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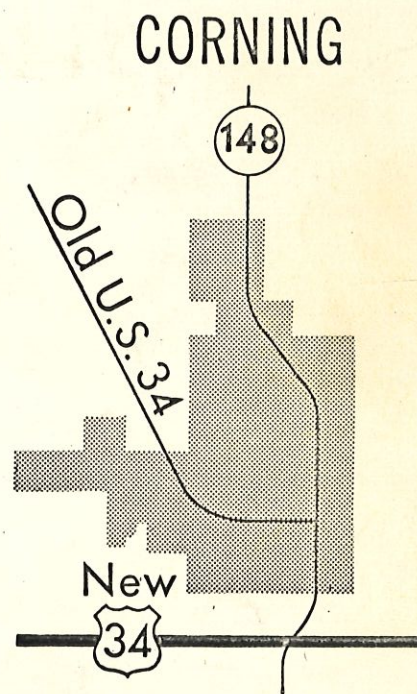
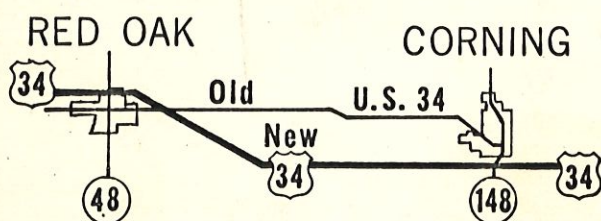
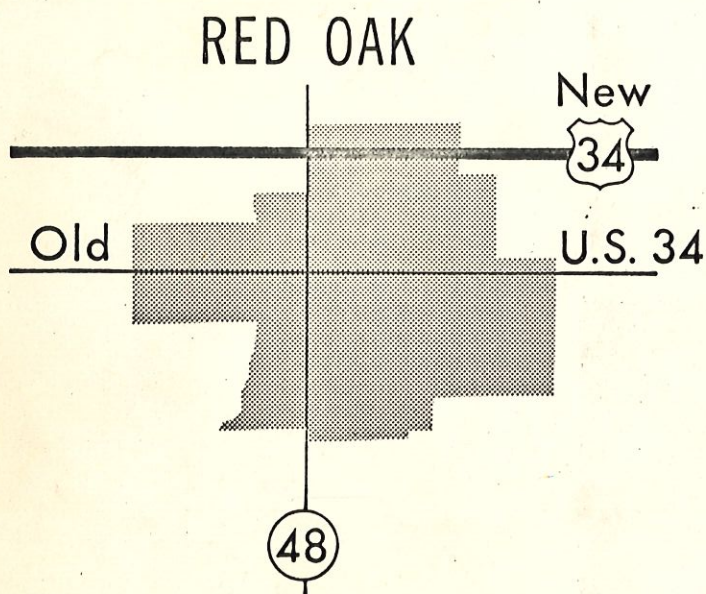
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RED OAK and CORNING

U.S. 34 BYPASS

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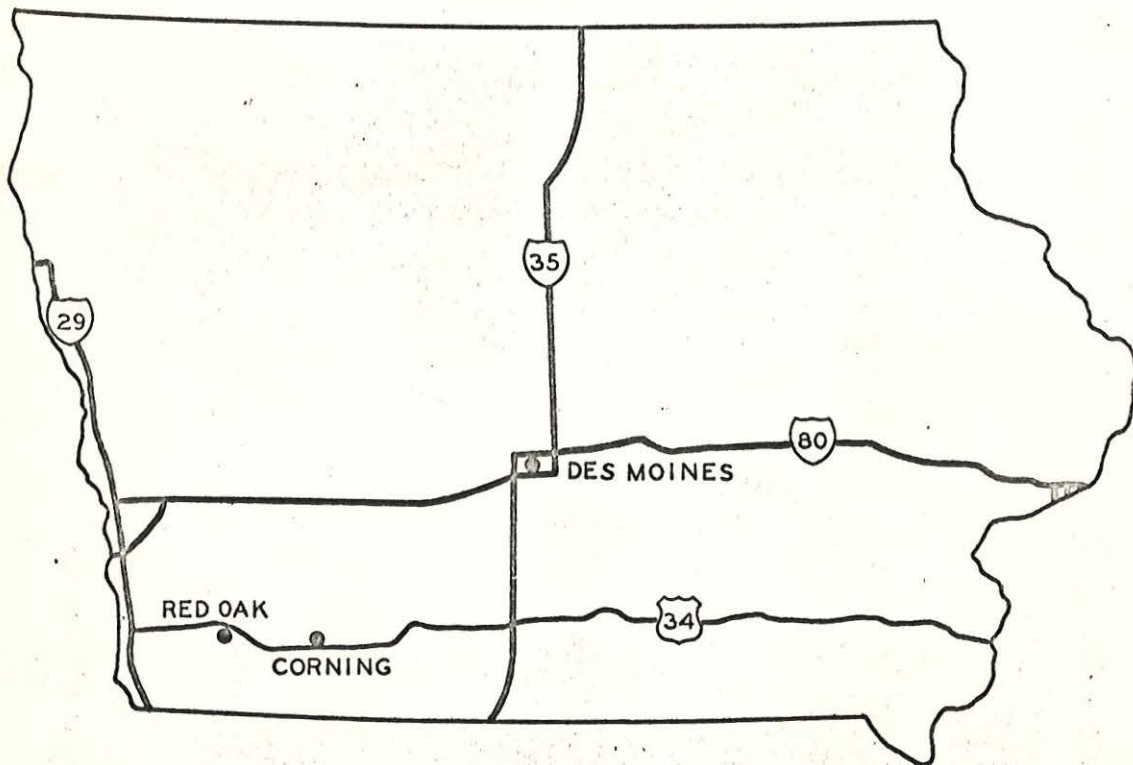
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ECONOMIC STUDY

IOWA
OCTOBER 1970

RED OAK - CORNING
U. S. 34 RELOCATION



Prepared September 1970
by the
Highway Planning Surveys Department
Division of Planning
Iowa State Highway Commission
in cooperation with the
U.S. Department of Transportation
Federal Highway Administration

The opinions, findings, and conclusions expressed in this report are those of the author and not necessarily those of the Federal Highway Administration.

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RED OAK - CORNING
U. S. 34 RELOCATION
ECONOMIC STUDY

INTRODUCTION

Origin and Purpose

The primary purpose of Iowa's highways is to serve the traveling public in the most convenient manner possible. In the past when traffic was light, it was convenient for the traveled roadway to be routed near or on the main street of a town. This enabled the local residents to commute from their residence or farmstead to the nearest town where they would transact business or shop. As time proceeded and long distance travel increased, the highways became excellent business locations for establishments providing goods and services for the highway traveler. Other developments which were not primarily concerned with highway traffic also began to locate on the highway. These developments gradually changed the highway into a congested city street.

As long distance travel became more common, traffic increased on these roads and people became more conscious of travel time on the highways. To meet the demands made by modern automobiles and to satisfy the desire of the motorist to save time, many of Iowa's highways had to be reconstructed or relocated in order to provide a safe, convenient, and economical transportation system. In order to keep the road as free from conflicting traffic as possible, many of the existing routes were relocated around the congested main

streets of cities. These early bypasses were built without the control of access and in a short time these roads became excellent sites for business locations. Other developments followed along the by-pass route, and eventually it became another congested area.

Access-control was created to discourage development on new highways. With limited access, fewer conflicts occurred, and the result was a safer, more convenient highway. However, access-control prohibited the establishment of business firms along the highway. So, the citizens of many towns, where relocations were proposed, began to oppose all attempts to relocate a highway. In most communities they feared that the local economy would be adversely affected by a bypass which would remove thru-traffic from the city streets. Many times these fears were unjustified and were not documented but were based on "hearsay" and personal opinion. In order to better understand the economic consequences of highway relocations near cities, the Iowa State Highway Commission is conducting a series of economic impact studies on Iowa towns and cities.

A proposal, "Iowa Economic Impact of Highway Improvements, Study.Procedures," was made in May, 1959, by the Highway Planning Surveys Department, Division of Planning, Iowa State Highway Commission. Studies published and completed include the following:

1. "Influence of the U.S. 30 Relocation Upon Jefferson," April, 1962.
2. "Retail Sales of Six Iowa Cities Near Interstate Highway Construction Projects," November, 1962.

3. "The Impact of Interstate Route 80 Construction on Rural Property Taxes in Adair County," September, 1963.
4. "Service Station Sales in Eight Iowa Cities," November, 1963.
5. "Stuart, Interstate 80 Bypass," July, 1964.
6. "Chariton, U.S. 34 Bypass," October, 1965.
7. "Newton, Interstate 80 Bypass," January, 1966.
8. "Boone - Webster City, U.S. 30 Relocation," May, 1969.

The Red Oak - Corning bypass study, the ninth in this series of projects will be similar to the Boone - Webster City study in that it involves two communities. However, both Red Oak and Corning were bypassed by the U.S. 34 relocation during the same time period and this report illustrates the comparable effect the U.S. 34 relocation has had upon the two communities. These cities are of similar economic climate and both are located in the same geographical area in southwestern Iowa. This "corridor" type of study analysis allows the researcher to study the various social- 10 economic changes that occur in each community along the U.S. 34 corridor and to relate these changes between the two communities.

The purpose of this study is to analyze and publish factual information concerning the probable effects of the highway relocation in Red Oak and Corning and compare these changes between the two communities to determine the relative impact the relocation has had upon each community.

This information may be presented at public hearings preceding new projects, and distributed to city officials in order to

provide a better understanding of what effects would likely result from traffic route improvements. It is hoped that this study will help, once again, to show that the Iowa State Highway Commission is concerned with the general welfare of the public and shares an interest in their problems.

Study Procedure

The Red Oak - Corning Economic Study was made on a "before and after" basis using a control area technique. The control area method of comparison was utilized on data, where available, for both the study area and the control area. This report utilizes a corridor technique in its analysis of data since both Red Oak and Corning are located along the same corridor of U.S. 34 and were bypassed during the same time period. Economic data for these two cities and the surrounding area was compared and analyzed to determine the changes that occurred during the study period.

In addition to the comparisons made of data in Corning to similar data collected in Red Oak and the control area, data was collected for business firms located along the highways in these two cities. This data was compared to data collected for the remainder of the city. In the "before and after" analysis, a comparison was made between the trends in this data prior to, during, and following the construction of relocated U.S. 34 in and around the Red Oak - Corning corridor.

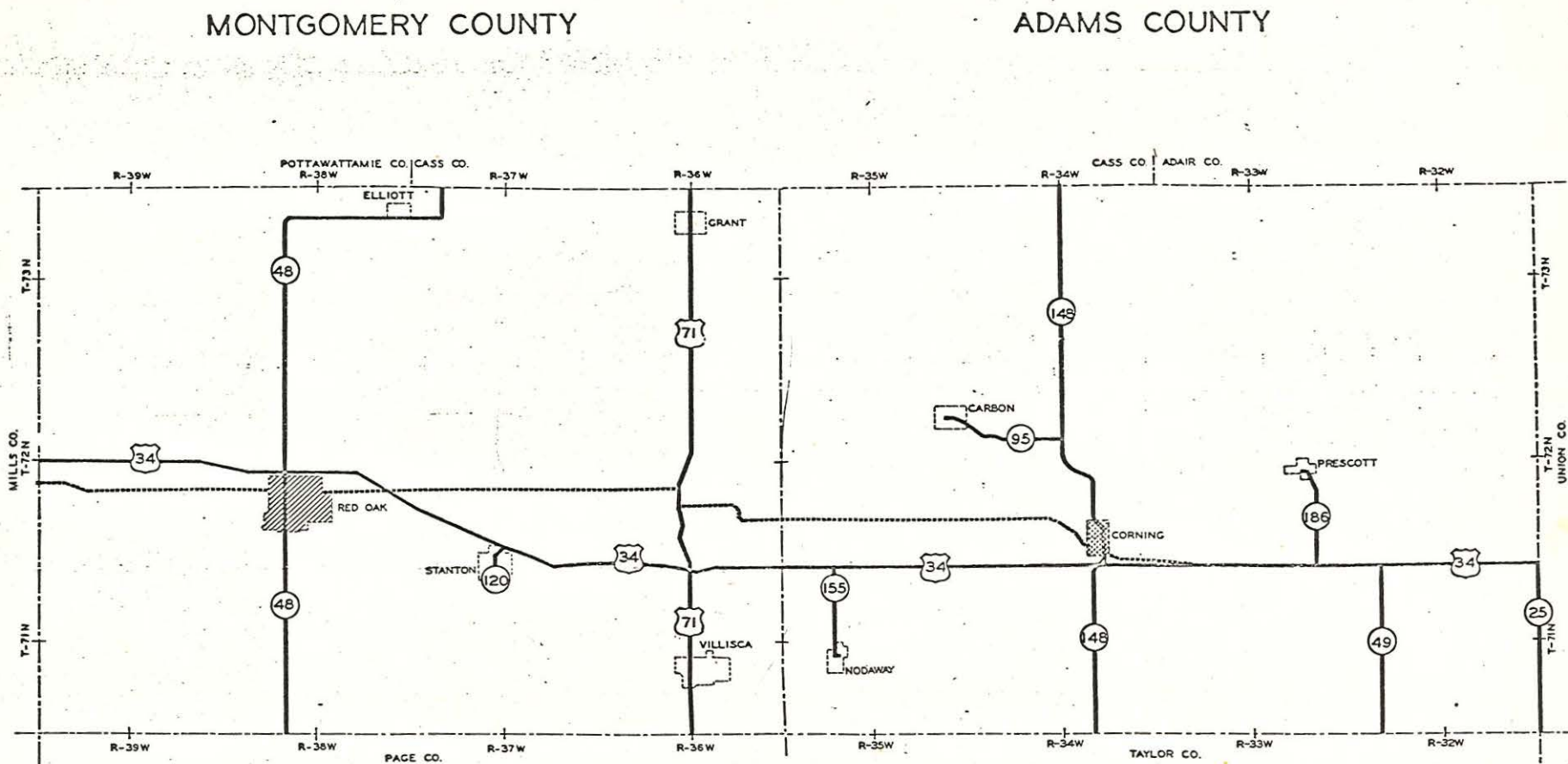


Figure 1 Map of Montgomery and Adams Counties Showing the Location of Red Oak and Corning

By comparing the changes in data over a period of time, it is possible to obtain a reasonably good estimate of the economic impact that a relocation or bypass will have upon a community. This comparison assumes that the economic trends in both the control area and the study area will be similar during the study period and that any changes in the study area are the result of the highway improvement. There are many other factors besides highway changes that may alter the economy of the city. If these factors are considered in making the comparison of the ^{"BEFORE AND AFTER"} data between the study area and the control area, ~~and the "before and after" data~~, a reasonable conclusion can be reached regarding the economic impact the highway improvement may have upon a community.

General Background of the Study Area and Control Area

If comparisons are to be made between the study area and the control area and if they are to be effective, the control area should be as similar to the study area as possible and it should also be outside the influence of the highway improvement in the study area. Both the study area and the control area should be similar in economic, social, and political bases and should be subject to similar economic pressures.

