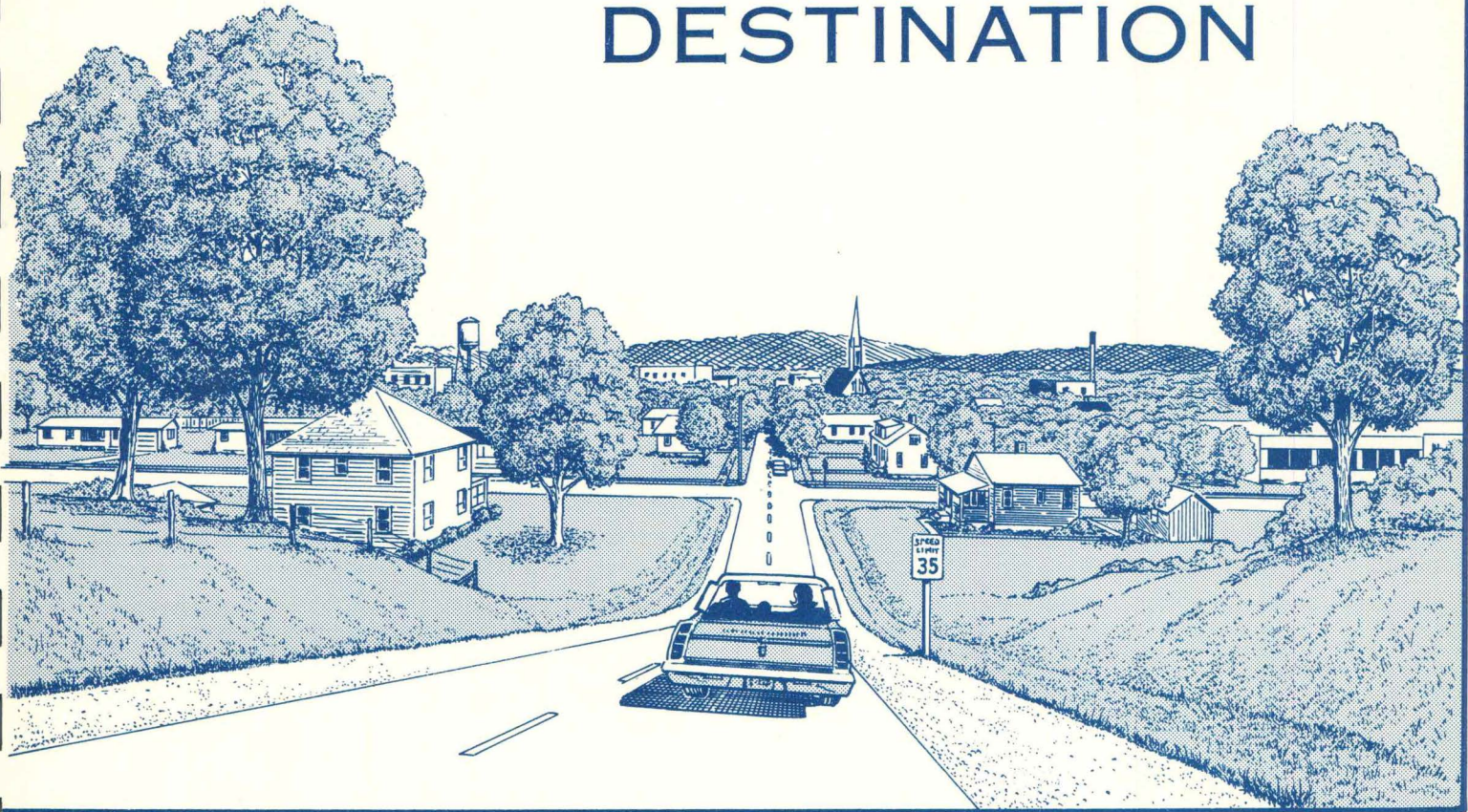


HE  
370  
.075  
H36  
1969

# HAMPTON

ORIGIN AND  
DESTINATION



TRAFFIC REPORT

# IOWA

JUNE OF 1968

STATE OF IOWA

**HAMPTON**

ORIGIN AND DESTINATION

TRAFFIC REPORT

DATA GATHERED JUNE 1968

PUBLISHED OCTOBER 1969

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

BUREAU OF PUBLIC ROADS

Reproduction Cost           \$4.16

## INTRODUCTION

This report is based on an external origin and destination traffic survey that was made in Hampton in June of 1968. The survey was conducted in cooperation with the United States Bureau of Public Roads and was made to determine the total number and type of vehicles entering or leaving the study area, along with specific origin-destination data from a representative sample of vehicle operators.

The purpose of this report is to summarize the data gathered in Hampton and to present this data in a manner which will implement the determination of traffic needs and thereby provide a sound basis for street and highway planning.

TABLE OF CONTENTS

	Page
LIST OF ILLUSTRATIONS . . . . .	vi
LIST OF TABLES . . . . .	vii
DEFINITIONS . . . . .	viii
PART I      SIGNIFICANT FACTS	
Distribution of Trips . . . . .	2
Summary . . . . .	3
Regional Influence of the Study Area . . . . .	4
Vehicle Type Summary . . . . .	6
PART II      HISTORY AND DEVELOPMENT	
History . . . . .	8
Population Trends . . . . .	10
Motor Vehicle Registration . . . . .	12
Study Area Position . . . . .	14
PART III     SURVEY PROCEDURES	
The Survey . . . . .	16
Tract Map of the Study Area . . . . .	18
PART IV     TRAFFIC MOVEMENTS	
Internal Dispersion of All Vehicular Trips Passing Through the Following Interview Stations:	
701, U.S. 65 North . . . . .	21
705, Iowa 3 East . . . . .	22
707, U.S. 65 South . . . . .	23
710, Iowa 3 West . . . . .	24
711, Local Road Northwest . . . . .	25
712, F.A.S. 1674 North . . . . .	26
Desire Lines of Travel of Trips to or from External Entrances of the Study Area and ...	
The Central Business District . . . . .	27
Other External Entrances . . . . .	27
Internal Tracts . . . . .	27



	Page
Summary of Trips Entering or Leaving the Study Area . . . . .	29
Dispersion of External Trips Between the Hampton Study Area and Points in Iowa Beyond Franklin County . . . . .	30
Dispersion of External Trips Between the Hampton Study Area and Points Within Franklin County . . . . .	31
Traffic Volumes on Rural Primary Highways in Franklin County . . . . .	32
Traffic Volumes on Primary Road Extensions and Major Streets in the Hampton Study Area . . . . .	33
 PART V      APPENDIX	
Trip Purpose of External Trips . . . . .	36
Average Car Occupancy by Trip Purpose . . . . .	37
Origin and Destination of Trips by Autos, Trucks, Taxis, and Buses . . . . .	38
Origin and/or Destination of Trips by Autos, Trucks, Taxis, and Buses . . . . .	40

LIST OF ILLUSTRATIONS

Figure		Page
1-1	Distribution of Trips . . . . .	2
1-2	Regional Influence of the Study Area . . . . .	4
2-1	Population Trends . . . . .	11
2-2	Motor Vehicle Registration in Clay County . . . . .	13
2-3	Study Area Position . . . . .	14
3-1	Tract Map of the Study Area . . . . .	18
Internal Dispersion of All Vehicular Trips Passing Through the Following Interview Stations:		
4-1	701, U.S. 65 North . . . . .	21
4-2	705, Iowa 3 East . . . . .	22
4-3	707, U.S. 65 South . . . . .	23
4-4	710, Iowa 3 West . . . . .	24
4-5	711, Local Road Northwest . . . . .	25
4-6	712, F.A.S. 1674 North . . . . .	26
Desire Lines of Travel of Trips to or from External Entrances of the Study Area and:		
4-7	The Central Business District . . . . .	27
4-8	Other External Entrances . . . . .	27
4-9	Internal Tracts . . . . .	27
4-10	Dispersion of External Trips Between the Hampton Study Area and Points in Iowa Beyond Franklin County . . . . .	30
4-11	Dispersion of External Trips Between the Hampton Study Area and Points Within Franklin County . . . . .	31
4-12	Traffic Volumes on Rural Primary Highways in Franklin County . . . . .	32
4-13	Traffic Volumes on Primary Road Extensions and Major Streets in the Hampton Study Area . . . . .	33

LIST OF TABLES

Table	Page
1-1 Regional Influence of the Study Area . . . . .	5
1-2 Vehicle Type Summary . . . . .	6
Population Trends in ...	
2-1 Hampton . . . . .	10
2-2 Franklin County . . . . .	10
2-3 Motor Vehicle Registration in Franklin County . . . . .	12
4-1 Summary of External Trips . . . . .	29
B-2a Trip Purpose of External Trips . . . . .	36
B-3a Average Car Occupancy by Trip Purpose . . . . .	37
E-1 Origin and Destination of Trips by Autos, Trucks, Taxis, and Buses . . . . .	38
E-2 Origin and/or Destination of Trips by Autos, Trucks, Taxis, and Buses . . . . .	40

## DEFINITIONS OF TECHNICAL TERMS

Study Area	The area enclosed by a cordon line of interview stations
Cordon Line	A hypothetical line determined by the location of traffic interview stations and used to delimit the area under study
Interview Station	A location at which vehicle drivers are stopped and interviewed
Code Station	A location on a street or highway at the point where it crosses the cordon line and at which traffic is counted but not interviewed
Central Business District	The major business district of a city
Origin	The location from which a driver started a trip
Destination	The location at which a trip was ended
Trip	The one-way travel between a point of origin and a point of destination
Internal Trip	A trip having both origin and destination within the study area
External Local Trip	A trip having either origin or destination within the study area and which passed through only one interview station in the cordon line enroute to its destination
External Through Trip	A trip having neither origin nor destination within the study area but which passes through it enroute to its destination
Traffic	The total number of vehicles passing a given point
Desire Line	A straight line between the point of origin and point of destination without regard to routes of travel



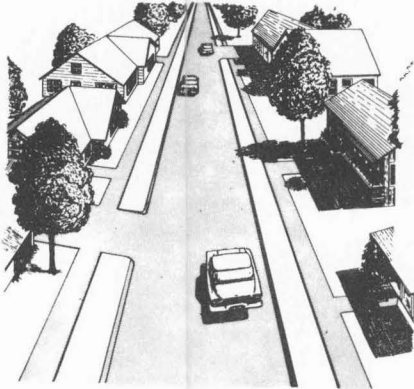


# *Significant Facts*



FIGURE 1-1  
**DISTRIBUTION OF TRIPS**  
HAMPTON STUDY AREA

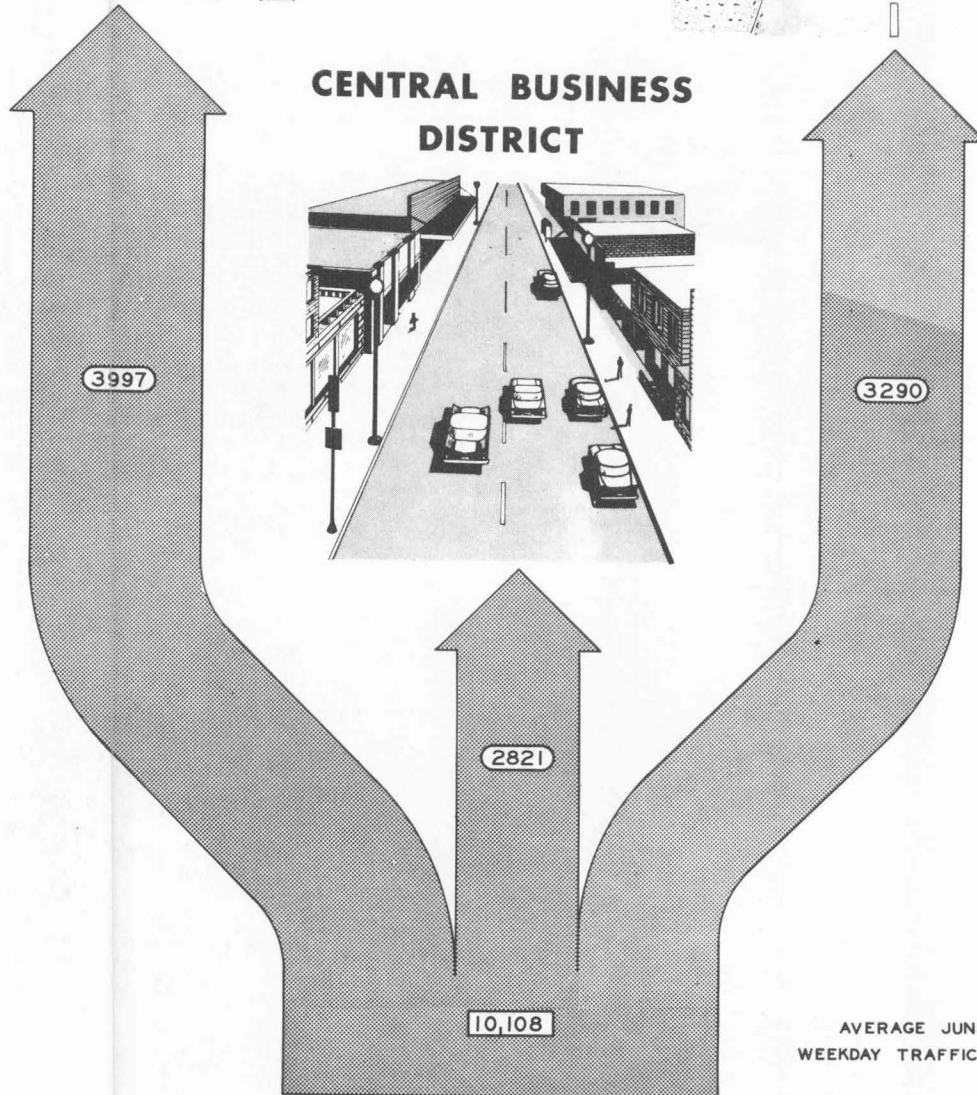
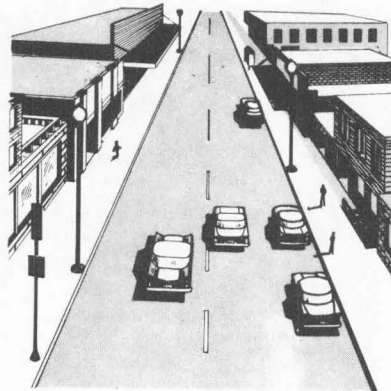
**INTERNAL TRACTS**



**THROUGH TRIPS**



**CENTRAL BUSINESS DISTRICT**



**EXTERNAL**

AVERAGE JUNE  
WEEKDAY TRAFFIC 1968

## SUMMARY

The chart at left graphically illustrates some of the more significant traffic volumes derived from the Hampton origin and destination traffic survey. An average of 10,108 trips per day passed through the external cordon line of interview stations surrounding the study area during the survey period.

