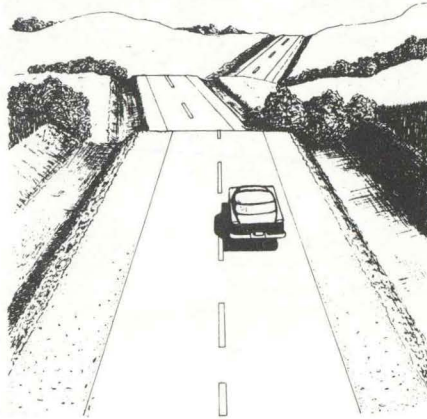
DISTRIBUTION OF TRIPS

STORM LAKE STUDY AREA

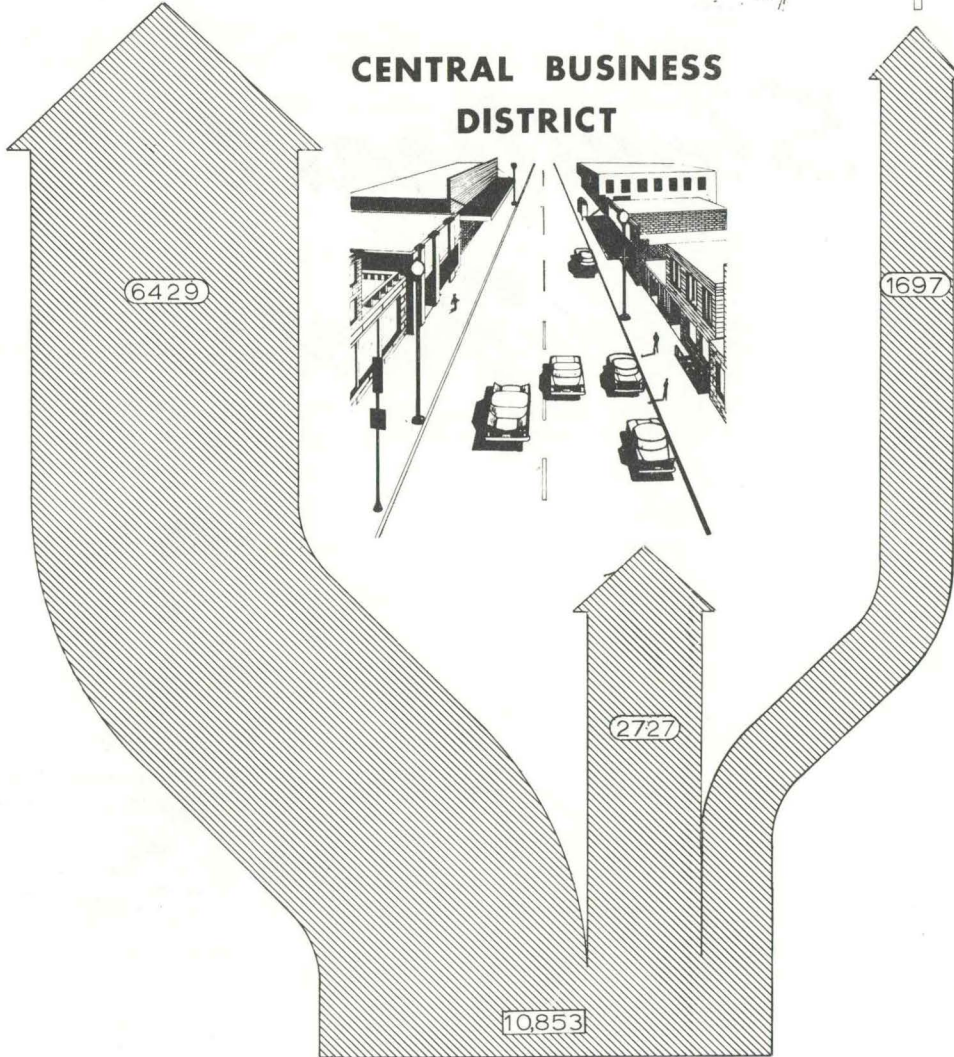
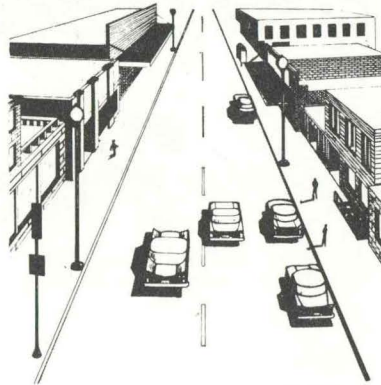
INTERNAL TRACTS



THROUGH TRIPS



CENTRAL BUSINESS DISTRICT



AVERAGE SUMMER
WEEKDAY TRAFFIC 1967

EXTERNAL

SUMMARY

The chart at left graphically illustrates some of the more significant traffic volumes derived from the Storm Lake origin and destination traffic survey. An average of 10,853 trips per day passed through the external cordon line of interview stations surrounding the study area during the survey period.

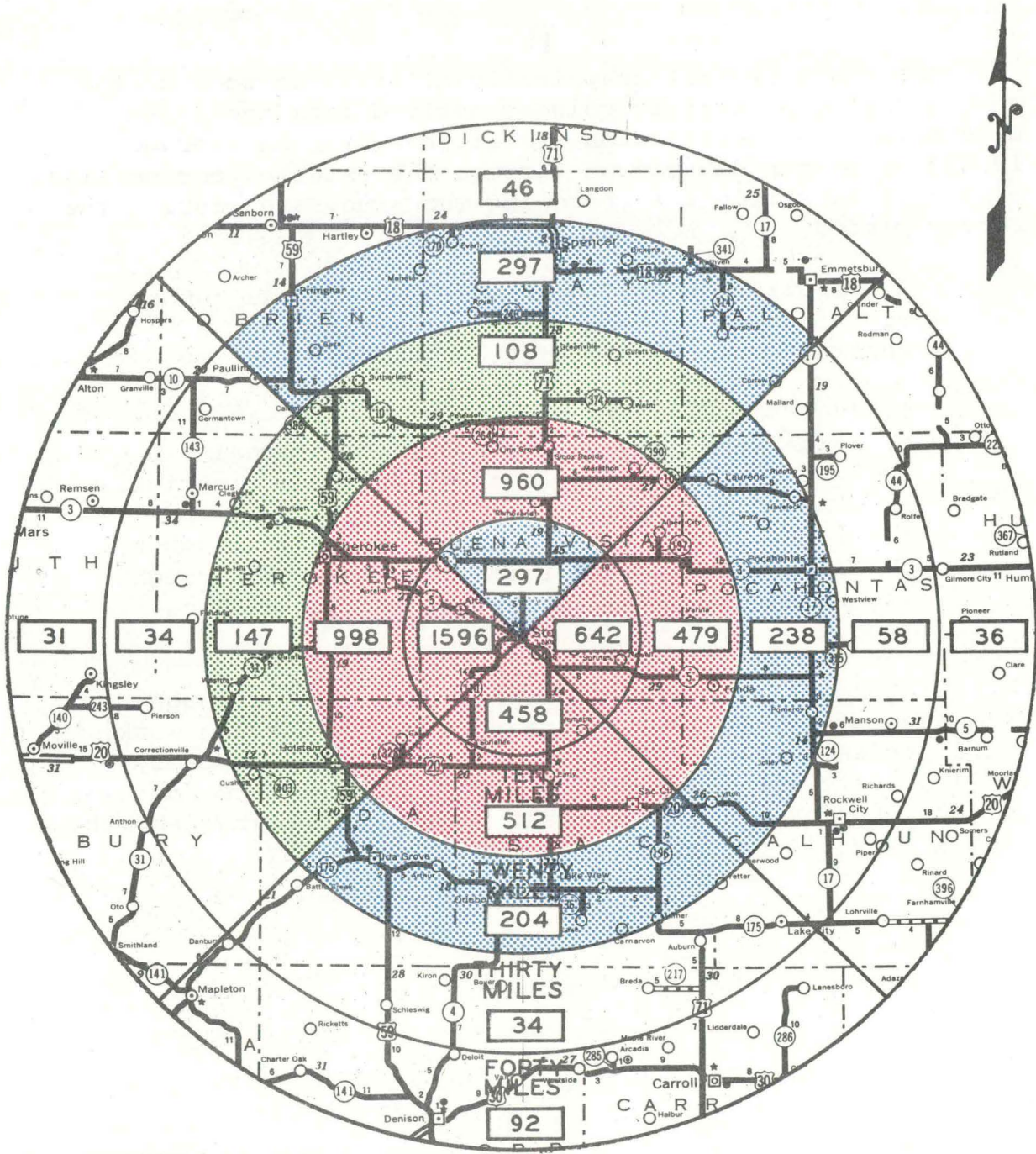
2,727 trips or 25.12 percent of the total number of trips were between external areas and the central business district.

6,429 trips or 59.24 percent of the total number of trips were between external and internal areas exclusive of the central business district.

1,697 trips or 15.64 percent of the total number of trips were through trips which passed through the Storm Lake area enroute to another destination.

Of the total number of trips which passed through interview stations, 18.05 percent began or ended at work, 23.81 percent were for social or recreational purposes, 21.81 percent were during work, 12.95 percent were for personal business, 13.77 percent were for shopping, and the remaining 9.61 percent were for other purposes.

FIGURE I-2
 REGIONAL INFLUENCE OF THE
 STORM LAKE STUDY AREA



LEGEND

0 TO 100 TRIPS	
100 TO 200 TRIPS	
200 TO 400 TRIPS	
400 AND OVER.	

EXPANDED TO AVERAGE
 SUMMER WEEKDAY TRAFFIC 1967

Table 1-1
REGIONAL INFLUENCE OF THE STORM LAKE STUDY AREA

Expanded to Average Summer Weekday Traffic 1967

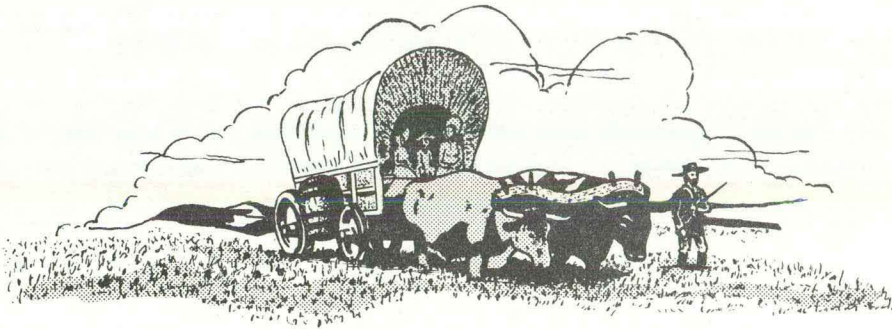
Miles from Study Area		Number of Trips	Percent of Total Trips Within a Fifty-Mile Radius
North	0 - 10	297	4.09
	10 - 20	960	13.21
	20 - 30	108	1.48
	30 - 40	297	4.09
	40 - 50	46	.63
North Total		1,708	23.50
East	0 - 10	642	8.83
	10 - 20	479	6.59
	20 - 30	238	3.28
	30 - 40	58	.80
	40 - 50	36	.50
East Total		1,453	20.00
South	0 - 10	458	6.30
	10 - 20	512	7.04
	20 - 30	204	2.81
	30 - 40	34	.47
	40 - 50	92	1.27
South Total		1,300	17.89
West	0 - 10	1,596	21.96
	10 - 20	998	13.73
	20 - 30	147	2.02
	30 - 40	34	.47
	40 - 50	31	.43
West Total		2,806	38.61
Grand Total		7,267	100.00

VEHICLE TYPE SUMMARY
STORM LAKE STUDY AREA

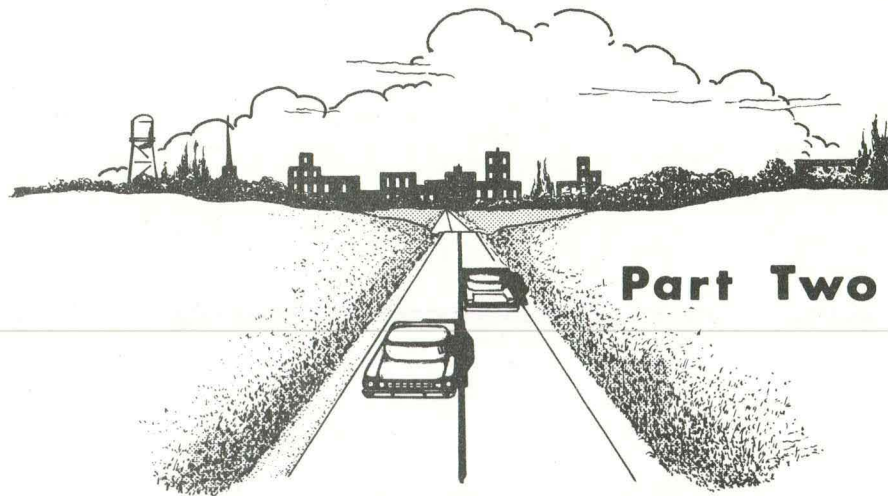
EXPANDED TO AVERAGE SUMMER WEEKDAY TRAFFIC 1967

Station	Location	Passenger Cars	Pickups and Panels	Single Unit Trucks	Truck Combi- nations	Total
701	U.S. 71 North	2,908	256	194	140	3,498
704	F.A.S. 334 East	553	85	43	13	694
710	Iowa 5 East	1,243	114	90	44	1,491
712	U.S. 71 South	1,829	147	103	139	2,218
717	Iowa 110 West	848	98	116	39	1,101
719	F.A.S. 1574 West	409	48	54	30	541
720	Iowa 5 West	2,362	264	314	51	2,991
Grand Total		10,152	1,012	914	456	12,534

The totals shown above include the duplication of those trips which passed entirely through the study area and were, therefore, interviewed twice.