In previous economic reports, economic areas established by the U.S. Department of Commerce, U.S. Bureau of Census were used as control area. Their extensive study combined all 99 counties into homogenous economic, social, agricultural, industrial, and

IOWA'S ECONOMIC AREAS

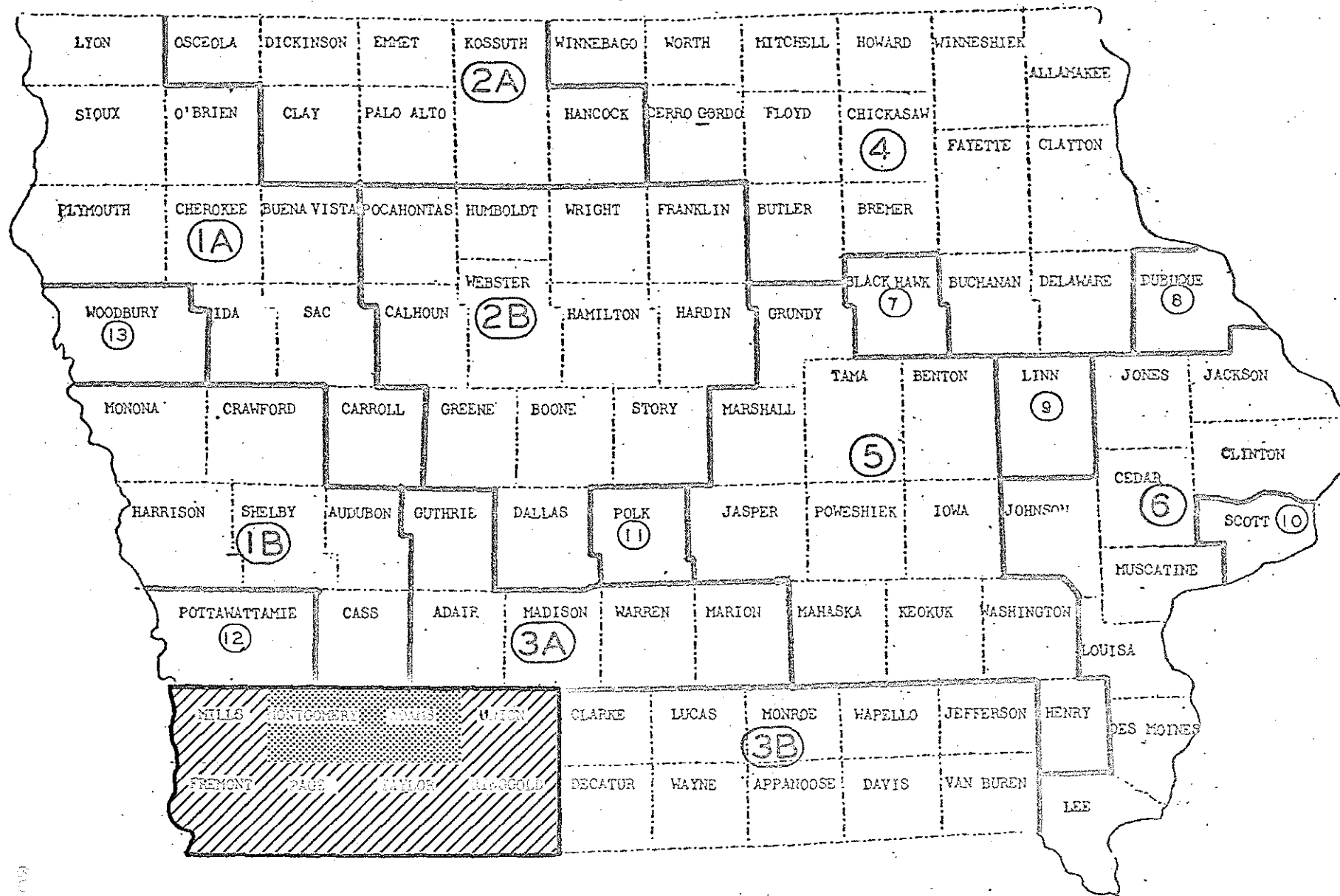


FIGURE 2- OUTLINE MAP OF IOWA SHOWING COUNTIES, ECONOMIC AREAS, AND THE SOUTHWEST IOWA CONTROL AREA.

political bases. There are sixteen such economic areas or bases in the State of Iowa. Six of these are metropolitan in nature and the remaining ten are agricultural. Figure 2 shows Iowa's sixteen economic areas. However, in this study, since Adams County is located in Economic Area 3A and Montgomery County is located in Economic Area 1B, it would have involved using two economic areas as control area, which was not desirable. As a result, an Eight County Economic Area was arbitrarily used in southwest Iowa. These eight counties, which include Adams and Montgomery Counties, are similar in population, climate, and economic base, and, therefore, could very well serve as a comparable control area. Figure 2 shows this southwest Iowa economic area.

The study towns, although they differ somewhat in population, are similar in agriculture, climate, industry, and economic base. The selection of two study towns present a greater opportunity to compare the trends of local conditions against the trends of identical conditions in the control area and the State of Iowa.

Figure 3 illustrates the population trends for Iowa, the Southwest Iowa Economic Area, Adams County, Montgomery County, the city of Red Oak, and the city of Corning. Figure 4 shows the trend in automobile registration for Iowa, the Southwest Iowa Economic Area, Adams County, and Montgomery County.

FIGURE 3 - POPULATION TRENDS FOR IOWA, SOUTHWEST IOWA ECONOMIC AREA
MONTGOMERY COUNTY, ADAMS COUNTY, RED OAK, AND CORNING

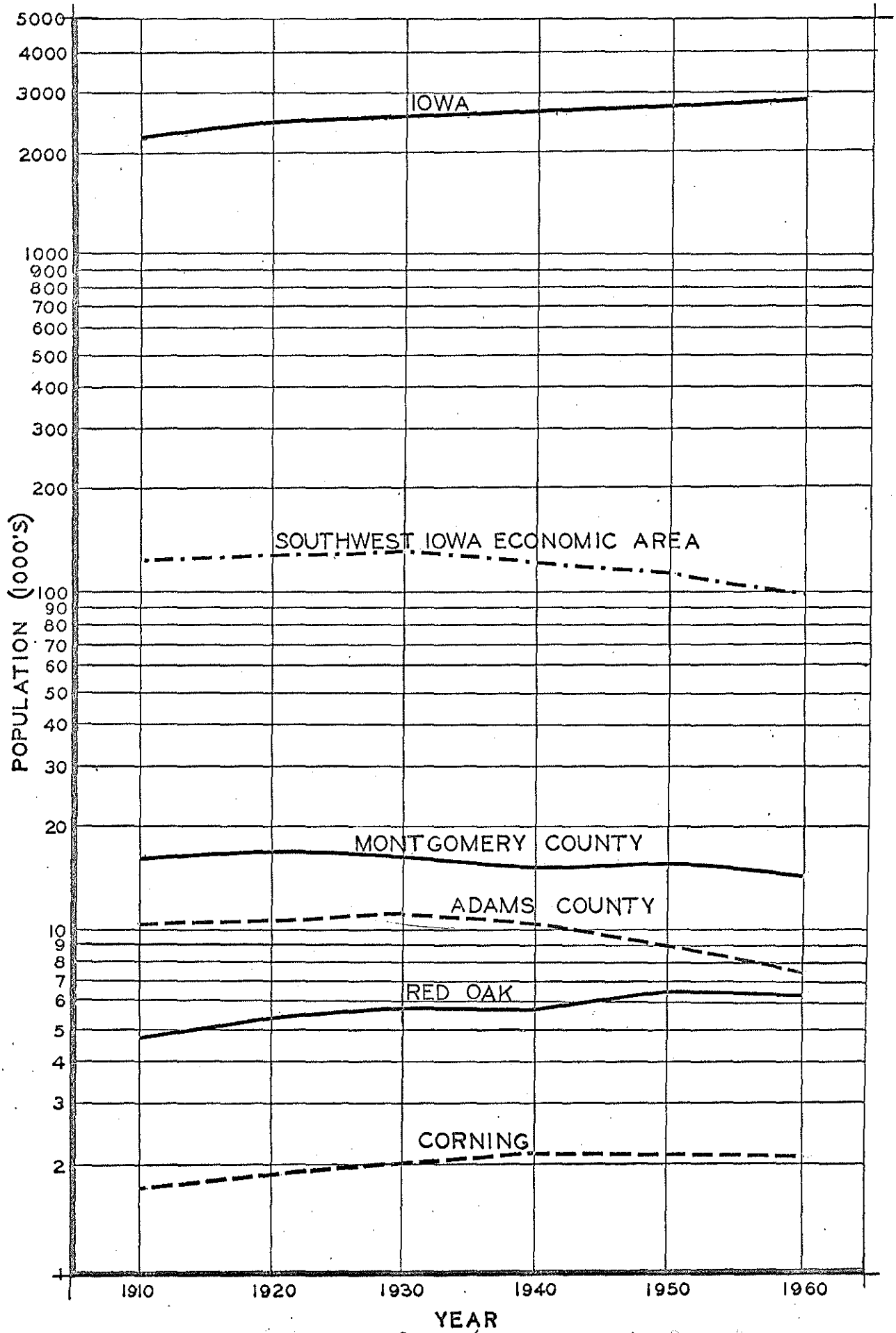
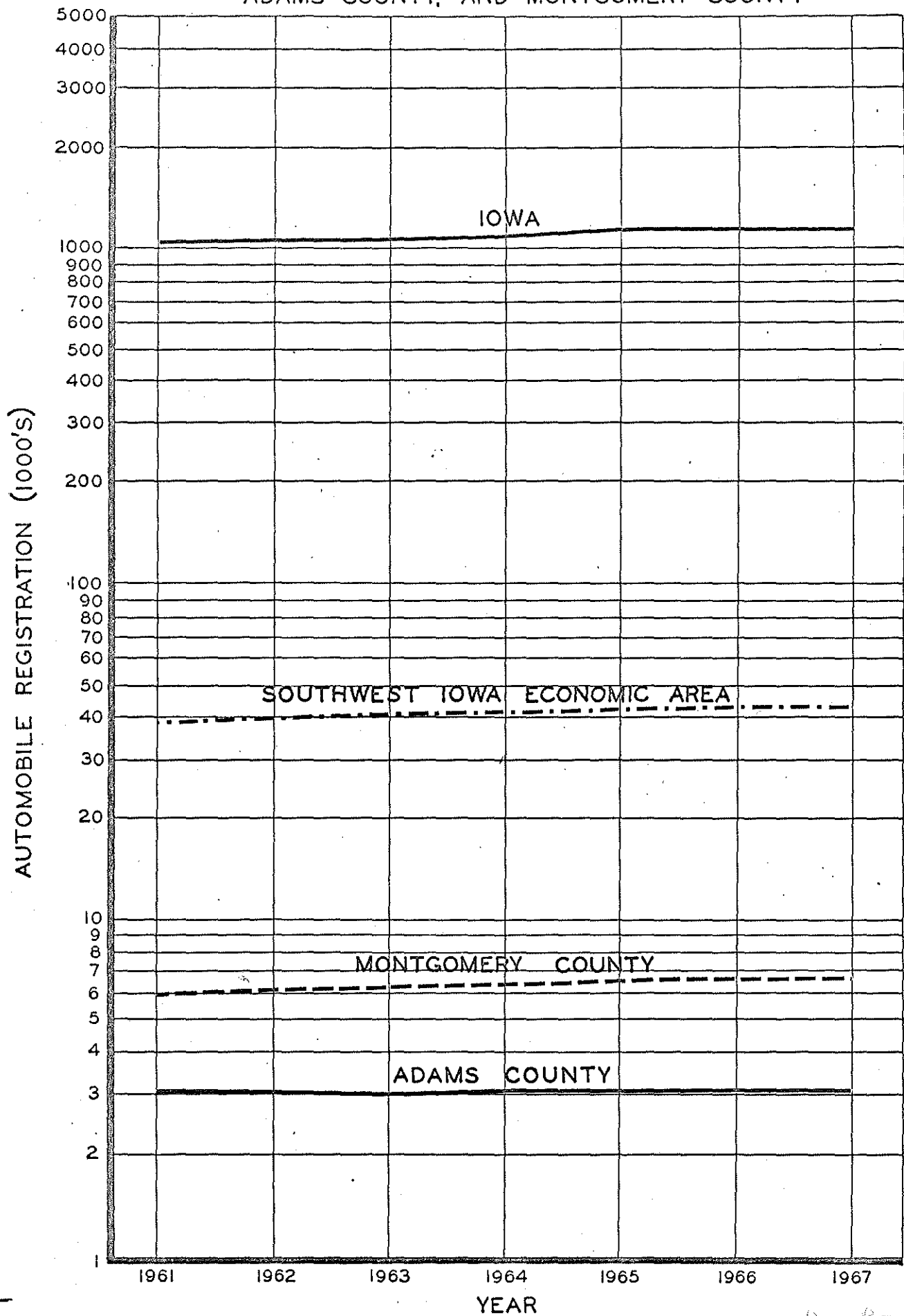


FIGURE 4-AUTOMOBILE REGISTRATION TRENDS IN IOWA,
SOUTHWEST IOWA ECONOMIC AREA,
ADAMS COUNTY, AND MONTGOMERY COUNTY



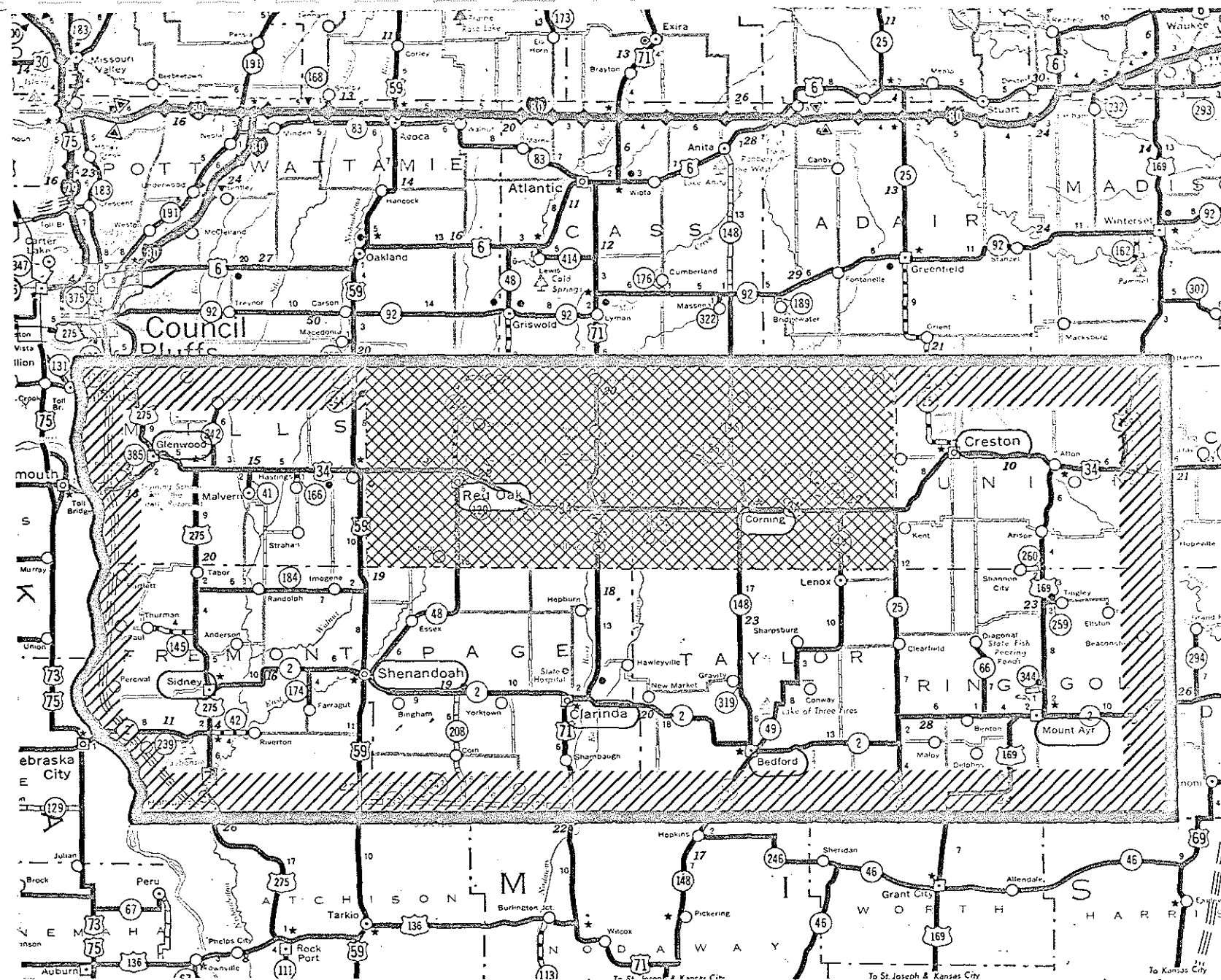


FIGURE 5-OUTLINE MAP OF THE SOUTHWEST IOWA ECONOMIC AREA SHOWING CORNING, RED OAK, AND SEVEN OTHER SOUTHWEST IOWA COMMUNITIES.

