## .075 <br> - 556 <br> 1964

## 路

## Origin and

上-DestinaI


## State of lowa

## SIDNEY

Origin And Destination Traffic Study February 1964


TRAFFIC AND HIGHWAY PLANNING DEPARTMENT DIVISION OF PLANNING

IOWA STATE HIGHWAY COMMISSION IN COOPERATION WITH THE UNITED STATES DEPARTMENT OF COMMERCE BUREAU OF PUBLIC ROADS


## INTRODUCTION

In July, 1961, the Iowa State Highway Commission in cooperation with the United States Bureau of Public Roads, conducted an external origin-destination traffic survey in Sidney.

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.

Information of this nature is essential in the planning of streets and highways which will not only serve the needs of local traffic, but which will serve the needs of interstate and intercity traffic as well.

It is not within the scope of this report to make recommendations concerning the revision or construction of routes. It iș rather to organize and present the findings of the survey in a manner which will implement the determination of traffic needs and thereby provide the basis for future street and highway planning.

## TABLE OF CONTENTS

Page
Introduction ..... iii
List of Illustrations ..... vi
List of Tables ..... vii
Definitions ..... viii
Part I History and Development ..... 1
Part II Survey Procedure ..... 9
Part III Summary ..... 13
Part IV Traffic Movements ..... 17
Part V Appendix ..... 39
Index ..... 47

## LIST OF ILLUSTRATIONS

## Figure

Page
1-2 Study Area Position in Iowa . . . . . . . . . . . 5

1-1 Study Area Position in Midwest . . . . . . . . . . . 4
Study Area Position in Midwest ..... 4
1-2 Study Area Position in Iowa ..... 5

1-3 Motor Vehicle Registration in Fremont County froin
1939 through 1962
$1-3$2-1 Tract Map of Sidney with External Station Locations12
3-1 Distribution of Trips ..... 14
4-1 Internal Movement of External Through Trips Betveen Stations ..... 19
Internal Dispersion of Trips to or from Station 4-2 769, U.S. 275 North ..... 21
4-3 770, Iowa 2 East ..... 23
4-4 771, U.S. 275 and Iowa 2 South ..... 25
4-5 772, F.A.S. 762 West ..... 27
Desire Lines of Travel of Trips to or from ExterialEntrances of Sidney and:
29
4-6 The Central Business District
29
4-7 Other External Stations29
4-9 External Dispersion of Trips Passing Through Interview Stations to or from Areas beyond Fremont County ..... 32
4-10 External Dispersion of Trips Passing Through Interview Stations to or from Areas within Fremont County ..... 334-11 Traffic Volumes on Rural Primary Highways EnteringSidney36
4-12 Traffic Volumes on Primary Road Extensions in Sidney ..... 37Table
Page
1-1 Population of Sidney ..... 3
1-2 Population of Fremont County ..... 3
1-3 Motor Vehicle Registration in Fremont County from 1939 Through 1962 ..... 6
3-1 Vehicle Type Summary ..... 16
Internal Dispersion of Trips to or from Station: 769, U.S. 275 North ..... 20
4-1
4-2770, Iowa 2 East22
4-3 771, U.S. 275 and Iowa 2 South ..... 24
4-4 772, F.A.S. 762 West ..... 26
4-5 Summary of External Trip Termini ..... 31
A-1 Origin and Destination of Trips Entering or Leaving the Sidney Study Area ..... 41
Trip Purpose of Vehicle Drivers Passing Through: Station 769, U.S. 275 North ..... 42
A-2
Station 770, Iowa 2 East ..... 43
A-3
44
A-4 Station 771, U.S. 275 and Iowa 2 South
45
A-5 Station 772, F.A.S. 762 West46

Central Business District (C.B.D.)

Cordon Line

Destination

Desire Line

External Local Trip

External Through Trip

Internal Trip

Origin

Study Area

The major business district of a city.

A hypothetical line delimiting the area under stuóy and composed of traffic interview stations located on major traffic arteries at or near the corporate limits.

The location of the objective of a trip.

A straight line between the point of origin and point of destination without regard to routes of travel.

A trip having either origin or destination with in the study area and which passes through only one interview station in the external cordon line enroute to its destination.