*History
and
Development*



Part Two

HISTORY

Storm Lake, the seat of Buena Vista County, is located in Northwest Iowa, 75 miles east of Sioux City. It was originally settled in the late 1850's. By 1870 the area was prospering, rail connections had been completed, and a newspaper was being published. Storm Lake was incorporated in 1873 and has grown to be a thriving community of approximately 8,000.

The city is located on the north shore of Storm Lake, a natural body of water having approximately 3,200 surface acres. There have been parks along the lake front since the early days of development and in 1885, a city park system was initiated. Chataqua Park is a very popular area used extensively on weekends by residents of the entire state. There are also three other parks and one playground.

The Storm Lake Library was originally organized in 1876, and in 1904 approval was gained to establish a Carnegie Public Library. Today the library houses more than 25,000 volumes and has an annual circulation in excess of 54,000.

Storm Lake is the home of Buena Vista College, a four-year, coeducational liberal arts college which was established in 1891. By 1970 the college anticipates an enrollment of 1,200. In addition to its academic buildings and dormitories, the college also has a chapel, library, theater, and gymnasium.

An extensive food processing industry is an important asset to the economy of the area. Several firms engage in the processing or packing of meat, poultry, and vegetables. Approximately 30 percent of the labor force is engaged in retail or wholesale trade, 26 percent in services, 15 percent in manufacturing, and 29 percent in other miscellaneous industries.

Transportation facilities in Storm Lake include services for both passenger and freight, and a municipal airport with hard-surface runways capable of handling multi-engine corporate aircraft. Highways serving the area include U.S. Highway 71 and Iowa Highways 5 and 110.

FIGURE 2-1

STUDY AREA POSITION IN THE MIDWEST

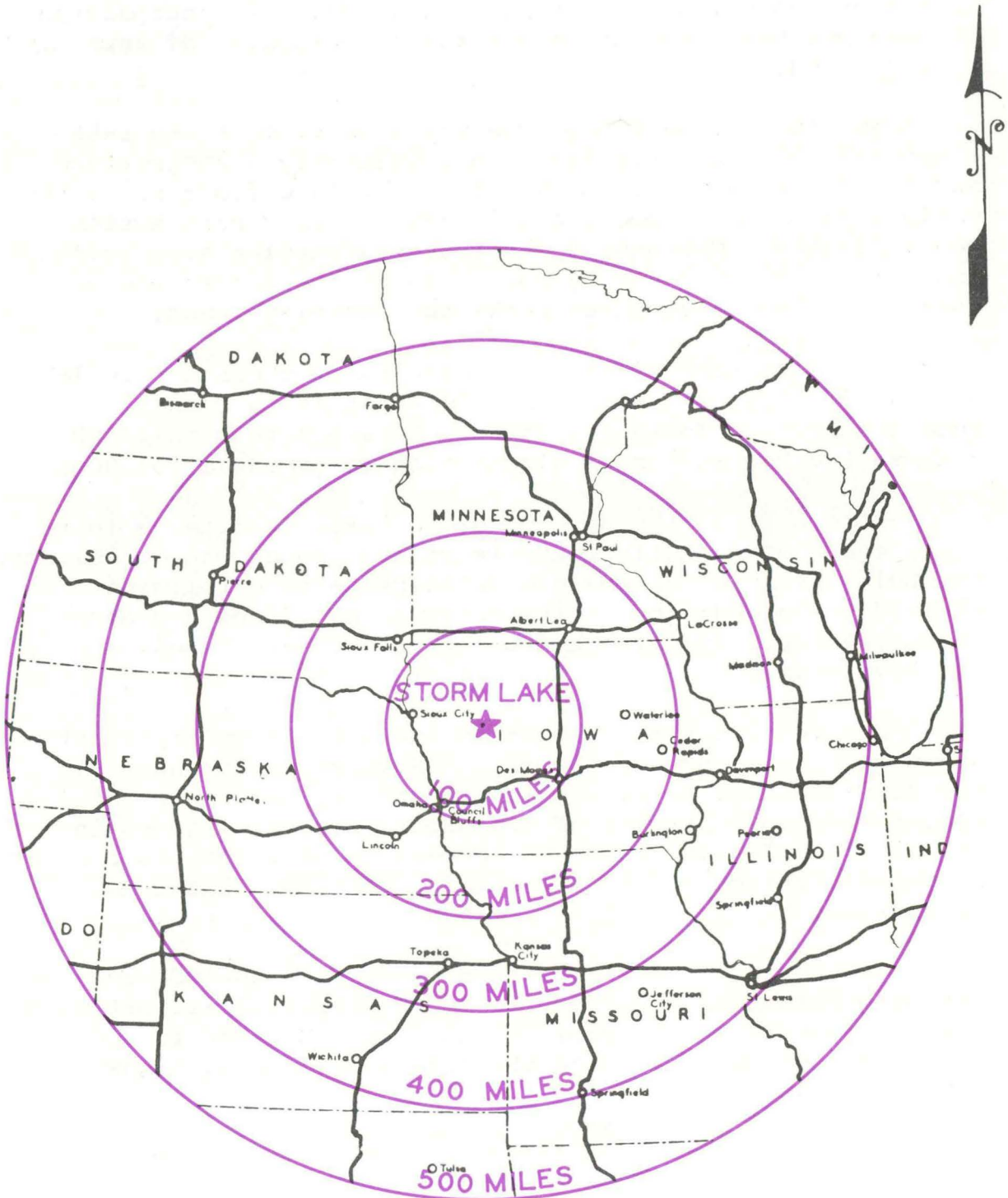
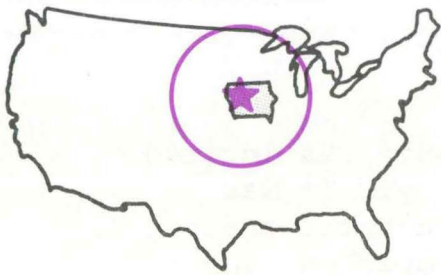
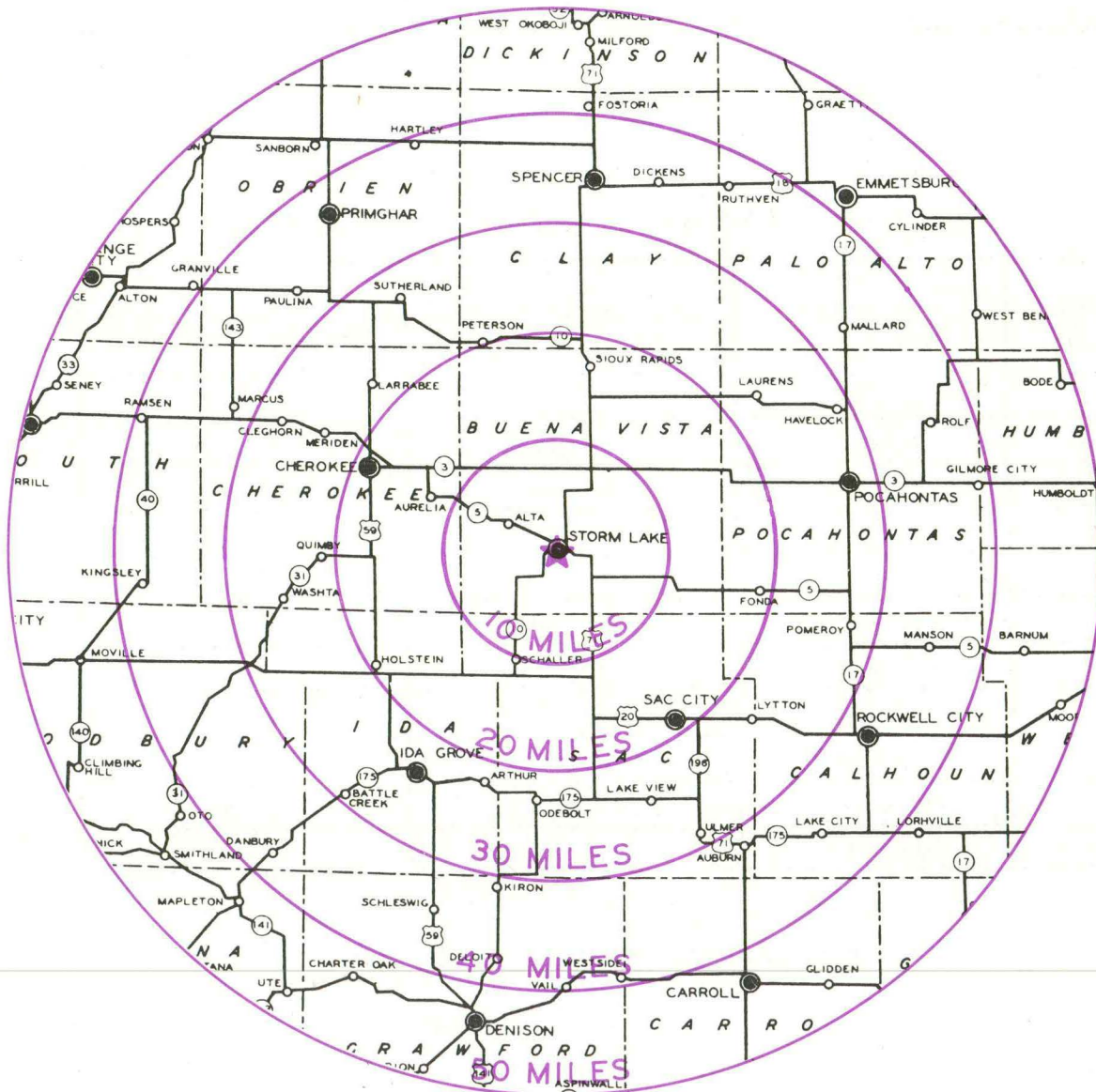
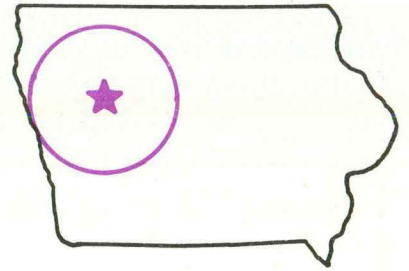


FIGURE 2-2

STUDY AREA POSITION IN IOWA



POPULATION TRENDS

TABLE 2-1 STORM LAKE POPULATION

Census Year	Storm Lake Population	Volume Increase or Decrease	Percent Change
1900	2,169		
1910	2,428	259	11.94
1920	3,658	1,230	50.64
1930	4,157	499	13.64
1940	5,274	1,117	26.87
1950	6,954	1,680	31.85
1960	7,728	774	11.13

TABLE 2-2 BUENA VISTA COUNTY POPULATION

Census Year	Buena Vista Co. Population	Volume Increase or Decrease	Percent Change
1860	57		
1870	1,585	1,528	2,680.70
1880	7,537	5,952	375.52
1890	13,548	6,011	79.52
1900	16,975	3,427	25.30
1910	15,981	- 994	- 5.86
1920	18,553	2,572	16.09
1930	18,667	114	.61
1940	19,838	1,171	6.27
1950	21,113	1,385	6.43
1960	21,189	76	.36