In addition to the previously mentioned control areas, seven communities in the Southwest Iowa Economic Area were selected for comparison of economic data. These seven communities are as follows:

Bedford	Mount Ayr
Clarinda	Shenandoah
Creston	Sidney
Glenwood	

The location of these seven communities in the Southwest Iowa Economic Area is shown in Figure 5. For comparison purposes the total sales of these seven communities were averaged for each year of the study period.

This report contains factual information on taxable retail sales, land use, employment, traffic, real estate property valuations, banking deposits, and farm income for Red Oak, Corning, and the surrounding area. An evaluation of this data was made to determine what effect the relocation of U.S. 34 would have upon the economy of Red Oak, Corning, and the surrounding area.

Description of Red Oak

Red Oak, the county seat of Montgomery County, is located in southwestern Iowa, approximately fifty miles southwest of Council Bluffs and thirty-five miles west of Creston on U.S. 34.

The area in and around Montgomery County was settled during the 1850's. The town of Red Oak was originally known as "Red Oak Junction." In 1858 the first post office was established and the

first school was constructed the following year. In 1865 the Montgomery County Seat was moved from Frankfort to Red Oak Junction.

In 1869 the predecessor to the Chicago, Burlington, and Quincy Railroad, the Burlington and Missouri River Railroad, extended its facilities to Red Oak Junction from Villisca. With the coming of the railroad and the resulting development of Red Oak Junction, the city was incorporated the same year. By 1900 the city had grown to a population of 4,335. In 1901 the name of the city was officially changed to Red Oak.

With the growth of Red Oak, industries started to develop. The first was the Thomas D. Murphy Company which developed the idea of art calendars. This company was established in 1889. Presently other industries in Red Oak are a branch of Union Carbide, Wilson Concrete, Douglas and Lomason, and Red Oak Machine. At the present time these firms employ about 850 people.

The 1960 population of Red Oak was 6,421. The school district presently operates six elementary, one junior high, and one senior high school. Today the economy of Red Oak depends primarily on its manufacturing industries and the surrounding agricultural area. The incorporated area of Red Oak is approximately 2,386 acres.

The Chicago, Burlington, and Quincy Railroad provides Red Oak with rail transportation facilities. An airport located west of the city provides facilities for light aircraft travel. Relocated U.S. 34 will, in the future, become an expressway placing Red Oak

on a major east - west highway. Iowa 48 provides a connection to Shenandoah and points in Missouri to the south, and Griswold and Interstate 80 to the north.

Description of Corning

Corning, the county seat of Adams County, is located in southwestern Iowa approximately seventy-five miles southwest of Omaha and twenty-two miles west of Creston on U.S. 34.

The Adams County area was settled during the early 1850's and the county was established by the Iowa Legislature in 1853. The first county seat was located at Quincy, approximately five miles north and west of Corning. However, this community did not prosper and it was unincorporated in 1934. In 1858 a group of French Socialist founded an Icarian Colony approximately five miles north of Corning. However, this colony was dissolved in 1895. A school house museum depicting the type of life that existed in this Icarian Colony is located in Corning.

By 1869, the Baltimore and Missouri Railroad had extended its facilities through Corning, bypassing Quincy. This resulted in rapid growth for Corning and rivalry developed between the two communities for the location of the county court house. A contest ensued between Corning and Quincy, with Corning winning the county seat. However, the county court house safe had to be stolen by a Corning citizen in the face of a court injunction to complete the transfer. The same year two churches were constructed and the first bank was opened in 1870.

In 1871 the city of Corning was incorporated and the first permanent courthouse was constructed the following year. This courthouse was destroyed by fire in 1888. A second courthouse was built in 1890 and was not replaced until 1954.

Disaster struck Corning in 1896 when a fire did about \$200,000 damage destroying twenty-three buildings within a two block area. Corning recovered from this tragedy, but in 1885, 1903, and again in 1947 the East Nodaway River flooded out of its banks and rampaged through the town doing considerable damage.

In 1960 the population of Corning was 2,041 as compared to 1,702 in 1910, indicating a moderate growth. The city is presently governed by a mayor-councilmen form of government.

The economy of Corning is based primarily on the surrounding agricultural area. Nodaway Valley Foods and the Farmer's Creamery, two of Corning's main industries, are agriculturally related. The National Farmers Organization (N.F.O.), the nation's largest agricultural collective bargaining union, has it's national headquarters in Corning. Approximately 150 people are employed by the N.F.O. in the Corning area.

The Chicago, Burlington, and Quincy Railroad provides Corning with rail transportation facilities. An airport located west of the city provides facilities for light aircraft travel. In the future, relocated U.S. 34 will become an expressway, linking Corning with a major east-west highway. Iowa 148 provides a

connection to Bedford and points in Missouri to the south, and Anita and Interstate 80 to the north.

U.S. Highway 34

U.S. 34 is located for a great part, near what was originally known as the old "Blue Grass Trail," and as such was the first marked road across the State of Iowa. Grading began on the section of U.S. 34 between Red Oak and Corning about 1919 and continued through 1924. In 1929 this section of U.S. 34 was paved, and by the end of 1930 the paving of U.S. 34 was completed across the State of Iowa. The original paving was an eighteen foot wide concrete slab, seven inches thick, placed on an earth embankment and built under the direction of county personnel. Payment for construction and right-of-way was made by the State. The original paving was built to accommodate automobile speeds of 30 to 40 miles per hour.

It was known for some time that U.S. 34 had a high accident rate. Today's highway and automobile design standards have changed considerably since the original construction of U.S. 34. This highway was a hazardous route to travel considering the speed of today's modern automobile. The high accident rate, coupled with studies showing that both the rural and urban sections of this highway were in critical condition, indicated that an improvement was needed on U.S. 34 in the Red Oak - Corning area.

Personnel of the Iowa State Highway Commission made several studies to determine the most equitable means of improving U.S. 34 between proposed Interstate 29 and a point just east of Corning. The results of the studies indicated that the road user would realize the most benefit out of the tax dollar expended for highway construction purposes if an almost complete relocation of U.S. 34 were built in this area. Initially, five alternate locations were studied with a road user analysis made of each alternate. The proposed or present relocation was approved, bypassing Red Oak and Corning along with Emerson.

On October 14, 1960, a hearing was held in Red Oak to inform the residents of Corning, Emerson, Glenwood, Hastings, Malvern, Nodaway, Pacific Junction, Red Oak, Stanton, and Villisca of the Commission's proposal for a relocation of U.S. 34 in this area. Approximately 200 citizens of the surrounding area attended this hearing.

Many people from the above mentioned communities felt that the route proposed by the Highway Commission was favorable to all. Everyone was in agreement that action of some kind on U.S. 34 was necessary. Several residents of Emerson were bitterly opposed to the relocation of U.S. 34 outside of that city. They felt that relocation of the highway would severely effect the economic growth of Emerson.

The Commission personnel prepared economic data based on retail sales of other communities in Iowa that have been bypassed

in previous years and compared this information to retail sales in similar communities that have not been bypassed. The results of this study were made available at the hearing and it showed that while there was a slight decrease in retail sales of the communities that were bypassed, this decrease in sales was rapidly overcome in a short period after the relocation was completed.

After the U.S. 34 hearing, the Commission staff reviewed all the transcripts and letters that were presented at the hearing and made every attempt to make changes in the proposed alignment so as to best serve the people in the five communities affected by the relocation. The final alignment was approved and contracts were let for relocation of U.S. 34 between U.S. 275 and a point just east of Corning in February of 1964. Construction began in the spring of 1964 and the relocation was completed in May of 1966.

According to the Iowa State Highway Commission's latest proposal, U.S. 34 will become a part of Iowa's proposed expressway system. The design of relocated U.S. 34 incorporated Iowa's latest concepts of expressway design. The project was built initially using a twenty-four foot width pavement for both directions of travel with a minimum design speed of sixty miles per hour and a minimum of no passing zones. Right-of-way was purchased for an additional two lanes which will be added at a future date when warranted by increased traffic volumes. This design allows for at grade intersections on minor traffic secondary roads with interchanges to be

constructed at most primary highways and major secondary roads. Separations will be built at those secondary roads with heavy cross traffic and minor turning movement traffic.

SUMMARY

The time saving, convenient, economical, and safety benefits that have been derived from Iowa's Interstate System, along with the need to supplement this system of access-controlled highways led to the development of Iowa's proposed system of Freeways and Expressways. The relocation of U.S. 34 in the Red Oak - Corning area is a portion of this proposed system.

This relocation is a part of an overall improvement to U.S. 34 in Mills, Montgomery, and Adams Counties. On October 14, 1960 a public hearing was held in Red Oak to inform the residents of Corning, Emerson, Glenwood, Hastings, Malvern, Nodaway, Pacific Junction, Red Oak, Stanton, and Villisca of the Commission's proposal for a relocation of U.S. 34 in this area. While most of the people attending the hearing were in favor of the proposed improvement there were some businessmen who were apprehensive of this relocation because of the adverse effect the removal of thru-traffic might have upon their businesses. The purpose of this report is to present factual information concerning the general economy of Red Oak and Corning and what effect the relocation of U.S. 34 has had upon the various businesses in Red Oak and Corning.

This report differs from previous economic studies in that it considers the economic parameters such as retail sales, land use zoning, industry, employment, and traffic patterns in two communities, both simultaneously bypassed by Relocated U.S. 34. This

report utilizes a corridor technique in its analysis of data since both Red Oak and Corning are located on the same corridor of U.S.

34. Economic data on these two communities were compared and analyzed to determine the relative changes that occurred during the study period.

Economic data on Red Oak, Corning, Southwest Iowa Economic Area, the average of seven communities in this economic area and the State of Iowa were collected and analyzed both before and ^{af-}after the opening of Relocated U.S. 34. More detailed information on the economy of Red Oak and Corning was obtained by a study of business firms located along the highway in both cities. In addition, detailed land use and zoning information was obtained for both communities and analyzed to determine what effect the highway change had on these economic parameters. The study was conducted over a six year period with four years of "before" data and two years of "after" data.

A review of the material collected in this study indicates that while the general economy of both Red Oak and Corning did not suffer as a result of the relocation there were several changes that did occur in both communities during the study period reflecting the impact caused by the relocation. The following conclusions were made concerning the economic effect the highway change had on Red Oak and Corning.

Taxable Retail Sales

1. Total Retail Sales increased 34.4 percent in Red Oak and 19.3 percent in Corning during the study period compared to 30.5 percent in the seven surrounding communities, 28.5 percent in the surrounding eight county area, and 34.9 percent for the State of Iowa.
2. A study of retail sales by business classification indicates that retail sales in the food and general merchandise group were somewhat higher in Red Oak than Corning during the study period as were sales in the service station and cafe group. However, sales in the heavy materials, motor vehicle services, and miscellaneous group enjoyed a greater increase in Corning than in Red Oak during this period.
3. An analysis of retail sales by location in both Red Oak and Corning indicates that the majority of the retail sales are made by business firms with off highway locations. Between the two communities, there was more shifting of business locations in Red Oak than in Corning. However, this shift did not result in a decrease in sales in any of the business groups, but rather it reoriented the business firms in Red Oak to where they would be in a more favorable position to serve both the traveling public and the citizens of Red Oak. In Corning the analysis of retail sales by location shows that those firms with highway locations had a decrease in sales during the study period in most all business classifications. The majority of Corning's increase in retail sales can be attributed to the sales of those business firms in off highway locations.
4. A detailed study of service stations in Red Oak and Corning indicates that for the entire city, those service stations in Red Oak were not affected nearly as much by the loss in trade with the change in traffic as were those stations in Corning. However, within the town of Red Oak there were several changes made in the location of service stations from Old U.S. 34 to Iowa 48. The results of this study also show that much of the decrease in total sales by this group can be attributed to management and ownership changes as well as the loss in trade to the thru-traffic customer.
5. Cafes in Red Oak experienced an overall increase in retail sales during the study period while cafes in Corning showed

a decrease in retail sales during this time period. The increase in cafe sales in Red Oak was not enjoyed by all cafes since there was a definite shift in cafe operations from Old U.S. 34 locations to Iowa 48 and other city locations in Red Oak. In Corning the decrease in retail sales of cafes was the result of the removal of thru-traffic from Old U.S. 34. The results of this study also indicated that much of the decrease in retail sales by cafes was also the result of management and ownership changes.

Land Use

1. The most significant land use change on Old U.S. 34 in Red Oak during the study period was the reduction of residences and the increase in the number of non-highway oriented commercial firms. On Iowa 48 there was an increase in both highway oriented and non-highway oriented firms with a small decrease in the number of residences. On relocated U.S. 34 considerable construction activity has taken place in the area adjacent to the highway. Several new highway oriented firms were built as well as some industrial buildings.
2. There were very little land use changes along Old U.S. 34 in Corning during this period. Those changes that did occur were a decrease in highway oriented firms and an increase in non-highway oriented businesses. ^{AND NON-HIGHWAY ORIENTED BUSINESSES.} ~~ON IOWA 148 THERE WAS A DECREASE IN HIGHWAY ORIENTED FIRMS AND AN INCREASE IN NON-HIGHWAY ORIENTED BUSINESSES.~~ The land use change followed approximately the same pattern on Iowa 148. Several new buildings were constructed on Iowa 148 north of its junction with Old U.S. 34.

Zoning

1. Red Oak has expanded its city limits during the study period primarily to the north and west. Much of this land is now zoned commercial and industrial with some development occurring particularly in the area adjacent to Relocated U.S. 34.
2. Corning also expanded its city limits during the study period. The new area annexed into the city was primarily agricultural, however there have been recent commercial, industrial, and residential developments in various areas of the city with the land being rezoned to conform with the change in land use.

Industry and Employment

1. There are approximately 830 people employed by four of the major industries in Red Oak, with numerous smaller industries and businesses employing 10 to 30 persons. The Red Oak Industrial Foundation was formed after the relocation of U.S. 34 and now has an eighty acre tract in the area of the relocation.
2. The National Headquarters of the National Farmer's Organization (N.F.O.) is located in Corning. This firm and other major firms in Corning employ approximately 280 persons. There are numerous other firms in Corning employing from 5 to 20 people. Many of these employees commute into Corning from the surrounding rural area. There are no new industries in Corning at this time, however, it is anticipated that as the community develops its natural resources, new industries will eventually be located in Corning.

Traffic

1. Traffic on Old U.S. 34 in the Red Oak area decreased approximately 35 percent during the 1959 to 1968 interval. However, the traffic on both the relocation and the old route increased from 2600 vehicles per day in 1959 to 3500 vehicles per day in 1968. External thru-trips decreased from 24.23 percent of the total trips passing through the Red Oak area in 1958 to 17.36 percent of the total trips passing through the Red Oak area in the 1969 origin and destination study.
2. In 1968, Old U.S. 34 in Corning carried an average annual daily traffic of approximately 920 vehicles in and through the Corning area compared to 1930 vehicles per day on Old U.S. 34 in 1959. In 1968, the combined traffic on Old U.S. 34 and Relocated U.S. 34 was approximately 2170 vehicles per day. An external origin and destination study conducted in Corning in 1958 indicated that approximately 25.16 percent of the trips passing through the Corning area were external thru-trips. The majority of these trips diverted to Relocated U.S. 34 when it was completed.

The above findings indicate that between the two communities, Corning suffered more economic consequences from the change in traffic patterns resulting from the relocation than Red Oak. It was evident in both communities that there was a decrease in business by the highway oriented firms, particularly those along Old U.S. 34. However, in Red Oak many of these businesses were able to relocate themselves on Iowa 48 and thus be in a better position to serve both the local people and the traveling public. This study indicated that ownership and management changes can also have an impact upon the sales made by these firms. Those businesses that were undergoing constant ownership and management changes did not have the support of the local trade and were eventually closed when they could no longer operate with a profitable margin of support.

One of the most significant changes that occurs when a bypass is built around a community is the change in land use and zoning around the area of the relocation. In Red Oak this is evident by the increased commercial and industrial usage of the land along Iowa 48 and Relocated U.S. 34. Corning has not yet had an opportunity to capitalize upon this commercial and industrial development. However, it is anticipated that as Corning develops its industrial resources there will be more opportunities for new industries to be located in Corning.