A trip having neither origin nor destination within the study area and which passes through two or more interview stations in the external cordon line enroute to its destination.

A trip having both origin and destination within the study area.

The location from which a driver started a trip.

The area enclosed by the external cordon line of interview stations and generally corresponding with corporation lines or urban area lines.

Histary

## and

Developensent


## HISTORY

The town, of Sidney, originally known as Austin, kecame the county seat of Fremont County on May 10, 1851. Mrs. Milton Richards, wife of the first Clerk of Court, naned the town after Sidney, Ohio.

Fremont County was organized in 1850 and named for Col. John C. Fremont, a famous explorer of the Rocky Mountain region and an officer of the Mexican War.
A. M. Hitchcock was one of the early settlers in Fcemont County who settled near Sidney. In 1851 J. J. Singlet.on opened a store in Sidney and S. T. Cromwell built the first public house in the new settlement.

The first term of the District Court was held in 1350 by Judge William McKay in a log cabin at McKissick's c cove. The first court house was erected in 1851 and replacec by a more adequate structure in 1857. The present court hcuse was built in 1893.

Sidney's first newspaper, the Sidney Union, was established in 1863 and published weekly by L. J. Easton.

The first railroad in the county was the Kansas City and Council Bluffs Railroad built in 1867-68. The first railroad to reach Sidney was the Chicago, Burlington and Quincy which began operation between Sidney and Hastirgs in 1870。

Sidney is the home of America's largest outdoor Rcleo. The Rodeo, which was begun in 1924, is held annually wder the sponsorship of American Legion Post 128 of Sidney.

Sidney is located near the center of Fremont County in southwest Iowa and is served by U.S. Highway 275 and Iowa 2.

Table 1-1

## POPULATION OF SIDNEY

| Census <br> Year | Sidney <br> Population | Percent Change <br> 10 Year Period | Percent Change <br> Since 1900 |
| :---: | :---: | :---: | :---: |
| 1900 | 1143 |  |  |
| 1910 | 1019 | -10.85 | -10.85 |
| 1920 | 1154 | 13.25 | .96 |
| 1930 | 1074 | -6.93 | -6.04 |
| 1940 | 1290 | 20.11 | 12.86 |
| 1950 | 1132 | -12.25 | -96 |
| 1960 | 1057 | -6.63 | -7.52 |

Table 1-2
POPULATION OF FREMONT COUNTY

| Census <br> Year | Fremont Co. <br> Population | Percent Change <br> lo Year Period | Percent Change <br> Since 1900 |
| :---: | :---: | :---: | :---: |
| 1900 | 18546 |  |  |
| 1910 | 15623 | -15.76 | -15.76 |
| 1920 | 15447 | -1.13 | -16.71 |
| 1930 | 15533 | .56 | -16.25 |
| 1940 | 14645 | -5.72 | -21.03 |
| 1950 | 12323 | -15.86 | -33.55 |
| 1960 | 10282 | -16.56 | -44.56 |

## STUDY AREA POSITION IN THE MIDIVEST



## STUDY AREA POSITION IN IOWA



Table 1-3
MOTOR VEHICLE REGISTRATION IN FREMONT From 1939 Through 1962

| Year | Autos | Trucks | Motorcycles | Total | Percent Change |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1939 | 3551 | 624 | 9 | 4184 |  |
| 1940 | 3586 | 672 | 10 | 4268 | 2.01 |
| 1941 | 3745 | 733 | 8 | 4486 | 5.11 |
| 1942 | 3457 | 699 | 5 | 4161 | - 7.24 |
| 1943 | 3189 | 660 | 7 | 3856 | $-7.32$ |
| 1944 | 3177 | 692 | 8 | 3877 | . 39 |
| 1945 | 3039 | 708 | 12 | 3759 | - 3.04 |
| 1946 | 3256 | 791 | 34 | 4081 | 8.57 |
| 1947 | 3595 | 929 | 50 | 4574 | 12.08 |
| 1948 | 3803 | 1033 | 55 | 4891 | 6.93 |
| 1949 | 4058 | 1167 | 34 | 5259 | 7.52 |
| 1950 | 4204 | 1155 | 31 | 5390 | 2.49 |
| 1951 | 4171 | 1198 | 26 | 5395 | . 09 |
| 1952 | 3992 | 1234 | 26 | 5252 | - 2.56 |
| 1953 | 4131 | 1256 | 35 | 5422 | 3.24 |
| 1954 | 4108 | 1288 | 45 | 5441 | . 35 |
| 1955 | 4137 | 1312 | 49 | 5498 | 1.05 |
| 1956 | 4134 | 1352 | 52 | 5538 | . 73 |
| 1957 | 4138 | 1363 | 53 | 5554 | . 29 |
| 1958 | 4183 | 1411 | 55 | 5649 | 1.71 |
| 1959 | 4290 | 1458 | 40 | 5788 | 2.46 |
| 1960 | 4316 | 1459 | 40 | 5815 | . 47 |
| 1961 | 4335 | 1505 | 52 | 5892 | 1.32 |
| 1962 | 4535 | 1551 | 45 | 6131 | 4.06 |