FIGURE 2-3

POPULATION TRENDS

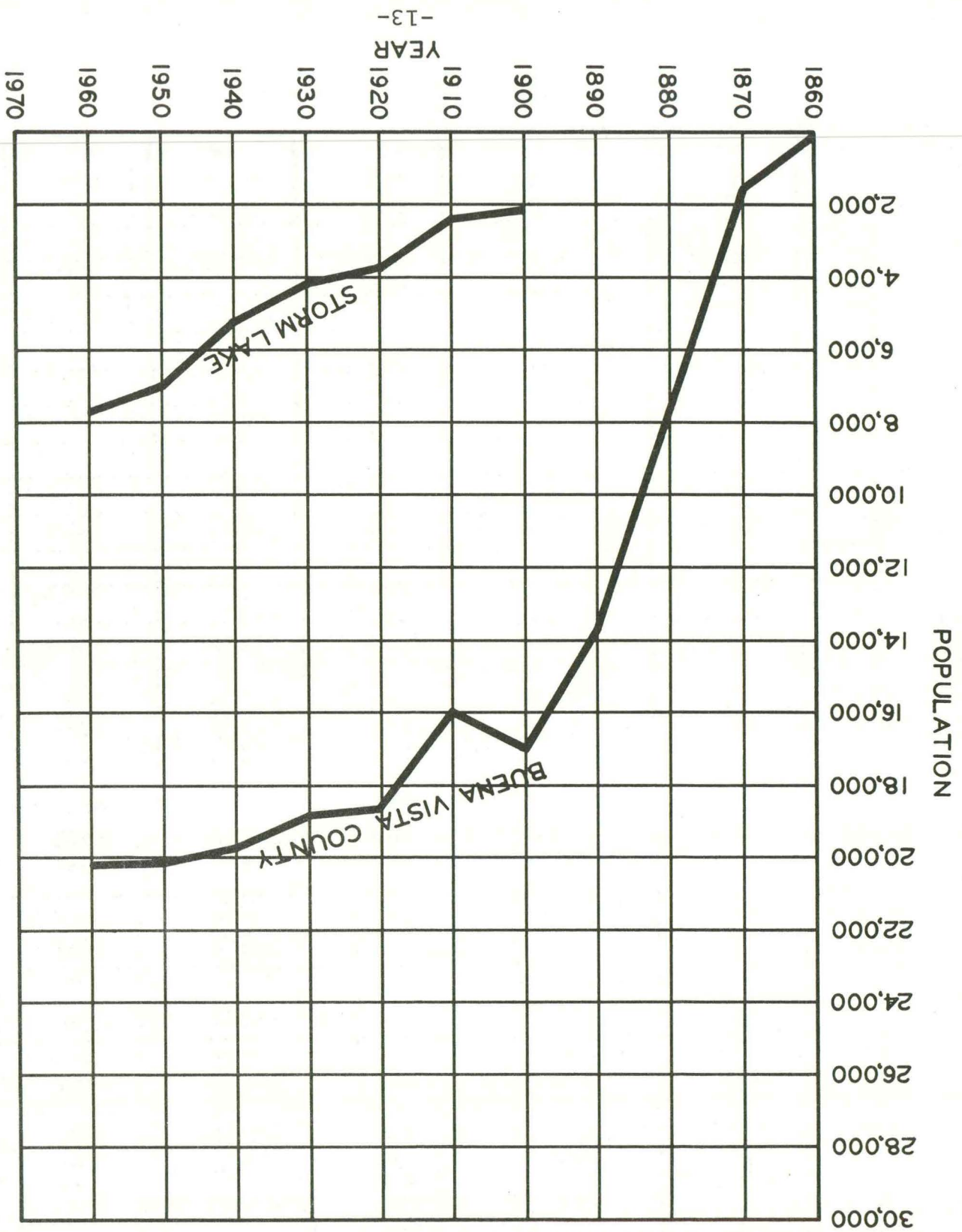
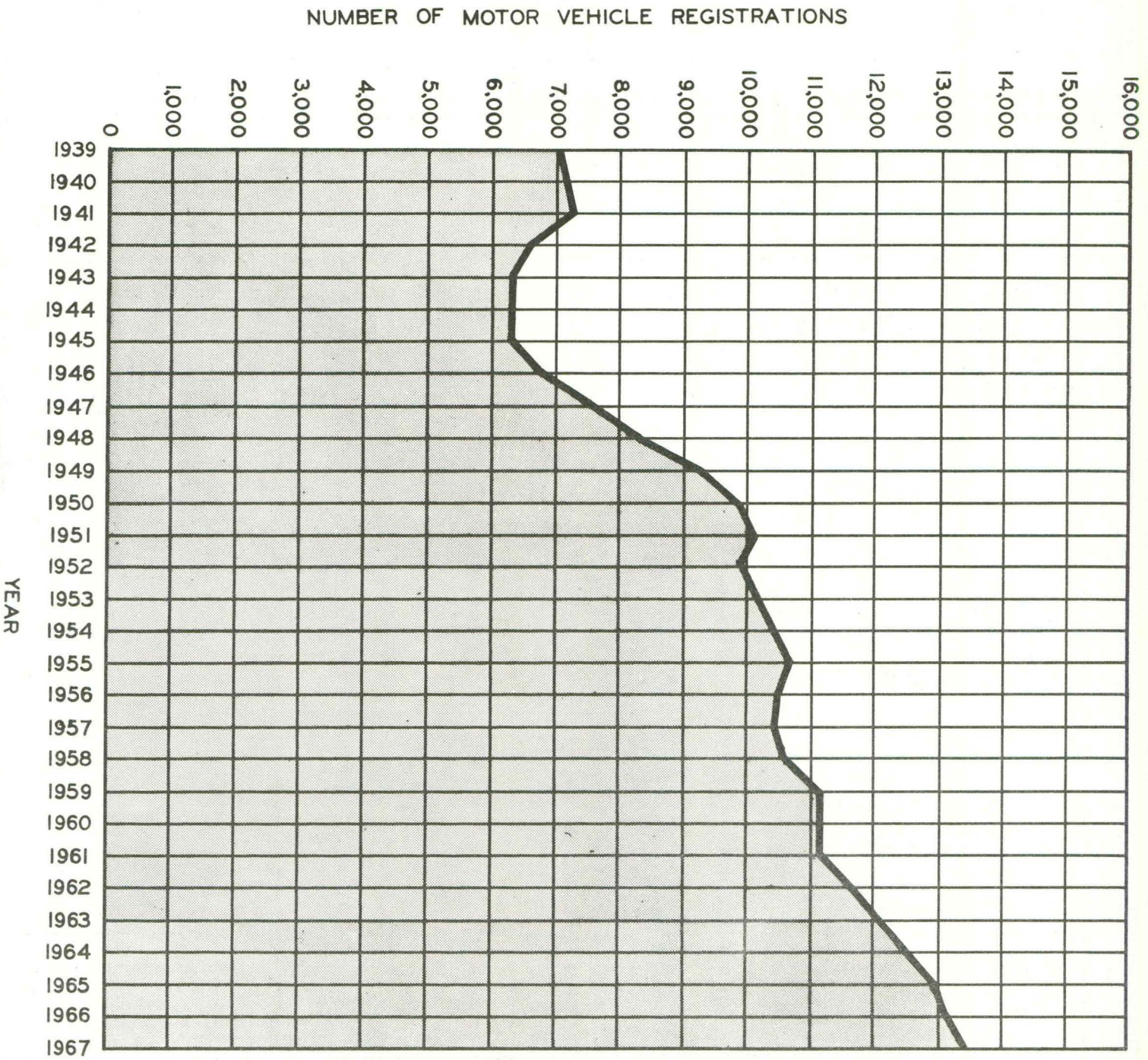
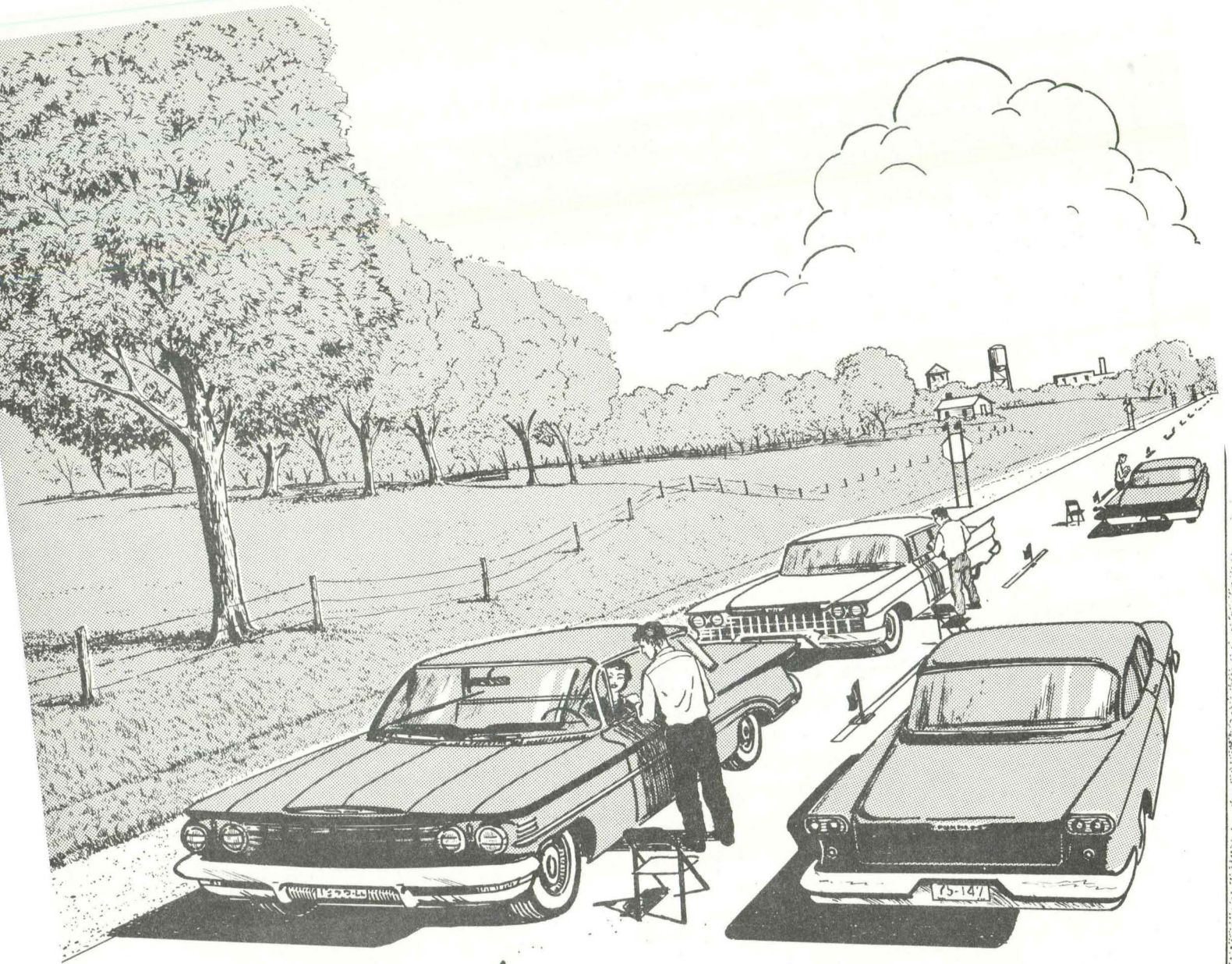


Table 2-3
 MOTOR VEHICLE REGISTRATION IN
 BUENA VISTA COUNTY FROM 1939 THROUGH 1967

Year	Autos	Trucks	Motorcycles	Total	Percent Change
1939	6,144	851	17	7,012	
1940	6,290	920	29	7,239	3.23
1941	6,333	957	26	7,316	1.06
1942	5,776	887	21	6,684	-8.64
1943	5,410	882	18	6,310	-5.60
1944	5,404	880	18	6,302	- .13
1945	5,403	922	21	6,346	- .70
1946	5,759	1,016	38	6,813	7.36
1947	6,420	1,175	74	7,669	12.56
1948	6,960	1,299	84	8,343	8.79
1949	7,750	1,486	87	9,323	11.75
1950	8,290	1,599	83	9,972	6.96
1951	8,295	1,755	75	10,125	1.53
1952	8,174	1,752	73	9,999	-1.24
1953	8,359	1,752	73	10,184	1.85
1954	8,463	1,865	74	10,402	2.14
1955	8,742	1,936	70	10,748	3.33
1956	8,387	2,083	74	10,544	-1.90
1957	8,433	1,984	56	10,473	- .67
1958	8,489	2,041	75	10,605	1.26
1959	8,917	2,124	77	11,118	4.84
1960	8,955	2,113	72	11,140	.20
1961	9,045	2,120	73	11,238	.88
1962	9,431	2,212	83	11,726	4.34
1963	9,649	2,273	96	12,018	2.49
1964	10,072	2,336	124	12,532	4.28
1965	10,261	2,467	174	12,902	2.95
1966	10,401	2,593	202	12,196	2.29
1967	10,392	2,684	237	13,313	.89

FIGURE 2-4
MOTOR VEHICLE REGISTRATION IN BUENA VISTA COUNTY
FROM 1939 THROUGH 1967





Survey

Procedure

Part Three

THE SURVEY

An external origin and destination traffic survey, of the type conducted in Storm Lake, is designed primarily to determine the origin, destination, and purpose of travel, along with the number and type of all vehicles entering or leaving the study area in a given period of time.

It has been demonstrated that travel is an expression of behavior and as such, tends to be repetitive. It is this repetition which enables the statistician and the highway planner to expand and project current data for the prediction of future needs.

In order to obtain accurate information upon which to base an analysis, it is necessary to interview vehicle drivers at strategically located interview stations. A cordon line composed of interview stations and code stations was located around the perimeter of the study area. Interview stations were located on all major roads entering the study area and all other roads were assigned station code numbers to facilitate the organization of interview data for those external through trips which passed through only one interview station. The study area was divided into 46 tracts, and all trips which had either origin or destination within the study area were traced to one of these tracts.

Interviewing for the Storm Lake survey was done between July 27th and August 3rd in 1967. All vehicles passing through interview stations during a 15-hour period from 6 a.m. to 9 p.m. were stopped briefly for interviews in which vehicle operators were questioned concerning the origin, destination, and purpose of the trip in progress. In addition, the vehicle type was recorded along with the location where it was normally kept or garaged, the place of registration, direction of travel, and number of occupants.

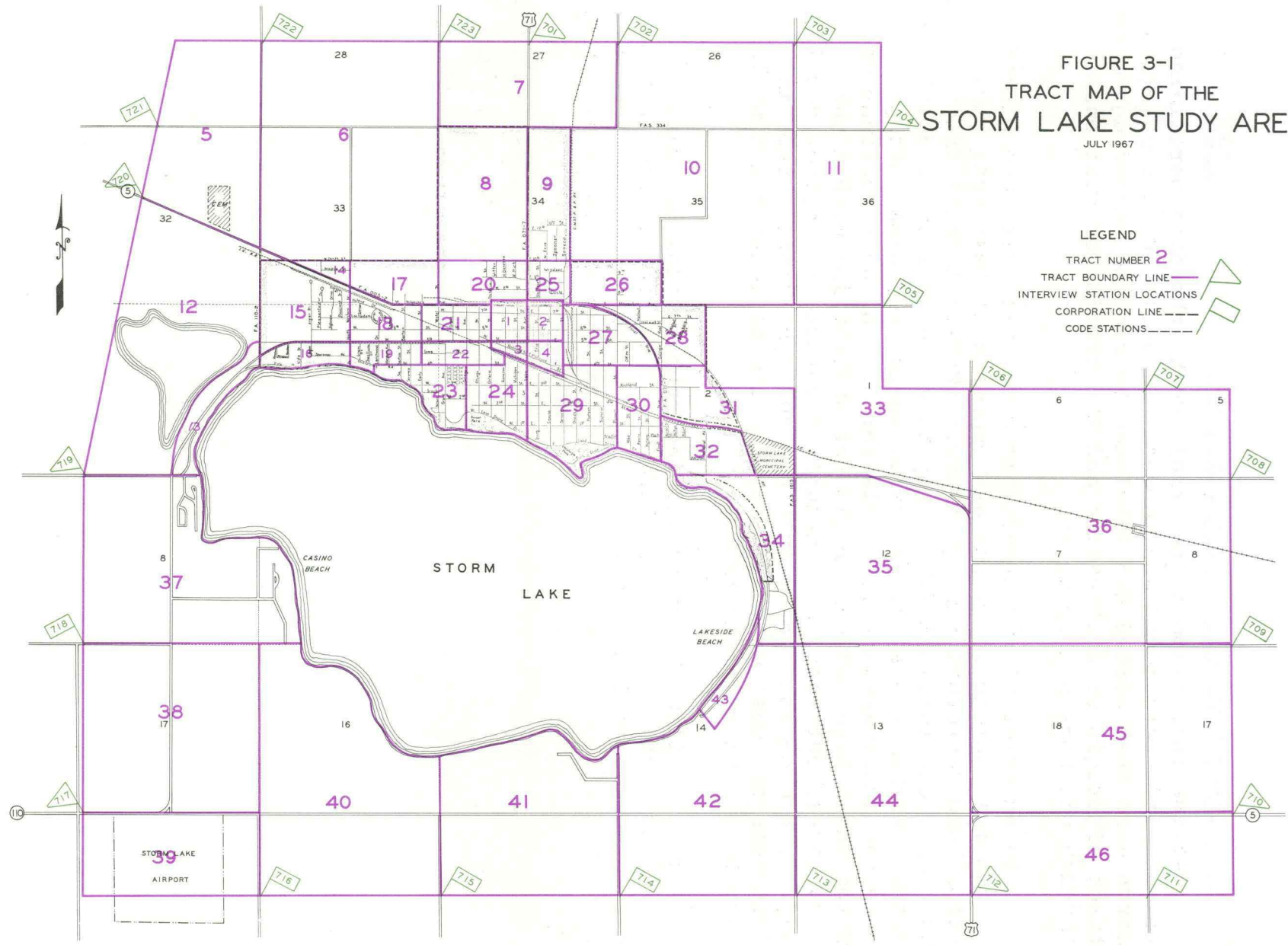
Mechanical traffic recorders were placed at the location of each interview station and were operated continuously for a period of five weekdays, including the day on which the interviewing was done. Manual vehicle classification counts were also taken and, together with the data provided by mechanical recorders, were used to expand the interview data to 24-hour average summer weekday traffic for 1967.

