

HE
370
.075
S628
1966

IOWA STATE HIGHWAY COMMISSION
LIBRARY



**SPECIAL
ORIGIN AND DESTINATION
STUDY
IDA COUNTY**

Sept. 1966



PREPARED BY
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

17-H53HP
2:Or16
Ida Co.

ty 1966

11-75571
2:0r16
Ida Con.

TABLE OF CONTENTS

	Page
Summary	1
Chart # 1 Flow of Traffic Through Station Number 1	3
Chart # 2 Flow of Traffic Through Station Number 2	4
Chart # 3 Desire Lines of Travel Trips Passing Through Station Number 1.	5
Chart # 4 Desire Lines of Travel Trips Passing Through Station Number 2.	6
Table # 1 Termini of Trips Passing Through Station Number 1	7
Table # 2 Termini of Trips Passing Through Station Number 2	10

Summary

In September of 1966, all vehicle drivers traveling on two north-south roads in Ida County were interviewed to collect the specific travel information included in this study. All drivers using County Trunk "M" were intercepted at a point in Section 21, T-87N, R-41W, northwest of Battle Creek on September 13, 1966. This point is referred to as "Station # 1" throughout the report. Drivers using County Trunk "G" were intercepted at "Station # 2" located along the west line of Section 12, T-87N, R-41W on September 14, 1966.

During a sixteen-hour period from 6 a.m. to 10 p.m., drivers were asked the origin, destination and purpose of the trip. Also recorded were the direction of travel, vehicle type, state of registration, county of registration for Iowa vehicles, and the number of occupants. Automatic traffic recorders were operated for an extended period to collect additional data used in expanding the sixteen-hour samples to represent average 24-hour 1966 Fall weekday traffic volumes. The data obtained in the study are presented in charts and tables included in this report.

Charts # 1 and # 2 are traffic flow charts illustrating the dispersion of trips between points of origin and/or destination through the interview stations described above. These charts are intended to show approximate routes rather than exact routes used by drivers passing through the interview stations on each of the roads under study. Trip origins and destinations are not differentiated, and individual totals may be considered as either origin or destination. The volumes reflect the average 1966 24-hour fall weekday traffic activity along each road at the points where interviews were collected. Rural farm origins and destinations within Ida County can be traced to the section in which the farm is located. All termini outside of Ida County may be traced to the road used in entering or leaving the county.