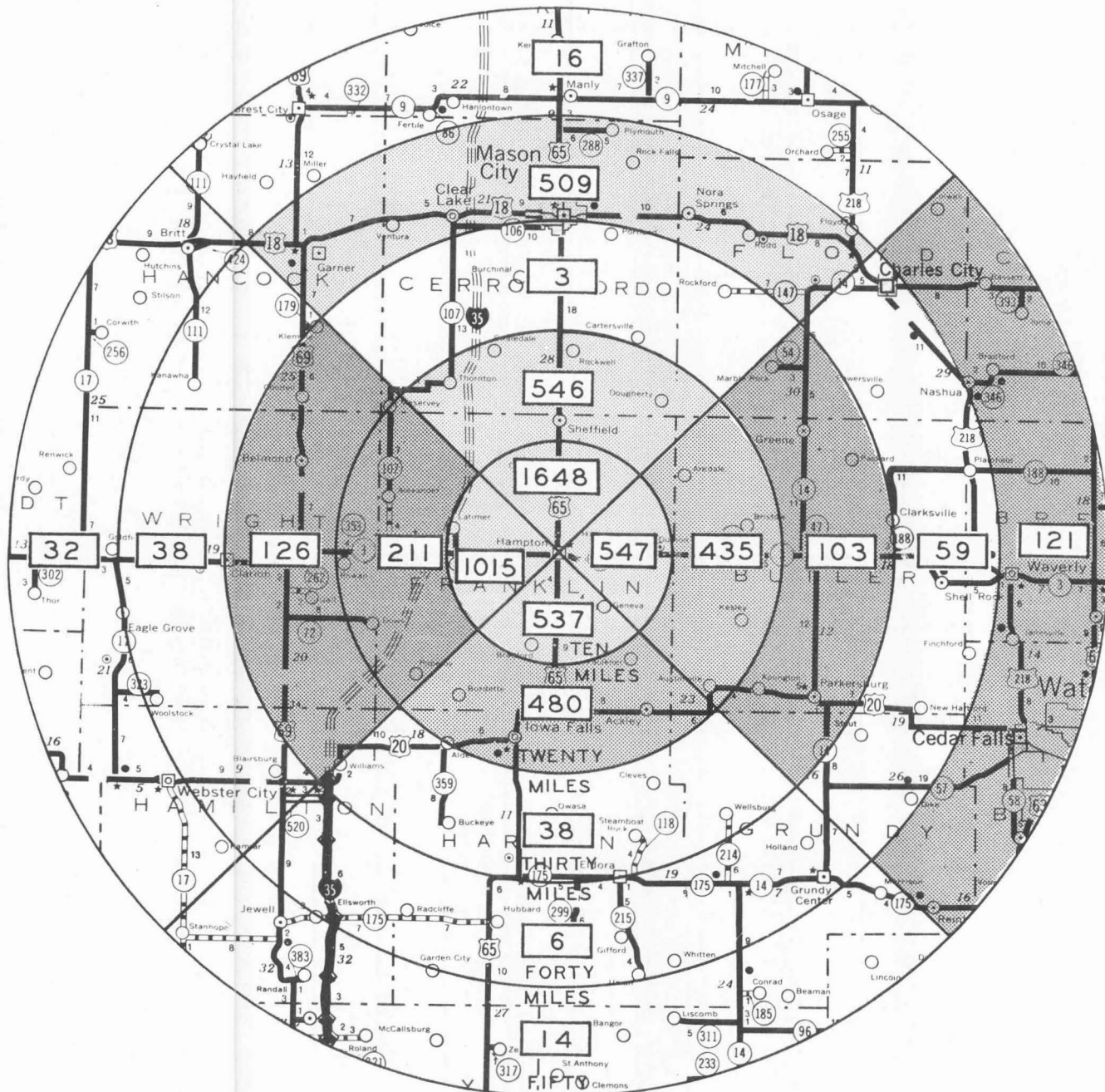
2,821 trips or 27.91 percent of the total number of trips were between external areas and the central business district.

3,997 trips or 39.54 percent of the total number of trips were between external and internal areas exclusive of the central business district.

3,290 trips or 32.55 percent of the total number of trips were through trips which passed through Hampton enroute to another destination.

Of the total number of trips which passed through interview stations, 14.50 percent began or ended at work, 30.48 percent were for social or recreational purposes, 23.96 percent were during work, 9.22 percent were for personal business, 12.42 percent were for shopping, and the remaining 9.42 percent were for other purposes.

FIGURE 1-2  
 REGIONAL INFLUENCE OF THE  
 HAMPTON STUDY AREA



- 0 TO 100 TRIPS
- 100 TO 300 TRIPS
- 300 TO 500 TRIPS
- 500 AND OVER

AVERAGE JUNE  
 WEEKDAY TRAFFIC 1968



Table 1-1  
REGIONAL INFLUENCE OF THE HAMPTON STUDY AREA

1968 Average June Weekday Traffic

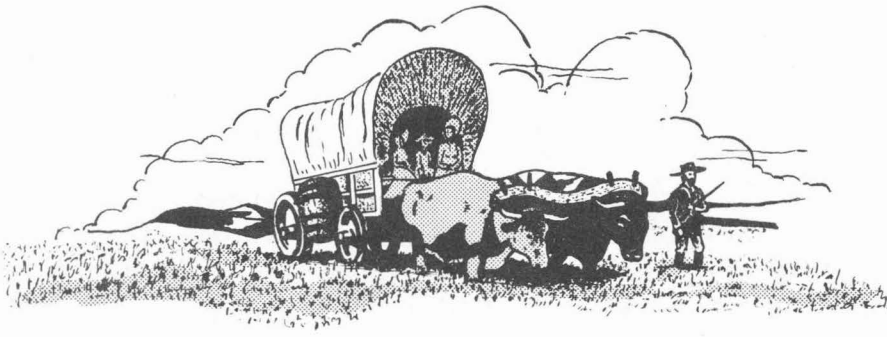
	Miles From Study Area	Number of Trips	Percent of Total Trips Within a Fifty-Mile Radius
North	0 - 10	1,648	25.41
	10 - 20	546	8.42
	20 - 30	3	.05
	30 - 40	509	7.85
	40 - 50	16	.25
North Total		2,722	41.98
East	0 - 10	547	8.44
	10 - 20	435	6.70
	20 - 30	103	1.59
	30 - 40	59	.91
	40 - 50	121	1.87
East Total		1,265	19.51
South	0 - 10	537	8.28
	10 - 20	480	7.40
	20 - 30	38	.59
	30 - 40	6	.09
	40 - 50	14	.22
South Total		1,075	16.58
West	0 - 10	1,015	15.65
	10 - 20	211	3.26
	20 - 30	126	1.94
	30 - 40	38	.59
	40 - 50	32	.49
West Total		1,422	21.93
Grand Total		6,484	100.00

TABLE I-2  
**VEHICLE TYPE SUMMARY**  
**HAMPTON STUDY AREA**

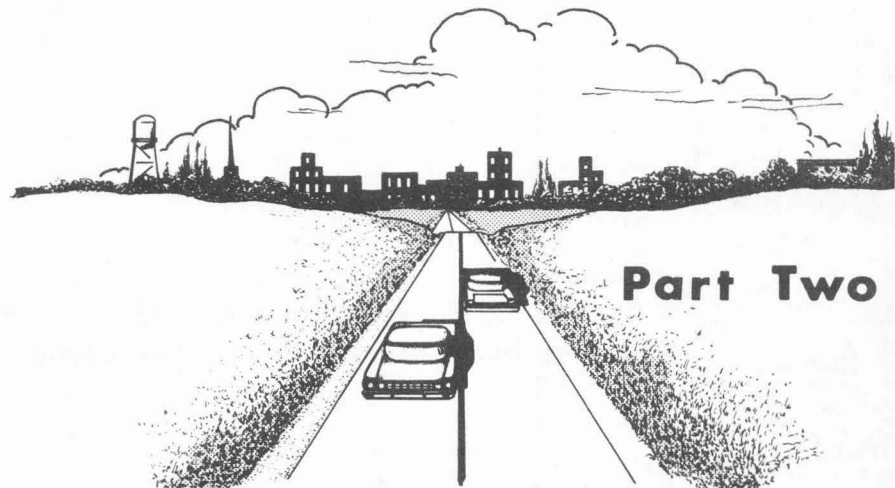
EXPANDED TO AVERAGE JUNE WEEKDAY TRAFFIC 1968

Station	Location	Passenger Cars	Pickups and Panels	Single Unit Trucks	Truck Combi- nations	Total
701	U.S. 65 North	3,133	409	214	301	4,057
705	Iowa 3 East	2,065	226	134	100	2,525
707	U.S. 65 South	2,416	281	199	291	3,187
710	Iowa 3 West	2,142	289	150	80	2,661
711	Local Road N.W. To Beeds Lake	512	77	13		602
712	F.A.S. 1674 North	253	62	33	7	355
Grand Total		10,521	1,344	743	779	13,387

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

Located near the center of Franklin County in north-central Iowa, the town of Hampton had its beginning more than a century ago. The town was platted in 1856 by Job Garner and George Ryan who gave it the name of Benjamin. Shortly thereafter it was discovered that there was already a town by this name in Iowa and the name was changed to Hampton. Due to its central location, the new settlement was designated as the county seat of Franklin County soon after the name had been formally changed to Hampton.

Perhaps the earliest settler in the Hampton area was A. A. Freetoe who settled here in 1855 along the banks of Hartgroves Creek. Freetoe assembled a saw mill using water power to drive his machinery but after the mill had been in operation for only a year he was forced to close for lack of business.

The first newspaper in Hampton was the Franklin Record which was established in 1859 by S. M. Jones. The paper, which began as a weekly, was discontinued in 1864. Two years later, J. C. Whitney resumed publication of the Record and in 1869 the Hampton Free Press was founded by L. B. Raymond.

During the first two years of its existence, the residents of Hampton had to travel to Cedar Falls to pick up their mail. Finally, in 1857, a post office was established in Hampton with Robert Piatt serving as the first post master.

Hampton's rail link to other markets was completed in 1868. In that year the St. Louis and St. Paul railroad finished its line to Hampton.

The town of Hampton was officially incorporated in 1871. William Raymond was elected to serve as the first mayor.

The municipal water system in Hampton was developed over a period of several years. In 1891 the town waterworks was completed and in 1902 a sewer system was placed in operation. A disposal plant for the treatment of sewage was completed in 1910.

The public library in Hampton is one of many throughout the United States that were made possible because of funds given by Andrew Carnegie. The library was opened in 1905 and has been an asset to the community ever since.



The first R.E.A. power plant in the United States was built in Hampton and continues to provide low-cost power to residents of the area. Additional electric power and natural gas service are provided by the Iowa Public Service Company.

Hampton is the home of numerous industries whose products include parts for washers and dryers, commercial vans and semitrailers, nursery stock, hand tools, hybrid corn and hogs, and several wholesale distributors.

Transportation facilities in Hampton include U.S. Highway 65 and Iowa Highway 3. Three railroads, several truck lines and a municipal airport presently serve the area. Upon its completion, Interstate 35 will pass only a few miles west of Hampton.

## POPULATION TRENDS

### HAMPTON POPULATION

Table 2-1

Census Year	Hampton Population	Volume Increase or Decrease	Percent Change 10-Year Period
1900	2,727		
1910	2,617	- 110	4.03
1920	2,992	375	14.33
1930	3,473	481	16.08
1940	4,006	533	15.35
1950	4,432	426	10.63
1960	4,501	69	1.56

### FRANKLIN COUNTY POPULATION

Table 2-2

Census Year	Franklin Co. Population	Volume Increase or Decrease	Percent Change 10-Year Period
1860	1,309		
1870	4,738	3,429	261.96
1880	10,249	5,511	116.31
1890	12,811	2,622	25.58
1900	14,996	2,125	16.51
1910	14,780	- 216	- 1.44
1920	15,807	1,027	6.95
1930	16,382	575	3.64
1940	16,379	- 3	- .02
1950	16,268	- 111	- .67
1960	15,472	- 796	- 4.89

FIGURE 2-1  
POPULATION TRENDS

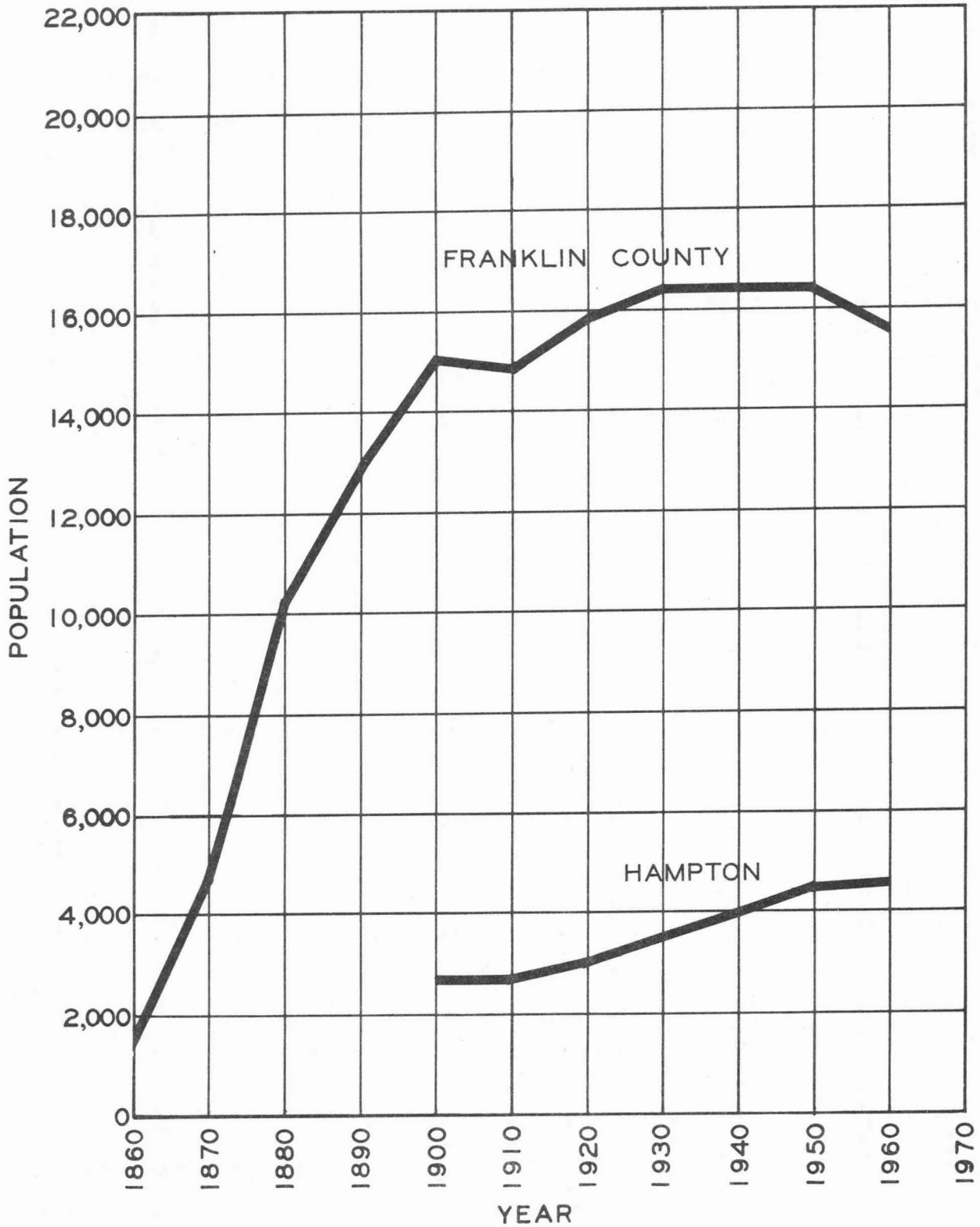


TABLE 2-3  
 MOTOR VEHICLE REGISTRATION IN FRANKLIN COUNTY  
 FROM 1939 THROUGH 1968

Year	Autos	Trucks	Motorcycles	Total	Percent Change
1939	5,169	673	16	5,858	
1940	5,193	700	15	5,908	.85
1941	5,181	740	16	5,937	.49
1942	4,795	699	19	5,513	- 7.14
1943	4,571	696	16	5,283	- 4.17
1944	4,547	707	21	5,275	- .15
1945	4,618	741	22	5,381	2.01
1946	4,751	801	36	5,588	3.85
1947	5,037	931	61	6,029	7.89
1948	5,471	1,057	86	6,614	9.70
1949	5,866	1,268	111	7,245	9.54
1950	6,244	1,374	125	7,743	6.87
1951	6,186	1,481	119	7,786	.56
1952	5,904	1,505	111	7,520	- 3.41
1953	6,012	1,606	109	7,727	2.75
1954	6,183	1,737	109	8,029	3.90
1955	6,460	1,799	94	8,353	4.04
1956	6,404	1,813	73	8,290	- .76
1957	6,437	1,896	70	8,403	1.36
1958	6,393	1,961	82	8,436	.39
1959	6,588	1,992	78	8,658	2.63
1960	6,532	1,954	75	8,561	- 1.12
1961	6,653	1,986	89	8,728	1.95
1962	6,779	2,034	93	8,906	2.04
1963	6,803	2,052	88	8,943	.42
1964	6,902	2,090	117	9,109	1.86
1965	7,067	2,180	156	9,403	3.23
1966	7,206	2,275	190	9,671	2.85
1967	7,054	2,337	197	9,588	- 8.58
1968	7,022	2,389	231	9,642	.57