TAXABLE RETAIL SALES

The Iowa State Highway Commission, in cooperation with the Iowa State Department of Revenue, Retail Sales Tax Division, has maintained a record of taxable retail sales for all Iowa communities since 1956. The sales tax data are summarized each quarter, listing the total taxable retail sales for all Iowa communities by the following business groups:

1. Cafe Group

This group includes taxable retail sales for cafes, restaurants, lunch rooms, and snack bars.

2. Motel Group

Motels, hotels, and lodging houses were included in this classification.

3. Service Station Group

This group includes taxable retail sales of service stations and bulk dealers.

4. Food Group

The food group includes taxable retail sales of grocery stores, meat markets, bakeries, dairies, candy stores, vegetable markets, and other places of business selling edible items.

5. General Merchandise Group

This group includes taxable retail sales of department stores, clothing stores, drug stores, hardware stores, shoe stores, dry goods stores, household appliance and furniture stores. This list is not all inclusive and contains only the predominant types of retail firms; e.g., sporting goods and jewelry stores are also in this category. In broad terms this group is dominated by the sale of consumer goods.

6. Motor Vehicle Group

The motor vehicle group includes taxable retail sales of automobile dealers, mobile homes, garages, auto salvage and auto accessory stores.

7. Heavy Materials Group

Included in this group are the taxable retail sales of lumber, brick, sand, gravel, tile, metals, and other building materials and supplies.

8. Service Group

The service group includes the taxable retail sales of movies, amusements and athletic events, printing and advertising, photographers, public utilities, railroads and other types of firms involved in the sale of services.

9. Miscellaneous Group

This group includes the taxable retail sales of grain elevators, tombstones, chemicals and gases, commercial supplies and devices, taverns, night clubs, key clubs, state liquor stores, and other firms not classified in the various other merchandise groups.

One limitation in using taxable retail sales in this phase of the study is that no sales tax is paid on the sale of gasoline. Thus, the retail sales tax data for the service station group can only serve as an indicator of the general prosperity of this group. However, with the cooperation of the State Tax Commission, Retail Sales Tax Division, we were able to obtain more accurate and reliable data on service station sales. Service station sales are classified as gross, gasoline, other, and net. Net sales are the sales of items subject to retail sales tax. Other sales are the sales of services and items not subject to retail sales

tax, excluding gasoline. The sum of the gasoline, other, and net sales are the gross sales.

Also, the hotel-motel group offered limited data. This is because the retail sales tax on motels and hotels did not become effective until July, 1965,

The quarterly retail sales tax data for all Iowa cities and towns are summarized on an annual basis and compiled for the total city, county, economic area, and the State of Iowa. This enables us to make comparisons of trends within these various groupings.

The following comparisons were made concerning retail sales activity in Red Oak, Corning, the average of seven surrounding communities, Southwest Iowa Economic Area, and the State of Iowa:

1. Total Retail Sales
2. Retail Sales by Business Classification
3. Retail Sales by Business Location in Red Oak and Corning
4. Service Station Sales in Red Oak and Corning
5. Cafe Sales in Red Oak and Corning

Total Retail Sales

A comparison was made between taxable retail sales in Corning and Red Oak which constitute the study areas; and the seven surrounding communities, the eight county area and the State of Iowa which are the control areas. Table 1 and 2 and Figures 6 and 7, illustrate these comparisons. During the study period 1962 through 1967, taxable retail sales increased 19.3 percent in Corning and 34.4 percent in Red Oak. In the control areas, the

FIGURE 6-TREND IN TAXABLE RETAIL SALES FOR THE STATE OF IOWA, SOUTHWEST IOWA ECONOMIC AREA AND THE AVERAGE OF SEVEN CITIES

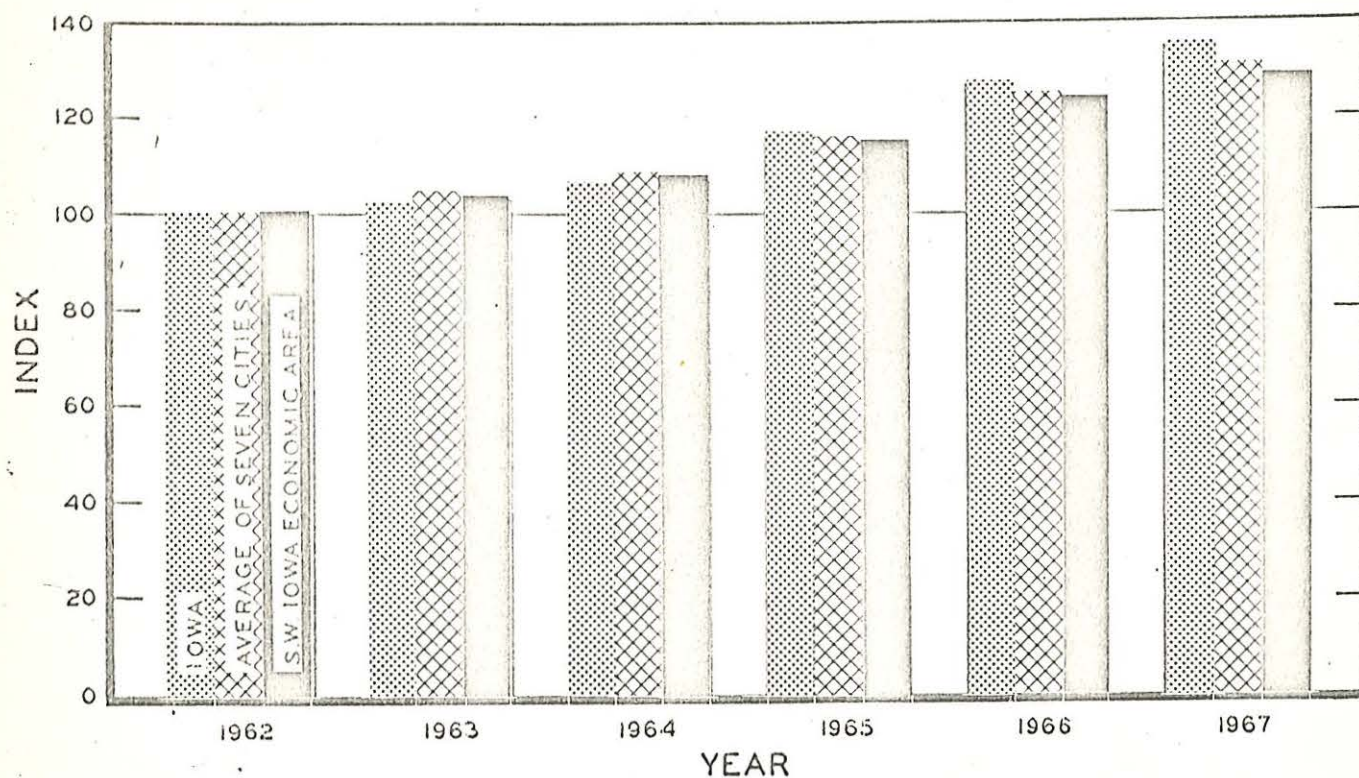
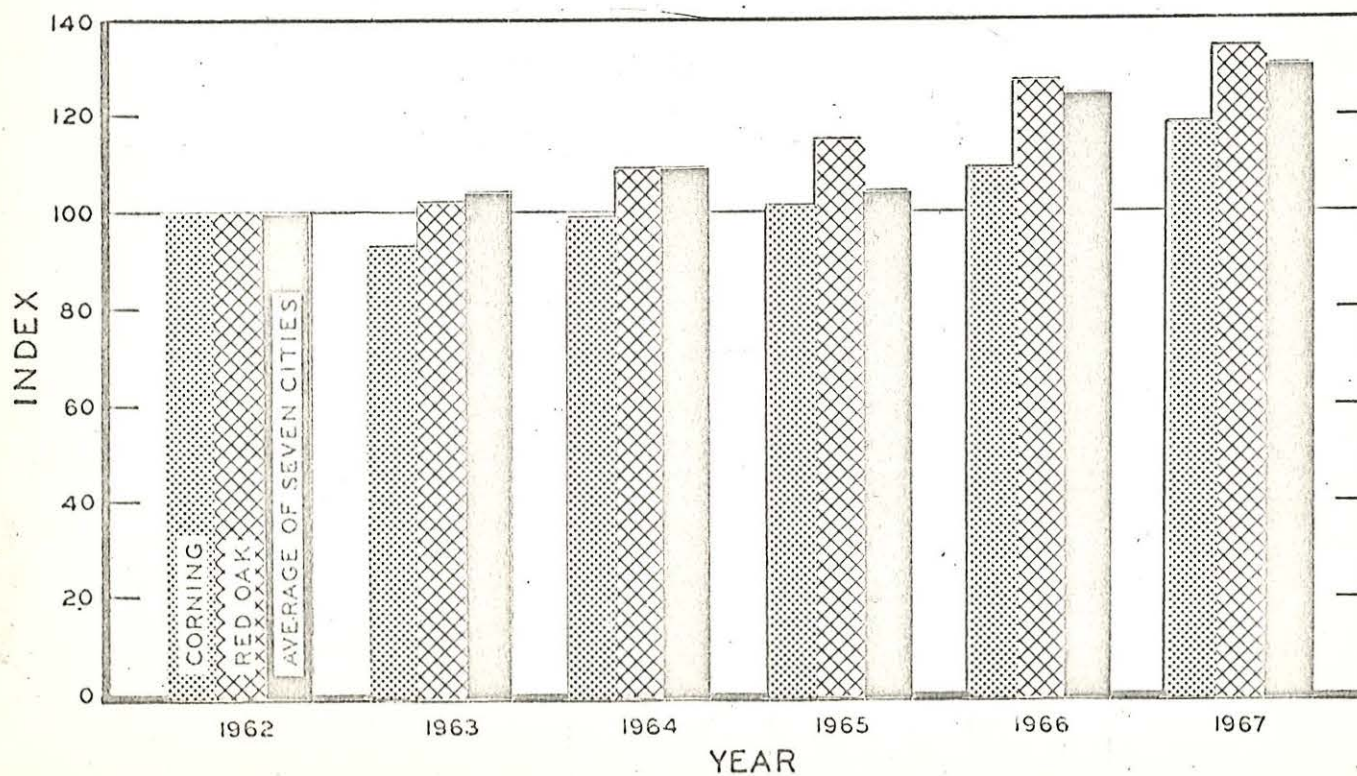


FIGURE 7-TREND IN TAXABLE RETAIL SALES FOR THE AVERAGE OF SEVEN CITIES, CORNING AND RED OAK



average of the seven surrounding communities had a 30.5 percent increase in taxable retail sales during this same period. The surrounding eight county area showed an increase in taxable retail sales of 28.5 percent and the State of Iowa increased its sales 34.9 percent during the study period.

Table 1 - Taxable Retail Sales in Iowa, Southwest Iowa Economic Area and the Average of Seven Cities

Year	TAXABLE RETAIL SALES (\$1000)					
	Iowa	Percent	S.W. Ia. E.A.	Percent	Seven City Average	Percent
1962	\$3,621,172	100.0	\$101,969	100.0	\$ 7,909	100.0
1963	3,704,074	102.3	105,368	103.3	8,212	103.8
1964	3,856,974	106.5	109,247	107.1	8,583	108.5
1965	4,184,593	115.6	116,124	113.9	9,054	114.5
1966	4,596,894	126.9	125,186	122.8	9,801	123.9
1967	4,884,614	134.9	130,991	128.5	10,322	130.5

Table 2 - Taxable Retail Sales for the Average of Seven Cities, Corning and Red Oak

Year	TAXABLE RETAIL SALES (\$1000)					
	Seven City Average	Percent	Corning	Percent	Red Oak	Percent
1962	\$ 7,909	100.0	\$5,553	100.0	\$14,138	100.0
1963	8,212	103.8	5,175	93.2	14,448	102.2
1964	8,583	108.5	5,517	99.3	15,370	108.7
1965	9,054	114.5	5,593	100.7	16,291	115.3
1966	9,801	123.9	6,034	108.7	17,903	126.6
1967	10,322	130.5	6,625	119.3	19,004	134.4

As can be seen in Figures 6 and 7, the increase in retail sales was fairly uniform for both the study area and the control area, with the exception of Corning which showed a slight decrease of 6.8 percent in 1963. From a comparison of the data illustrated in Figures 6 and 7, the control areas show a rate of growth similar to that of Corning and Red Oak during the study period using 1962 as a base year.

The analysis of total retail sales in the two study areas to that of seven surrounding communities indicates a reasonably good rate of growth for Red Oak and Corning. Only three of the seven surrounding cities enjoyed a greater increase in retail sales than Red Oak during the study period and five of the seven communities showed a higher rate of growth than Corning during the same time period. This comparison would indicate that most areas concerned showed a uniform rate of growth in taxable retail sales, with the exception of Corning which showed a slight decline earlier in the study period.

While total retail sales serve as a "guide line" to determine the relative economic growth between the study area and the control area, they do not provide detailed information on the trend in retail sales by type of business during the study period. To further evaluate the economic effects a highway relocation might have on a community a study of retail sales by business classification was made to determine what changes occur in the

retail sales of each business group in the study area and the control area, and what effect it has upon the total retail sales.

Retail Sales by Business Classification

In order to aid in the evaluation of taxable retail sales in Corning, Red Oak and the control areas, the nine business groups defined earlier in this report were grouped into three general classifications:

1. Cafe, Motel and Service Station Group
2. Food and General Merchandise Group
3. Motor Vehicle, Heavy Materials, Service and Miscellaneous Group

In previous economic impact studies, it has been found that highway-oriented businesses such as cafes, motels and service stations are the most likely to be affected by a change in traffic conditions since they depend more upon the patronage of the traveling public for much of their business. One change that should be pointed out in this grouping is that beginning in July, 1965, a sales tax on motels was put into effect. ^{ALSO THE} ~~As a result, a~~ sales tax on taverns which was previously included in this group, is now included in the miscellaneous group.

