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SPECIAL ORIGIN AND DESTINATION STUDY CEDAR COUNTY December 1962

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TABLE OF CONTENTS

						Page
Summary .	•••••••••••	•	•	•	•	1
Chart #1	Origin and/or Destination of Trips Crossing the Cedar River at Cedar Bluff	•				3
Chart #2	Origin and/or Destination of Trips Crossing the Cedar River at Cedar Valley	•				4
Chart #3	Desire Lines of Travel of Trips Crossing the Cedar River at Cedar Bluff and Cedar Valley	•				5
Chart #4	Accumulated Desire of Travel	•		•	•	6
Table 1	Origin and/or Destination of Trips Crossing the Cedar River at Cedar Bluff		•			7
Table 2	Origin and/or Destination of Trips Crossing the Cedar River at Cedar Valley		•		•	9

The purpose of this study is to present an analysis of the average 1962 December weekday traffic crossing the Cedar River at the Cedar Bluff and Cedar Valley bridges in Cedar County.

To obtain data used in this study, vehicle drivers crossing the Cedar Bluff and Cedar Valley bridges were interviewed during a sixteen hour period from 2 PM until 10 PM on December 4, 1962, and from 6 AM until 2 PM on December 5, 1962. Each driver was asked the origin, destination, and purpose of his trip. The interviewer also recorded the direction of travel, type of vehicle, state of registration, county of registration of Iowa vehicles, and the number of occupants in the vehicle. Automatic traffic recorders were used to aid in expanding the 16 hour interviews to an average 1962 December weekday traffic volume.

The results of the study are presented in the charts and tables described in the following paragraphs.

Chart #1 and Chart #2 are traffic flow charts illustrating the dispersion of traffic between points of origin and/or destination through the interview stations at the Cedar Bluff and Cedar Valley bridges.

These charts are not intended to show exact routes, but rather to show approximate routes and the cumulative volume of traffic as it approaches or leaves the interview station. Trip origins and destinations are not differentiated and the individual totals may be considered as either origin or destination. Chart #1 reflects the average 1962 December weekday traffic flow at the Cedar Bluff bridge, and Chart #2 reflects the traffic flow at the Cedar Valley bridge. It should be noted origins and destinations pertain to the farm unit if the location is rural, and to the municipality if the location is urban.

Chart #3 is a desire line chart which illustrates the straight line movement between the origins and destinations of all trips crossing the Cedar Bluff and Cedar Valley bridges without regard to existing routes or actual routes traveled.

Chart #4 is an accumulated desire of travel chart which represents graphically the accumulated trip desires in crossing the Cedar River in the Cedar Bluff-Cedar Valley area, with no out-of-distance travel involved.

In this chart, a base line was established parallel to the Cedar River and represents the ten-mile study area. Each trip was individually examined and added to the total of each of the 1-mile base line segments along which it could pass in traveling from the origin to the destination with no "Out-of-Distance Travel". It should be noted that each trip was traced parallel to the base line from the origin to a point through which a line to the destination would be perpendicular to the base line. The trip was then added to each segment along the parallel portion of the line. In this procedure, existing routes are disregarded entirely, and all movements are traced along lines either parallel or perpendicular to the base line.

The total number of trips which could pass through a mile segment of the base line is represented graphically by a bar scale which originates at the base line and corresponds in width and placement to the mile segment to which it pertains. The bar scale of each segment is composed of three trip length categories, identified by color. Brown represents the total number of trips from 0-10 miles in length, green 10-20 miles, and heliotrope over 20 miles in length.

Examination of this graph reveals the number and trip length of vehicular movements which could pass through each mile segment of the 10 mile study area without out-of-distance travel based on an average 1962 December weekday.

Table #1 is a listing of the origins and/or destinations of all trips crossing the bridge at Cedar Bluff. The trip totals shown have been expanded to a 24 hour average 1962 December weekday.

Table #2 is a listing of the origins and/or destinations of all trips crossing the bridge at Cedar Valley. The trip totals shown have been expanded to a 24 hour average 1962 December weekday.