At the conclusion of the field work, the data pertaining to each trip were coded and punched on tabulating cards. These cards were then sorted and tabulated by machine according to the tract of origin or destination and the station or stations through which each trip passed.

In an external survey of this type, all trips are placed in two main categories which are composed of "external local trips" and "external through trips." External local trips have only one terminal (which may be either origin or destination) within the study area and, therefore, pass through only one interview station while enroute to their destination. Trips which have neither origin nor destination within the study area, but must pass through it enroute to another destination, are classified as external through trips. Trips in this category must cross the cordon line at least twice while enroute to their destination.

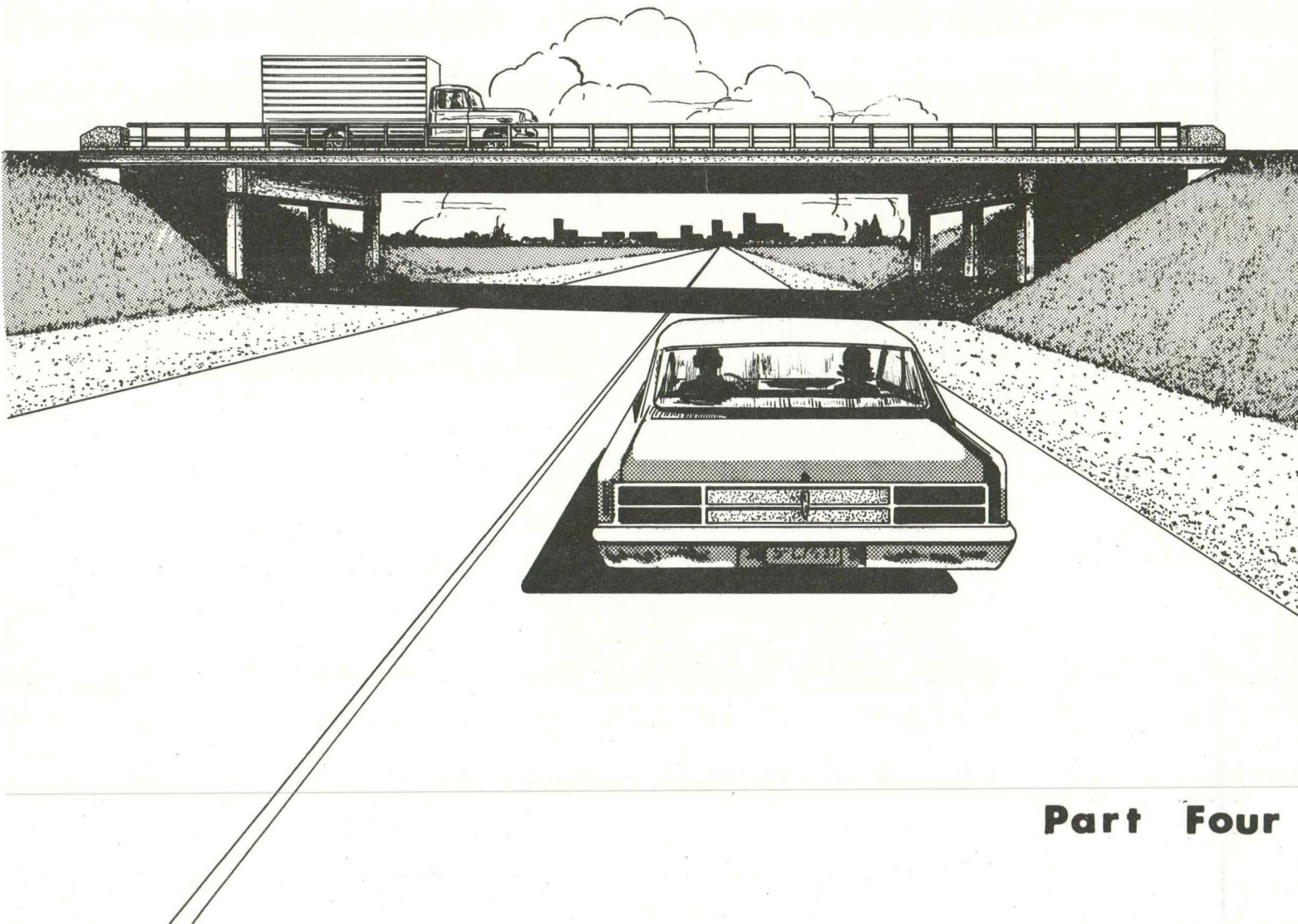
Traffic flow charts indicating trip termini by tract of origin or destination are included in this report along with a series of desire line charts showing desired routes of travel in straight lines between interview stations and internal tracts.

FIGURE 3-1
TRACT MAP OF THE
STORM LAKE STUDY AREA
JULY 1967



Traffic

Movements



Part Four

TRAFFIC FLOW CHARTS

The following traffic flow charts illustrate the internal dispersion of trips between points of origin and/or destination through the stations indicated. These charts are not intended to show exact routes, but rather to show trip volume by tract of origin or destination and the number of trips passing through each external interview station. Trip origins and destinations are not differentiated and the tract or station totals shown may be considered as either origin or destination.

FIGURE 4-1
 INTERNAL DISPERSION OF
 ALL VEHICULAR TRIPS PASSING THROUGH
 STATION 701-U.S. 71 NORTH
 OF THE
 STORM LAKE STUDY AREA

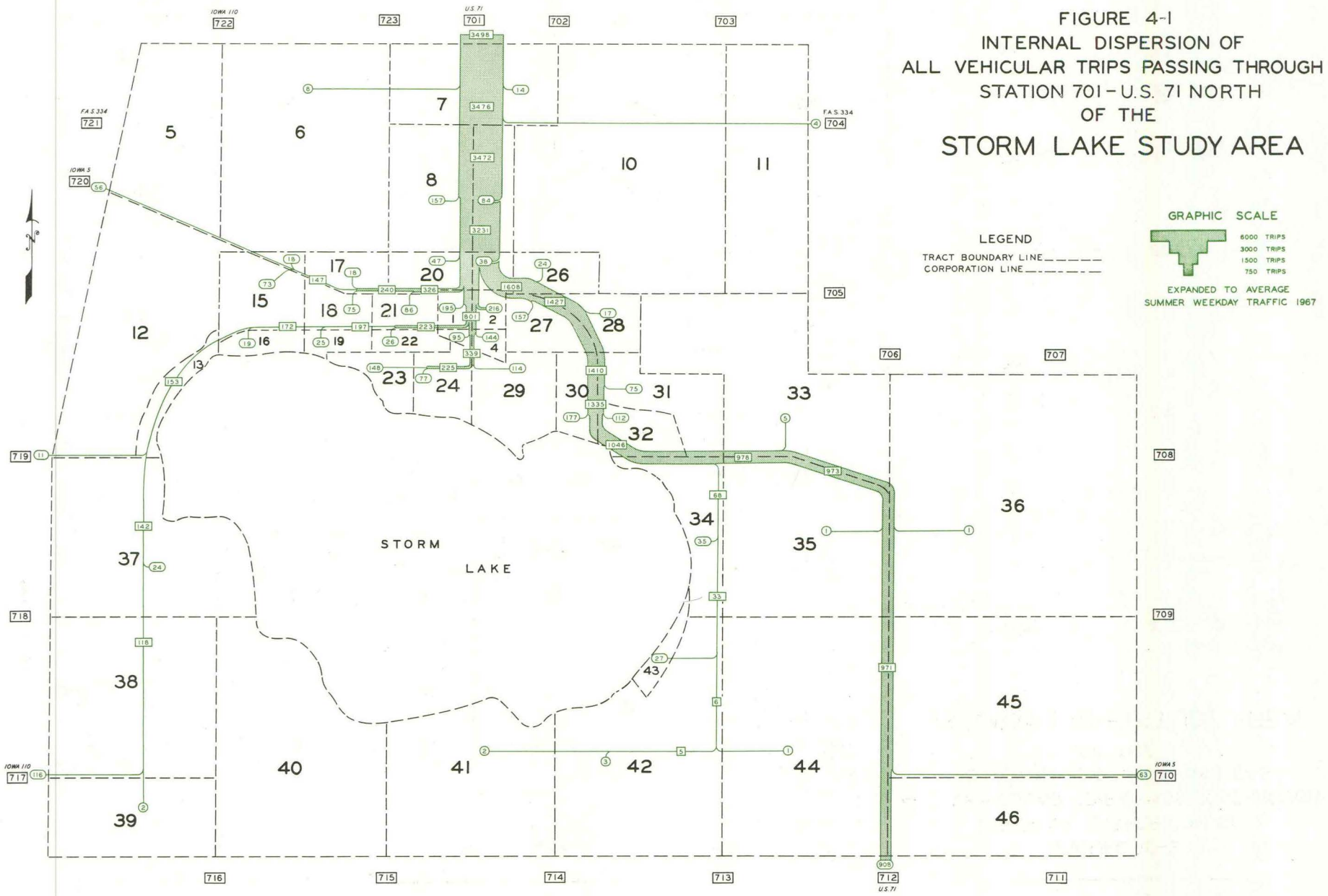


FIGURE 4-2
 INTERNAL DISPERSION OF
 ALL VEHICULAR TRIPS PASSING THROUGH
 STATION 704 -F.A.S. 334 EAST
 OF THE
 STORM LAKE STUDY AREA

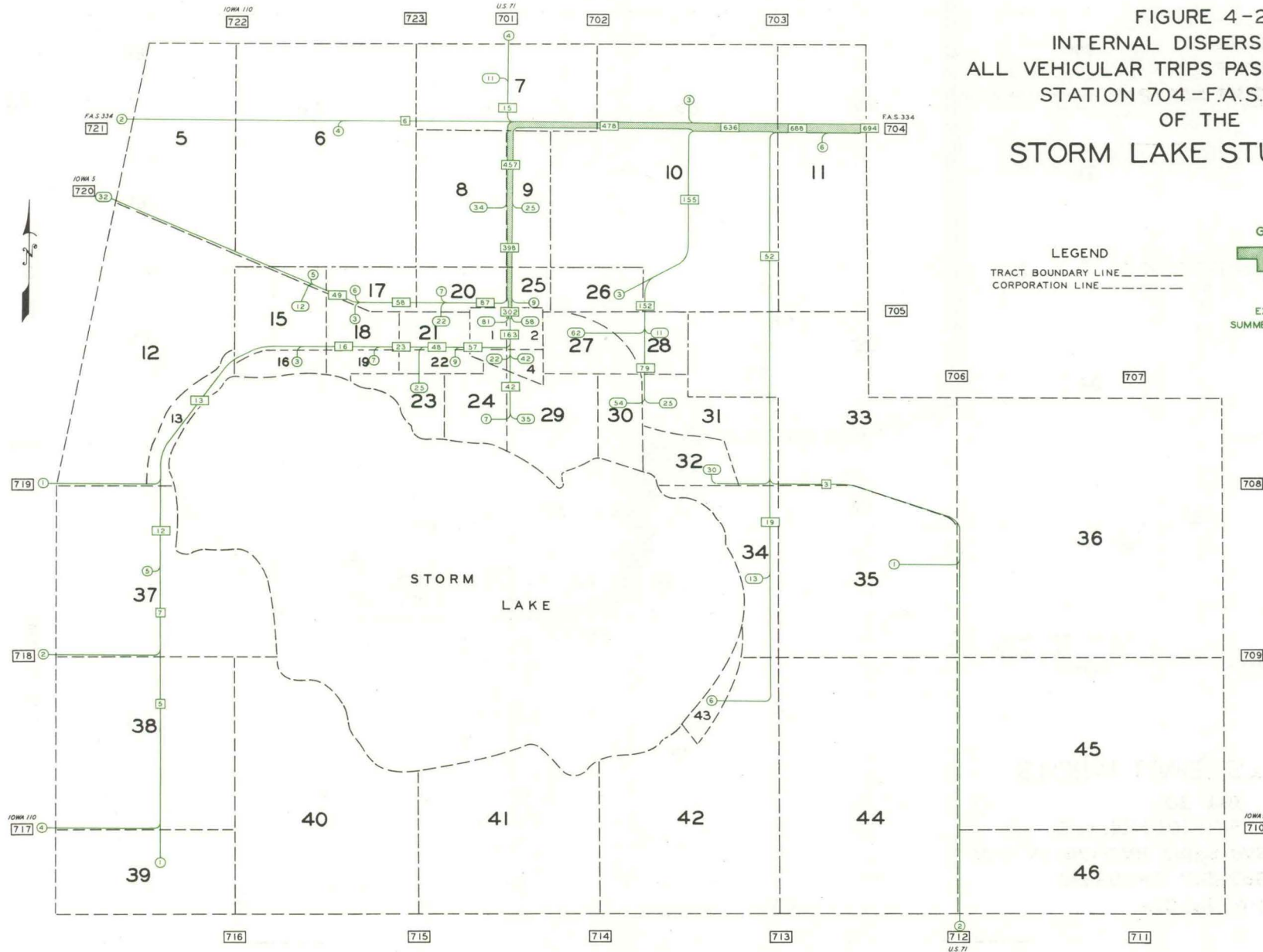


FIGURE 4-3
 INTERNAL DISPERSION OF
 ALL VEHICULAR TRIPS PASSING THROUGH
 STATION 710 - IOWA 5 EAST
 OF THE
 STORM LAKE STUDY AREA