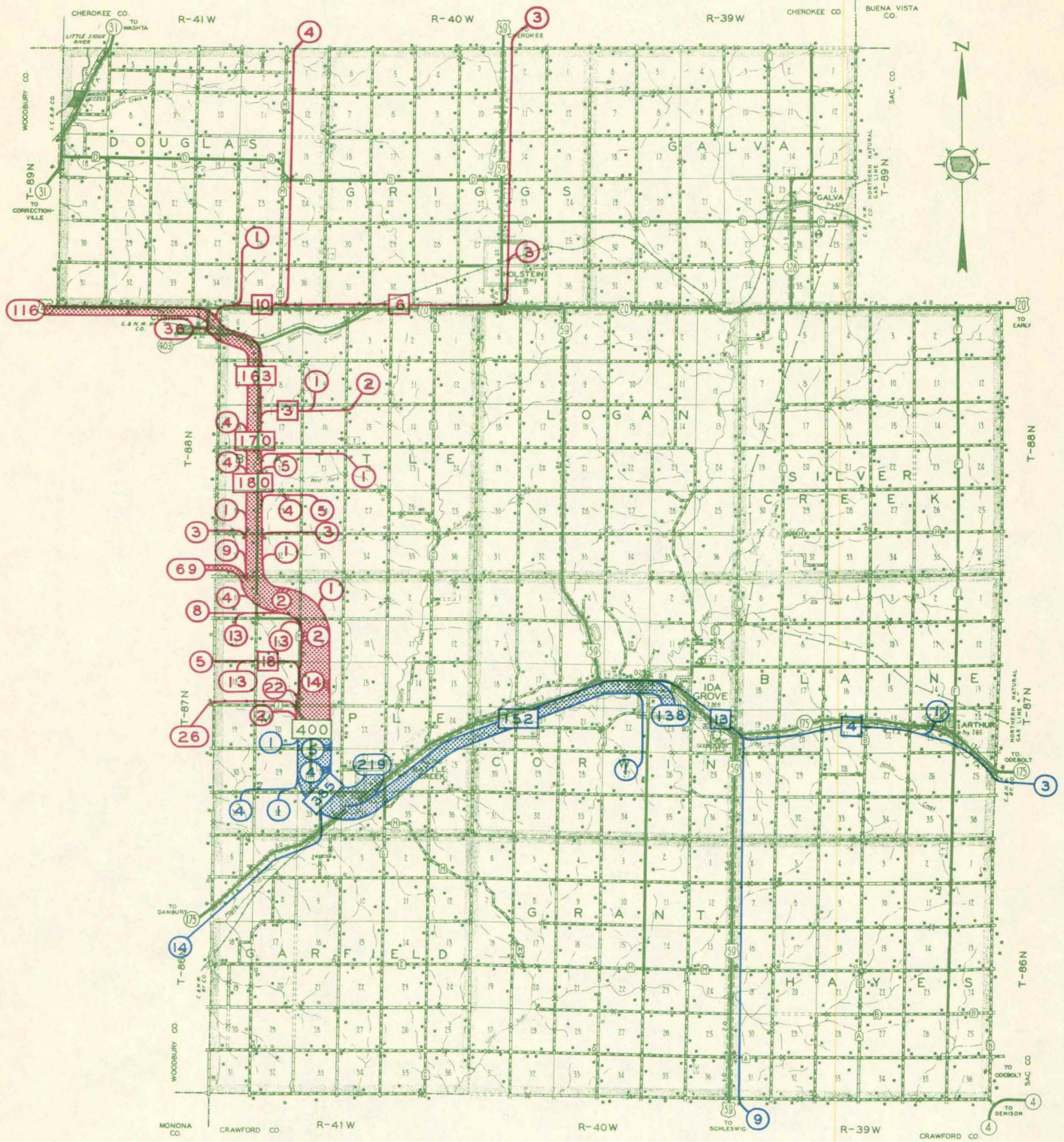
Charts # 3 and # 4 are desire line charts. The lines connect origin and destination to illustrate the straight-line travel desire of drivers using each road without regard to existing routes or actual routes traveled. Again, trips which enter or leave Ida County are represented by a line terminating at the route used in entering or leaving the county.

An average of 400 vehicles used County Trunk "M" during a fall 24-hour weekday in 1966. The analysis shows that 55 percent or 219 trips were bound to or from Battle Creek. Of the remaining trips, 138 or 35 percent had one terminus in Ida Grove. A listing of the termini of all daily trips intercepted at Station # 1 on County Trunk "M" is included as Table # 1.

During an average 24-hour Fall weekday in 1966, 77 trips were made on County Trunk "G" where Station # 2 was located. About 61 percent or 47 trips were bound to or from Battle Creek, and the remaining 39 percent were between other towns or from town-to-farm or farm-to-farm. A complete listing of all daily trips intercepted at Station # 2 on County Trunk "G" is included as Table # 2.