The above table shows motor vehicle registration for Fremont County as a whole and does not necessarily reflect registration trends for the town of Sidney.

NUMBER OF MOTOR VEHICLE REGISTRATIONS


4ADd

## sumpsosid

## bromens

An origin-destination survey, as the name implies, is a comprehensive study of trip termini with special emr hasis being placed on the origin, destination and routes of travel between the terminal points of each trip. The ultimate goal of such a survey is to obtain factual evidence of traffic patterns in a given locality. This information can tren be used in the development of an efficient and practical street or highway program。

In order to obtain accurate information it is necessary to interview vehicle drivers at strategically located interview stations. In Sidney, interview stations were located at or near the corporate limits on each of the primary highways and on F.A.S. 762 (Park Street) west. Secondary roads entering Sidney were given station code numbers for the purpose of establishing routes of entry or exit to or from the study area. The study area was divided into five internal racts using major streets or highways, in most cases, as the dividing lines between tracts. A map showing the location of ract boundary lines, interview stations, and code stations will be found on page 12 .

Interviewing for the Sidney survey was done on July 3lst and August lst of 1961. Interviewing was done over a sixteen hour period from 6 A.M. to 10 P.M. at each station. jach vehicle passing through an interview station was stop ped and the driver was asked the origin, destination, route o entry or exit and the purpose of his trip. In addition, in erviewers also noted and recorded the type of vehicle, number o occupants, direction of travel, and the state or Iowa county in which the vehicle was registered.

Additional data was obtained through the use of nechanical recorders and manual vehicle classification counts which were taken at a later date and used to expand the intervie data to twenty-four July average weekday traffic 1961.

At the conclusion of the fieldwork, the data pertaining to each trip was converted into code and punched on tabulating cards. These cards were then sorted and tabulated by machine according to 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 grouped into two main categories as shown below.

> 1. External local trips. Trips in this category have only one terminal point within the study area and consequently pass through only one interview station while enroute to their destination. These trips may have either origin or destination within the study area.
2. External through trips. Trips in this category have neither origin nor destination within the study area and therefore must pass through two interview stations while enroute to their destination.

Traffic flow charts indicating the internal dispersion of trips 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。



Part Three

FIGURE 3－1
DISTRIBUTION OF TRIIDS

INTERNAL TRACTS


CENTRAL BUSINESS DISTRICT


## SUMMARY OF TRIPS

The chart at left graphically illustrates some of the more significant traffic volumes derived from the Sidney origin-destination traffic survey. An average of 3814 trips per day passed through the external cordon line of interview stations during the survey period.

933 trips or 24.46 percent of the total number of trips were between external areas and the central business district.

1426 trips or 37.39 percent of the total number of trips were between external areas and internal areas exclusive of the central business district.

1455 trips or 38.15 percent of the total number of trips were external through trips which passed through Sidney enroute to another station.