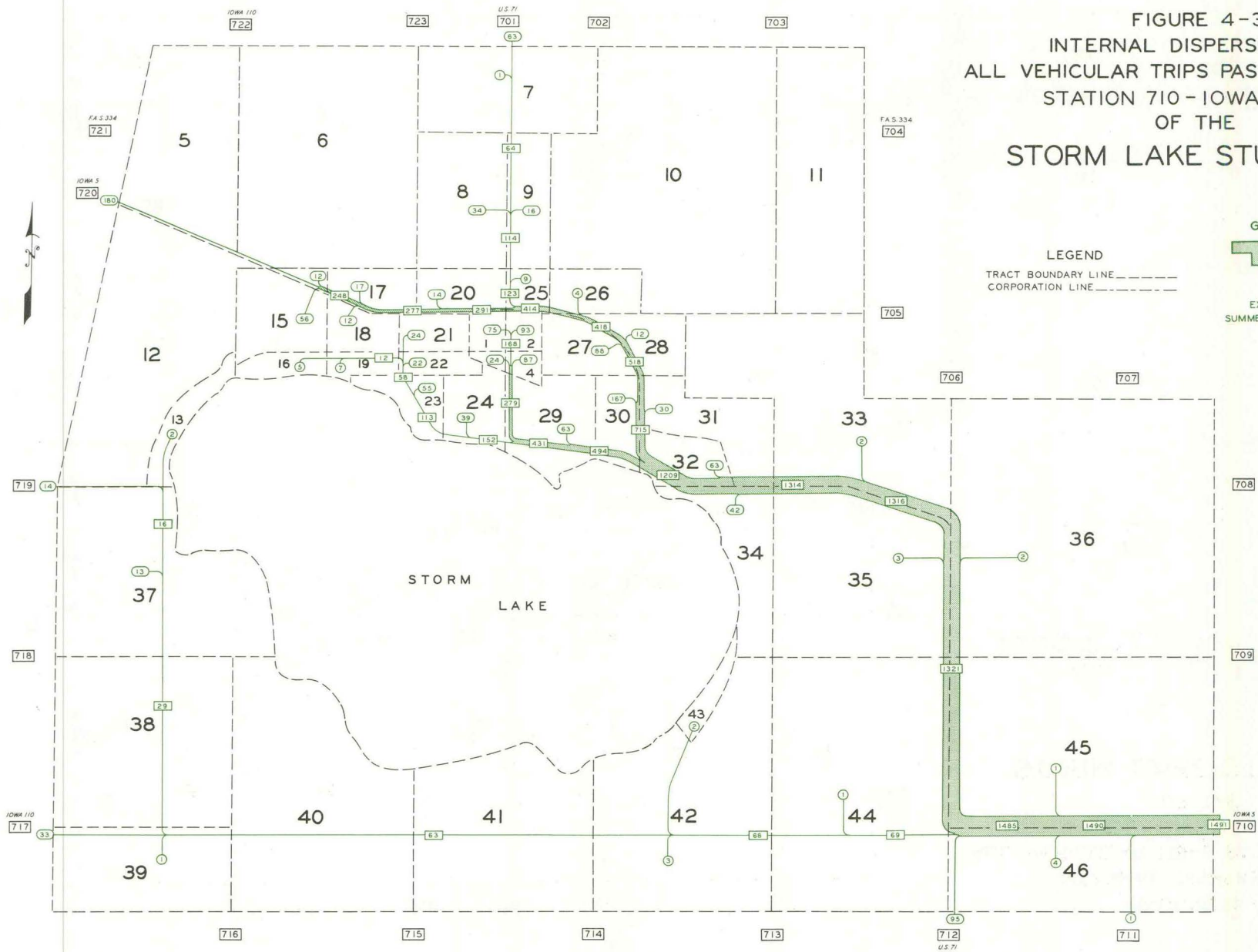


FIGURE 4-5
 INTERNAL DISPERSION OF
 ALL VEHICULAR TRIPS PASSING THROUGH
 STATION 717-IOWA 110 WEST
 OF THE
 STORM LAKE STUDY AREA

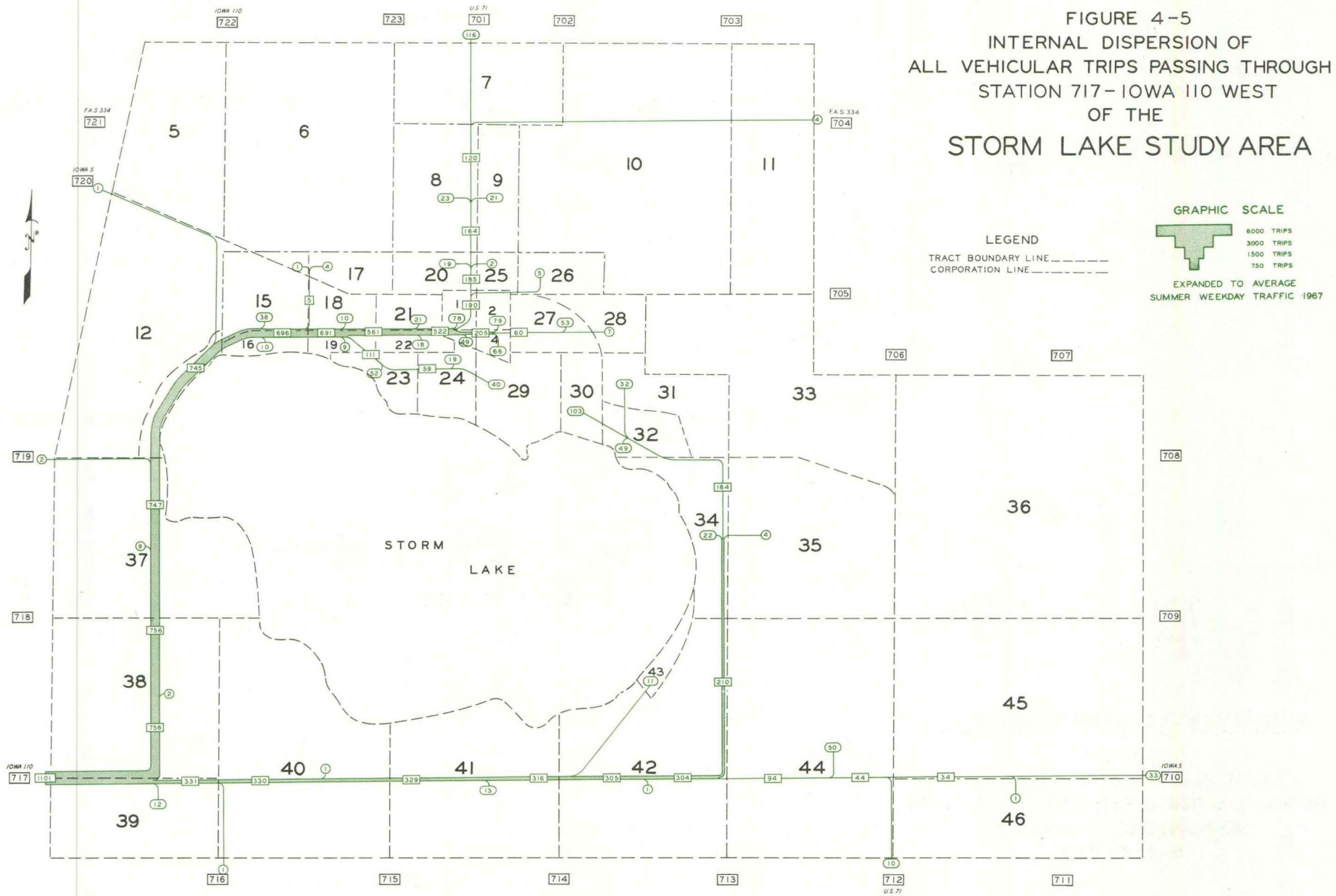


FIGURE 4-6
 INTERNAL DISPERSION OF
 ALL VEHICULAR TRIPS PASSING THROUGH
 STATION 719- F.A.S. 1574 WEST
 OF THE
 STORM LAKE STUDY AREA

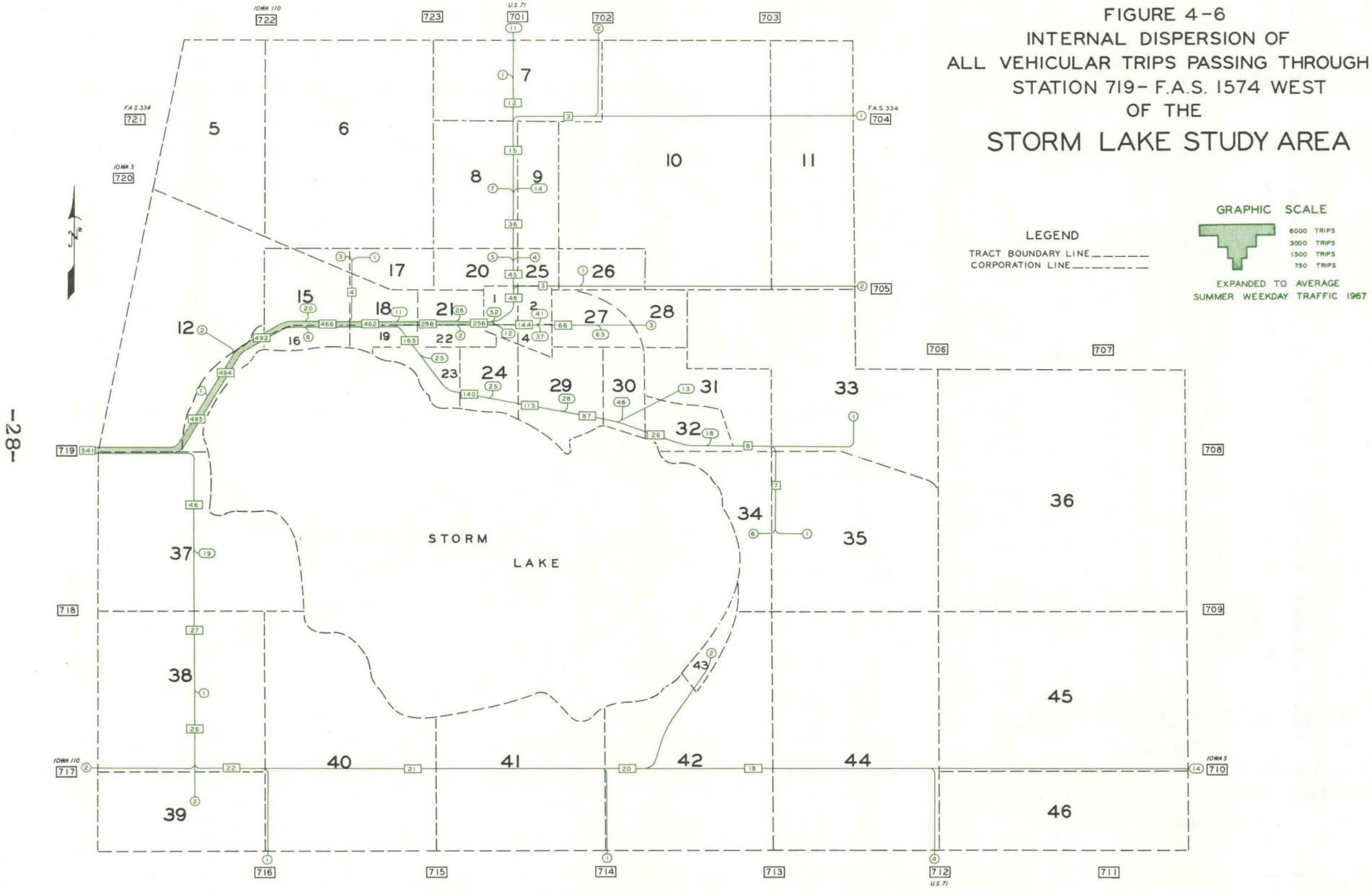
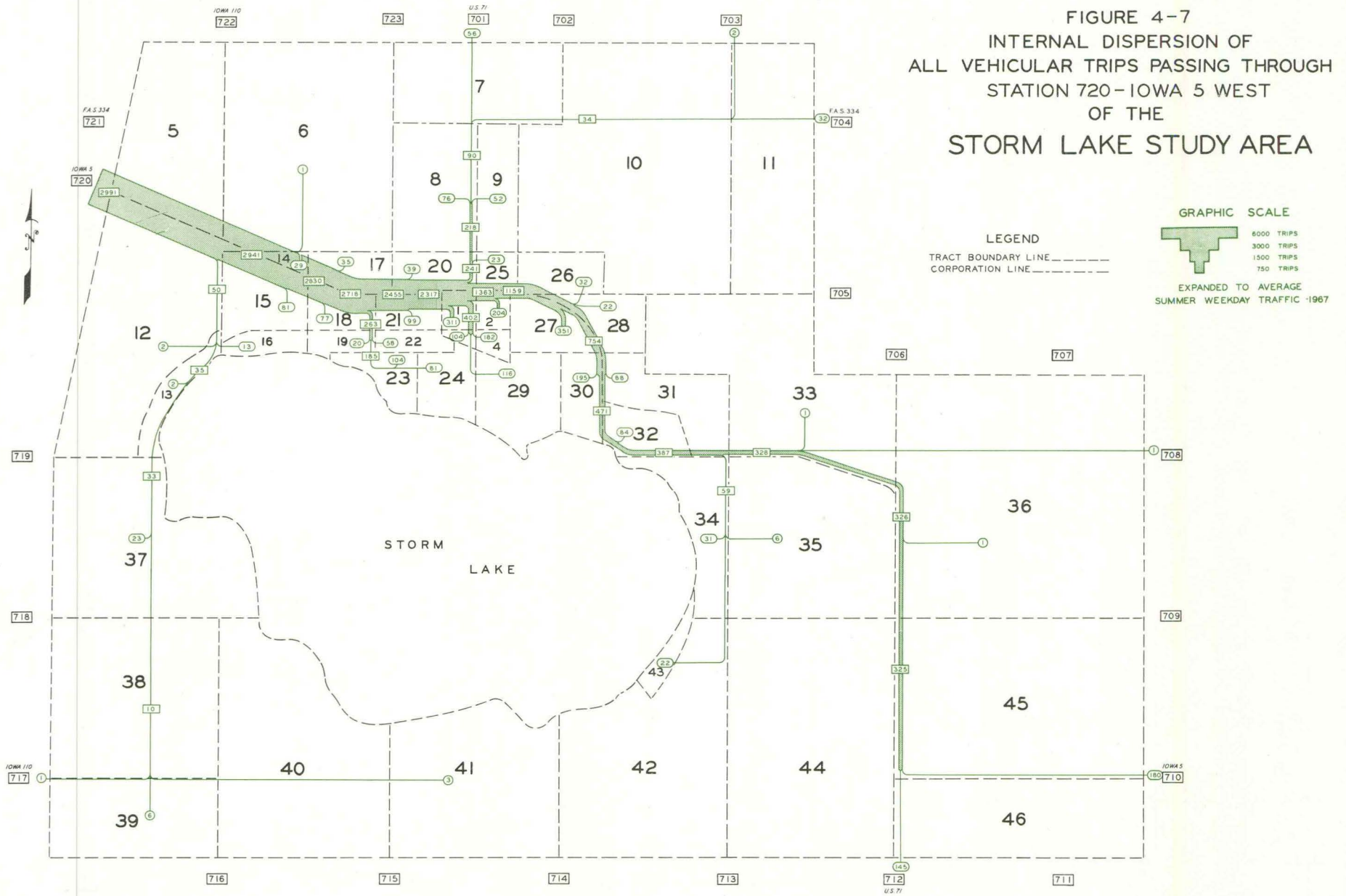