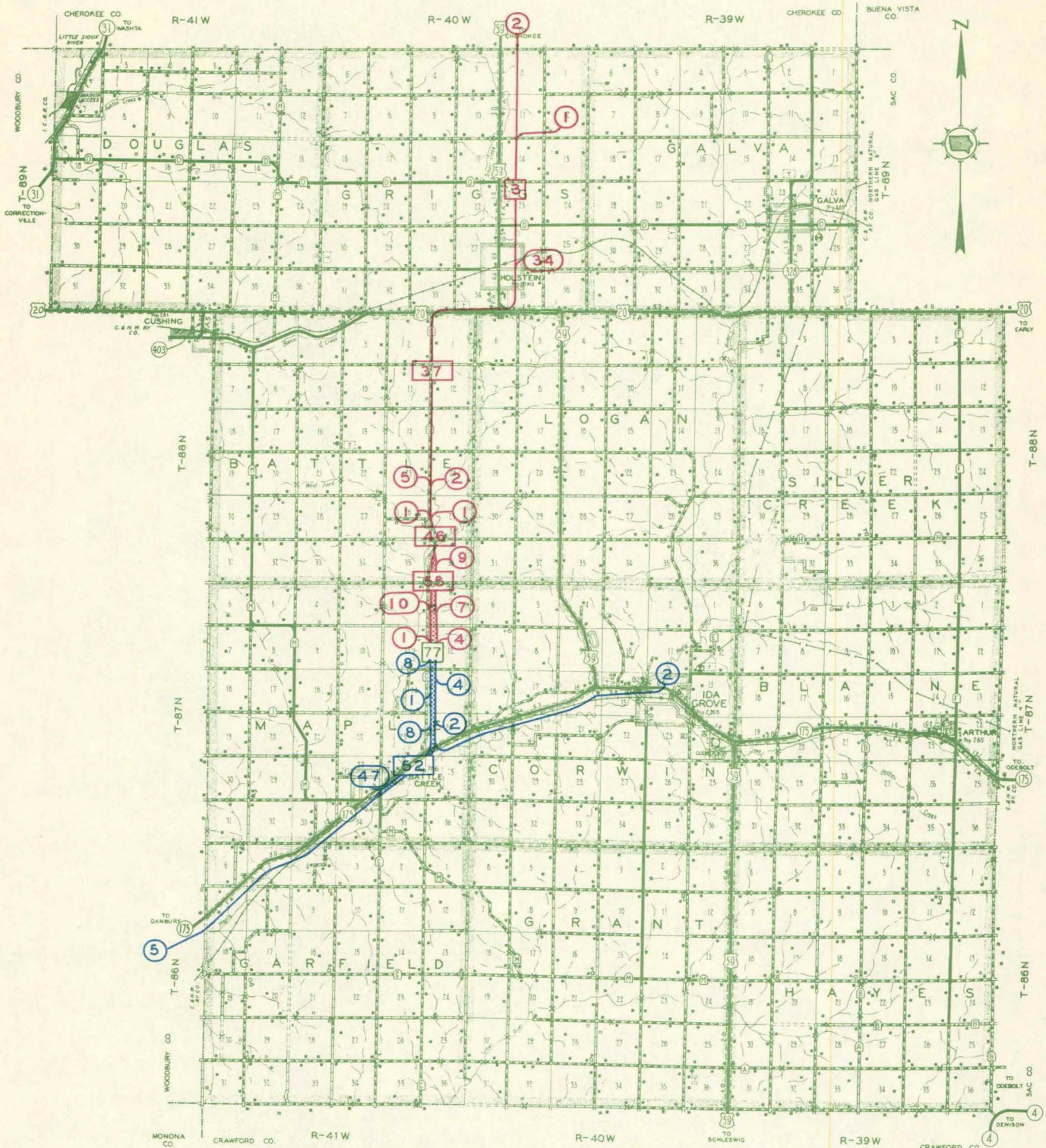
FLOW OF TRAFFIC THROUGH STATION NUMBER 1 COUNTY TRUNK 'M' WEST LINE SEC. 21 T-87N, R-41W IDA COUNTY AVERAGE FALL WEEKDAY 1966