FIGURE 2-2  
MOTOR VEHICLE REGISTRATION IN FRANKLIN COUNTY  
FROM 1939 THROUGH 1968

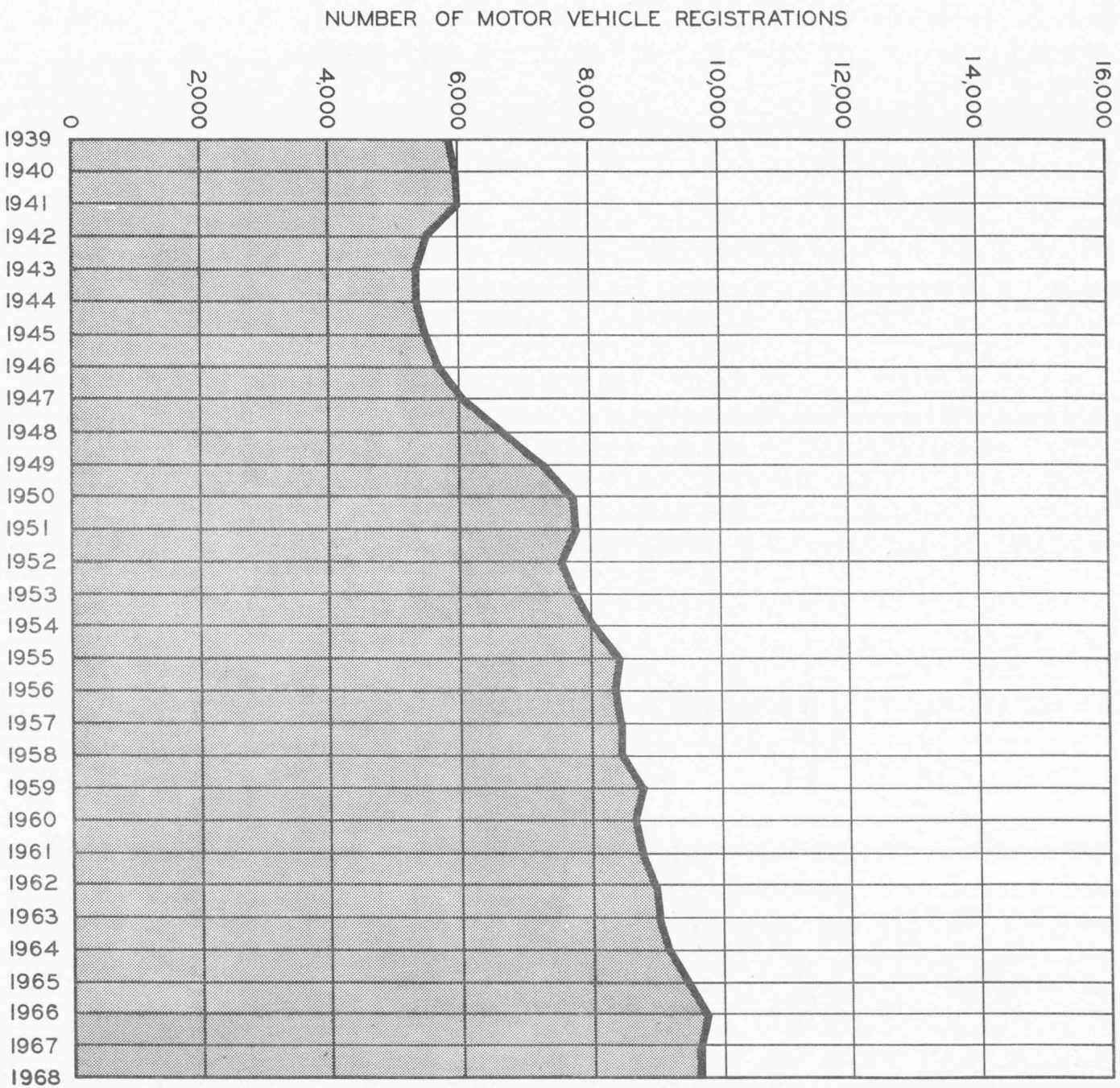
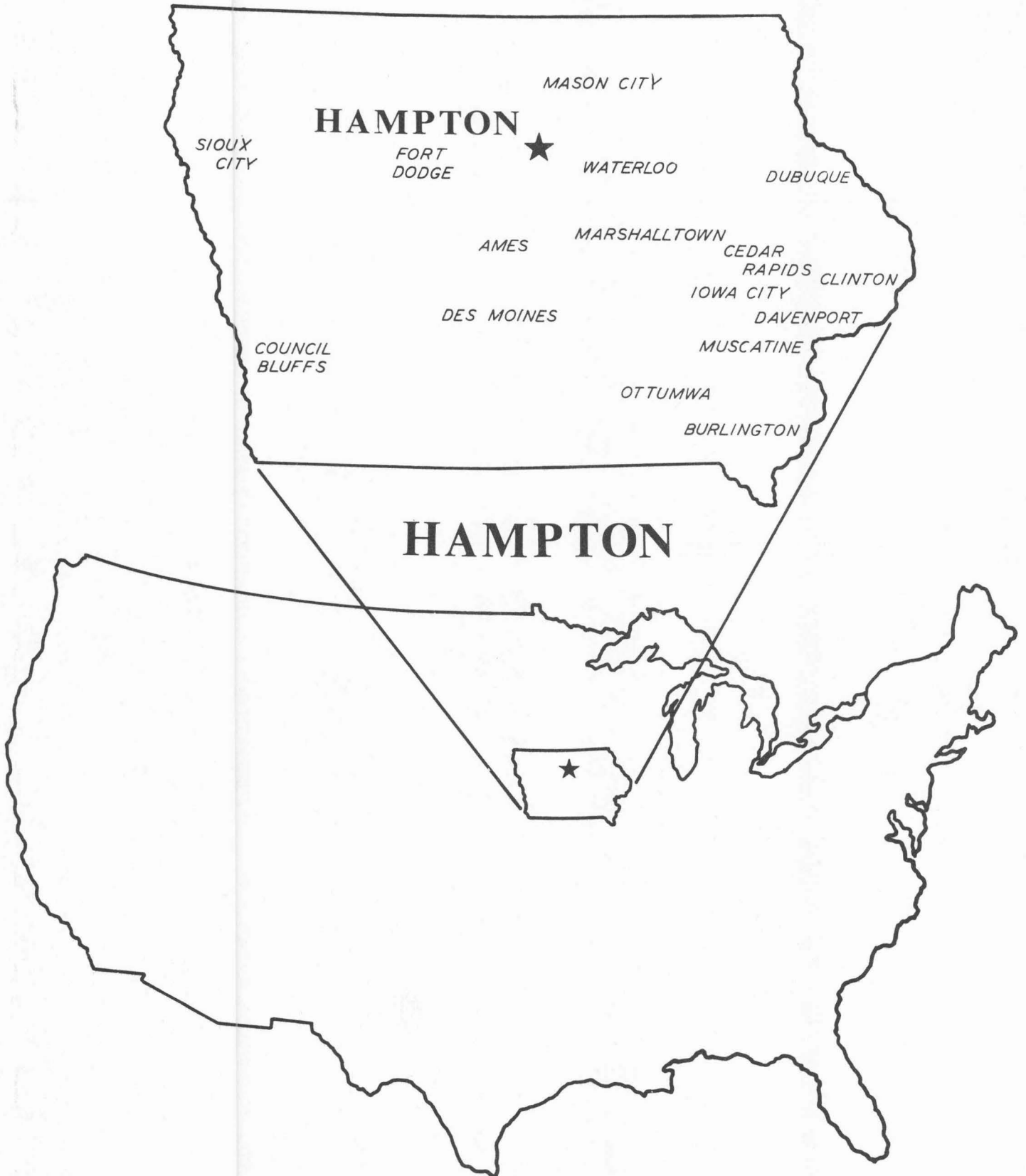
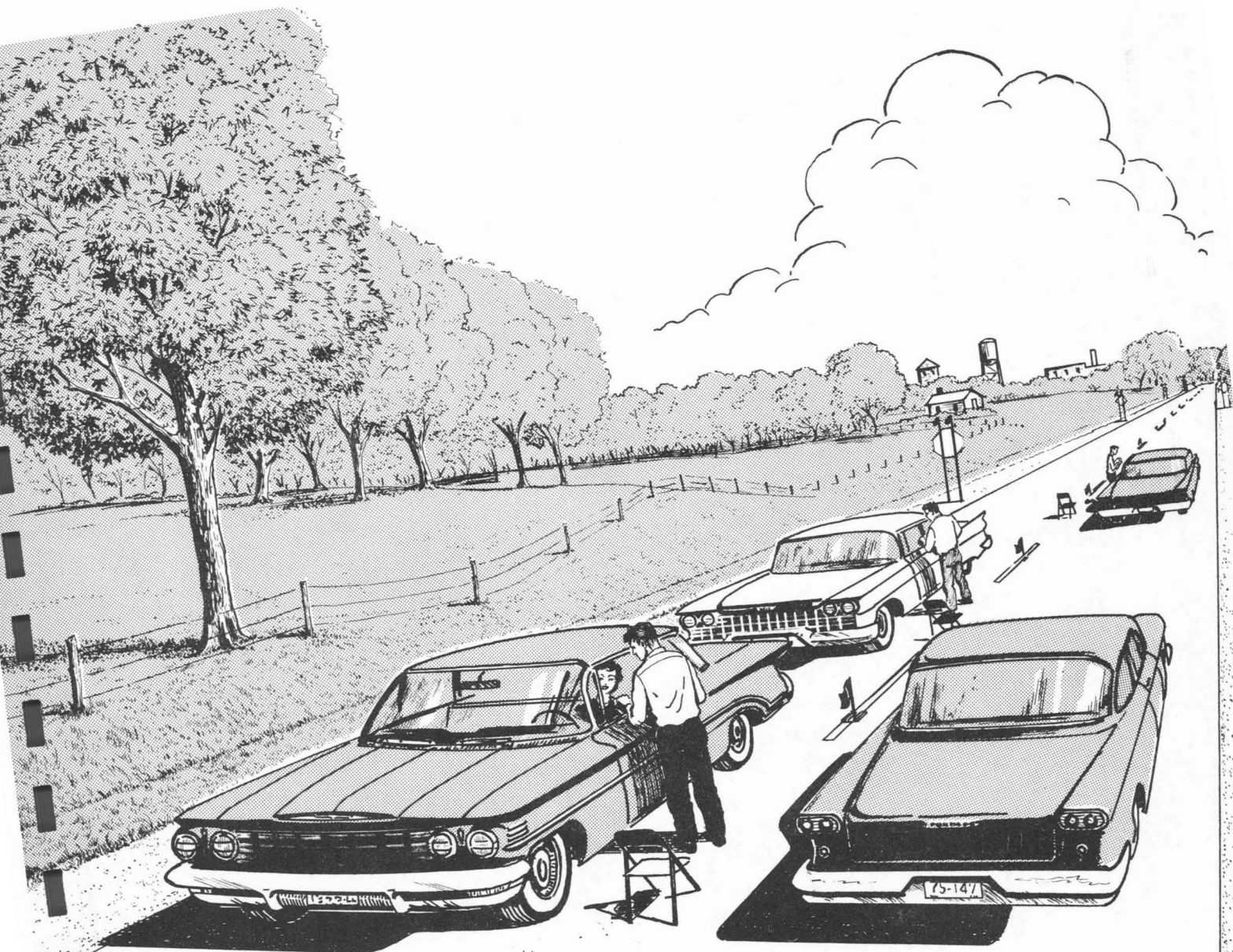


FIGURE 2-3

# STUDY AREA POSITION





*Survey*

*Procedures*

**Part Three**

## THE SURVEY

An external origin and destination traffic survey, of the type conducted in Hampton, 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 through trips which passed through only one interview station. The study area was divided into eight tracts, and all trips which had either their origin or their destination within the study area were traced to one of these tracts.

Interviewing for the Hampton survey was done between June 18th and 21st in 1968. 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 the mechanical recorders, were used to expand the interview data to 24-hour average June weekday traffic for 1968.



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 composed of "external local trips" and "external through trips". External local trips have only one terminal (which may be either the 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.

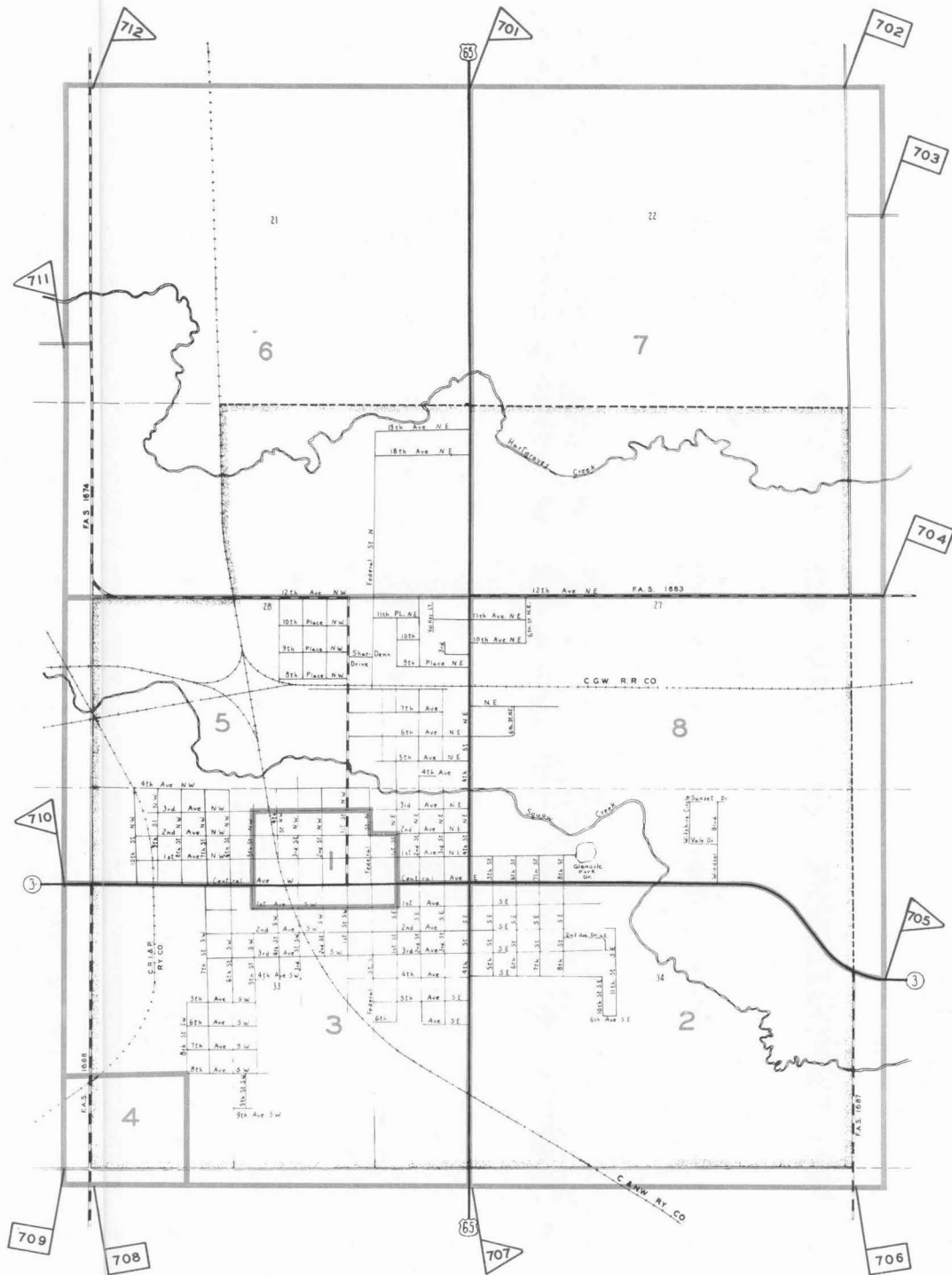
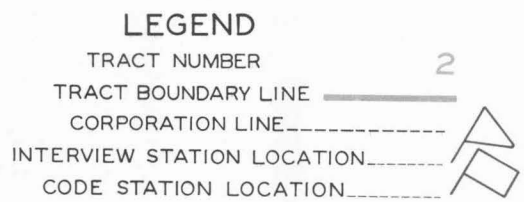