Table 3－1
VEHICLE TYPE SUMMARY

July Average Weekday Traffic 196

| External <br> Station <br> Location | Passenger Cars and Pick－ups | Single <br> Unit <br> Trucks | Truck Combi－ nation | Total | Inter views | Percent <br> Inter－ <br> viewed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U．S． 275 N 。 | 1260 | 226 | 184 | 1670 | 1187 | 71.08 |
| Ia． 2 E 。 | 1111 | 96 | 131 | 1338 | 1305 | 97.53 |
| U．S． 2 and <br> Ia。 275 S。 | 1440 | 208 | 283 | 1931 | 1685 | 87.26 |
| F．A．S． 276 | 307 | 16 | 2 | 325 | 371 | 114.15 |
| Total | 4118 | 546 | 600 | 5264 | 4548 | 86.39 |

The above table shows the total traffic passing through interview stations located on major traffic arteries leading to Sidney．Station totals and vehicle type totals represent the total traffic which passed through each individual station and therefore includes duplicate through trips．

Higher than average traffic volumes were encountered during the interview pexiod on F．A．S． 762 （Park stree $t$ ）west， as shown by traffic counts taken at a later date．

## Jnos \&dDd

## TRAFFIC FLOW CHARTS

The following traffic flow charts illustrate the dispersion of traffic between points of origin and/or destination through the stations indicated. These ch arts are not intended to show exact routes, but rather to show the cumulative volume of traffic as it approaches or leaves the station location. Trip origins and destinations are not differentiated and the tract or station totals sh own may be considered as either origin or destination.

Figure 4-1 illustrates the movement of external through trips between stations whereas figures 4-2 through 4-5 illustrate the internal dispersion of traffic through individual stations.


Table 4-1
INTERNAL DISPERSION OF TRIPS TO OR FROM STATION 769, U.S. 275 NORTH

| Trips with internal origin or destination | 831 |
| :--- | ---: |
| Trips with external origin and destination | 839 |
| Grand total of all trips through station 769 | 1670 |
| Trips with origin or destination in C.B.D. | 245 |
| Number of interviews (14 hours) | 1187 |
| Percent of total traffic through all |  |
|  |  |

Percent
49.76
50.24
100.00
14.67
71.08
31.72

TRACT BOUNDARY LINES
CORPORATION LINE $\qquad$

GRAPHIC SCALE


| 2000 | TRIPS |
| ---: | ---: |
| 1000 | TRIPS |
| 500 | TRIPS |
| 250 | TRIPS |

JULY AVERAGE WEEKDAY TRAFFIC 196I

FIGURE 4-2
INTERNAL DISPERSION OF TRIPS
TO OR FROM
STATION 769,US 275 NORTH OF
SIDNEY

Table 4-2
INTERNAL DISPERSION OF TRIPS TO OR FROM STATION 770, IOWA 2 EAST



## LEGEND

TRACT BOUNDARY LINES CORPORATION LINE $\qquad$ +

## GRAPHIC SCALE



JULY AVERAGE WEEKDAY TRAFFIC 1961

FIGURE 4-3
INTERNAL DISPERSION OF TRIPS
TO OR FROM
STATION 770, IOWA 2 EAST
OF
SIDNEY

Table 4-3
INTERNAL DISPERSION OF TRIPS TO OR FROM STATION 771, U.S. 275 and IOWA 2 SOUTH

Trips with internal origin or destination

| Trips | Percent |
| ---: | ---: |
| 638 | 33.04 |
| 1293 | 66.96 |
| 1931 | 100.00 |
| 299 | 15.48 |
| 1635 | 87.26 |
|  | 36.68 |



## LEGEND

TRACT BOUNDARY LINES __ _ _ _ _
CORPORATION LINE $\qquad$

GRAPHIC SCALE


JULY AVERAGE WEEKDAY TRAFFIC 1961

FIGURE 4-4
INTERNAL DISPERSION OF TRIPS
TO OR FROM
STATION 771, U.S. 275 IOWA 2 SOUTH of
SIDNEY

Table 4-4
INTERNAL DISPERSION OF TRIPS TO OR FROM STATION 772, F.A.S. 762 WEST



FIGURE 4-5

## INTERNAL DISPERSION OF TRIPS TO OR FROM STATION 772,FAS. 762 WEST OF SIDNEY

## DESIRE LINE CHARTS

The following desire line charts illustrate desiced routes of travel between external stations and internal tracts without regard to existing streets or actual routes traveled. Charts such as these graphically illustrats the travel desires of motorists and frequently point out the need for improvement of existing routes or construction of new ones to satisfy the demands of traffic.