-4-





-6-

TABLE NO. 1 ORIGIN AND/OR DESTINATION OF TRIPS CROSSING THE BRIDGE AT CEDAR BLUFF IN CEDAR COUNTY

Trip Terminal	Trip Terminal	Total No. of Trips
Cedar Bluff	Cedar Vallev	3
Cedar Bluff	Cedar Rapids	1
Cedar Bluff	Iowa City	11
Cedar Bluff	Kalona	1
Cedar Bluff	Solon	4
Cedar Bluff	West Branch	8
Cedar Bluff	16-81-4W-29-1*	24
Cedar Bluff	52-81-5W-23-3*	1
Cedar Bluff	16-81-4W-33-3*	12
Cedar Bluff	52-81-5W-24-3*	3
Cedar Bluff	16-81-4W-32-12*	3
Cedar Bluff	16-80-4W-15-4*	3
Cedar Bluff	16-80-4W-09-1*	3
Cedar Bluff	16-80-4W-04-3*	3
Cedar Rapids	Muscatine	2
Cedar Rapids	Tipton	1
Cedar Rapids	16-80-2W-12-1*	1
Cedar Valley	Solon	1
Cedar Valley	Tipton	2
Davenport	16-81-4W-19-3*	1
Iowa City	Mechanicsville	1
Iowa City	Tipton	4
Iowa City	16-81-4W-27-4*	1
Iowa City	16-81-4W-22-3*	2
Frytown	16-81-4W-23-6*	1
Mechanicsville	Morse	4
Mechanicsville	West Branch	6
Mechanicsville	West Liberty	1
Mechanicsville	Solon	1
Mechanicsville	16-81-4W-33-3*	2
Mechanicsville	16-80-4W-15-4*	1
Mechanicsville	16-80-4W-05-5*	1
Mechanicsville	52-80-5W-03-2*	1
Mechanicsville	52-80-5W-02-1*	2
Mechanicsville	52-81-6W-20-6*	3

December Average Weekday Traffic 1962

December Av	erage	Weekday	Traffic	1962
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Trip Terminal	Trip T _e rminal	Total No. of Trips
Morse	Stanwood	1
Morse	Tipton	7
Muscatine	16-80-4W-06-1*	i
Paris	Tipton	1
Plato	Tipton	6
Solon	Bennett	2
Solon	Tipton	8
Solon	Stanwood	1
Solon	16-81-4W-23-4*	ī
Tipton	West Branch	4
Tipton	16-79-3W-17-1*	1
Tipton	16-82-3W-12-2*	3
Tipton	16-81-4W-32-12*	3
Tipton	16-81-4W-19-3*	6
Tipton	16-80-4W-10-1*	2
Tipton	16-81-4W-29-1*	12
Tipton	52-79-5W-36-2*	4
Tipton	16-81-4W-33-3*	9
Tipton	16-80-4W-06-3*	3
Tipton	52-81-5W-36-4*	1
Tipton	52-81-6W-07-1*	1
Tipton	16-80-4W-31-2*	1
Tipton	52-79-5W-05-1*	2
Tipton	16-81-4W-32-6*	1
Tipton	16-80-4W-34-2*	1
Tipton	16-80-4W-15-4*	1
West Branch	Stanwood	2
West Branch	16-82-2W-25-1*	1
West Branch	16-81-4W-20-3*	1
West Liberty	16-81-4W-33-3*	1
16-80-4W-24-1*	16-81-4W-33-3*	2
16-82-2W-30-2*	16-80-4W-18-3*	1
16-80-2W-31-2*	16-81-4W-33-3*	1
16-81-4₩-23+4*	16-81-4₩-32₩6*	1
16-80-2W-31-2*	16-80-4W-05-5*	2
Total		214