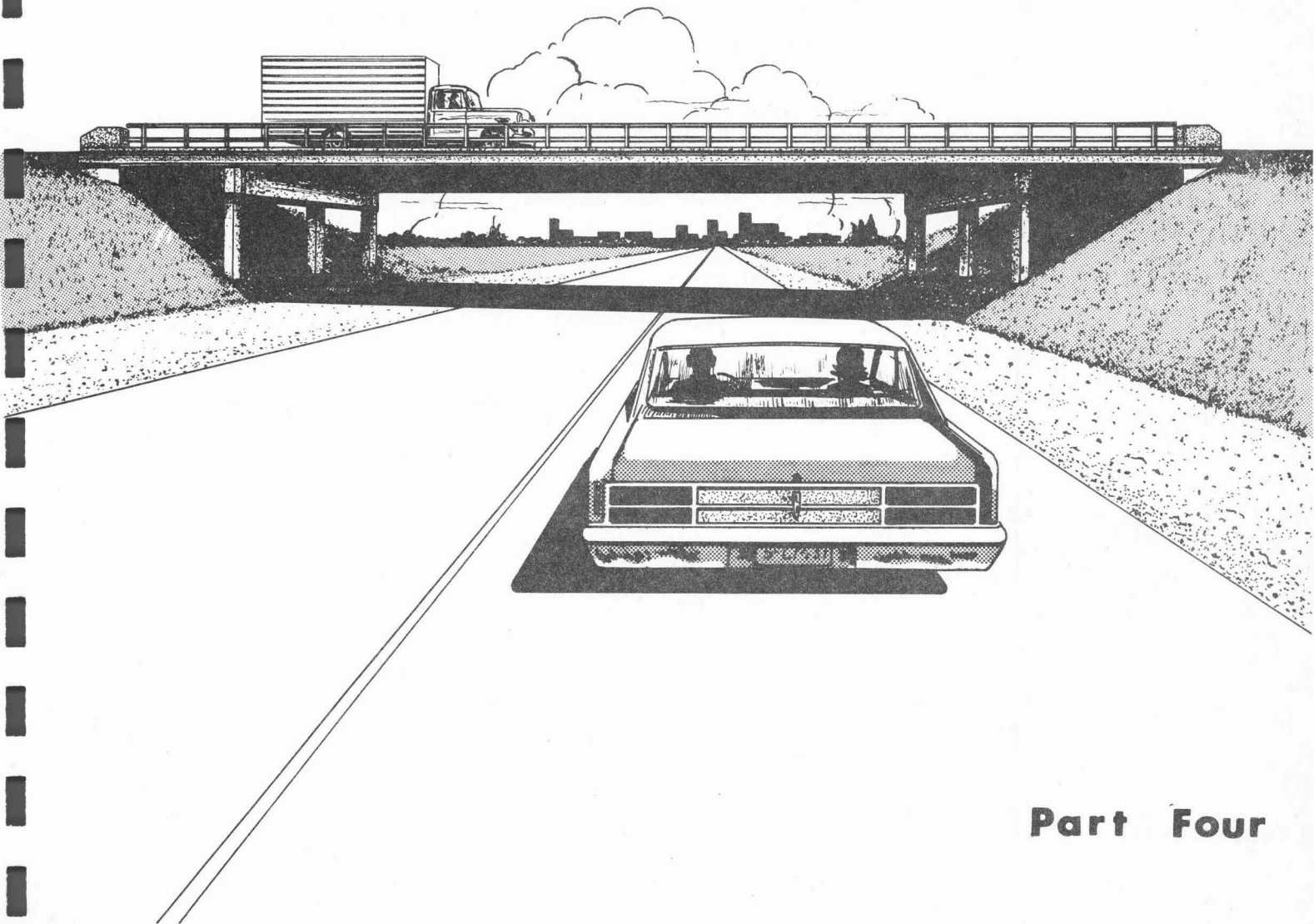
FIGURE 3-1  
TRACT MAP OF THE  
HAMPTON STUDY AREA  
JUNE 1968





*Traffic*

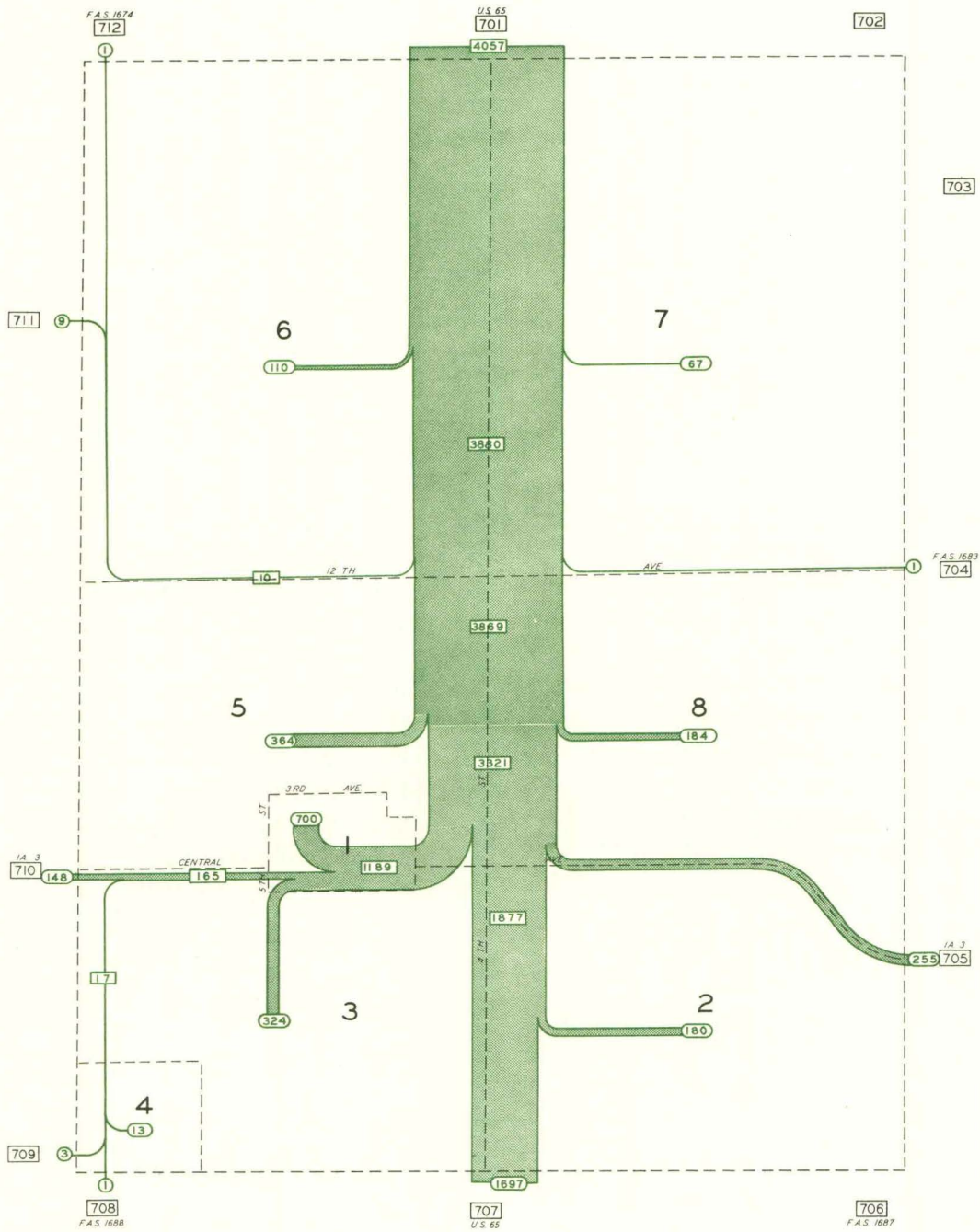
*Movements*



**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 include both origins or destinations.



LEGEND  
 TRACT BOUNDARY LINE - - - - -  
 CORPORATION LINE - - - - -

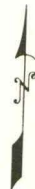
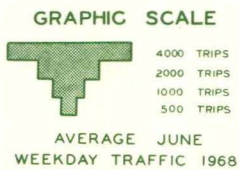
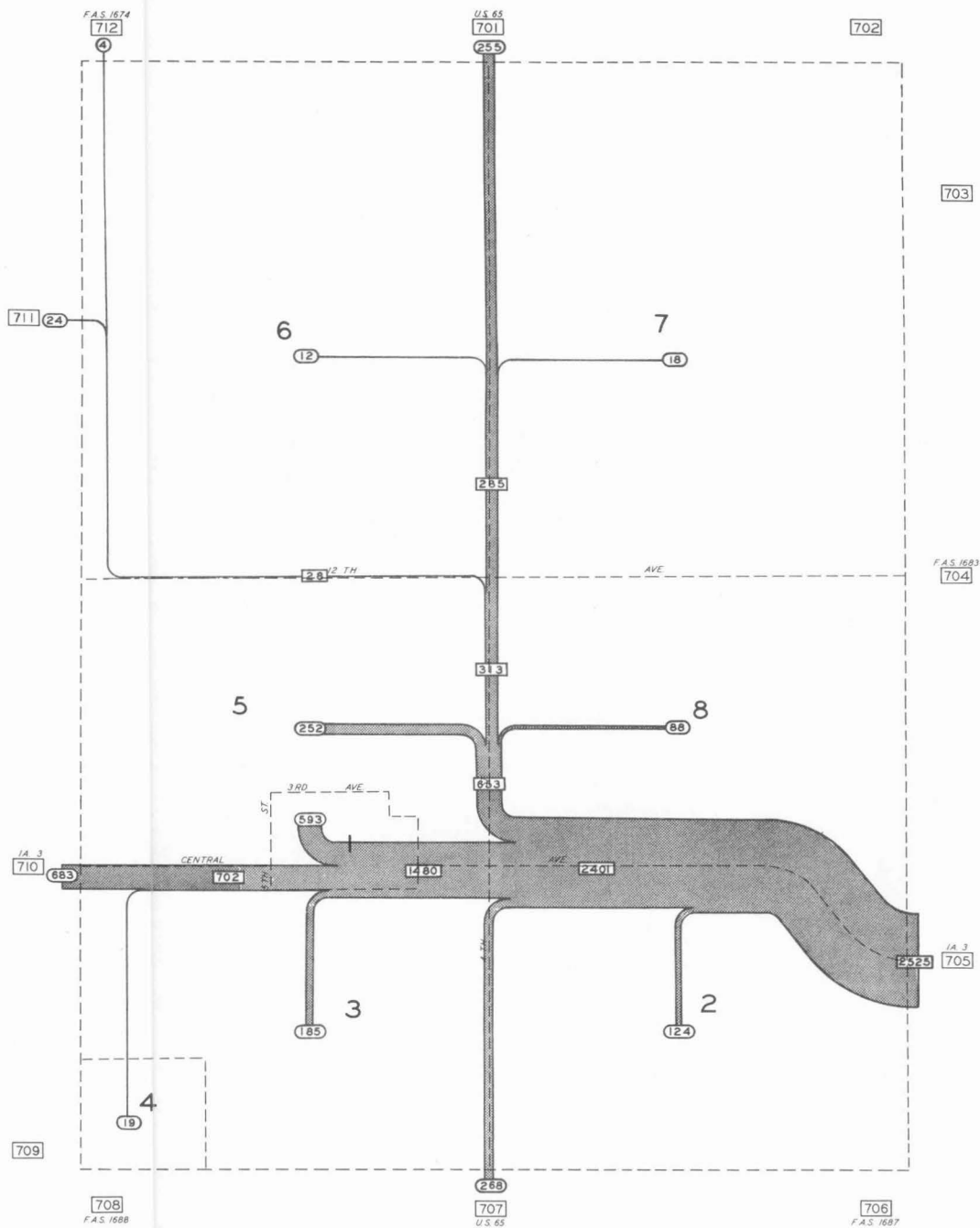


FIGURE 4-1  
 INTERNAL DISPERSION OF  
 ALL VEHICULAR TRIPS PASSING THROUGH  
 STATION 701-U.S. 65 NORTH  
 OF THE  
 HAMPTON STUDY AREA  
 (ALL TRIPS BY DRIVERS OF AUTOS, TRUCKS, TAXIS AND BUSES)



LEGEND

TRACT BOUNDARY LINE - - - - -  
 CORPORATION LINE \_\_\_\_\_

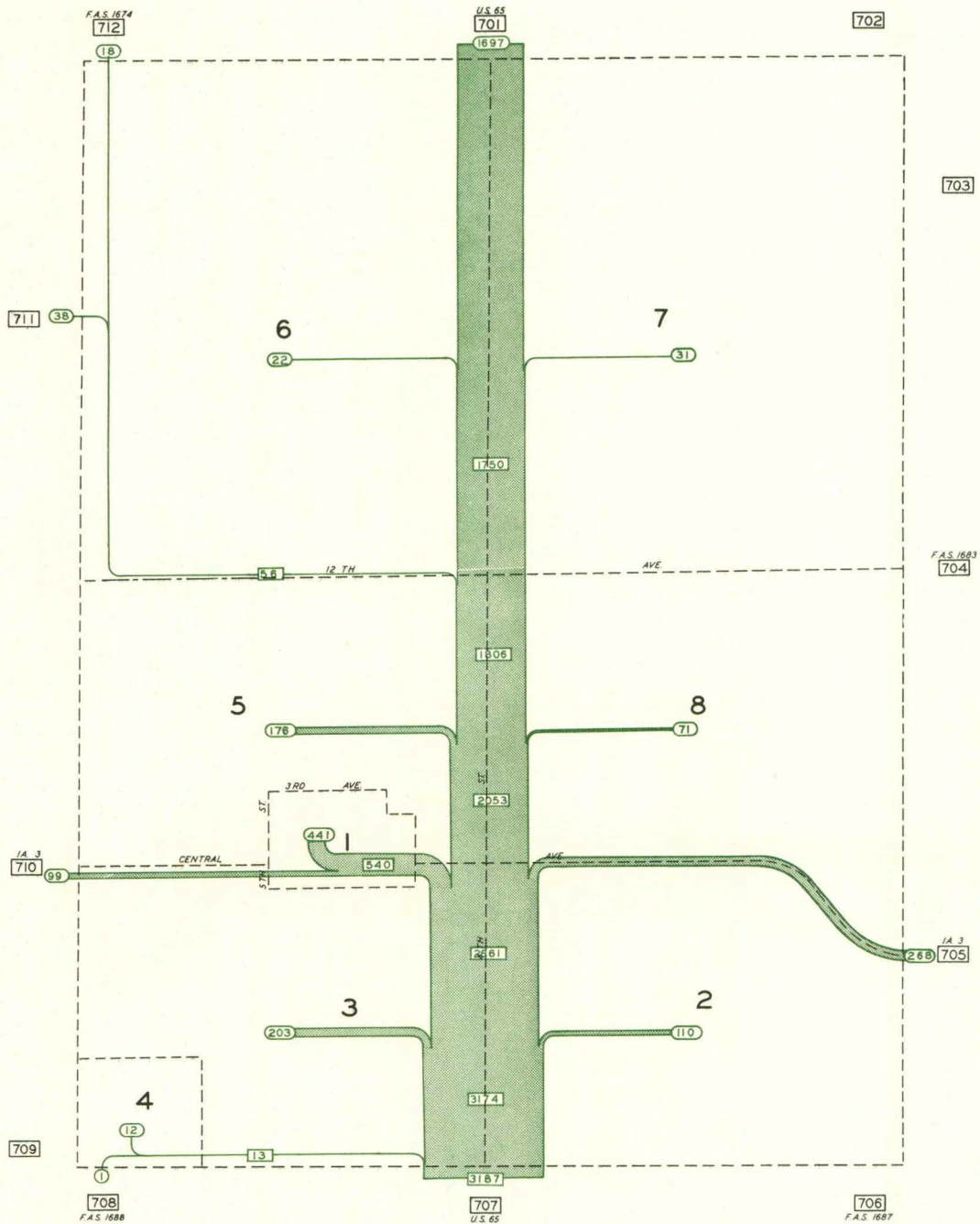
GRAPHIC SCALE



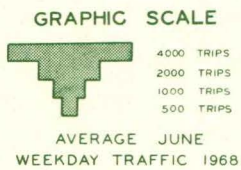
AVERAGE JUNE  
 WEEKDAY TRAFFIC 1968



FIGURE 4-2  
 INTERNAL DISPERSION OF  
 ALL VEHICULAR TRIPS PASSING THROUGH  
 STATION 705-IOWA 3 EAST  
 OF THE  
 HAMPTON STUDY AREA  
 (ALL TRIPS BY DRIVERS OF AUTOS, TRUCKS, TAXIS AND BUSES)