This series of desire line charts illustrates the travel desires of external local trips and external through trips. The top overlay shows travel desires of through trips between external stations and the central business district. The second overlay shows the travel desires of through trips between external stations. The base map shows travel desires between external stations and internal tracts other than the central business district.


FIGURE $4-6$

THE CENTRAL BUSINESS DISTRICT



FIGURE 4-7

EXTERNAL TRACTS



```
    LEGEND
TRACT BOUNDARY LINES
``` \(\qquad\)
```

CORPORATION LINE

``` \(\qquad\)


JULY AVERAGE WEEKDAY TRAFFIC 196I

FIGURE 4-8
```

DESIRE LINES OF TRAVEL OF TRIPS
TO OR FROM
EXTERNAL ENTRANCES
OF
SIDNEY
AND
INTERNAL TRACTS

```

Table 4-5 on the adjoining page shows a tabulation of the number and percent of those trips which had termiri in Fremont County towns, rural areas within the county, other counties in Iowa and other states.

The following traffic flow charts illustrate the external termini of all trips which passed through interview s:ations in Sidney during the 1961 origin-destination survey.

Figure 4-9 shows the external termini of all tri]s which originated or terminated outside of Fremont County. Those trips having terminal points in other states are shown as entering or leaving Iowa on routes which are the most direct to the study area. All routes shown are approximate rather than exact and should be interpreted as such.

Figure 4-10 is a continuation of figure 4-9 and shows the external termini of those trips which originated or terminated in Fremont County beyond the corporate limits of Sidney.