Chart # 1



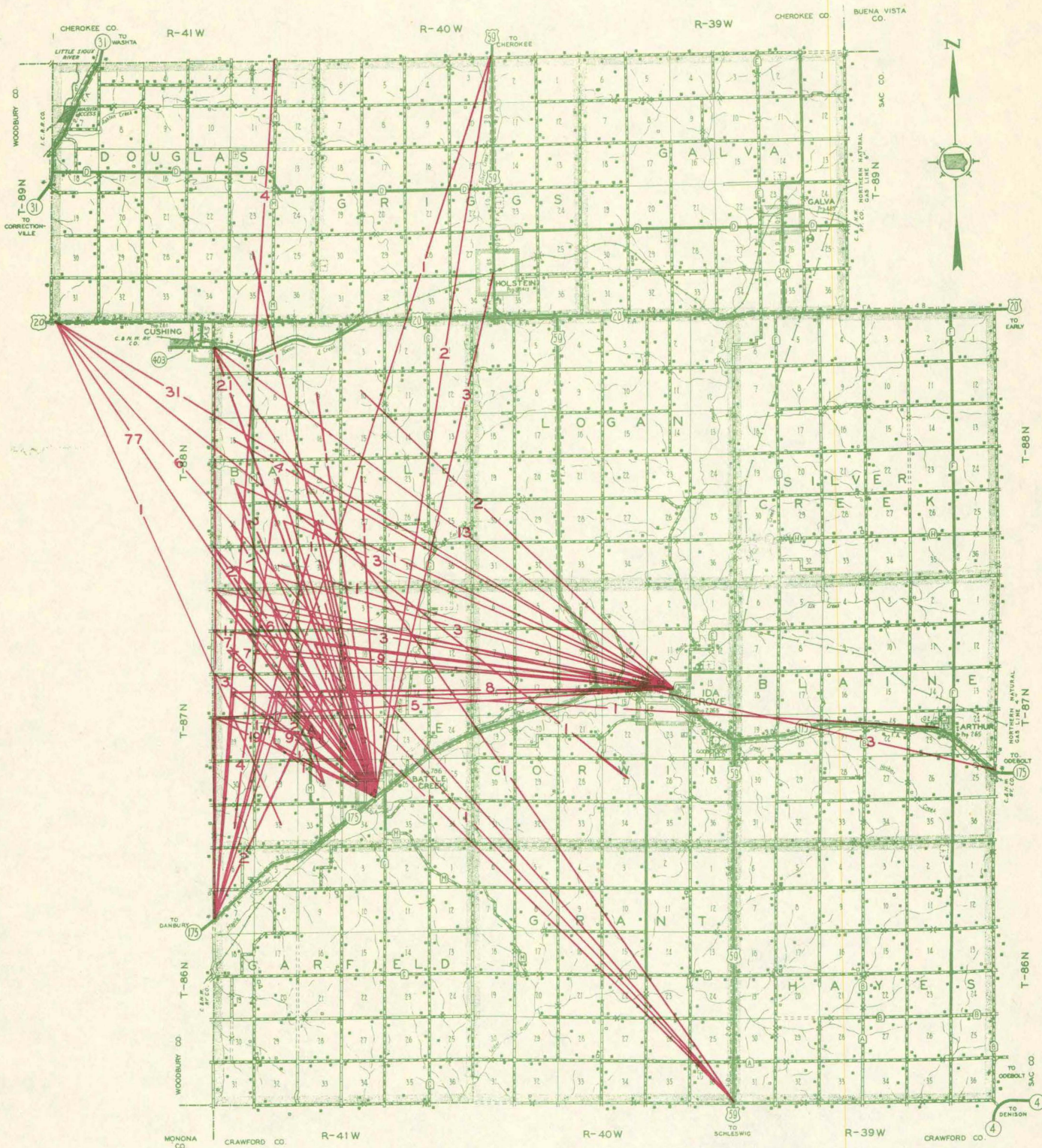
FLOW OF TRAFFIC
 THROUGH STATION NUMBER 2
 COUNTY TRUNK G WEST LINE SEC. 12 T-87N, R-41W
 IDA COUNTY
 AVERAGE FALL WEEKDAY 1966

Chart # 2



DESIRE LINES OF TRAVEL
 TRIPS PASSING THROUGH STATION NUMBER 1
 COUNTY TRUNK 'M' WEST LINE SEC. 21, T-87N, R-41W
 IDA COUNTY
 AVERAGE FALL WEEKDAY 1966

Chart # 3



DESIRE LINES OF TRAVEL
 TRIPS PASSING THROUGH STATION NUMBER 2
 COUNTY TRUNK 'G' WEST LINE SEC. 12, T-87N, R-41W
 IDA COUNTY
 AVERAGE FALL WEEKDAY 1966