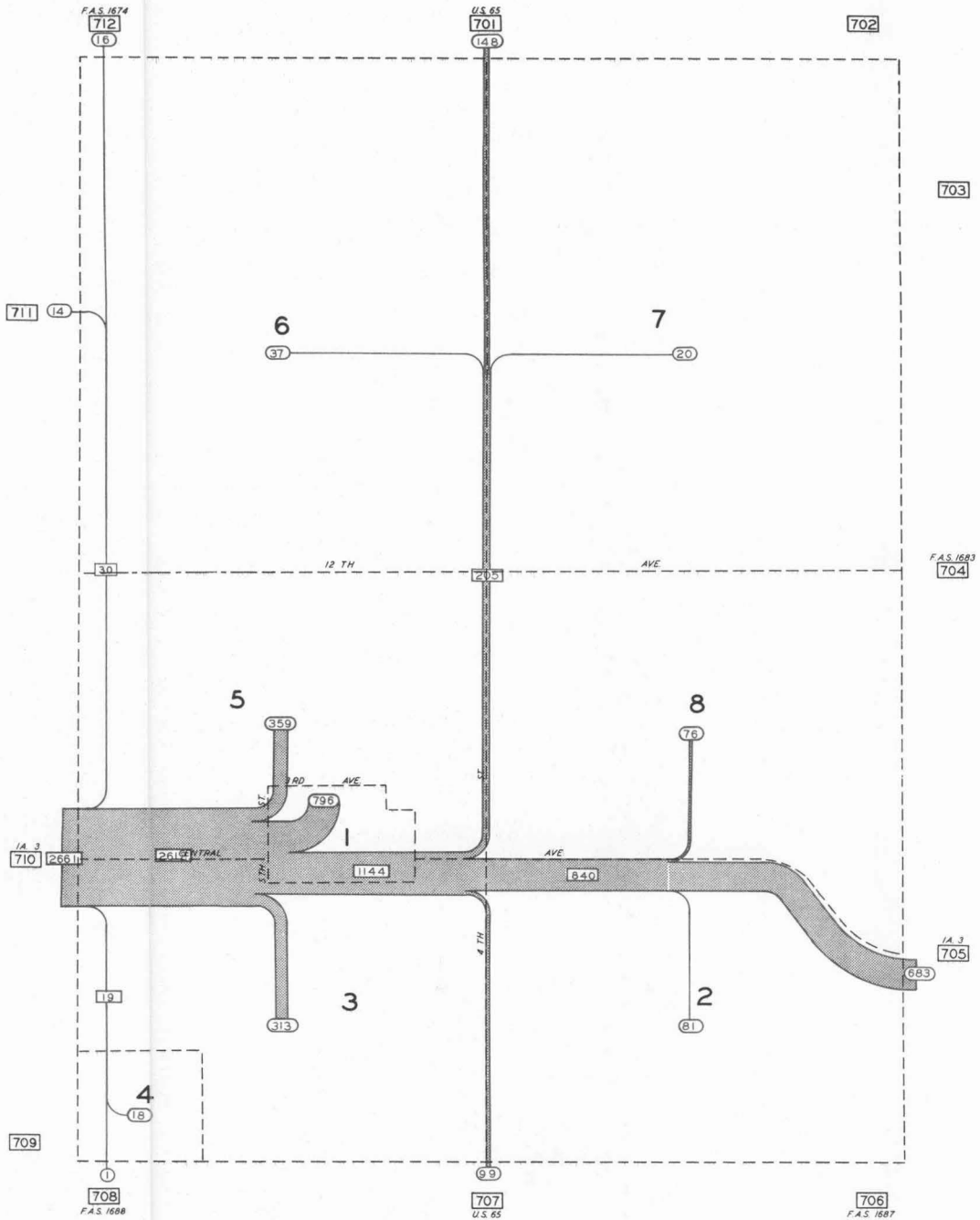


**LEGEND**  
 TRACT BOUNDARY LINE - - - - -  
 CORPORATION LINE - - - - -



**FIGURE 4-3**  
 INTERNAL DISPERSION OF  
 ALL VEHICULAR TRIPS PASSING THROUGH  
 STATION 707-U.S. 65 SOUTH  
 OF THE  
 HAMPTON STUDY AREA  
 (ALL TRIPS BY DRIVERS OF AUTOS, TRUCKS, TAXIS AND BUSES)





LEGEND  
 TRACT BOUNDARY LINE - - - - -  
 CORPORATION LINE - - - - -

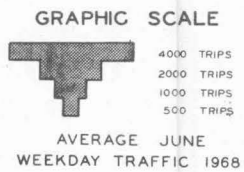
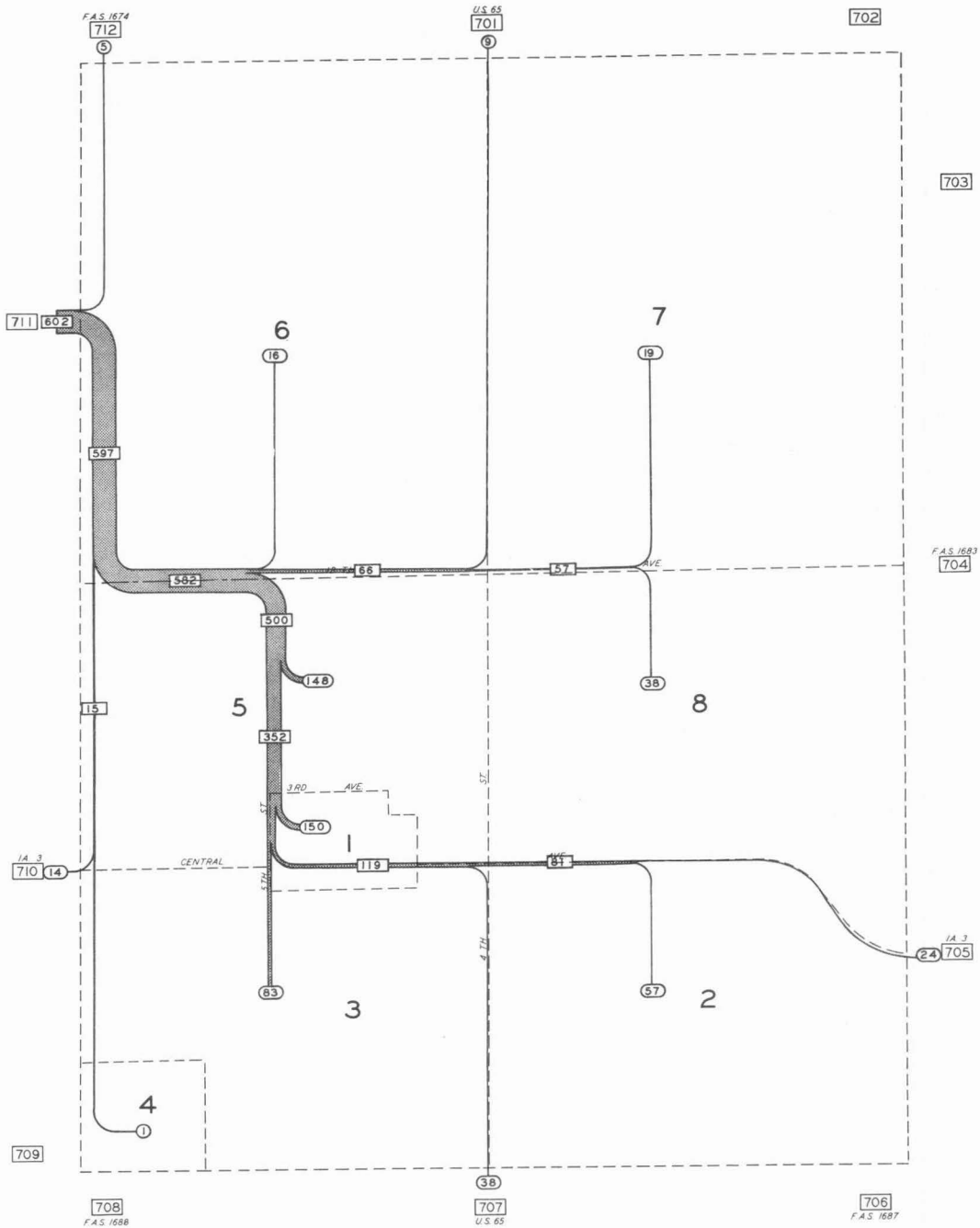


FIGURE 4-4  
 INTERNAL DISPERSION OF  
 ALL VEHICULAR TRIPS PASSING THROUGH  
 STATION 710-IOWA 3 WEST  
 OF THE  
 HAMPTON STUDY AREA  
 (ALL TRIPS BY DRIVERS OF AUTOS, TRUCKS, TAXIS AND BUSES)





LEGEND  
 TRACT BOUNDARY LINE - - - - -  
 CORPORATION LINE - - - - -

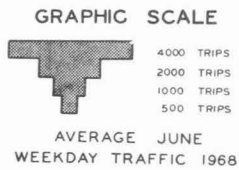
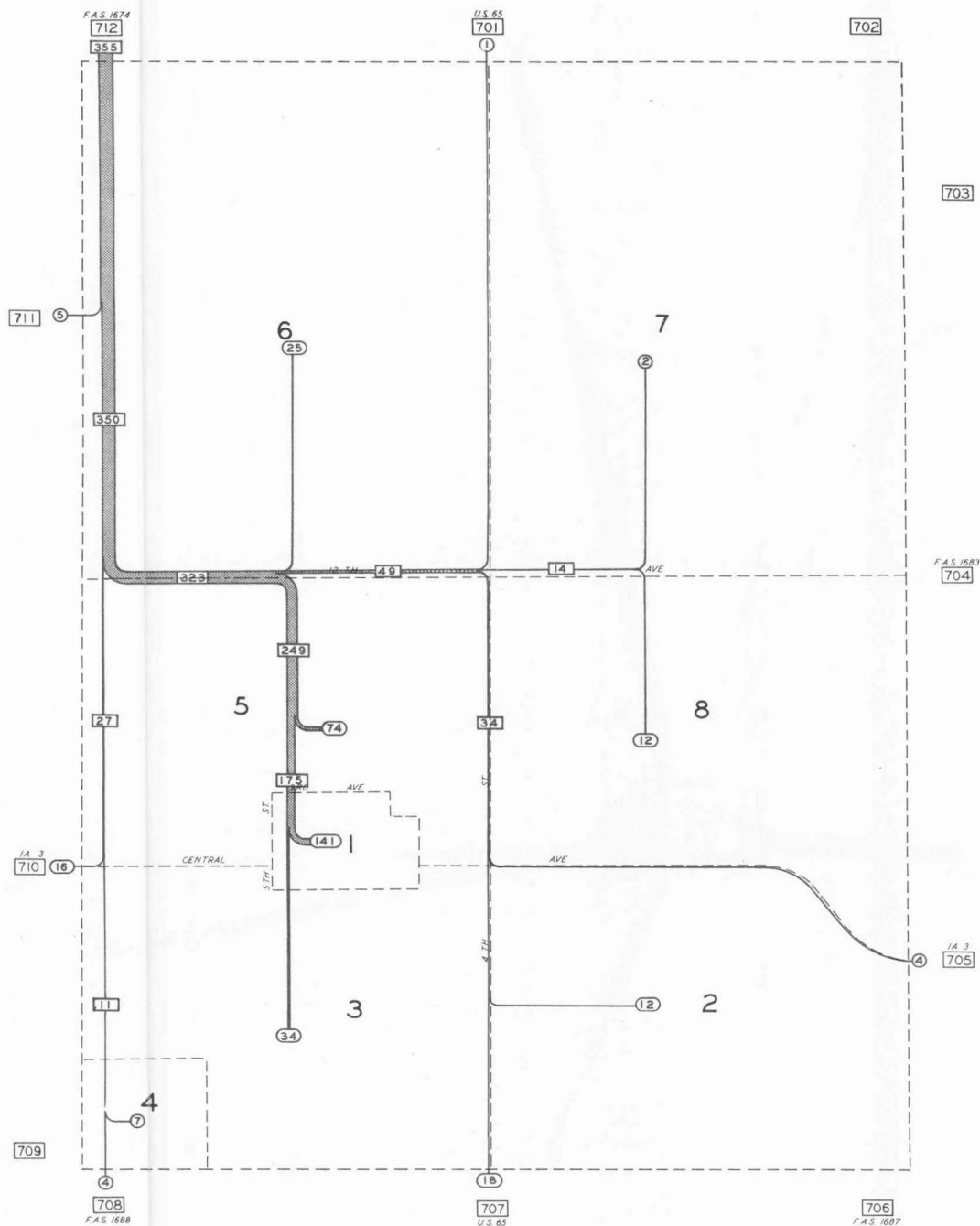


FIGURE 4-5  
 INTERNAL DISPERSION OF  
 ALL VEHICULAR TRIPS PASSING THROUGH  
 STATION 711-LOCAL ROAD WEST  
 OF THE  
 HAMPTON STUDY AREA  
 (ALL TRIPS BY DRIVERS OF AUTOS, TRUCKS, TAXIS AND BUSES)



LEGEND  
 TRACT BOUNDARY LINE - - - - -  
 CORPORATION LINE - - - - -

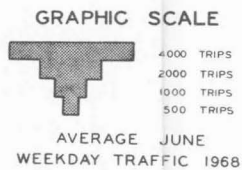


FIGURE 4-6  
 INTERNAL DISPERSION OF  
 ALL VEHICULAR TRIPS PASSING THROUGH  
 STATION 712-F.A.S. 1674 NORTH  
 OF THE  
 HAMPTON STUDY AREA  
 (ALL TRIPS BY DRIVERS OF AUTOS, TRUCKS, TAXIS AND BUSES)