Firms in the food and general merchandise group generally serve as an indicator of the general prosperity of a community. The changes that occur in this group usually are the result of a change in the overall economy of a community and not a sudden change in the traffic pattern. Business firms in the Motor

FIGURE 8-DISTRIBUTION OF TAXABLE RETAIL SALES, CORNING, IOWA

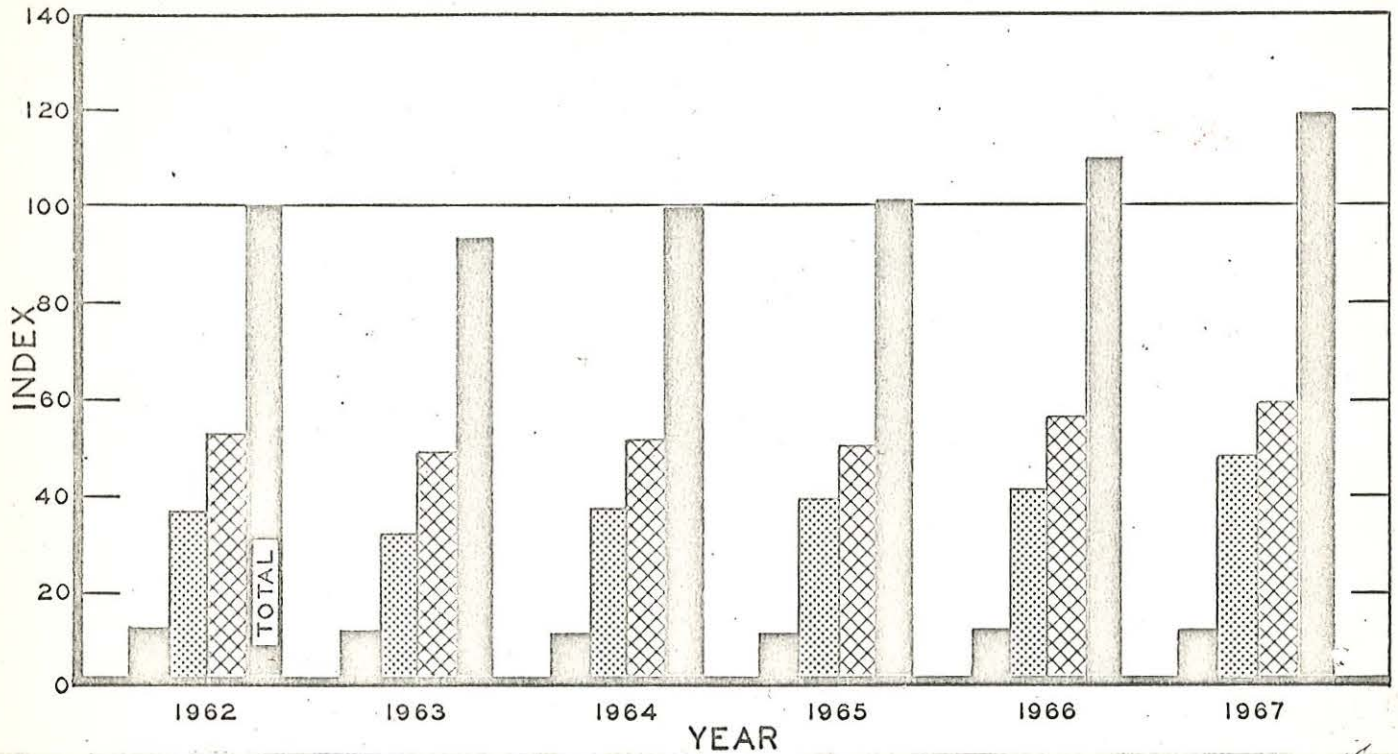
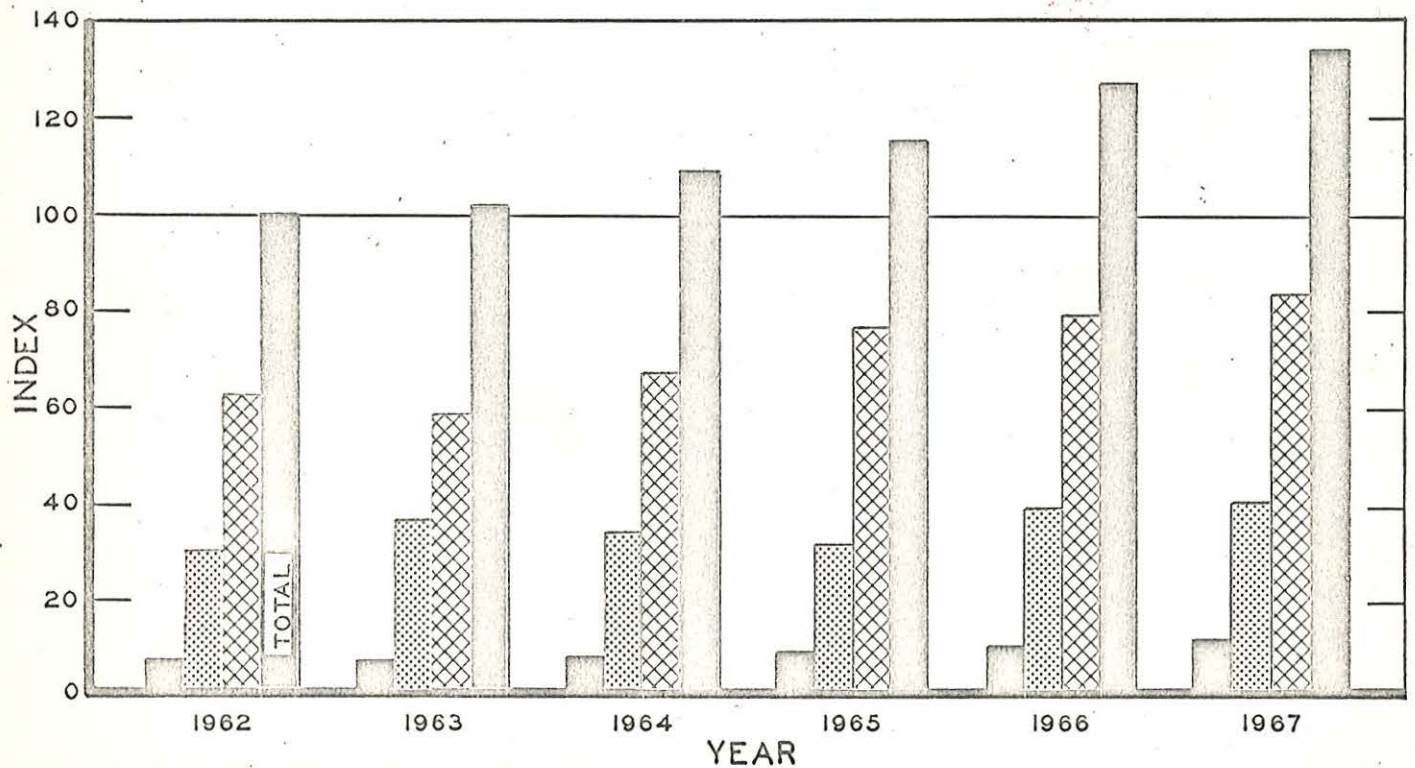


FIGURE 9-DISTRIBUTION OF TAXABLE RETAIL SALES, RED OAK, IOWA



CAFES
MOTELS
SERVICE STATIONS

GENERAL
MERCHANDISE
FOOD

MOTOR VEHICLE
HEAVY MATERIALS
SERVICE
MISCELLANEOUS

Vehicle, Heavy Materials, Service and Miscellaneous Group are mainly dependent upon local patronage and are not likely to be affected by any change in the traffic pattern.

Figures 8 and 9 show the distribution of taxable retail sales for all Corning and Red Oak firms by the three business classifications groups mentioned previously.

As illustrated in Figure 8, retail sales from the Cafe, Motel and Service Station Group in Corning were approximately 12.4 percent of total retail sales in 1962. This group comprised only 9.9 percent of total retail sales in 1967 showing a gradual decrease during the study period. In Red Oak, the cafe, motel and service station group increased from 7.6 percent in 1962 to 9.0 percent of total retail sales in 1967 with only a slight decrease in 1963.

For the City of Corning, retail sales in the Food and General Merchandise Group were 51.6 percent of total sales in 1962. With some minor fluctuations, this group decreased to 49.6 percent of the total sales in 1967. Comparing Corning to Red Oak, the Food and General Merchandise Group made up 62.4 percent of total retail sales for Red Oak in the base year, 1962. There was only minor fluctuation in retail sales for this group during the study period and in 1967 the food and general merchandise group for Red Oak was approximately 61.5 percent of total retail sales.

The total retail sales from the Motor Vehicle, Heavy Materials,

Service ^{and} Miscellaneous Group were approximately 36.0 percent of total retail sales in 1962 for the city of Corning. This group showed the strongest rate of growth for Corning, increasing to 40.5 percent by 1967. In Red Oak, the sales for this same group in 1962 were 30.0 percent of total retail sales and by 1967, they were 29.5 percent, showing little variation during the study period.

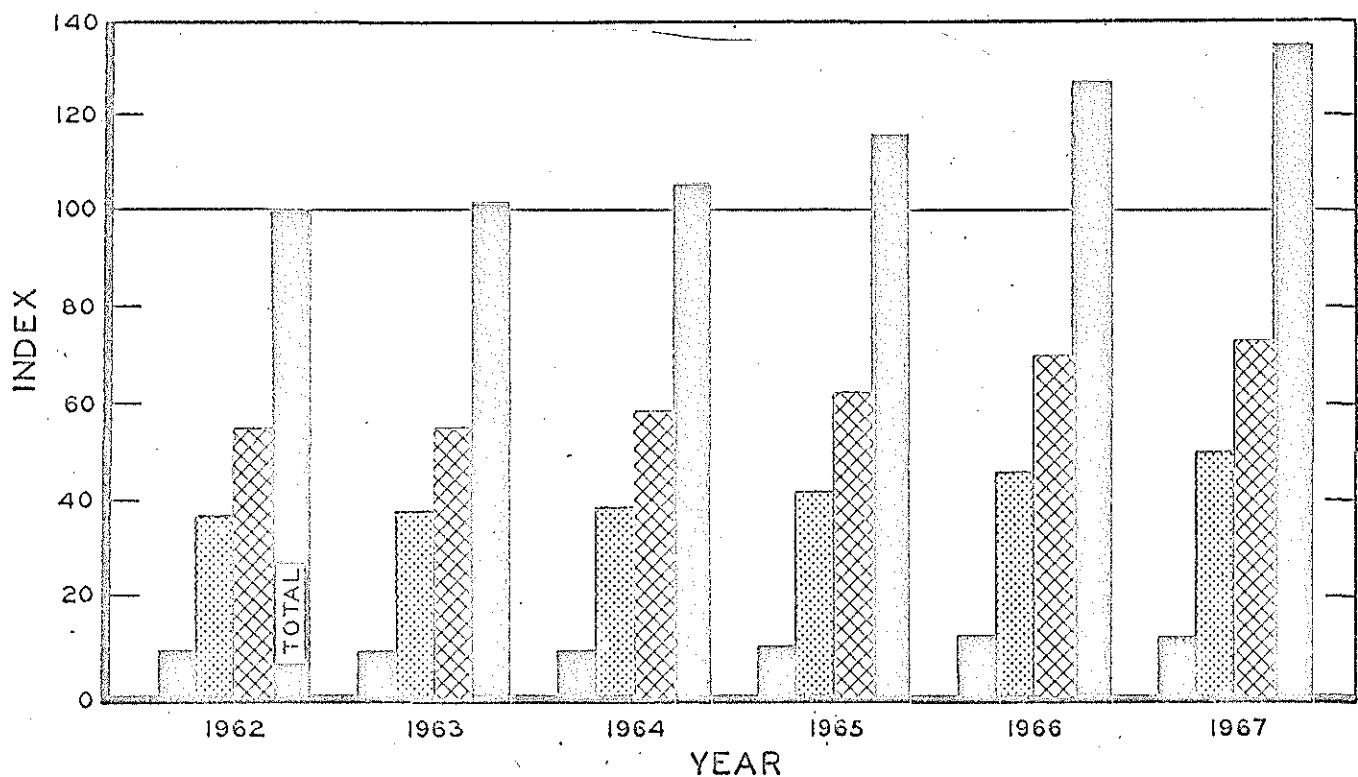
These comparisons of retail sales by business classification grouping for Corning and Red Oak show a steady rate of growth in nearly all areas of retail sales. Highway-oriented firms showed a slight decline in sales in Corning while Red Oak firms showed a steady growth with only minor fluctuations in this group. When related to total sales, those sales in the Food and General Merchandise Group for both Corning and Red Oak show a gradual increase during the study period directly proportional to total retail sales. Like the highway-oriented group, there was some variation in retail sales in this group for both cities. This variation in sales did not follow any specific trend and therefore it is assumed that they were not a result of the relocation, but were related to other socio-economic factors. In the service and Miscellaneous Group, Corning showed a moderate increase during the study period while Red Oak showed little change. X

In both the highway-oriented group and the Food and General Merchandise Group, retail sales increased faster in Red Oak than

in Corning. This growth is reflected mainly in service station and cafe sales with service stations showing the greater increase. In the Food and General Merchandise Group, General Merchandise experienced the greatest increase in growth, while Food Sales showed a moderate growth in Red Oak.

Figures 10, 11, and 12 illustrate the distribution of taxable retail sales by business classification for Iowa, Southwest Iowa Economic Area, and the average of the seven cities in the control area.

FIGURE 10-DISTRIBUTION OF TAXABLE RETAIL SALES,
STATE OF IOWA



CAFES
MOTELS
SERVICE STATIONS

GENERAL
MERCHANDISE
FOOD

MOTOR VEHICLE
HEAVY MATERIALS
SERVICE
MISCELLANEOUS

FIGURE 11- DISTRIBUTION OF TAXABLE RETAIL SALES,
SOUTHWEST IOWA ECONOMIC AREA

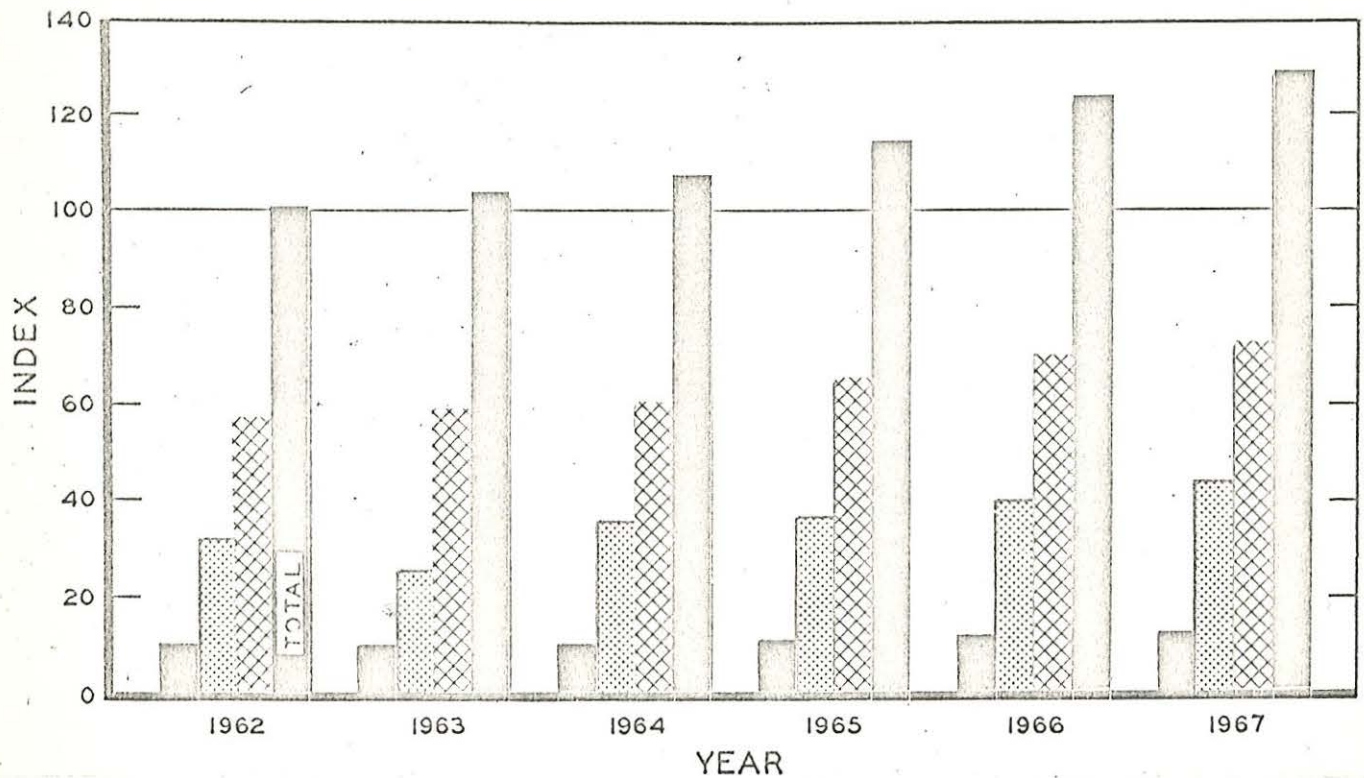
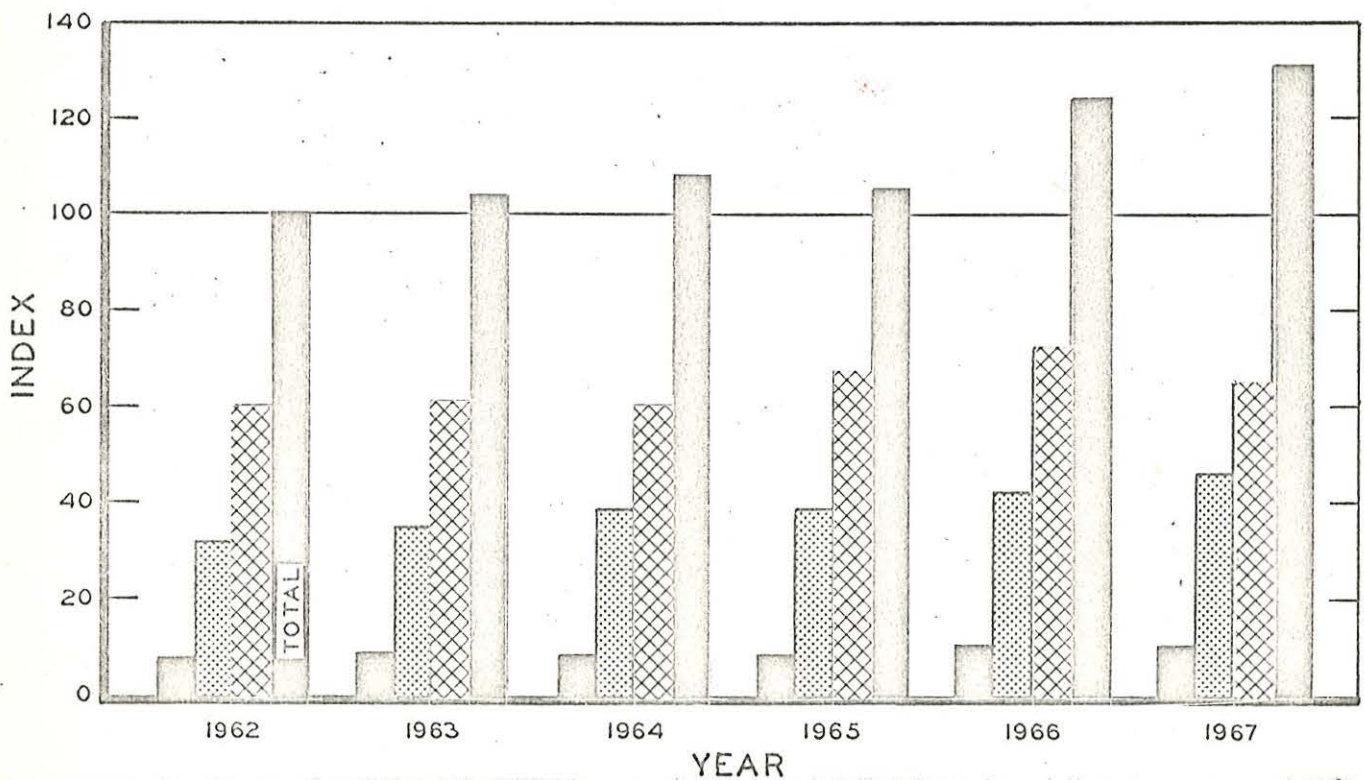


FIGURE 12- DISTRIBUTION OF TAXABLE RETAIL SALES, AVERAGE
OF SEVEN CITIES.