Table 4-5
SUMMARY OF EXTERNAL TRIP TERMINI

July Average Weekday Traffic 1961
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{```
    Origin
        or
Destination
```} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { U.S. } 275 \\
\text { North } \\
\text { Station } 769
\end{gathered}
\]} & \multicolumn{2}{|l|}{Iowa 2 East Station 770} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { U.S. } 275 \text { \& Ia. } 2 \\
\text { South } \\
\text { Station } 771
\end{gathered}
\]} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { F.A.S. } 762 \\
\text { West } \\
\text { Station } 772
\end{gathered}
\]} \\
\hline & Vol. & \% & Vol. & \% & Vol. & \% & Vol. & \% \\
\hline Anderson & 64 & 3.83 & 10 & . 75 & 451 & 23.35 & & \\
\hline Bartlett & 17 & 1.02 & & & & & 1 & . 31 \\
\hline Farragut & & & 85 & 6.35 & 29 & 1.50 & & \\
\hline Hamburg & & & & & & & 9 & 2.77 \\
\hline Imogene & 4 & . 24 & 15 & 1.12 & & & & \\
\hline McPaul & 4 & . 24 & & & & & & \\
\hline Payne & & & & & 4 & . 21 & 1 & . 31 \\
\hline Percival & & & & & & & 85 & 26.15 \\
\hline Randolph & 41 & 2.46 & 56 & 4.19 & & & & \\
\hline Riverton & & & 4 & . 30 & 140 & 7.25 & & \\
\hline Tabor & 265 & 15.87 & & & & & & \\
\hline Thurman & 133 & 7.96 & & & & & 24 & 7.38 \\
\hline Town Totals & 528 & 31.62 & 170 & 12.71 & 624 & 32.31 & 120 & 36.92 \\
\hline Rural Totals & 412 & 24.67 & 380 & 28.40 & 351 & 18.18 & 177 & 54.46 \\
\hline Other Counties & 224 & 13.41 & 596 & 44.54 & 9 & . 47 & & \\
\hline Out-of-State & 506 & 30.30 & 192 & 14.35 & 947 & 49.04 & 28 & 8.62 \\
\hline Grand Total & 1670 & 100.00 & 1338 & 100.00 & 1931 & 100.00 & 325 & 100.00 \\
\hline
\end{tabular}

FIGURE 4-9
EXTERNAL DISPERSION OF TRIPS

\section*{PASSING THROUGH INTERVIEW STATIONS}

IN SIDNEY
TO OR FROM AREAS BEYOND FREMONT COUNTY
-32-


\section*{LEGEND}

august average weekday traffic - 1961


The following charts on pages 36 and 37 illustrate the average annual daily traffic on rural primary highways entering or leaving Sidney and on primary extensions within the study area.

The data shown in figures \(4-11\) and \(4-12\) were obtained from traffic counts rather than interviews and indicate average annual daily traffic for 1961 and 1962 rather than July average weekday traffic for 1961.



GRAPHIC SCALE


AVERAGE ANNUAL DAILY TRAFFIC 1961

FIGURE 4-12
TRAFFIC VOLUMES
ON PRIMARY ROAD EXTENSIONS IN
SIDNEY


\section*{\(1 \pm+10 d\)}

x:ppsodrdit

The following table shows a compilation of 196] July average weekday traffic for Sidney.

Table A-l shows the directional movement of external trips to, from, and through the Sidney study area. Fract or station origin may be found in the vertical colunns along either side of the table. Tract or station destination may be found in the horizontal columns across the top or bottom of the table. In table A-l it will be necessary to add origins to destinations in order to determin the number of trips between two points.

\title{
Origin and Destination of Trips
} Entering or Leaving

Sidney

July Average Weekday Traffic 1961

                                    STATION 769, U.S. 275 NORTH
                                    To or From the Sidney Study Area

July Average Weekday Traffic 1961
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{12}{|c|}{Trip Purpose - Destination} \\
\hline Trip Purpose Origin & Work & Transact Business & \[
\begin{array}{|c}
\text { During } \\
\text { Work } \\
\hline
\end{array}
\] & Medical or Dental & School & Recreation Social or Cultural & Eat & Shop & Serve
Passen-
gers & Home & Total & Percent \\
\hline Work & & 1 & & & & 4 & 1 & & & 59 & 65 & 3.89 \\
\hline Transact Business & 8 & 18 & & & & 10 & & 1 & & 165 & 202 & 12.09 \\