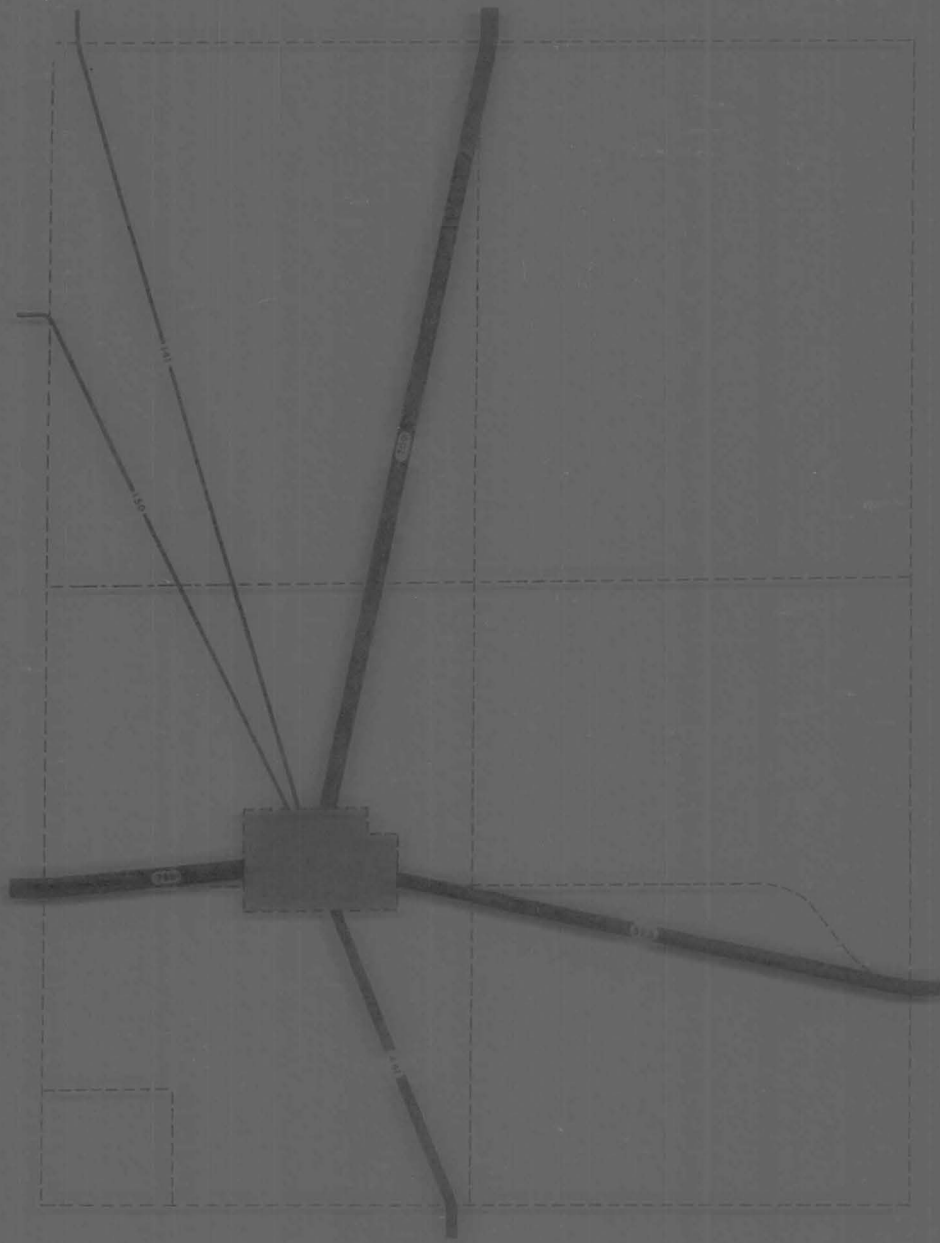
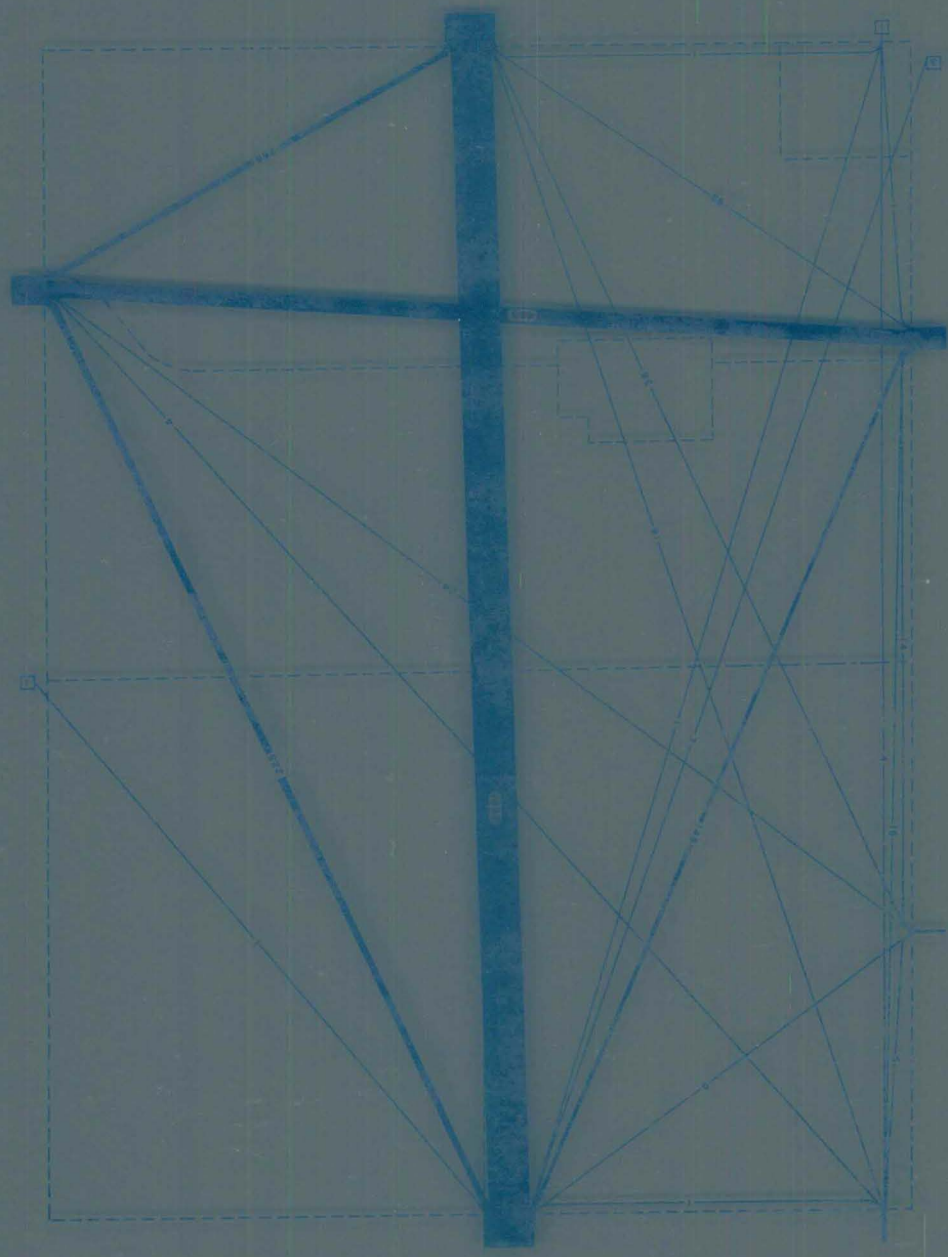


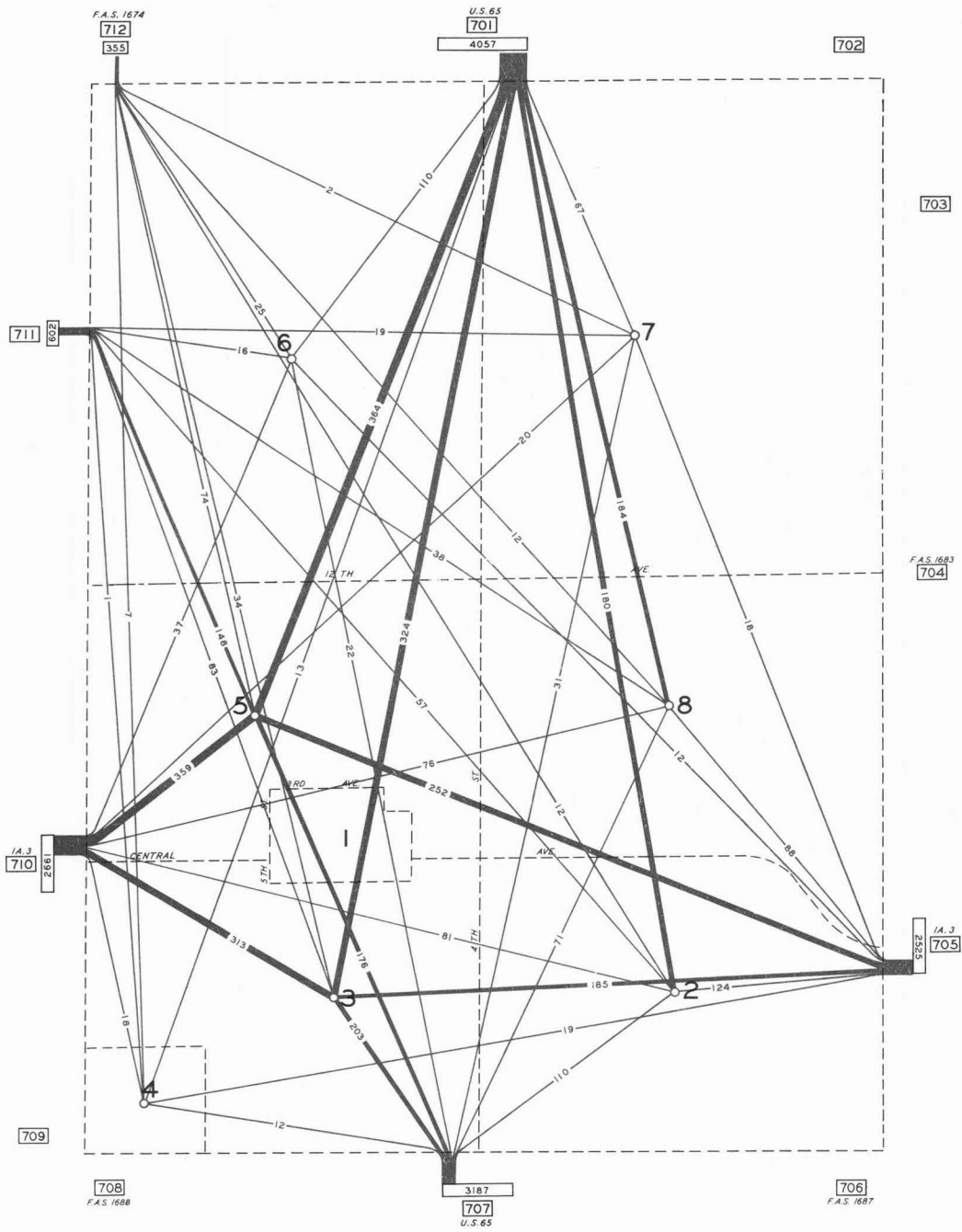
FIGURE 4-7

CENTRAL BUSINESS DISTRICT

OTHER EXTERNAL ENTRANCES

FIGURE 4-8





LEGEND

TRACT BOUNDARY LINE - - - - -  
 CORPORATION LINE \_\_\_\_\_

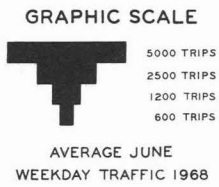


FIGURE 4-9  
 DESIRE LINES OF TRAVEL OF TRIPS  
 TO OR FROM  
 EXTERNAL ENTRANCES OF THE  
 HAMPTON STUDY AREA  
 AND  
 INTERNAL TRACTS

## 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 Franklin County, rural areas adjacent to the study area, other counties in Iowa, and other states.

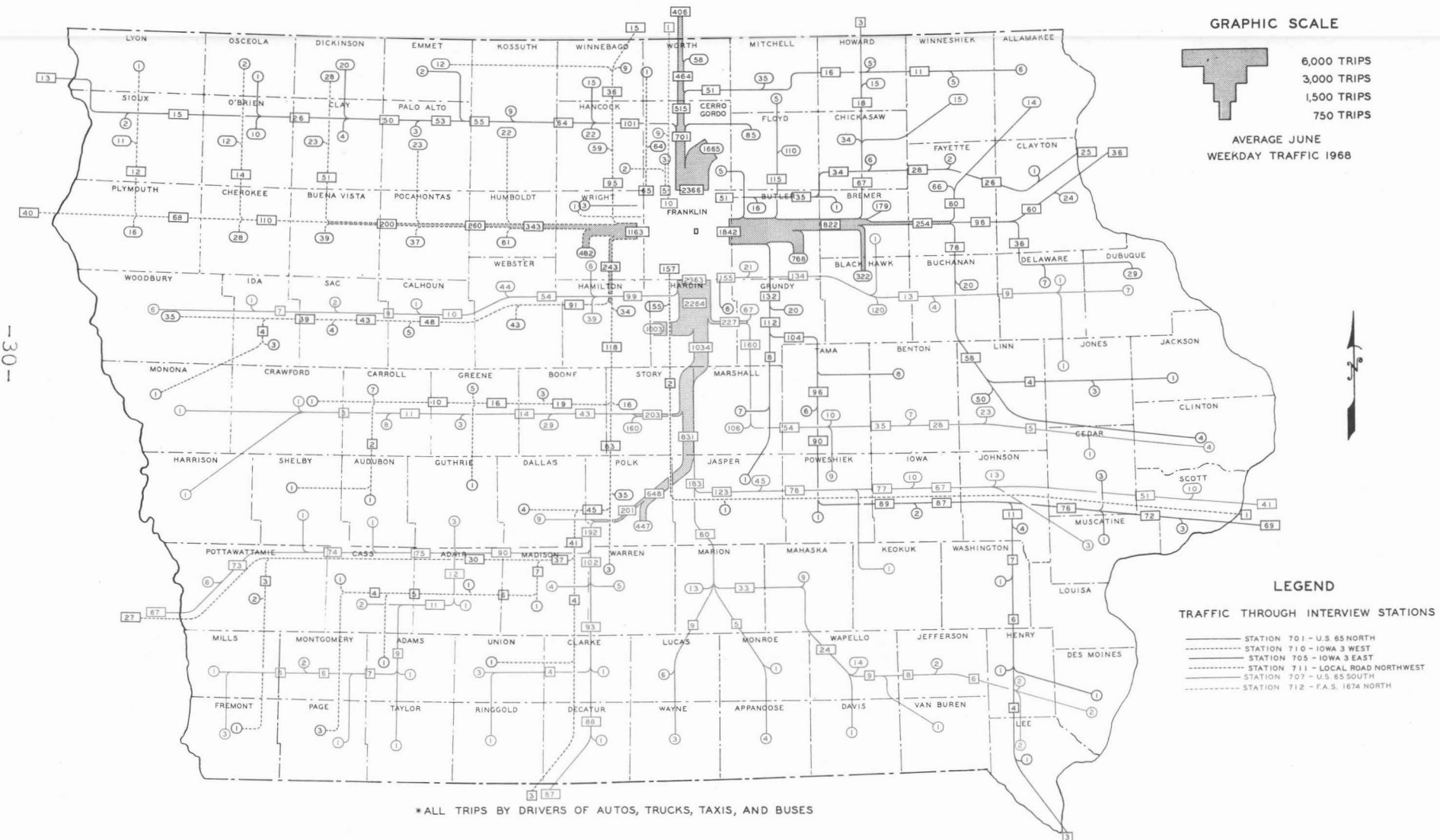
The following traffic flow charts illustrate the data shown in Table 4-1 and point out the Iowa terminals of all trips which passed through the Hampton study area at the time of the survey. Figure 4-10 shows the external termini of all trips which originated or terminated beyond Franklin County. Those 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 4-11 is a continuation of Figure 4-10 and shows the external termini of those trips which originated or terminated in Franklin County beyond the cordon line surrounding the study area. All routes shown are approximate and should be interpreted as such.