Chart # 4

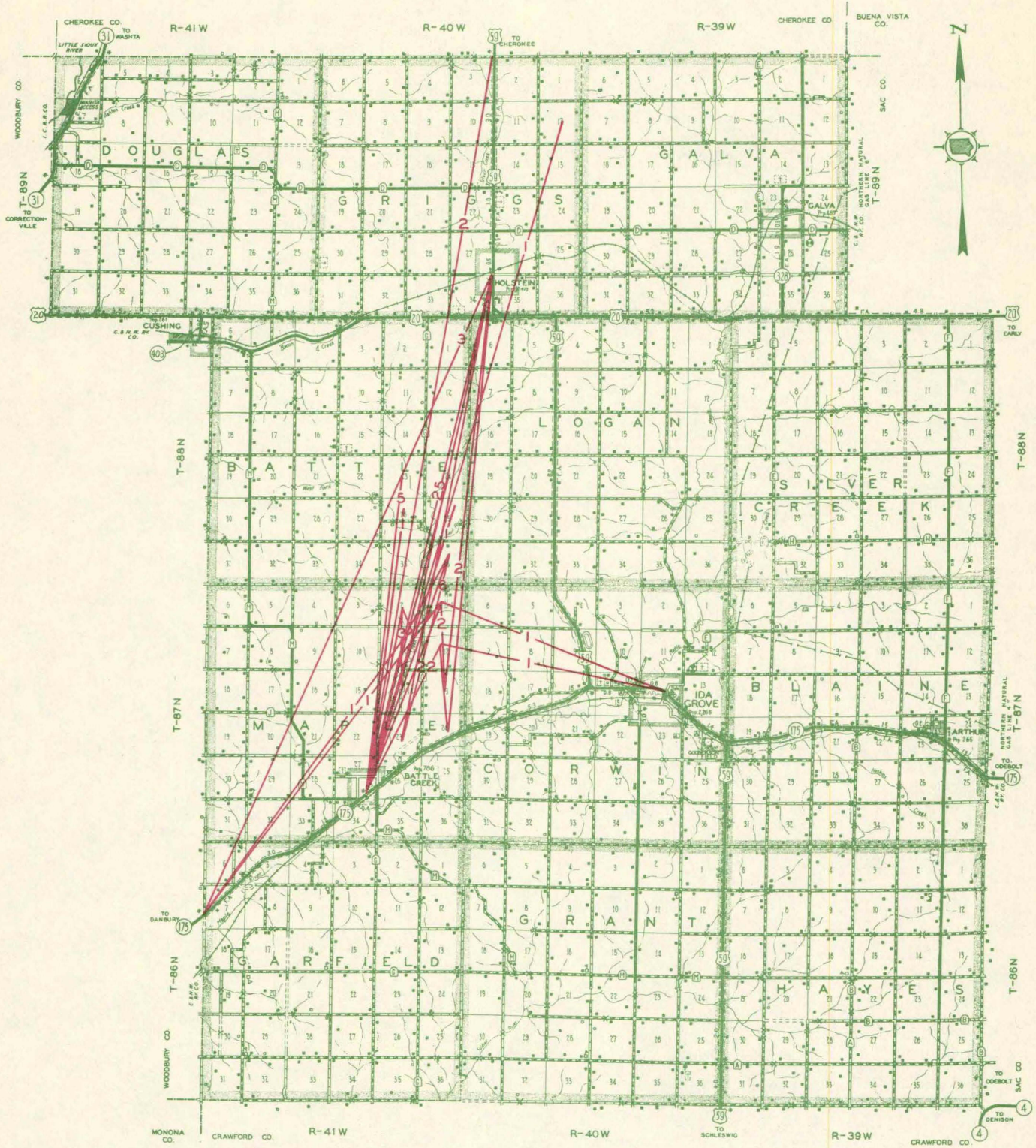


Table -1
 TERMINI OF TRIPS
 PASSING THROUGH STATION # 1

Co. "M", W-LINE SEC. 21, T-87N, R-41W

Ida County

Average Fall Weekday 1966

Trip Terminal	Trip Terminal	Total No. of Trips
Albia	LeMars	1
Anthon	Denison	2
Anthon	Des Moines	2
Anthon	Odeboldt	1
Arthur	87-41-16	1
Battle Creek	Anthon	25
Battle Creek	Concord, Nebr.	2
Battle Creek	Correctionville	16
Battle Creek	Cushing	21
Battle Creek	Holstein	3
Battle Creek	Kingsley	5
Battle Creek	LeMars	18
Battle Creek	LuVerne, Minn	1
Battle Creek	Merrill	2
Battle Creek	Milford	1
Battle Creek	Moville	1
Battle Creek	Spencer	1
Battle Creek	Sioux City	32
Battle Creek	Woodbury Co.	33
Battle Creek	87-41-4	1
Battle Creek	87-41-5	1
Battle Creek	87-41-6	1
Battle Creek	87-41-7	6
Battle Creek	87-41-8	4
Battle Creek	87-41-9	1
Battle Creek	87-41-16	2
Battle Creek	87-41-17	11
Battle Creek	87-41-18	9
Battle Creek	87-41-20	1
Battle Creek	88-41-9	1
Battle Creek	88-41-19	2
Battle Creek	88-41-20	1
Battle Creek	88-41-22	1
Battle Creek	88-41-28	4
Battle Creek	88-41-29	1

Rural locations are described by a series of three numbers denoting township, range and section.

Trip Terminal	Trip Terminal	Total No. of Trips
Battle Creek	88-41-30	1
Battle Creek	88-41-31	6
Battle Creek	88-41-33	3
Battle Creek	89-41-26	1
Cherokee	Mapleton	1
Correctionville	Denison	3
Council Bluffs	Woodbury Co.	1
Cushing	Kiron	1
Cushing	Omaha	1
Danbury	Woodbury Co.	2
Denison	Woodbury Co.	1
Denison	Sioux City	1
Ida Grove	Anthon	36
Ida Grove	Correctionville	23
Ida Grove	Cushing	13
Ida Grove	Sioux City	7
Ida Grove	Woodbury Co.	8
Ida Grove	87-41-5	1
Ida Grove	87-41-6	3
Ida Grove	87-41-7	7
Ida Grove	87-41-8	9
Ida Grove	87-41-9	1