TABLE NO. 2 ORIGIN AND/OR DESTINATION OF TRIPS CROSSING THE BRIDGE AT CEDAR VALLEY IN CEDAR COUNTY

December	Average	Weekday	Traffic	1962
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Trip Terminal	Trip Terminal	Total No. of Trips
Anamosa	West Liberty	1
Atalissa	16-80-3W-18-9*	1
Buchanan	West Branch	2
Buchanan	16-80-4W-05-3*	1
Cedar Bluffs	Rochester	1
Cedar Rapids	West Branch	1
Cedar Valley	Bennett	1
Cedar Valley	Buchanan	1
Cedar Valley	Cedar Bluff	1
Cedar Valley	Monticello	1
Cedar Valley	Solon	1
Cedar Valley	Wilton Junction	3
Cedar Valley	Tipton	19
Cedar Valley	16-80-3W-17-5*	5
Cedar Valley	16-80-3W-19-11*	14
Cedar Valley	16-80-3W-18-4*	2
Cedar Valley	16-80-3W-14-3*	3
Cedar Valley	16-80-3W-08-5*	6
Cedar Valley	16-80-3W-18-9*	6
Cedar Valley	16-80-3W-18-3*	2
Cedar Valley	16-79-2W-10-1*	3
Cedar Valley	16-80-3W-21-4*	2
Cedar Valley	16-80-3W-17-3*	1
Centerdale	Buchanan	3
Iowa City	Buchanan	2
Iowa City	Mechanicsville	3
Iowa City	Tipton	5
Davenport	16-80-4W-10-4*	1
Hills	16-80-4W-02-5*	2
Kalona	16-80-3W-05-4*	1
Mechanicsville	West Liberty	5
Mechanicsville	16-80-4W-21-1*	4
Mechanicsville	16-80-3W-06-1*	1
Mechanicsville	16-80-4W-28-1*	1
Monticello	16-80-4W-10-4*	3

December	Average	Weekday	Traffic	1962
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Trip Terminal	Trip Terminal	Total No. of Trips
Springdale	Lisbon	1
Springdale	Mechanicsville	1
Springdale	16-80-3W-17-5*	2
Springdale	16-81-4W-35-1*	3
Springdale	16-80-4W-06-8*	1
Springdale	16-80-3W-23-2*	1
Stanwood	Station	1
Station	16-80-3W-18-9*	1
Tipton	Downey	2
Tipton	Plato	1
Tipton	Wayland	1
Tipton	West Branch	5
Tipton	Springdale	4
Tipton	Atalissa	1
Tipton	16-80-4W-11-1*	1
Tipton	16-80-4W-21-1*	4
Tipton	16-80-4W-24-3*	4
Tipton	16-80-4W-26-3*	1
Tipton	16-80-4W-11-4*	4
Tipton	16-80-4W-23-5*	4
Tipton	16-80-4W-10-4*	1
Tipton	16-80-4W-22-1*	4
Tipton	16-80-4W-19-8*	3
Tipton	16-80-3W-19-10*	5
Tipton	16-80-4W-04-1*	2
Tipton	16-79-4W-06-2*	1
Tipton	16-80-4W-28-1*	3
Tipton	16-80-4W-30-2*	1
West Branch	Stanwood	ī
West Branch	16-81-4W-01-1*	1
West Branch	16-80-3W-15-3*	1 1
West Branch	16-80-3W-18-9*	4
West Branch	16-80-3W-08-5*	2
West Liberty	16-80-3W-17-5*	ī
16-80-4W-24-3*	16-80-3W-18-9*	3
16-80-4W-10-1*	16-80-3W-14-3*	1
16-80-3W-08-3*	16-80-4W-21-1*	7
16-80-2W-31-2*	16-80-4W-26-4*	1
16-80-4W-20-1*	16-80-3W-19-11*	2
16-80-4W-11-4*	16-80-3W-18-9*	2

Trip Terminal	Trip Terminal	Total No. of Trips
16-80-3W-17-3* 16-80→3W-15-3* 16-80-4W-24-1* 16-80-2W-33-4* 16-80-3W-18-9* 16-80-3W-09-3* 16-80-3W-18-9*	16-79-2W-14-1* 16-80-4W-10-3* 16-81-4W-33-3* 16-80-4W-10-4* 16-80-3W-30-3* 16-80-4W-22-1* 16-80-4W-10-2*	1 1 1 1 1 2 1
Total		206

December Average Weekday Traffic 1962