TABLE 4-1  
SUMMARY OF TRIPS ENTERING OR LEAVING  
THE HAMPTON STUDY AREA  
1968 AVERAGE JUNE WEEKDAY TRAFFIC

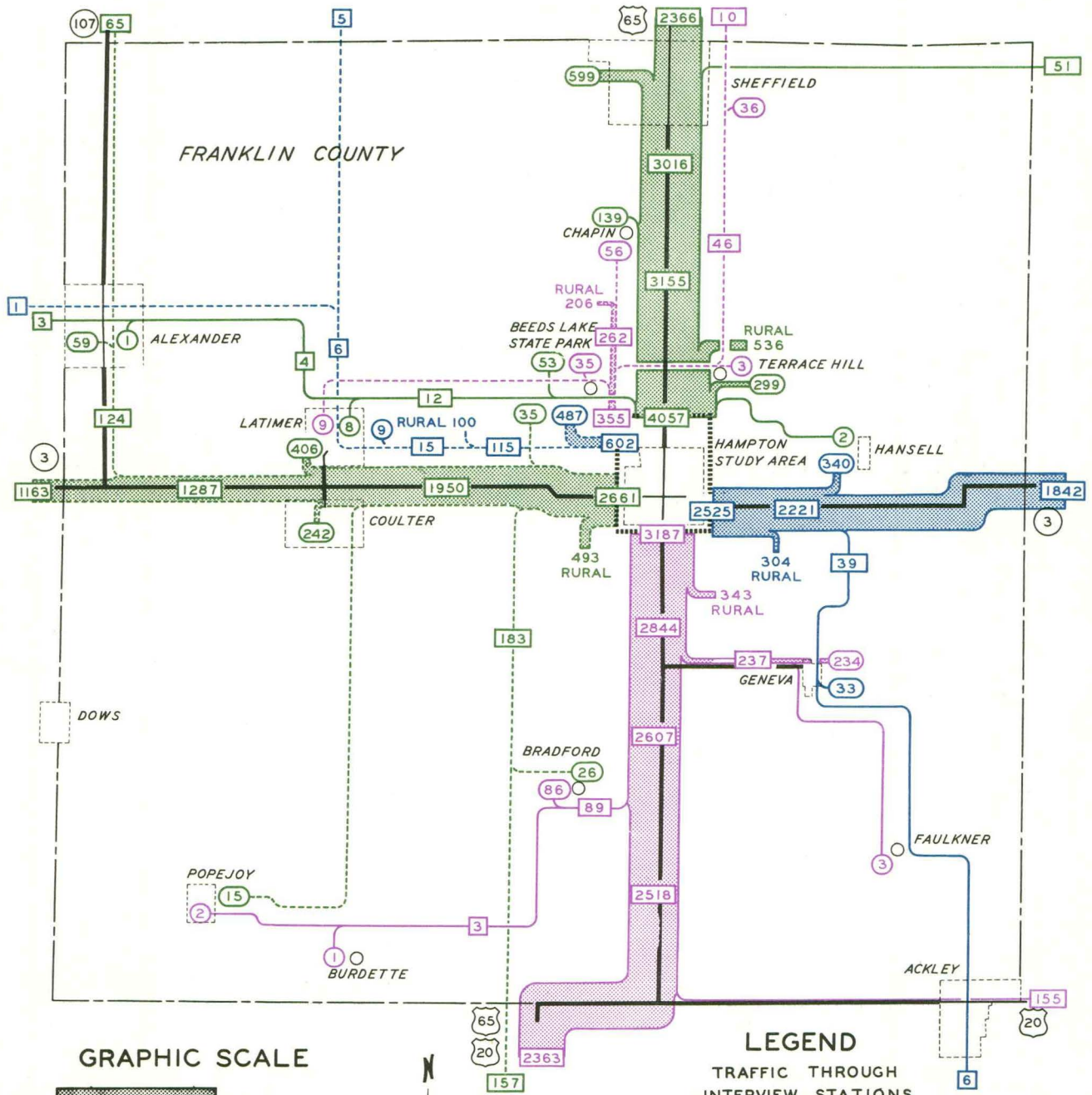
Station Location Origin or Destination	U.S. 65 North		Iowa 3 East		U.S. 65 South		Iowa 3 West		Local Road Northwest to Beeds Lake		F.A.S. 1674 North	
	Station 701		Station 705		Station 707		Station 710		Station 711		Station 712	
	Vol.	%	Vol.	%	Vol.	%	Vol.	%	Vol.	%	Vol.	%
Alexander	1	.02					59	2.22				
Bradford					86	2.70	26	.98				
Burdette					1	.03						
Chapin	139	3.43									56	15.77
Coulter							242	9.09				
Foulkner					3	.09						
Geneva			33	1.31	234	7.35						
Hansell	2	.05	340	13.46								
Latimer	8	.20					406	15.26	9	1.49	9	2.54
Popejoy					2	.06	15	.56				
Sheffield	599	14.76									36	10.14
Terrace Hill	299	7.37									3	.85
Beeds Lake	53	1.31					35	1.32	487	80.90	35	9.86
Total to Towns	1,101	27.14	373	14.77	326	10.23	783	29.43	496	82.39	139	39.16
Rural Franklin Co.	536	13.21	304	12.04	343	10.76	493	18.53	100	16.61	206	58.03
Other Counties	1,976	48.71	1,737	68.79	2,323	72.89	1,299	48.81	6	1.00	9	2.53
Out-of-State	444	10.94	111	4.40	195	6.12	86	3.23			1	.28
Grand Total	4,057	100.00	2,525	100.00	3,187	100.00	2,661	100.00	602	100.00	355	100.00

FIGURE 4-10  
DISPERSION OF EXTERNAL TRIPS  
BETWEEN THE HAMPTON STUDY AREA AND  
POINTS IN IOWA BEYOND FRANKLIN COUNTY\*

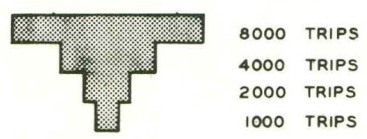


# FIGURE 4-11 DISPERSION OF EXTERNAL TRIPS BETWEEN THE HAMPTON STUDY AREA AND POINTS WITHIN FRANKLIN COUNTY

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



### GRAPHIC SCALE

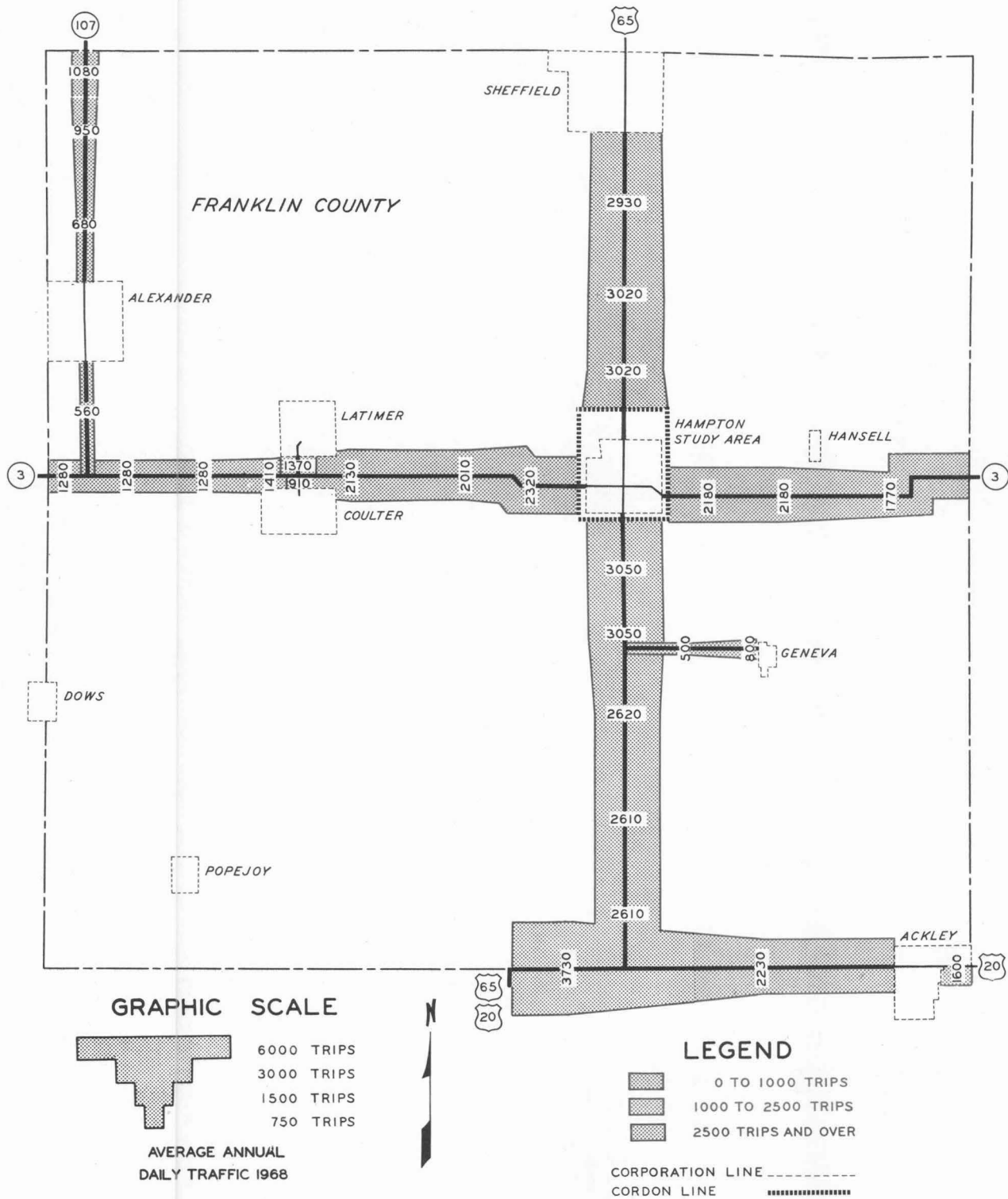


AVERAGE JUNE  
WEEKDAY TRAFFIC 1968

### LEGEND

- TRAFFIC THROUGH  
INTERVIEW STATIONS
- STATION 701 - U.S. 65 NORTH
  - - - STATION 710 - IOWA 3 WEST
  - STATION 705 - IOWA 3 EAST
  - - - STATION 711 - LOCAL ROAD NORTHWEST
  - STATION 707 - U.S. 65 SOUTH
  - - - STATION 712 - F.A.S. 1674 NORTH
  - CORPORATION LINE
  - CORDON LINE

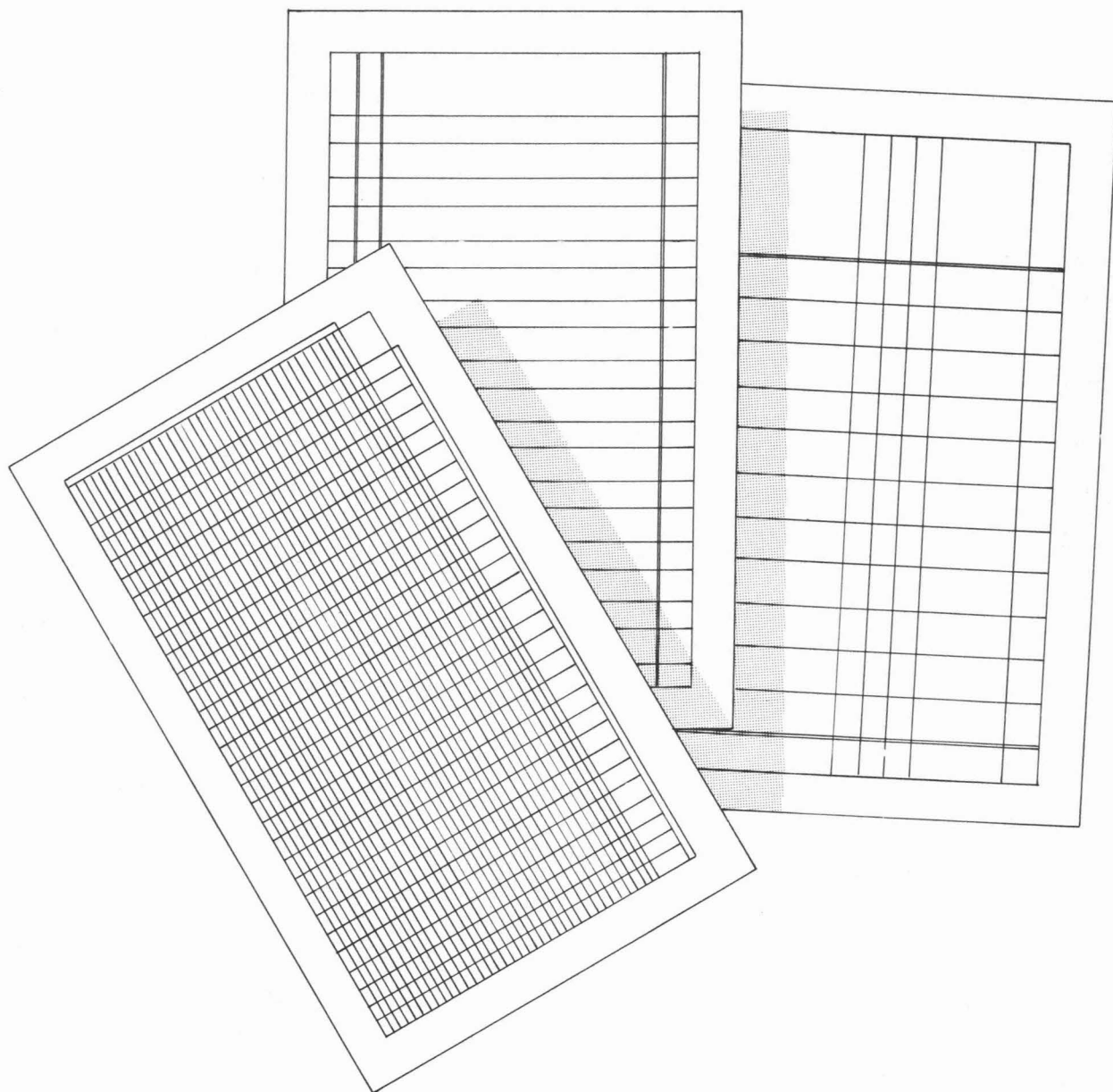
**FIGURE 4-12**  
**TRAFFIC VOLUMES ON**  
**RURAL PRIMARY HIGHWAYS**  
**IN FRANKLIN COUNTY**







# Appendix





**HAMPTON STUDY AREA**  
**TRIP PURPOSE OF EXTERNAL TRIPS**  
**BY AUTOS, TRUCKS, TAXIS, AND BUSES**  
**AVERAGE JUNE WEEKDAY TRAFFIC 1968**

Table B-2a(1) EXTERNAL LOCAL TRIPS

Station	701	705	707	710	711	712	Total Traffic	Total Trips
	U.S. 65 North	Iowa 3 East	U.S. 65 South	Iowa 3 West	Local Road Northwest	F.A.S. 1674 North		
Work	303	220	178	349	57	72	1,179	1,179
Personal Business	206	90	102	219	28	22	667	667
During Work	367	205	257	334	48	68	1,279	1,279
Medical or Dental	52	55	30	58	1	2	198	198
School	23	32	24	15	2	5	101	101
Social or Recreation	563	250	247	362	285	49	1,756	1,756
Eat	89	54	42	68	22	25	300	300
Shop	304	336	153	256	49	51	1,149	1,149
Serve Passengers	35	49	33	39	20	13	189	189
Total Traffic	1,942	1,291	1,066	1,700	512	307	6,818	
Total Trips	1,942	1,291	1,066	1,700	512	307		6,818

Table B-2a(2) EXTERNAL THROUGH TRIPS

Station	701	705	707	710	711	712	Total Traffic	Total Trips
	U.S. 65 North	Iowa 3 East	U.S. 65 South	Iowa 3 West	Local Road Northwest	F.A.S. 1674 North		
Work	172	106	195	86	6	8	573	287
Personal Business	172	97	180	75	2	4	530	265
During Work	821	347	813	280	5	15	2,281	1,143
Medical or Dental	23	6	21	6			56	28
School	32	52	30	28			142	71
Social or Recreation	769	575	765	449	73	15	2,646	1,325
Eat	10	7	8	5			30	15
Shop	88	26	77	16		4	211	106
Serve Passengers	28	18	32	16	4	2	100	50
Total Traffic	2,115	1,234	2,121	961	90	48	6,569	
Total Trips	1,060	617	1,061	481	45	26		3,290