\hline During Work & & 1 & 519 & & & & & & & & 520 & 31.14 \\
\hline Medical or Dental & & & & & & 1 & & & & 17 & 18 & 1.08 \\
\hline School & & & & & & & & & & 1 & 1 & . 06 \\
\hline Recreation Social or Cultural & 3 & 2 & & 1 & & 59 & & & 1 & 250 & 316 & 18.92 \\
\hline Eat & & & & & & & & & & 5 & 5 & 30 \\
\hline Shop & & & & & & 1 & & & 1 & 26 & 28 & 1.68 \\
\hline Serve & & & & & & & & & & & & \\
\hline passengers & & & & & & & & & & 1 & 1 & . 06 \\
\hline Home & 25 & 156 & 3 & 13 & & 282 & 3 & 18 & 14 & & 514 & 30.78 \\
\hline Total & 36 & 178 & 522 & 14 & & 357 & 4 & 19 & 16 & 524 & 1670 & 100.00 \\
\hline Percent & 2.15 & 10.66 & 31.26 & . 84 & & 21.38 & . 24 & 1.14 & . 96 & 31.37 & 100.00 & \\
\hline
\end{tabular}

Table A-3
TRIP PURPOSE OF VEHICLE DRIVERS PASSING THROUGH
STATION 770. IOWA 2 EAST
To or From the Sidney Study Area
July Average Weekday Traffic 1961
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{12}{|c|}{Trip Purpose - Destination} \\
\hline Trip Purpose Origin & Work & Transact Business & \[
\begin{array}{|c}
\text { During } \\
\text { Work } \\
\hline
\end{array}
\] & \[
\begin{array}{|c|}
\hline \text { Medical } \\
\text { or } \\
\text { Dental } \\
\hline
\end{array}
\] & School & Recreation Social or Cultural & Eat & Shop & Serve
Passen-
gers & Home & Total & Percent \\
\hline Work & & 10 & 7 & & & 2 & 3 & & & 102 & 124 & 9.27 \\
\hline Transact Business & 11 & 32 & 4 & & & 1 & & & & 133 & 181 & 13.53 \\
\hline During Work & 7 & 8 & 245 & & & 1 & & & & 1 & 262 & 19.58 \\
\hline Medical or Dental & & & & & & 1 & & 1 & & 9 & 11 & . 82 \\
\hline School & & & & & & & & & & 1 & 1 & .07 \\
\hline Recreation Social or Cultural & & 1 & & & & 46 & 1 & & & 156 & 204 & 15.24 \\
\hline Eat & 2 & 1 & & & & 2 & & & & 5 & 10 & . 75 \\
\hline Shop & & 1 & & & & 1 & & & & 31 & 33 & 2.47 \\
\hline Serve Passengers & 1 & & 1 & & & 1 & & & & 5 & 8 & . 60 \\
\hline Home & 80 & 173 & 4 & 10 & & 201 & 5 & 21 & 10 & & 504 & 37.67 \\
\hline Total & 101 & 226 & 261 & 10 & & 256 & 9 & 22 & 10 & 443 & 1338 & 100.00 \\
\hline Percent & 7.55 & 16.89 & 19.51 & . 75 & & 19.13 & . 67 & 1.64 & . 75 & 33.11 & 100.00 & \\
\hline
\end{tabular}

TRIP PURPOSE OF VEHICIE DRIVERS PASSING THROUGH
STATION 771, U.S. 275 and IOWA 2 SOUTH
To or From the Sidney Study Area
July Average Weekday Traffic 1961
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{12}{|c|}{Trip Purpose - Destination} \\
\hline Trip Purpose Origin & Work & Transact Business & During Work & \begin{tabular}{l}
Medical \\
or Dental
\end{tabular} & School & Recreation Social or cultural & Eat & Shop & Serve
Passen-
gers & Home & Total & Percent \\
\hline & & & & & & & & & & & & \\
\hline Work & & 20 & 15 & & & 3 & & 1 & & 99 & 138 & 7.14 \\
\hline Transact Business & 2 & 15 & & & & 5 & & 1 & & 164 & 187 & 9.68 \\
\hline During Work & 5 & & 587 & & & & & & & 2 & 594 & 30.76 \\
\hline Medical or Dental & & & & & & 1 & & & & 11 & 12 & . 62 \\
\hline School & & & & & & & & & & 1 & 1 & . 05 \\
\hline Recreation Social or Cultural & & 2 & & & & 62 & & 1 & 1 & 235 & 301 & 15.59 \\
\hline Eat & 1 & 1 & & & & 2 & & & & 5 & 9 & .47 \\
\hline Shop & & & & & & & & & & 21 & 21 & 1.09 \\
\hline Serve & & & & & & & & & & & & \\
\hline Fassengers & 1 & & & & & & & & & 8 & 9 & .47 \\
\hline Home & 99 & 218 & & 10 & 1 & 297 & 2 & 20 & 12 & & 659 & 34.13 \\
\hline Total & 108 & 256 & . 602 & 10 & 1 & 370 & 2 & 23 & 13 & 546 & 1931 & 100.00 \\
\hline Percent & 5.59 & 13.26 & 31.18 & . 52 & . 05 & 19.16 & . 10 & 1.19 & .67 & 28.28 & 100.00 & \\
\hline
\end{tabular}

TRIP PURPOSE OF VEHICLE DRIVERS PASSING THROUGH
STATION 772, F.A.S. 762 WEST
To or From the Sidney Study Area

July Average Weekday Traffic 1961