Ida Grove	87-41-16	8
Ida Grove	87-41-17	5
Ida Grove	87-41-18	3
Ida Grove	88-41-10	2
Ida Grove	88-41-18	4
Ida Grove	88-41-19	1
Ida Grove	88-41-29	3
Ida Grove	88-41-31	3
Ida Grove	88-41-32	1
Mapleton	Quimby	2
Mapleton	87-41-17	1
Mapleton	87-41-18	1
Mapleton	88-41-28	1
Moorhead	Quimby	2
Omaha	87-41-16	2
Sioux City	87-40-27	1
Sioux City	87-41-32	1
Woodbury Co.	87-41-21	2
87-41-16	87-41-21	1
87-41-17	87-41-20	1
87-41-17	87-41-21	2

Rural locations are described by a series of three numbers denoting township, range and section.

Trip Terminal	Trip Terminal	Total No. of Trips
87-41-17	87-41-28	2
87-41-20	87-41-28	1
87-41-28	88-41-19	1
87-41-31	88-41-20	4
Total		400

Rural locations are described by a series of three numbers denoting township, range and section.

Table - 2
 TERMINI OF TRIPS
 PASSING THROUGH STATION # 2
 Co."G",-W Line Sec. 12, T-87N, R-41W

Ida County
 Average Fall Weekday 1966

Trip Terminal	Trip Terminal	Total No. of Trips
Battle Creek	Cherokee	2
Battle Creek	Holstein	25
Battle Creek	87-41-1	1
Battle Creek	87-41-2	6
Battle Creek	87-41-12	2
Battle Creek	88-41-23	5
Battle Creek	88-41-24	2
Battle Creek	88-41-25	1
Battle Creek	88-41-26	1
Battle Creek	88-41-36	1
Battle Creek	89-40-12	1
Holstein	Danbury	3
Holstein	87-41-11	1
Holstein	87-41-13	2
Holstein	87-41-23	2
Holstein	87-41-24	1
Ida Grove	87-41-1	1
Ida Grove	87-41-12	1
Mapleton	87-41-1	1
Mapleton	87-41-11	1
87-41-1	87-41-11	2
87-41-1	87-41-13	2
87-41-2	87-41-11	3
87-41-2	87-41-14	1
87-41-11	88-41-36	2
87-41-12	87-41-24	1
87-41-23	88-41-36	6
 Total		 77

Rural locations are described by a series of three numbers denoting township, range and section.

STATE LIBRARY OF IOWA



3 1723 02103 6710