CAFES
MOTELS
SERVICE STATIONS

GENERAL
MERCHANDISE
FOOD

MOTOR VEHICLE
HEAVY MATERIALS
SERVICE
MISCELLANEOUS

In comparing the trend of taxable retail sales in the Cafe, Motel, and Service Station Group for the control areas, the sales by this group in the seven city average constituted a slightly lower percentage of total retail sales than for the State of Iowa and the Southwest Iowa Economic Area. The highway-oriented group for the seven city average comprised 7.9 percent of the total retail sales in 1962 compared to 10.3 percent for the Southwest Iowa Economic Area and 8.7 percent for Iowa. Retail sales by the Cafe, Motel, and Service Station Group in the control areas showed a general increase in sales during the study period. This increase in retail sales is comparable to that of Red Oak. However, Corning experienced a decrease in retail sales by this group during the six year period.

The Food and General Merchandise Group usually accounts for the largest percent of the total retail sales and this was true in the control areas. In 1962 the sales from this group for the seven city average comprised 59.7 percent of the total retail sales, compared to 56.7 percent for the Southwest Iowa Economic Area, and 54.7 percent for the State of Iowa. However, for the same year, the Food and General Merchandise sales were 62.4 percent of Red Oak's total sales and 51.6 percent in Corning. This increase in retail sales by this group was fairly consistent for the control area during the study period. Between the study towns Red Oak had the highest rate of growth, while Corning showed a slight decline in the growth of sales by Food and General Merchandise Group.

The above comparison indicates that Red Oak has maintained a higher percentage of total retail sales in the Food and General Merchandise Group than the control areas of Corning.

The Motor Vehicle, Heavy Materials Service, and Miscellaneous Group accounted for 32.4 percent of the total retail sales in the seven city averages for 1962, compared to 33.0 percent in the Southwest Iowa Economic Area and 36.6 percent in Iowa. The growth of retail sales in this group was uniform for the control areas during the six year period. Retail sales made by the Motor Vehicle, Heavy Materials Service, and Miscellaneous Group in Red Oak amounted to 30.0 percent of total sales in 1962, while this group accounted for 36.0 percent of all sales in Corning for the same year. The growth of sales by this group in Corning was comparable to that of the control areas, while Red Oak experienced little or no growth in sales by the Motor Vehicle, Heavy Materials Service, and Miscellaneous Group.

While the above comparisons have illustrated the changes occurring in both total retail sales and in sales by business classification in the study areas and the control areas, more detailed information on the retail sales activity in the study area is necessary to indicate the changes that occur by location within the study towns. In making an analysis of this type, the retail sales of all business firms in Red Oak and Corning were grouped by their respective locations within each city. This grouping was made on an "on-highway" and "off-highway" location basis with each firm grouped by business classification and location for analysis.

Taxable Retail Sales By Location - Red Oak

In order to further evaluate the changes that occurred in taxable retail sales for the two communities, an analysis of retail sales was made for all business firms by their location within the community. For the town of Red Oak, business firms were grouped into the following locations:

- (1) U.S. 34
- (2) Iowa 48
- (3) Other City Locations

A grouping of this nature provides for the evaluation of retail sales by business firms as they relate to the changes that occur in the various areas of the city.

FIGURE 13-TREND IN TAXABLE RETAIL SALES BY BUSINESS LOCATION, RED OAK, IOWA

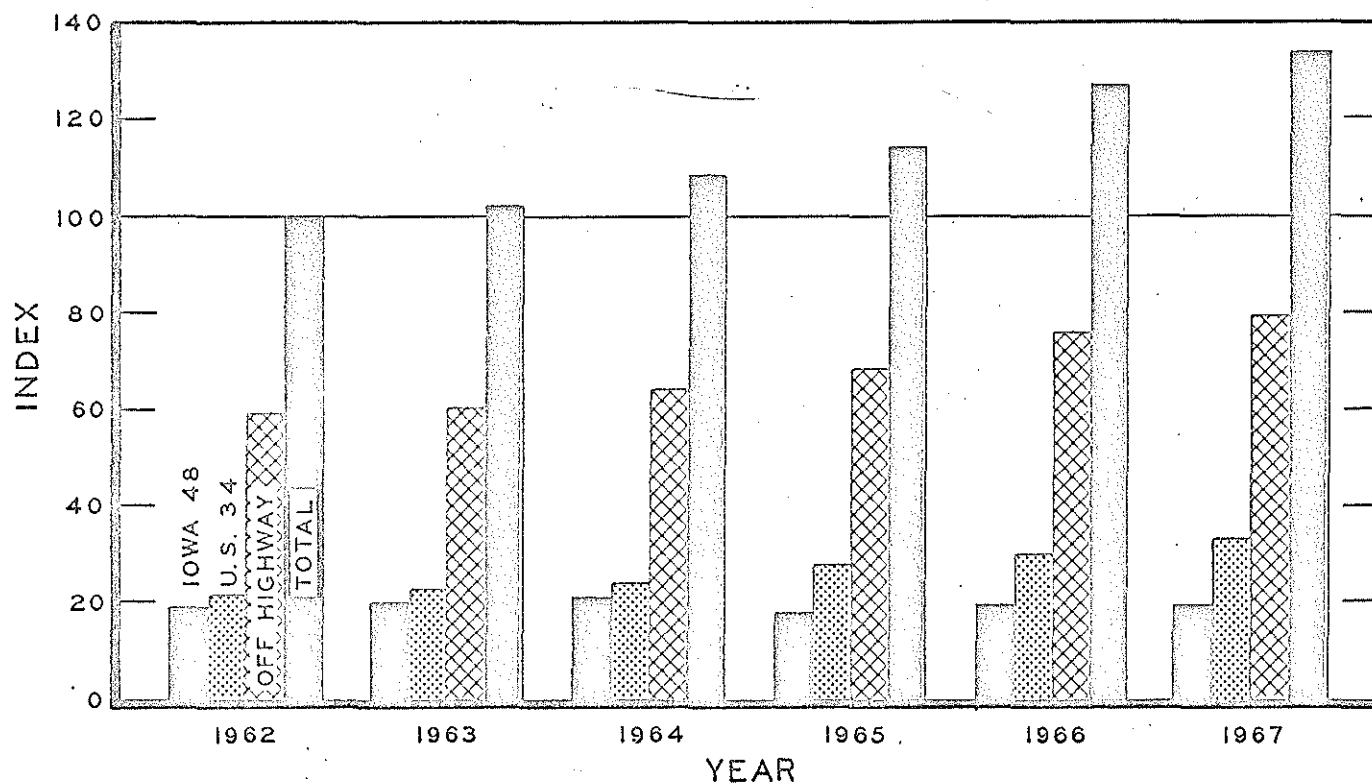


Figure 13 illustrates the trend in taxable retail sales by location in Red Oak, Iowa. As shown in this figure, the majority of the businesses are located in off-highway locations. In 1962, retail sales by business firms in off-highway locations accounted for 59 percent of all retail sales, increasing to 60 percent in 1967 with very little fluctuation during the study period. The retail sales by those firms located on U.S. 34 constituted 22 percent of the total sales in 1962 and increased to 25 percent in 1967. This trend was reversed on Iowa 48 with the retail sales of firms on this highway making up 19 percent of all sales in 1962 and decreasing to 15 percent in 1967. This would indicate that there has been a shift in business locations along the highways in Red Oak. To further analyze this trend the total retail sales were studied by locations within each business grouping.

The distribution of retail sales by location for all Red Oak firms in the highway-oriented group is illustrated in Figure 14. A review of this data indicates that total retail sales in the highway-oriented group for all locations increased approximately 63 percent during the study period with only slight decrease in sales during 1963. This increase is the result of increased sales by those firms located along Iowa 48. The sales of highway-oriented businesses located along U.S. 34 decreased from 37 percent of the total sales in this group for 1962 to only 20 percent of the total sales in 1964, with a slight increase to 21 percent in 1967.

FIGURE 14- TREND IN TAXABLE RETAIL SALES BY BUSINESS LOCATION, HIGHWAY ORIENTED GROUP, RED OAK, IOWA

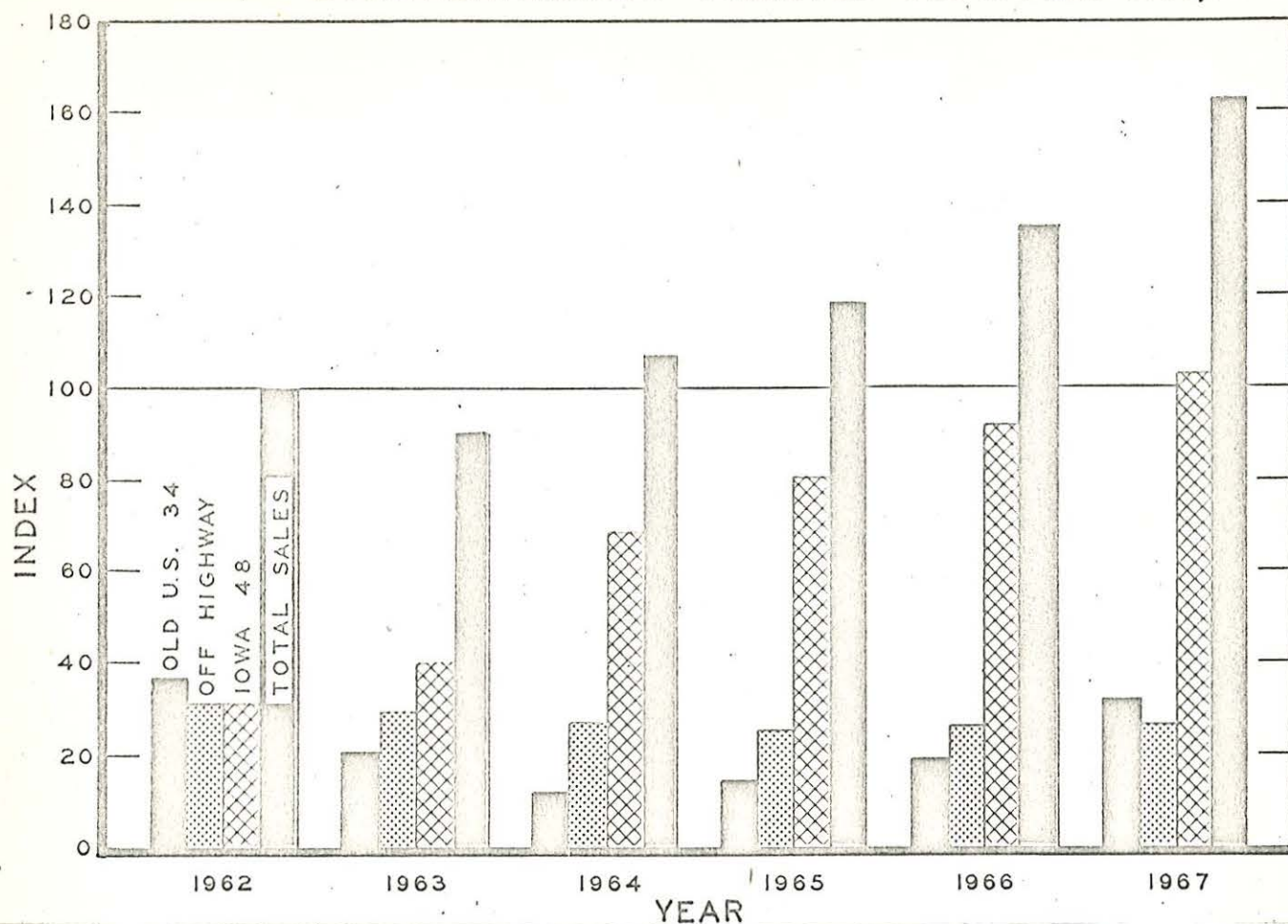
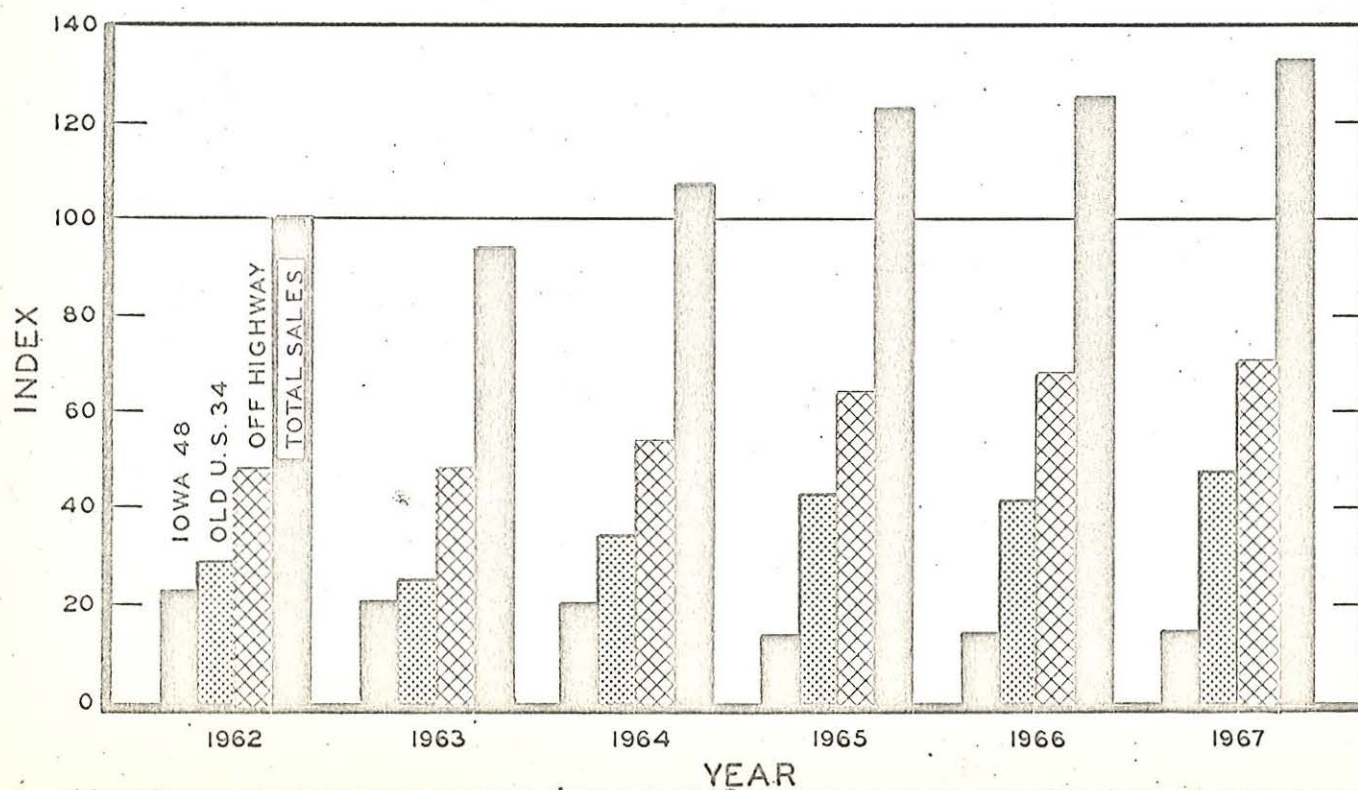


FIGURE 15- TREND IN TAXABLE RETAIL SALES BY BUSINESS LOCATION, FOOD AND GENERAL MERCHANDISE GROUP, RED OAK, IOWA



Much of this decrease can be attributed to the relocation of U.S. 34 in Red Oak and a more detailed discussion of these changes is included in the analysis of service stations and cafes.