Table B-2a(3) SUMMARY - ALL EXTERNAL TRIPS

Station	701	705	707	710	711	712	Total Traffic	Total Trips
	U.S. 65 North	Iowa 3 East	U.S. 65 South	Iowa 3 West	Local Road Northwest	F.A.S. 1674 North		
Work	475	326	373	435	63	80	1,752	1,466
Personal Business	378	187	282	294	30	26	1,197	932
During Work	1,188	552	1,070	614	53	83	3,560	2,422
Medical or Dental	75	61	51	64	1	2	254	226
School	55	84	54	43	2	5	243	172
Social or Recreation	1,332	825	1,012	811	358	64	4,402	3,081
Eat	99	61	50	73	22	25	330	315
Shop	392	362	230	272	49	55	1,360	1,255
Serve Passengers	63	67	65	55	24	15	289	239
Total Traffic	4,057	2,525	3,187	2,661	602	355	13,387	
Total Trips	3,002	1,908	2,127	2,181	557	333		10,108

**HAMPTON STUDY AREA**  
**AVERAGE CAR OCCUPANCY BY TRIP PURPOSE**  
**AVERAGE JUNE WEEKDAY TRAFFIC 1968**

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 Pass.	Home	
Work		1.161	1.000	3.000		1.385	1.184	1.897	1.834	1.234	1.262
Personal Business	1.400	1.691	1.000	2.000	2.000	2.172	2.000	4.000	2.000	1.532	1.632
During Work	1.000		1.282				1.000			1.128	1.274
Medical or Dental				3.000		1.163	3.054	2.000	3.803	2.112	2.177
School					3.313	1.000		1.911		2.007	2.187
Social or Recreation	1.340	1.893	1.157	2.442		3.072	3.001	2.759	3.468	2.367	2.505
Eat	1.335	1.994	1.607			3.335		2.347	2.000	2.124	2.479
Shop	1.688	1.000	1.000			2.453	2.000	2.023	3.629	2.017	2.067
Serve Passengers	1.372					2.994	1.640	2.502	3.257	2.546	2.523
Home	1.266	1.590	1.174	2.083	1.949	2.408	2.618	2.068	2.945		2.010
Average Occupancy	1.283	1.605	1.275	2.108	2.169	2.516	2.302	2.108	2.936	1.887	1.949

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 Pass.	Home		
Work		1.496	1.184			1.464				1.336	1.435	1.423
Personal Business		1.974				3.428				1.750	1.821	
During Work	1.000	1.000	1.271			1.000	1.000			1.315	1.271	
Medical or Dental						3.008				2.092	2.109	
School					3.000	1.719				2.290	1.759	1.788
Social or Recreation	1.242	1.000	1.335		2.000	3.022	2.632			3.257	2.718	2.814
Eat	1.000	2.265		1.000		3.021				2.025	2.697	
Shop	1.000	2.000	2.000			3.721		2.000	1.000	2.407	2.563	
Serve Passengers		2.000				5.435			1.000	2.503	2.523	
Home	1.419	1.928	1.661	2.394	2.023	2.775	2.496	2.513	2.868		2.480	
Average Occupancy	1.398	1.910	1.381	2.326	2.057	2.860	2.447	2.503	2.693	2.257	2.233	

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 Pass.	Home	
Work		1.209	1.096	3.000		1.395	1.184	1.897	1.747	1.279	1.296
Personal Business	1.400	1.741	1.000	2.000	2.000	2.304	2.000	4.000	2.000	1.587	1.674
During Work	1.000	1.000	1.277			1.000	1.000			1.230	1.283
Medical or Dental				3.000		2.086	3.054	2.000	3.803	2.109	2.177
School					3.291	1.540		1.911	2.290	1.874	1.987
Social or Recreation	1.322	1.801	1.193	2.442	2.000	3.041	2.956	2.759	3.412	2.520	2.647
Eat	1.315	2.073	1.607	1.000		3.246		2.347	2.000	2.117	2.516
Shop	1.656	1.113	1.140			2.581	2.000	2.022	3.306	2.054	2.113
Serve Passengers	1.372	2.000				3.808	1.640	2.502	2.966	2.538	2.611
Home	1.286	1.702	1.392	2.117	1.969	2.560	2.615	2.099	2.928		2.140
Average Occupancy	1.298	1.700	1.278	2.132	2.142	2.663	2.308	2.133	2.884	1.988	2.036

-37-

# HAMPTON STUDY AREA

## DIRECTIONAL TRIPS BETWEEN STATIONS AND TRACTS

AVERAGE JUNE WEEKDAY TRAFFIC 1968

TABLE E-1

VEHICLE TRIPS							VEHICLE TRIPS							VEHICLE TRIPS							
From	To	Auto	Pickup and Panel	Single Unit & Bus	Semi Truck	Total	From	To	Auto	Pickup and Panel	Single Unit & Bus	Semi Truck	Total	From	To	Auto	Pickup and Panel	Single Unit & Bus	Semi Truck	Total	
1	701	271	58	14	8	351															
2	701	100	9	2		111															
3	701	150	23	5	5	183	1	711	52	16			68								
4	701	3	1			4	2	711	27	1			28								
5	701	166	24	5	3	198	3	711	38	2	2		42	707	1	177	36	10	10		233
6	701	47	7	1		55	4	711	1				1	707	2	38	2	2			42
7	701	34	7	1		42	5	711	74	9	5		88	707	3	66	12	5	1		84
8	701	107	8	2	1	118	6	711	10	1			11	707	4	3	3				6
Cl. 2	Total	878	137	30	17	1,062	7	711	9				9	707	5	69	7	4	2		82
							8	711	20	2			22	707	6	13					13
							Cl. 2	Total	231	31	7		269	707	7	10					10
1	705	214	22	13	3	252								707	8	35	3		1		39
2	705	54	4		1	59								Cl. 3	Total	411	63	21	14		509
3	705	79	16	8	2	105	1	712	52	13	2		67								
4	705	9	1			10	2	712	1		1		2								
5	705	105	7	13	1	126	3	712	9	6	2		17	710	1	337	48	28	3		416
6	705	8				8	4	712	1	2	1		4	710	2	30	1	1			32
7	705	9				9	5	712	28	5	1	1	35	710	3	130	28	13	4		175
8	705	43	9	1	1	54	6	712	5	3	2		10	710	4	11	1	1			13
Cl. 2	Total	521	59	35	8	623	7	712	1				1	710	5	154	23	3			180
							8	712	7				7	710	6	16					16
							Cl. 2	Total	104	29	9	1	143	710	7	11		4			15
1	707	168	23	12	5	208								710	8	30	1	1			32
2	707	57	6	5		68	701	1	283	44	18	4	349	Cl. 3	Total	719	102	51	7		879
3	707	94	12	6	7	119	701	2	58	8	3		69								
4	707	1	4		1	6															
5	707	83	7	3	1	94	701	3	121	10	6	4	141	711	1	63	17	2			82
6	707	8	1			9	701	4	5		1	3	9	711	2	26	3				29
7	707	19		1	1	21	701	5	136	19	6	5	166	711	3	34	6	1			41
8	707	28	2	1	1	32	701	6	40	11	4		55	711	5	49	9	2			60
Cl. 2	Total	458	55	28	16	557	701	7	23	2			25	711	6	5					5
														711	7	8	2				10
							Cl. 3	Total	721	103	40	16	880	711	8	16					16
1	710	303	47	24	6	380								Cl. 3	Total	201	37	5			243
2	710	40	4	5		49	705	1	292	37	9	3	341								
3	710	100	21	16	1	138	705	2	58	3	3	1	65	712	1	52	16	6			74
4	710	4	1			5	705	3	58	14	6	2	80	712	2	6	1	3			10
5	710	147	24	5	3	179	705	4	9				9	712	3	10	4	3			17
6	710	16	5			21								712	4	2		1			3
7	710	3	1	1		5	705	5	103	8	14	1	126	712	5	36	2		1		39
8	710	43		1		44	705	6	4				4	712	6	13		2			15
Cl. 2	Total	656	103	52	10	821	705	7	9				9	712	7	1					1
							705	8	32	2			34	712	8	5					5
							Cl. 3	Total	565	64	32	7	668	Cl. 3	Total	125	23	15	1		164

# HAMPTON STUDY AREA

## DIRECTIONAL TRIPS BETWEEN STATIONS AND TRACTS

AVERAGE JUNE WEEKDAY TRAFFIC 1968

TABLE E - 1  
(CONTINUED)

VEHICLE TRIPS							VEHICLE TRIPS							VEHICLE TRIPS								
From	To	Auto	Pickup and Panel	Single Unit & Bus	Semi Truck	Total	From	To	Auto	Pickup and Panel	Single Unit & Bus	Semi Truck	Total	From	To	Auto	Pickup and Panel	Single Unit & Bus	Semi Truck	Total		
701	705	79	9	6	10	104	707	701	620	64	60	129	873	711	701	3	1					4
701	707	589	65	59	111	824	707	705	95	7	12	6	120	711	705	10						10
701	710	57	7	5	3	72	707	710	37	4	1	3	45	711	707	15	1					16
701	711	5				5	707	711	21	1			22	711	710	1	1					2
701	712	1				1	707	712	4	1	2	1	8	711	712	2	1	1				4
704	701	1				1	701	707	589	65	59	111	824	701	711	5						5
705	701	118	15	8	10	151	705	707	116	13	10	9	148	705	711	11	3					14
707	701	620	64	60	129	873	708	707	1				1	707	711	21	1					22
708	701			1		1	710	707	45	4	3	2	54	710	711	11	1					12
709	701	3				3	711	707	15	1			16	712	711	1						1
710	701	58	8	5	5	76	712	707	4	3	3		10	Cl. 4	Total	80	9	1				90
711	701	3	1			4	Cl. 4	Total	1,547	163	150	261	2,121	Cl. Total	Total	432	68	12				512
Cl. 4	Total	1,534	169	144	268	2,115	Cl. 2&3	Total	869	118	49	30	1,066	711	Total	512	77	13				602
Cl. 2&3	Total	1,599	240	70	33	1,942	707	Total	2,416	281	199	291	3,187									
701	Total	3,133	409	214	301	4,057																
705	701	118	15	8	10	151	710	701	58	8	5	5	76	712	705	1				1		2
705	707	116	13	10	9	148	710	705	233	23	14	20	290	712	707	4	3	3				10
705	710	315	33	17	28	393	710	707	45	4	3	2	54	712	708	1	1	1				3
705	711	11	3			14	710	708	1				1	712	710	4	2	1		1		8
705	712	1				2	710	711	11	1			12	712	711	1						1
701	705	79	9	6	10	104	710	712	5	1	1	1	8	701	712	1						1
707	705	95	7	12	6	120	701	710	57	7	5	3	72	705	712	1					1	2
710	705	233	23	14	20	290	705	710	315	33	17	28	393	707	712	1	1	2				4
711	705	10				10	707	710	37	4	1	3	45	710	712	5						8
712	705	1				2	711	710	1	1			2	711	712	2	1	1				4
Cl. 4	Total	979	103	67	85	1,234	712	710	4	2	1	1	8	Cl. 4	Total	24	10	9				48
Cl. 2&3	Total	1,086	123	67	15	1,291	Cl. 4	Total	767	84	47	63	961	Cl. 2&3	Total	229	52	24				307
705	Total	2,065	226	134	100	2,525	Cl. 2&3	Total	1,375	205	103	17	1,700	712	Total	253	62	33				355
							712	Total	2,142	289	150	80	2,661									

# HAMPTON STUDY AREA

## NONDIRECTIONAL TRIPS BETWEEN STATIONS AND TRACTS

AVERAGE JUNE WEEKDAY TRAFFIC 1968

TABLE E-2

VEHICLE TRIPS							VEHICLE TRIPS							VEHICLE TRIPS						
Between		Auto	Pickup and Panel	Single Unit & Bus	Semi Truck	Total	Between		Auto	Pickup and Panel	Single Unit & Bus	Semi Truck	Total	Between		Auto	Pickup and Panel	Single Unit & Bus	Semi Truck	Total
701	1	554	102	32	12	700	711	1	115	33	2		150	707	701	1,209	129	119	240	1,697
701	2	158	17	5		180	711	2	53	4			57	707	705	211	20	22	15	268
701	3	271	33	11	9	324	711	3	72	8	3		83	707	708	1				1
701	4	8	1	1	3	13	711	4	1				1							
701	5	302	43	11	8	364	711	5	123	18	7		148	707	710	82	8	4	5	99
701	6	87	18	5		110	711	6	15	1			16	707	711	36	2			38
701	7	57	9	1		67	711	7	17	2			19	707	712	8	4	5	1	18
701	8	162	17	4	1	184	711	8	36	2			38	Cl. 4 Total	Total	1,547	163	150	261	2,121
Cl. 2&3	Total	1,599	240	70	33	1,942	Cl. 2&3	Total	432	68	12		512	Cl. 2&3	Total	869	118	49	30	1,066
														707	Total	2,416	281	199	291	3,187
705	1	506	59	22	6	593	712	1	104	29	8		141							
705	2	112	7	3	2	124	712	2	7	1	4		12							
705	3	137	30	14	4	185	712	3	19	10	5		34	710	701	115	15	10	8	148
705	4	18	1			19	712	4	3	2	2		7	710	705	548	56	31	48	683
705	5	208	15	27	2	252	712	5	64	7	1	2	74	710	707	82	8	4	5	99
705	6	12				12	712	6	18	3	4		25	710	708	1				1
705	7	18				18	712	7	2				2	710	711	12	2			14
705	8	75	11	1	1	88	712	8	12				12	710	712	9	3	2	2	16
Cl. 2&3	Total	1,086	123	67	15	1,291	Cl. 2&3	Total	229	52	24	2	307	Cl. 4 Total	Total	767	84	47	63	961
														Cl. 2&3	Total	1,375	205	103	17	1,700
707	1	345	59	22	15	441	701	704	1				1	710	Total	2,142	289	150	80	2,661
707	2	95	8	7		110	701	705	197	24	14	20	255							
707	3	160	24	11	8	203	701	707	1,209	129	119	240	1,697	711	701	8	1			9
707	4	4	7		1	12	701	708			1		1	711	705	21	3			24
707	5	152	14	7	3	176	701	709	3				3	711	707	36	2			38
707	6	21	1			22	701	710	115	15	10	8	148	711	710	12	2			14
707	7	29		1	1	31	701	711	8	1			9	711	712	3	1	1		5
707	8	63	5	1	2	71	701	712	1				1	Cl. 4 Total	Total	80	9	1		90
Cl. 2&3	Total	869	118	49	30	1,066	Cl. 4	Total	1,534	169	144	268	2,115	Cl. 2&3	Total	432	68	12		512
							Cl. 2&3	Total	1,599	240	70	33	1,942	711	Total	512	77	13		602
710	1	640	95	52	9	796	701	Total	3,133	409	214	301	4,057							
710	2	70	5	6		81														
710	3	230	49	29	5	313	705	701	197	24	14	20	255	712	701	1				1
710	4	15	2	1		18	705	707	211	20	22	15	268	712	705	2			2	4
710	5	301	47	8	3	359	705	710	548	56	31	48	683	712	707	8	4	5	1	18
710	6	32	5			37	705	711	21	3			24	712	708	1	2	1		4
							705	712	2			2	4	712	710	9	3	2	2	16
710	7	14	1	5		20	Cl. 4	Total	979	103	67	85	1,234	712	711	3	1	1		5
710	8	73	1	2		76	Cl. 2&3	Total	1,086	123	67	15	1,291	Cl. 4	Total	24	10	9	5	48
Cl. 2&3	Total	1,375	205	103	17	1,700	705	Total	2,065	226	134	100	2,525	Cl. 2&3	Total	229	52	24	2	307
														712	Total	253	62	33	7	355

STATE LIBRARY OF IOWA



3 1723 02036 0970