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{12}{|c|}{Trip Purpose - Destination} \\
\hline Trip Purpose Origin & Work & Transact Business & During Work & \begin{tabular}{l}
Medical \\
or \\
Dental
\end{tabular} & School & Recreation Social or Cultural & Eat & Shop & Serve
Passen-
gers & Home & Total & Percent \\
\hline Work & & 2 & 1 & & & 1. & & & & 24 & 28 & 8.62 \\
\hline Transact Business & 2 & 3 & & & & & & & & 42 & 47 & 14.46 \\
\hline During Work & & & 15 & & & & & & & & 15 & 4.62 \\
\hline Medical or Dental & & & & & & & & & & & & \\
\hline School & & & & & & & & & & & & \\
\hline Recreation Social or Cultural & & & & & & 4 & & & 1 & 66 & 71 & 21. 84 \\
\hline Eat & & & & & & 2 & & & & 1 & 3 & .92 \\
\hline Shop & 1 & & & & & & & & & 3 & 4 & 1.23 \\
\hline Serve Passengers & & & & & & & & & & 2 & 2 & . 62 \\
\hline Home & 17 & 41 & & 1 & & 87 & 5 & 1 & 3 & & 155 & 47.69 \\
\hline Total & 20 & 46 & 16 & 1 & & 94 & 5 & 1 & 4 & 138 & 325 & 100.00 \\
\hline Percent & 6.15 & 14.15 & 4.92 & .31 & & 28.92 & 1.54 & .31 & 1.23 & 142.47 & 100.00 & \\
\hline
\end{tabular}

July Average Weekday Traffic 1961
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{13}{|c|}{Trip Purpose - Destination} \\
\hline Trip Purpose Origin & Work & Transact Business & \[
\begin{gathered}
\text { During } \\
\text { Work } \\
\hline
\end{gathered}
\] & \begin{tabular}{l}
Medical \\
or Dental
\end{tabular} & School & Recreation Social or cultural & Eat & Shop & Serve
Passen-
gers & Home & Total & Percent \\
\hline Work & & 27 & 14 & & & 9 & 4 & 1. & & 231 & 286 & 7.50 \\
\hline Transact Business & 19 & 51 & 4 & & & 15 & & 2 & & 385 & 476 & 12.48 \\
\hline During Work & 8 & 5 & 888 & & & 1 & & & & 2 & 904 & 23.70 \\
\hline Medical or Dental & & & & & & 3 & & 1 & & 29 & 33 & . 87 \\
\hline School & & & & & & & & & & 3 & 3 & . 08 \\
\hline Recreation Social or Cultural & 2 & 5 & & 1 & & 109 & 1 & 1 & 3 & 493 & 615 & 16.12 \\
\hline Eat & 3 & 2 & & & & 6 & & & & 16 & 27 & . 71 \\
\hline Shop & 1 & 1 & & & & 2 & & & 1 & 67 & 72 & 1.89 \\
\hline Serve & & & & & & & & & & & & \\
\hline wassengers & 2 & & 1 & & & 1 & & & & 14 & 18 & .41 \\
\hline Home & 178 & 456 & 3 & 27 & 2 & 617 & 15 & 51 & 31 & & 1380 & 36.18 \\
\hline Total & 213 & 547 & 910 & 28 & 2 & 763 & 20 & 56 & 35 & 1240 & 3814 & 100.00 \\
\hline Percent & 5.59 & 14.34 & 23.86 & . 73 & . 05 & 20.01 & . 52 & 1.47 & . 92 & 32.51 & 100.00 & \\
\hline
\end{tabular}
Definitions ..... viii
Desire Line Charts ..... 29
Distribution of Trips ..... 14
Flow Charts - External Dispersion
External Dispersion of Trips Passing Through Interview Stations to or from Areas Beyond Fremont County ..... 32
External Dispersion of Trips Passing Through Interview Stations to or from Areas Within Fremont County ..... 33
Flow Charts - Internal Dispersion
Station 769, U.S. 275 North ..... 21
Station 770, Iowa 2 East ..... 23
Station 771, U.S. 275 and Iowa 2 South ..... 25
Station 772, F.A.S. 762 West ..... 27
Internal Movements of External Through Trips ..... 19
History ..... 2
Map, Study Area Position in Iowa ..... 5
Map, Study Area Position in Midwest ..... 4
Map, Tract and Station Locations ..... 12
Origin and Destination of Trips Entering or Leaving the Sidney Study Area ..... 41
Population ..... 3
Summary, External Trip Termini ..... 31
Summary, Major Traffic Movements ..... 15
Summary, Vehicle Type ..... 16
Traffic Volumes on Rural Primary Highways Entering Sidney ..... 36
Traffic Volumes on Primary Road Extensions in Sidney ..... 37
Trip Purpose of Vehicle Drivers Passing Through: Station 769, U.S. 275 North ..... 42
Station 770, Iowa 2 East ..... 43
Station 771, U.S. 275 and Iowa 2 South ..... 44
Station 772, F,A.S. 762 West ..... 45
All Interview Stations ..... 46
```