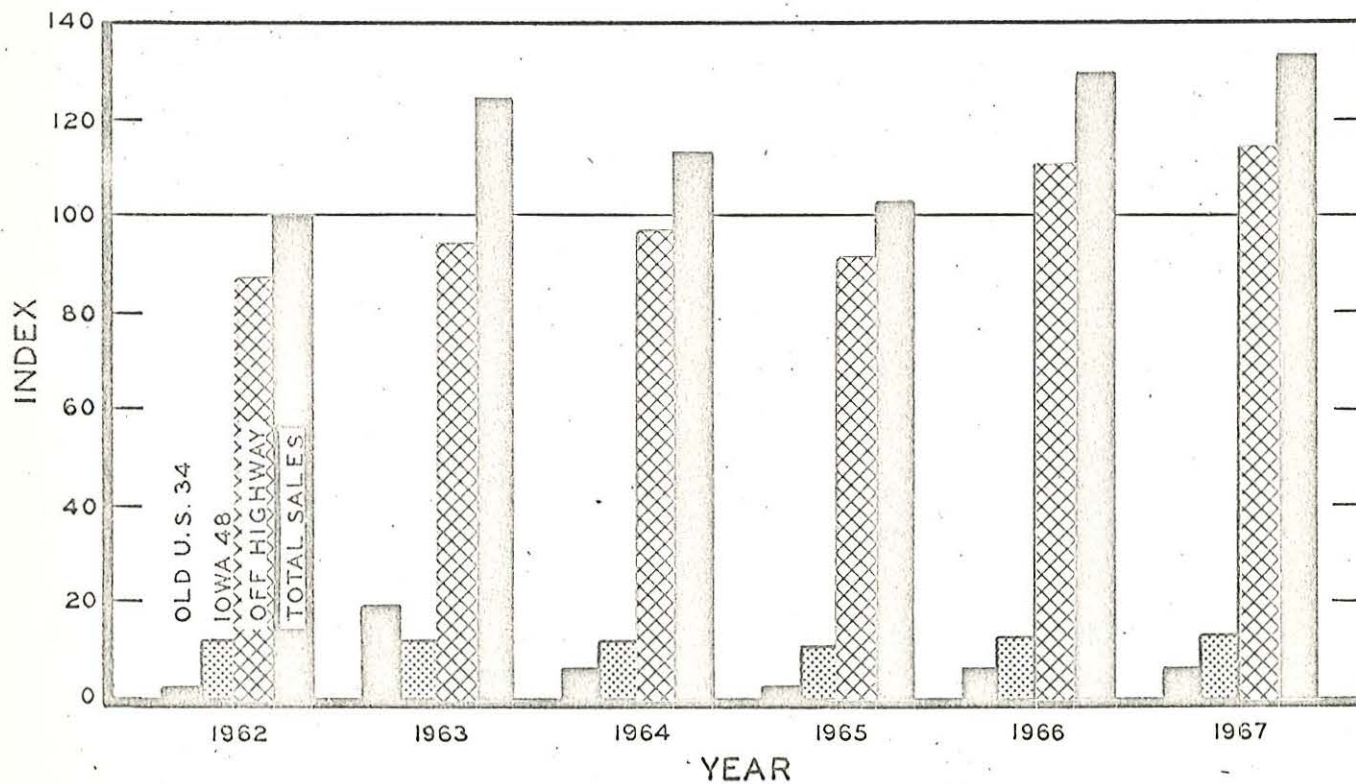
As Figure 14 illustrates, the ^{total} sales for this group in off-highway locations show a slight decrease in total sales during the study period. This decrease was partially the result of a change in location for some business firms to Iowa 48 locations. Those firms in the highway-oriented group along Iowa 48 accounted for 32 percent of the total sales in 1962, and increased rapidly during the latter part of the study period, constituting 63 percent of the sales in 1967. The improvement of Iowa 48 to relocated U.S. 34 and the ensuing development of highway-oriented firms along this section have resulted in the majority of this increase in retail sales. A more detailed analysis of this change will be included in the study of service stations and cafes for Red Oak.

As illustrated in Figure 15, the total sales for all locations in the food and general merchandise group increased 63 percent during the study period. Business firms in this group with off-highway locations accounted for 48 percent of the total sales in 1962, increasing to 53 percent by the end of the study period. It does not appear that the relocation of U.S. 34 has had any significant effect upon the sales made by this group in off-highway locations.

In reviewing the data in Figure 15, it is evident that there was a reversible trend in retail sales for those businesses located

along U.S. 34 and Iowa 48 during the study period. In 1962, business firms along Iowa 48 constituted 23 percent of total sales in the food and general merchandise group and decreased to 11 percent in 1967. However, on U.S. 34 the food and general merchandise firms made up 29 percent of the total sales in 1962 and increased to 36 percent at the end of the study period. The decrease in sales along Iowa 48 was the result of several businesses shifting locations along U.S. 34. Several new firms in the food and general merchandise group now located along U.S. 34 accounted for this increase in sales.

FIGURE 16- TREND IN TAXABLE RETAIL SALES BY BUSINESS LOCATION, MOTOR VEHICLE, HEAVY MATERIALS, SERVICES AND MISCELLANEOUS GROUP, RED OAK, IOWA



As illustrated in Figure 16, taxable retail sales of all firms in the motor vehicle, heavy materials, services and miscellaneous group increased 33 percent during the study period. Those firms in off-highway locations made up 87 percent of the total sales in 1962 and remained fairly stable during the study period. Sales for this group along U.S. 34 accounted for only two percent of the total sales in 1962, increasing to four percent in 1967. The sales of firms along Iowa 48 were eleven percent of total sales in 1962 and decreased to nine percent of the total sales in 1968.

This analysis of retail sales by business classification and by location in Red Oak indicates that, in general, the economy of Red Oak was not appreciably affected by the relocation of U.S. 34. However, some of the highway-oriented firms did show a decrease in retail sales during the study period, particularly along Old U.S. 34. While there was no overall decrease in sales by this group, the significant changes that occurred within the city by location indicate the relocation of U.S. 34 and the resulting change in traffic pattern did have an effect upon the sales made by highway-oriented firms.

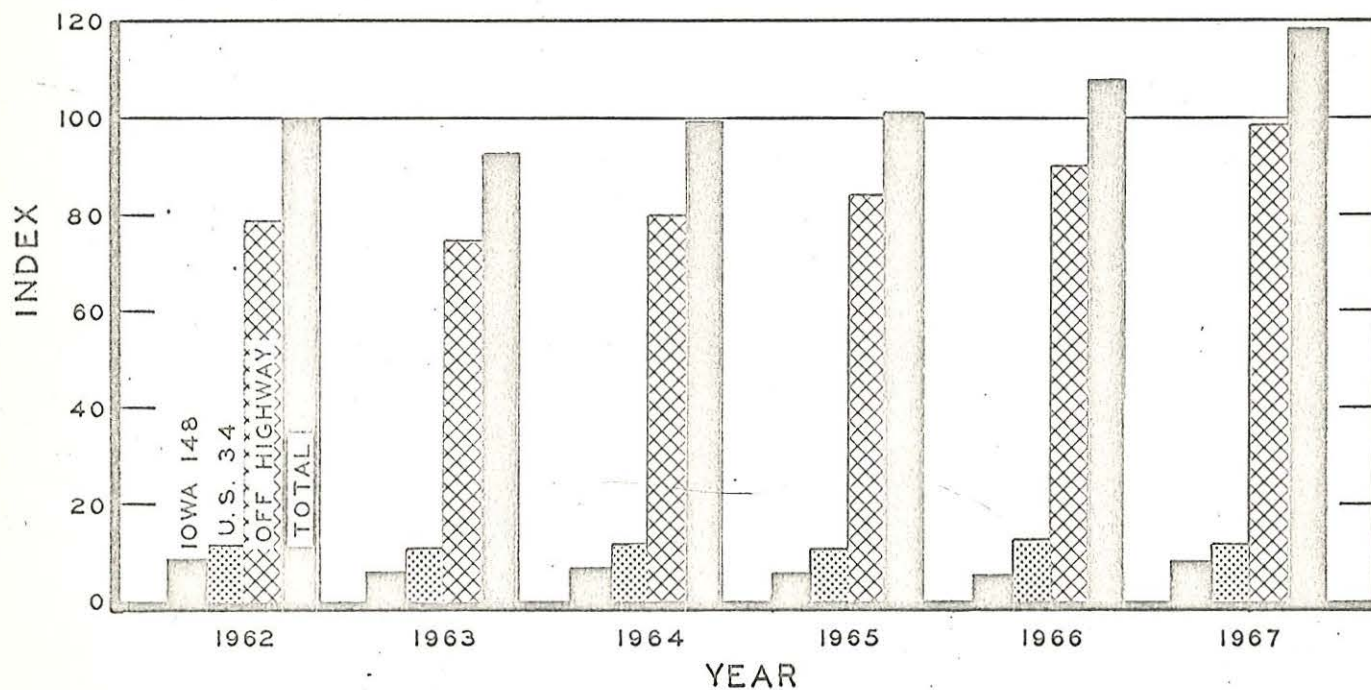
Taxable Retail Sales by Location - Corning

The retail sales of all business firms in Corning were analyzed by business type and by location to determine what changes occurred in business activity as it related to on-highway and off-highway locations. For this analysis all businesses in Corning were grouped into the following locations:

- (1) Iowa 148
- (2) U.S. 34
- (3) Off-Highway

Figure 17 illustrates the trend in total retail sales by location in Corning, Iowa. As shown in this figure, the majority of Corning businesses are located off the highway.

FIGURE 17- TREND IN TAXABLE RETAIL SALES BY BUSINESS LOCATION, CORNING, IOWA

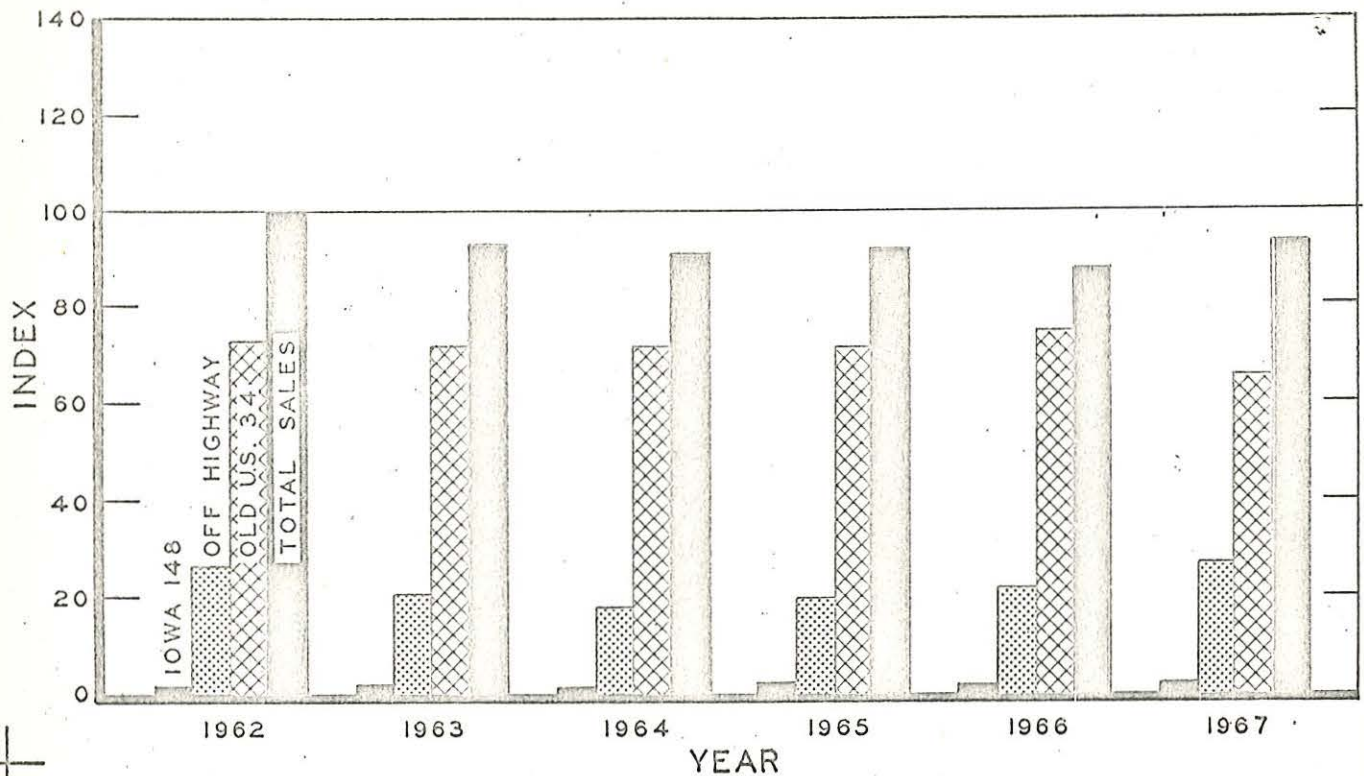


In 1962, retail sales by business firms with off-highway locations accounted for 79.0 percent of all retail sales. This figure later increased to 83.2 percent in 1967. The retail sales of those firms located along the highway did not experience a similar growth during the study period.

The retail sales of all firms located on U.S. 34 in Corning made up 12.0 percent of the total retail sales for Corning at the beginning of the study period. Retail sales by these firms fluctuated very little during the study period, accounting for 12.0 percent of the total retail sales in 1966 and 10.1 percent in 1967.

Those firms along Iowa 148 showed a decrease during the study period. In 1962 retail sales by business firms along Iowa 148 were 9.0 percent of the total retail sales, decreasing to 5.1 percent in 1966 and 6.7 percent of total sales in 1967. The above comparison indicates that there has not been a substantial growth in retail sales by business firms in Corning, Iowa, particularly those along the highways. The majority of Corning's increase in retail sales during the study period can be attributed to the sales of those business firms in off-highway locations. To further evaluate the trend of retail sales by location of business firms in Corning, an analysis of retail sales was made by business grouping within each location. Figure 18 illustrates the changes that have occurred in retail sales activity by location for those firms in the highway-oriented business group.