FIGURE 4-7
 INTERNAL DISPERSION OF
 ALL VEHICULAR TRIPS PASSING THROUGH
 STATION 720-IOWA 5 WEST
 OF THE
 STORM LAKE STUDY AREA



CENTRAL BUSINESS DISTRICT



FIGURE 4-8



CENTRAL BUSINESS DISTRICT

FIGURE 4-8

OTHER EXTERNAL ENTRANCES

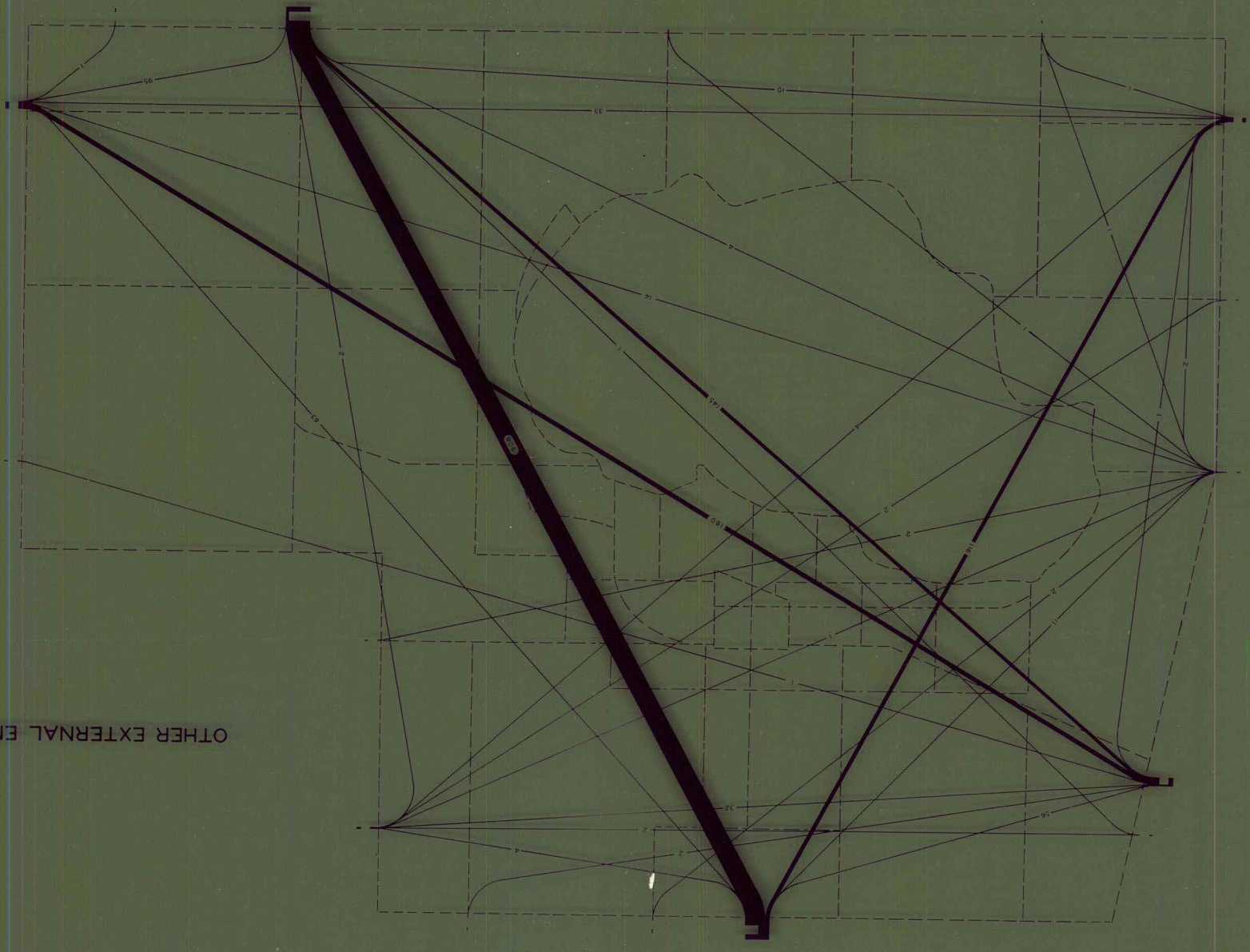
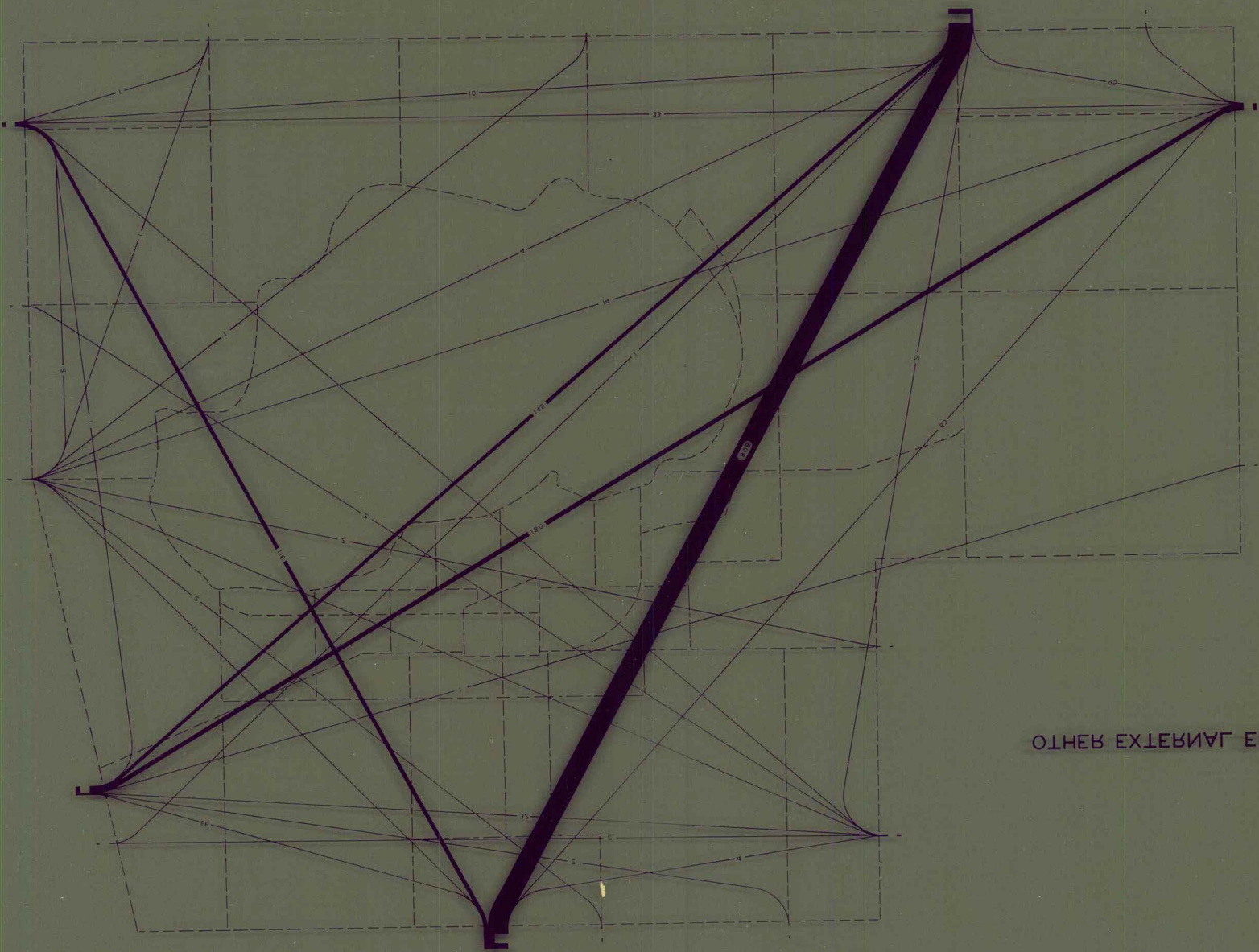


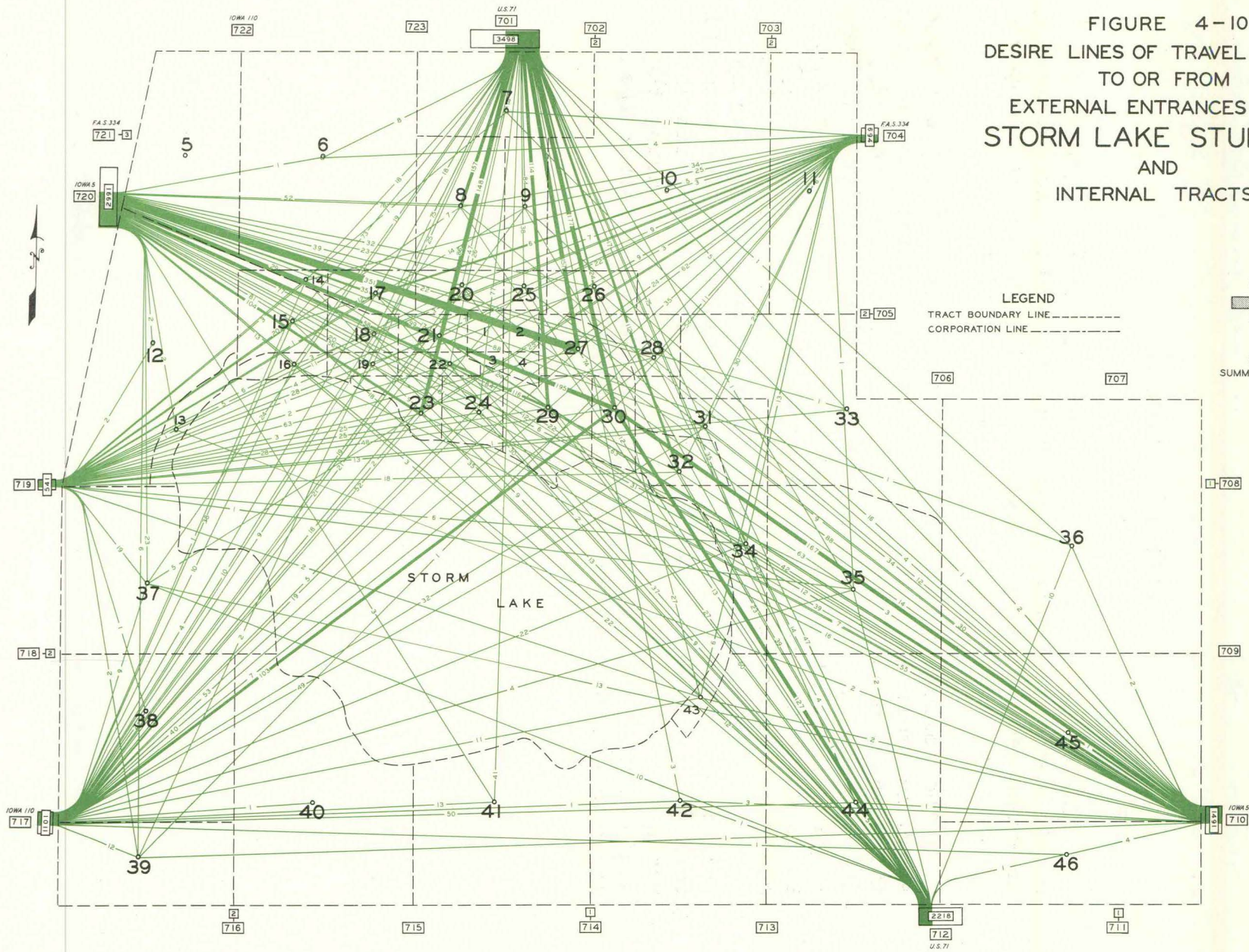
FIGURE 4-9



ОТНЕР EXTEPНAЛГ EHTPAHCEC

FIGURE 4-a

FIGURE 4-10
 DESIRE LINES OF TRAVEL OF TRIPS
 TO OR FROM
 EXTERNAL ENTRANCES OF THE
 STORM LAKE STUDY AREA
 AND
 INTERNAL TRACTS



EXTERNAL TRIP TERMINI

Table 4-1 on the adjoining page shows a tabulation of the number and percent of those trips which had termini in Buena Vista County, rural areas adjacent to the study area, other counties in Iowa, and other states.

The following traffic flow charts illustrate the data shown in Table 4-1 and point out the Iowa terminals of all trips which passed through the Storm Lake study area at the time of the survey. Figure 4-11 shows the external termini of all trips which originated or terminated beyond Buena Vista County. Those trips which had termini in other states are shown entering or leaving Iowa on routes which appear to be most direct to the study area. Figure 4-12 is a continuation of Figure 4-11 and shows the external termini of those trips which originated or terminated in Buena Vista County beyond the cordon line surrounding the study area. All routes shown are approximate rather than exact and should be interpreted as such.

TABLE 4-1
SUMMARY OF TRIPS ENTERING OR LEAVING
THE STORM LAKE STUDY AREA
EXPANDED TO AVERAGE SUMMER WEEKDAY TRAFFIC 1967

Origin or Destination	U.S. 71 North		F.A.S. 334 East		Iowa 5 East		U.S. 71 South		Iowa 110 West		F.A.S. 1574 West		Iowa 5 West	
	Station 701		Station 704		Station 710		Station 712		Station 717		Station 719		Station 720	
	Vol.	%	Vol.	%	Vol.	%	Vol.	%	Vol.	%	Vol.	%	Vol.	%
Albert City	171	4.89	69	9.94	3	.21								
Alta	24	.69							27	2.45	91	16.82	1,622	54.23
Hanover									22	2.00	1	.18		
Juniata							12	54						
Linn Grove	119	3.40												
Marathon	69	1.97	11	1.59										
Newell			118	17.00	655	43.93								
Rembrandt	284	8.12												
Sioux Rapids	233	6.66												
Sulpher Springs			2	.29	16	1.07								
Truesdale	313	8.95												
Total to Towns	1,213	34.68	200	28.82	674	45.21	12	.54	49	4.45	92	17.00	1,622	54.23
Rural Buena Vista Co.	413	11.81	279	40.20	85	5.70	124	5.59	202	18.33	159	29.39	150	5.02
Other Counties	1,524	43.56	214	30.84	705	47.28	1,590	71.69	802	72.77	289	53.43	1,171	39.15
Out-of-State	348	9.95	1	.14	27	1.81	492	22.18	49	4.45	1	.18	48	1.60
Grand Total	3,498	100.00	694	100.00	1,491	100.00	2,218	100.00	1,102	100.00	541	100.00	2,991	100.00

FIGURE 4-11
 EXTERNAL DISPERSION OF TRIPS
 PASSING THROUGH INTERVIEW STATIONS
 IN STORM LAKE TO OR FROM
 POINTS BEYOND BUENA VISTA COUNTY *

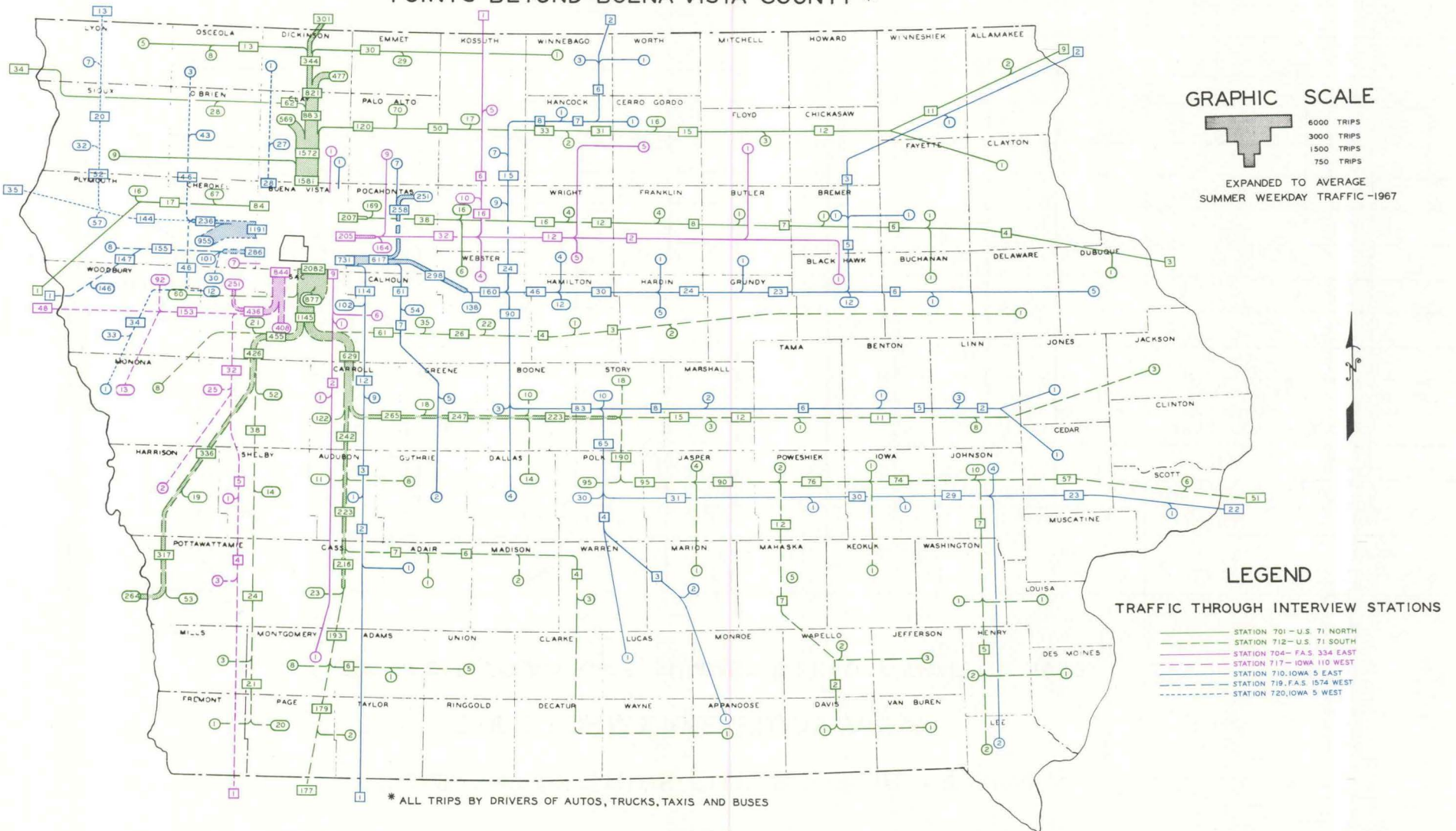
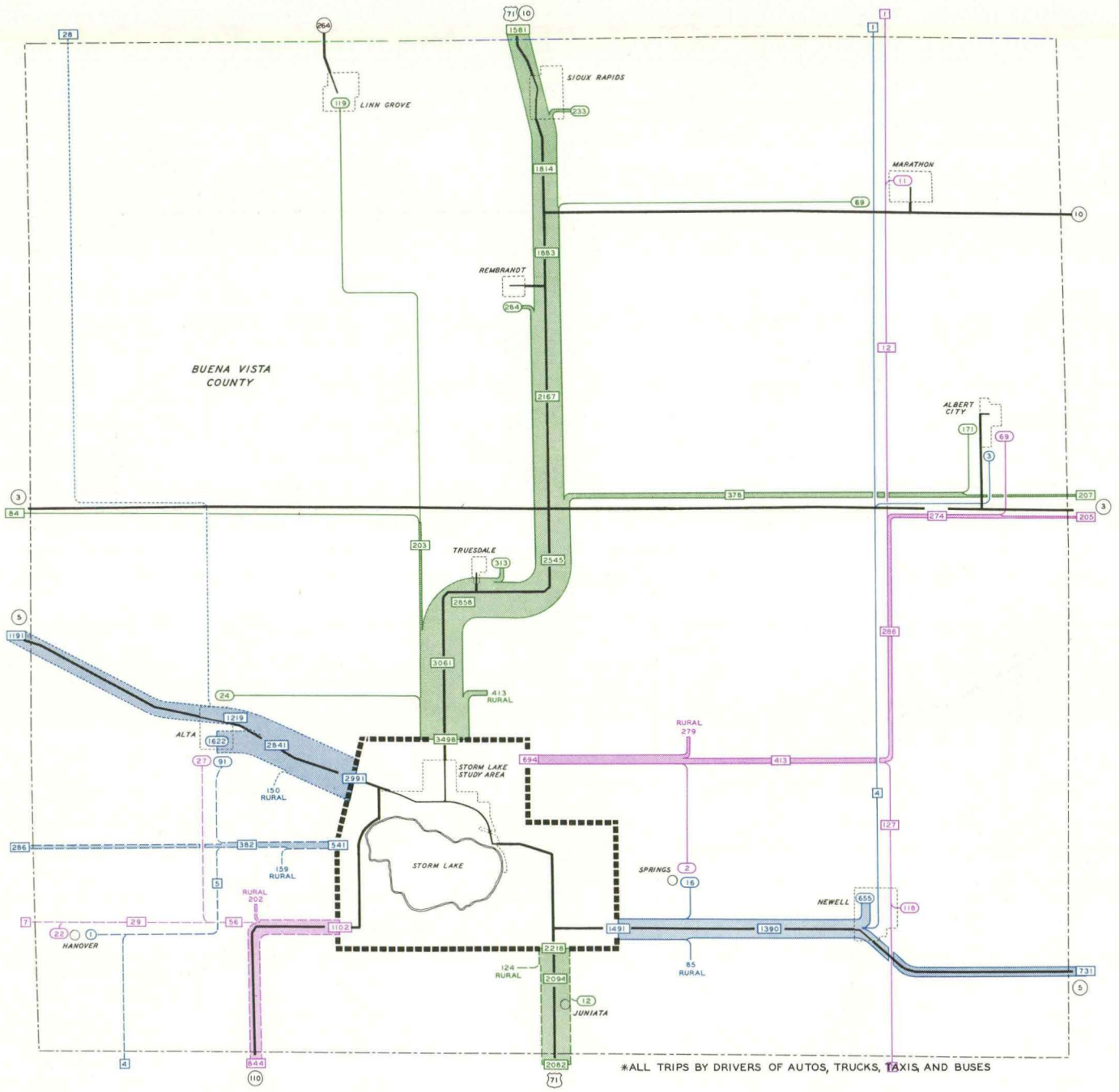


FIGURE 4-12
 EXTERNAL DISPERSION OF TRIPS
 PASSING THROUGH INTERVIEW STATIONS
 IN STORM LAKE TO OR FROM
 POINTS WITHIN BUENA VISTA COUNTY*



*ALL TRIPS BY DRIVERS OF AUTOS, TRUCKS, TAXIS, AND BUSES

GRAPHIC SCALE



EXPANDED TO AVERAGE
 SUMMER WEEKDAY TRAFFIC 1967



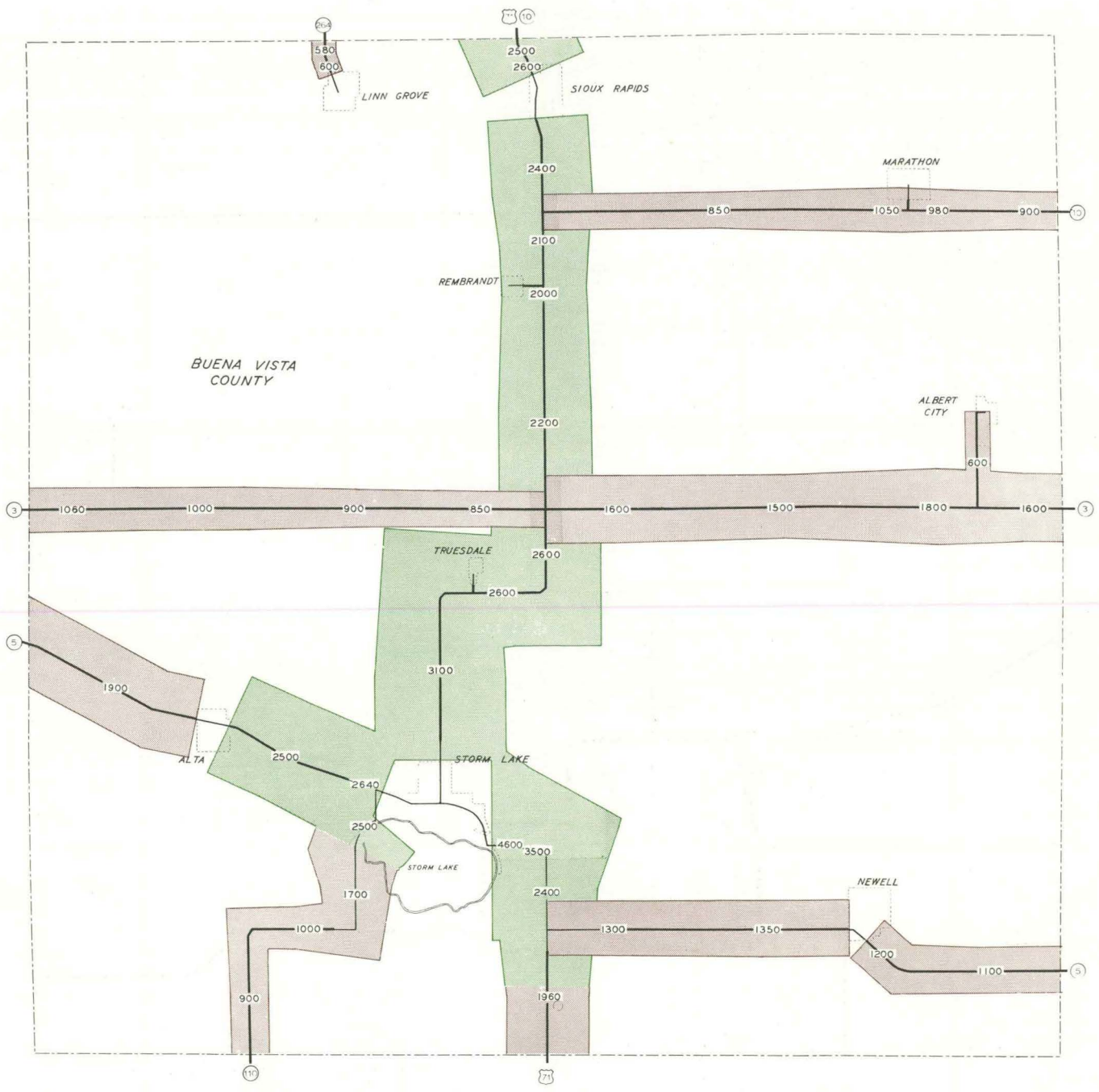
LEGEND

TRAFFIC THROUGH INTERVIEW STATIONS

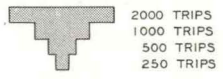
- STATIONS 701 - U.S. 71 NORTH
- STATIONS 712 - U.S. 71 SOUTH
- STATIONS 704 - F.A.S. 334 EAST
- STATIONS 717 - IOWA 110 WEST
- STATIONS 710 - IOWA 5 EAST
- STATIONS 719 - F.A.S. 1574 WEST
- STATIONS 720 - IOWA 5 WEST

- CORPORATION LINE - - - - -
- CORDON LINE - - - - -

FIGURE 4-13
 TRAFFIC VOLUMES ON
 RURAL PRIMARY HIGHWAYS IN
 BUENA VISTA COUNTY



GRAPHIC SCALE

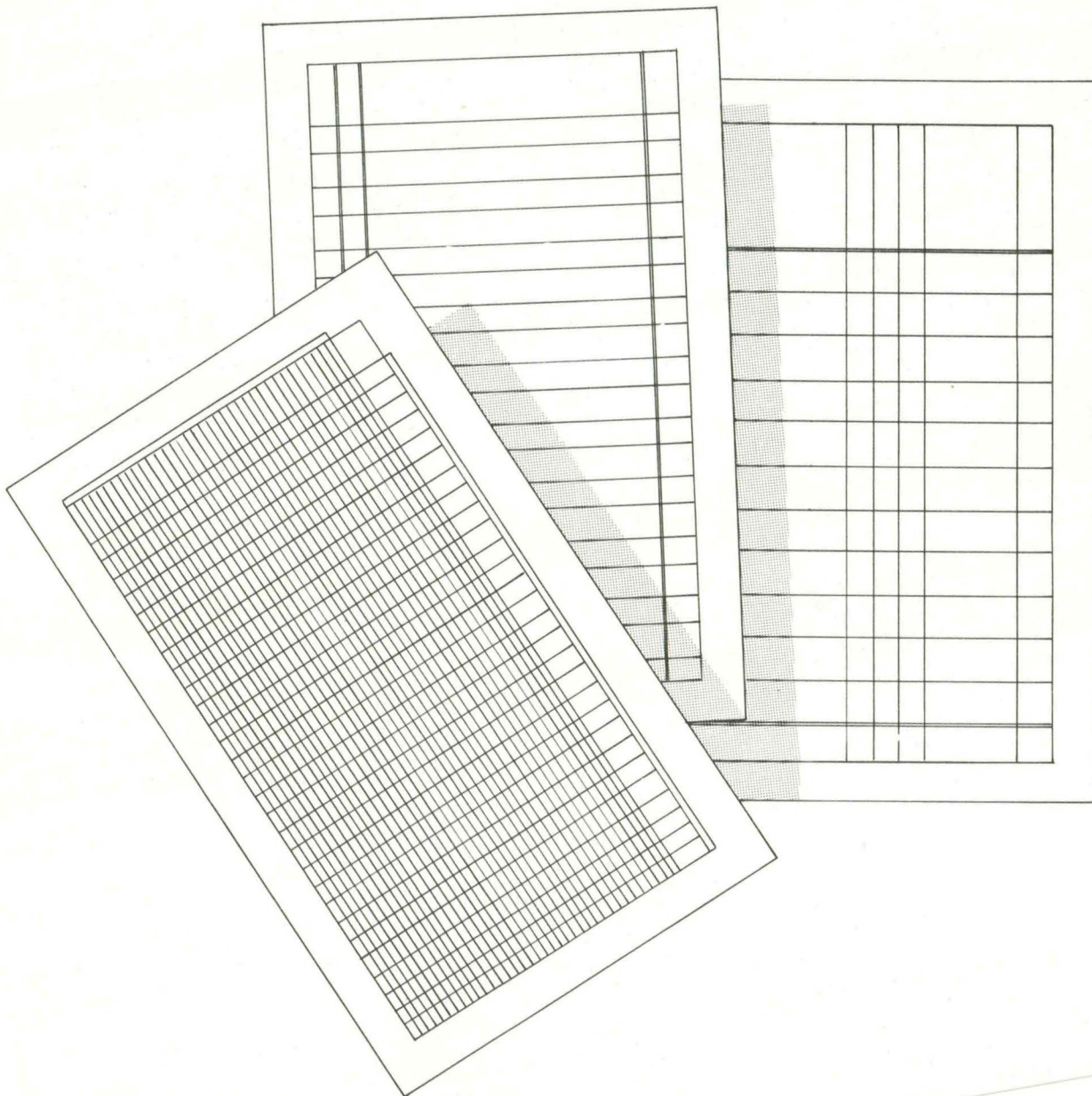


AVERAGE ANNUAL DAILY TRAFFIC 1967

LEGEND



Appendix



STORM LAKE STUDY AREA

TRIP PURPOSE OF EXTERNAL TRIPS BY AUTOS, TRUCKS, TAXIS AND BUSES

EXPANDED TO AVERAGE SUMMER WEEKDAY TRAFFIC 1967

Table B-2a (1) External Local Trips

Station Trip Purpose	701	704	710	712	717	719	720	Total Traffic	Total Trips
	U.S. 71 North	F.A.S. 334 East	Iowa 5 East	U.S. 71 South	Iowa 110 West	F.A.S. 1574 West	Iowa 5 West		
Work	472	129	276	118	162	107	584	1848	1848
Personal Business	407	108	118	138	78	60	327	1236	1236
During Work	450	106	211	270	253	119	533	1942	1942
Medical or Dental	90	33	67	35	32	15	77	349	349
School	77	10	28	21	31	11	50	228	228
Social or Recreation	427	106	226	165	156	86	473	1639	1639
Eat	46	18	46	30	25	25	49	239	239
Shop	319	124	114	256	172	64	432	1481	1481
Serve Passengers	52	13	19	20	25	16	49	194	194
Total Traffic	2340	647	1105	1053	934	503	2574	9156	
Total Trips	2340	647	1105	1053	934	503	2574		9156

Table B-2a (2) External Through Trips

Station Trip Purpose	701	704	710	712	717	719	720	Total Traffic	Total Trips
	U.S. 71 North	F.A.S. 334 East	Iowa 5 East	U.S. 71 South	Iowa 110 West	F.A.S. 1574 West	Iowa 5 West		
Work	49	6	38	62	13	6	48	222	112
Personal Business	103	7	41	102	24	9	51	337	169
During Work	253	13	128	261	58	12	122	847	425
Medical or Dental	6		3	7			4	20	10
School	2		3	3	1		5	14	7
Social or Recreation	729	20	164	713	67	11	178	1882	945
Eat	3		1	3				7	4
Shop	9	1	3	7	2		3	25	13
Serve Passengers	4		5	7	2		6	24	12
Total Traffic	1158	47	386	1165	167	38	417	3378	
Total Trips	579	25	194	583	84	22	210		1697

Table B-2a (3) Summary - All External Trips

Station Trip Purpose	701	704	710	712	717	719	720	Total Traffic	Total Trips
	U.S. 71 North	F.A.S. 334 East	Iowa 5 East	U.S. 71 South	Iowa 110 West	F.A.S. 1574 West	Iowa 5 West		
Work	521	135	314	180	175	113	632	2070	1960
Personal Business	510	115	159	240	102	69	378	1573	1405
During Work	703	119	339	531	311	131	655	2789	2367
Medical or Dental	96	33	70	42	32	15	81	369	359
School	79	10	31	24	32	11	55	242	235
Social or Recreation	1156	126	390	878	223	97	651	3521	2584
Eat	49	18	47	33	25	25	49	246	243
Shop	328	125	117	263	174	64	435	1506	1494
Serve Passengers	56	13	24	27	27	16	55	218	206
Total Traffic	3498	694	1491	2218	1101	541	2991	12534	
Total Trips	2919	672	1299	1636	1018	525	2784		10853

AVERAGE CAR OCCUPANCY BY TRIP PURPOSE
STORM LAKE STUDY AREA
EXPANDED TO AVERAGE SUMMER WEEKDAY TRAFFIC 1967

EXTERNAL LOCAL TRIPS

Table B-3a(1)

Trip Purpose Origin	TRIP PURPOSE DESTINATION										Average Occupancy
	Work	Personal Business	During Work	Medical or Dental	School	Social or Recreation	Eat	Shop	Serve Passengers	Home	
Work	1.000	2.146	1.318	1.000	1.000	1.443	1.150	1.481	4.316	1.368	1.395
Personal Business	1.678	1.639		2.000	3.662	1.703	1.749	3.000	2.675	1.692	1.719
During Work	2.006	2.000	1.294			1.000		1.000		1.188	1.293
Medical or Dental		1.507				1.976				2.100	2.088
School		4.000			3.211	1.000	1.000		4.000	1.309	1.652
Social or Recreation	1.861	1.732	1.000	3.291	5.000	3.082	3.003	2.238	1.404	2.301	2.420
Eat	1.403	1.000	1.106			2.774		2.000	3.000	2.439	2.252
Shop	1.000	2.620	1.318			2.390		2.536	1.969	2.182	2.195
Serve Passengers	3.473			2.000		2.664		3.000	6.166	2.063	2.383
Home	1.362	1.817	1.192	2.403	1.396	2.333	2.643	2.271	2.426		1.707
Average Occupancy	1.395	1.824	1.282	2.403	1.745	2.386	2.449	2.271	2.589	1.850	1.897

EXTERNAL THROUGH-TRIPS

Table B-3a(2)

Trip Purpose Origin	TRIP PURPOSE DESTINATION										Average Occupancy
	Work	Personal Business	During Work	Medical or Dental	School	Social or Recreation	Eat	Shop	Serve Passengers	Home	
Work			2.067			1.000				1.618	1.642
Personal Business		1.585				1.543				2.226	2.080
During Work	1.000		1.371							1.247	1.359
Medical or Dental										2.489	2.489
School					2.938	1.000				2.191	2.222
Social or Recreation	2.000	1.472	1.000	1.000		3.176			2.707	2.950	2.981
Eat		2.000				2.972				3.500	3.146
Shop						6.000				3.385	3.690
Serve Passengers						2.000				2.289	2.263
Home	1.696	2.096	1.327	2.520	2.972	2.991	3.000	2.264	3.555		2.753
Average Occupancy	1.687	2.027	1.379	2.335	2.961	3.022	3.000	2.264	3.276	2.695	2.571

SUMMARY - ALL EXTERNAL TRIPS

Table B-3a(3)

Trip Purpose Origin	TRIP PURPOSE DESTINATION										Average Occupancy
	Work	Personal Business	During Work	Medical or Dental	School	Social or Recreation	Eat	Shop	Serve Passengers	Home	
Work	1.000	2.146	1.376	1.000	1.000	1.434	1.150	1.481	4.316	1.382	1.410
Personal Business	1.678	1.629		2.000	3.662	1.681	1.749	3.000	2.675	1.747	1.758
During Work	1.913	2.000	1.310			1.000		1.000		1.202	1.306
Medical or Dental		1.507				1.976				2.109	2.097
School		4.000			3.192	1.000	1.000		4.000	1.334	1.674
Social or Recreation	1.869	1.718	1.000	2.994	5.000	3.123	3.003	2.238	1.701	2.589	2.652
Eat	1.403	1.330	1.106			2.797		2.000	3.000	2.471	2.285
Shop	1.000	2.620	1.318			2.460		2.536	1.969	2.192	2.208
Serve Passengers	3.473			2.000		2.629		3.000	6.166	2.083	2.374
Home	1.374	1.851	1.211	2.406	1.434	2.546	2.645	2.271	2.476		2.098
Average Occupancy	1.405	1.849	1.300	2.401	1.781	2.588	2.452	2.271	2.622	1.981	2.001

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