FIGURE 18- TREND IN TAXABLE RETAIL SALES BY BUSINESS LOCATION, HIGHWAY ORIENTED GROUP, CORNING, IOWA

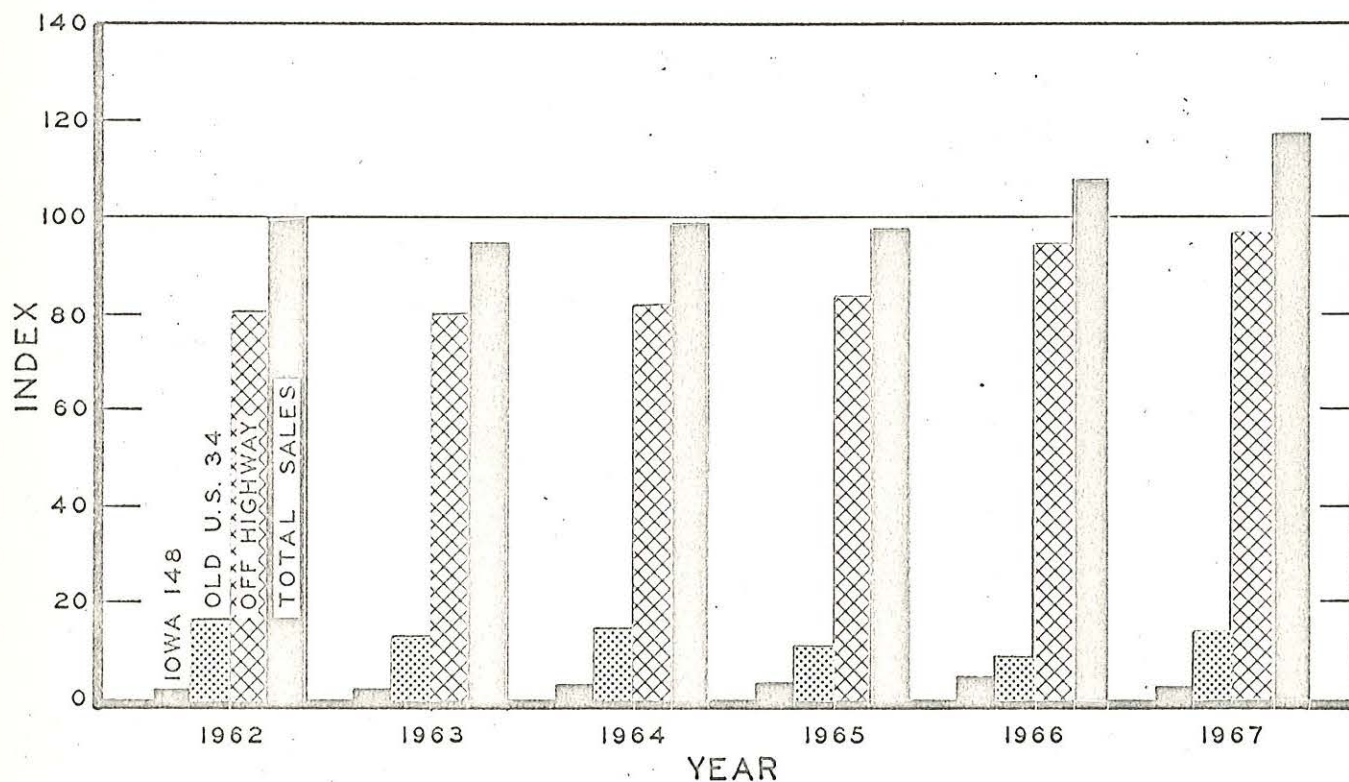


A review of the data shown in Figure 18 indicates that retail sales of all businesses in the highway-oriented group decreased 6 percent during the study period. Most of this decrease can be attributed to those businesses located along Old U.S. 34. In 1962 highway-oriented business firms with highway locations accounted for 73 percent of the total retail sales in this group and decreased to 69 percent in 1967. As can be seen in Figure 18, there was very little activity in this group along Iowa 148 during the study period. Those highway-oriented firms in the remainder of the city accounted for 25 percent of the total sales in 1962 and increased to 29 percent in 1967. In general, it appears that the change in traffic patterns resulting from the U.S. 34 relocation, precipitated

an overall retail sales decrease for highway oriented businesses in Corning. A more detailed analysis of these changes will be covered in the service station and cafe portion of this report.

Figure 19 shows the trend in the retail sales of those businesses in the food and general merchandise group by location in Corning.

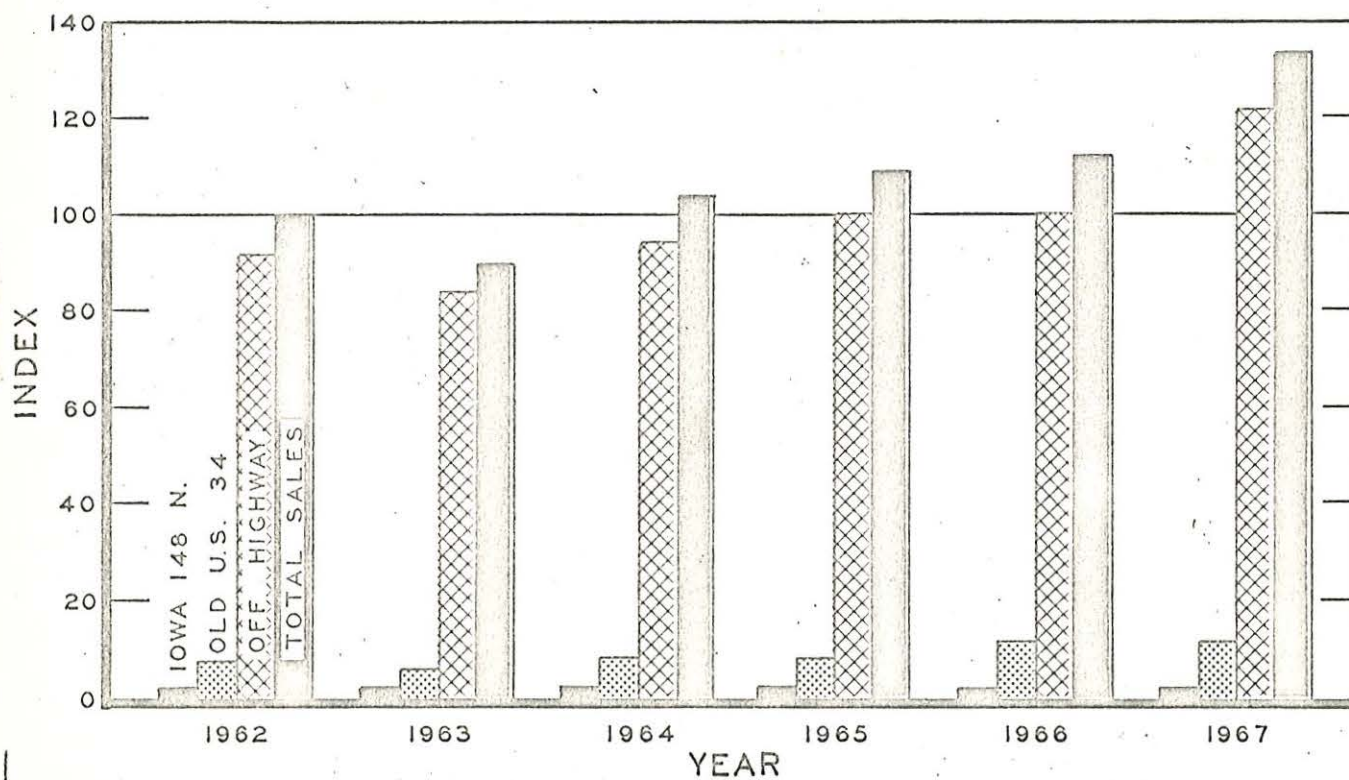
FIGURE 19-TREND IN TAXABLE RETAIL SALES BY BUSINESS LOCATION, FOOD AND GENERAL MERCHANDISE GROUP, CORNING, IOWA



As illustrated in Figure 19 retail sales for all firms in this group increased 15 percent during the study period. However, the increase was not constant throughout this period. The retail sales of this group in 1963 decreased approximately five percent from the sales for the base year, 1962. In reviewing Figure 19 it appears

that this trend of total retail sales is influenced to a great degree by the sales of this group located on Old U.S. 34. In 1962 the U.S. 34 business firms in this group accounted for 17 percent of the total sales, decreasing to 15 percent in 1963, and only 8 percent in 1966, increasing to 12 percent of total sales for this group at the end of the study period. However, the retail sales for the food and general merchandise group in off-highway locations was 81 percent of the total sales in 1962 and gradually increased to 85 percent in 1967. There was very little change during the study period in retail sales for those business firms in the food and general merchandise group located along Iowa 148.

FIGURE 20- TREND IN TAXABLE RETAIL SALES BY BUSINESS LOCATION, MOTOR VEHICLE, HEAVY MATERIALS, SERVICES AND MISCELLANEOUS GROUP, CORNING, IOWA



GREEN

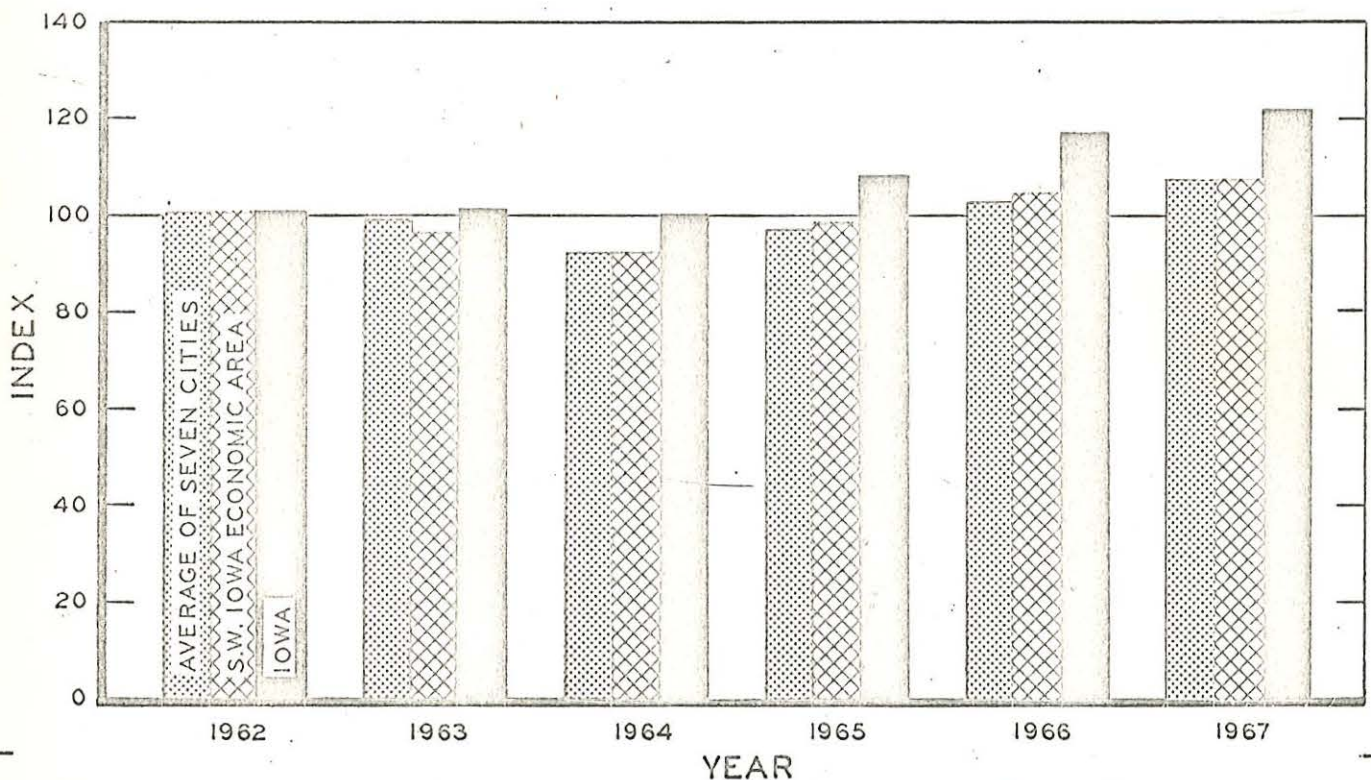
As the data in figure 20 illustrates, retail sales for all businesses in the motor vehicle, heavy materials, service and miscellaneous group indicated an increase of 34 percent during the 1962 - 1967 period. In 1962, 92 percent of the total sales in this group were from those firms with off-highway locations. This remained relatively constant throughout the study period and in 1969 the off-highway location firms constituted 91 percent of the total retail sales in the motor vehicles, heavy materials, service and miscellaneous group. Retail sales by firms in this group along the highways accounted for approximately 8 percent of the sales during the study period with the majority of these firms located along Old U.S. 34.

As has been indicated in the analysis of retail sales in Corning and Red Oak, the sales of firms located along the highways and in the highway-oriented business group reflect the changes that have occurred as a result of the relocation of U.S. 34. In order to evaluate these changes, a more detailed analysis of service station and cafe activity is necessary to determine the conditions that exist before, during, and after the highway relocation. Retail sales tax data for service stations and cafes was first analyzed on a "study area" versus "control area" basis and was then studied in detail for Corning and Red Oak.

Service Stations - General Data

A comparison was made between the trend in taxable retail sales of service stations in Red Oak, Corning, the average of seven surrounding cities, the Southwest Iowa Economic Area, and the State of Iowa.

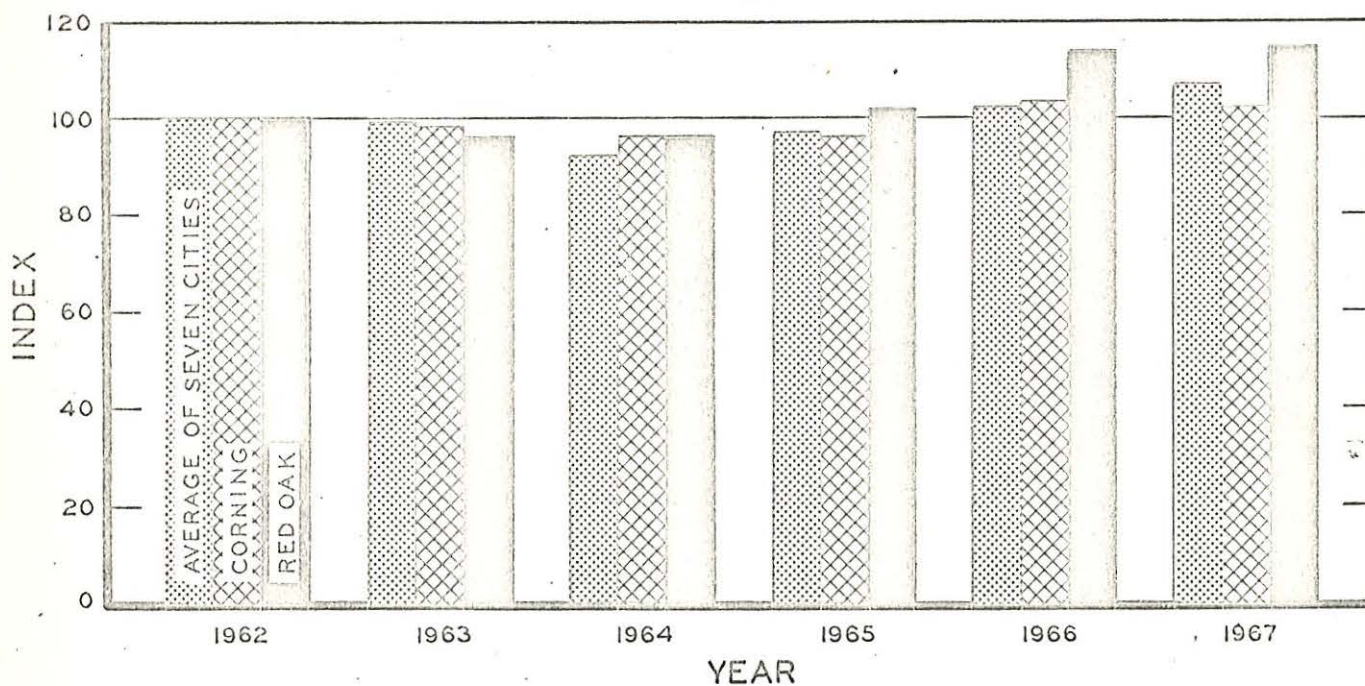
FIGURE 21- TREND IN TAXABLE RETAIL SALES OF SERVICE STATIONS IN THE STATE OF IOWA, THE SOUTHWEST IOWA ECONOMIC AREA AND THE AVERAGE OF SEVEN CITIES



As illustrated in Figure 21, the net sales of service stations for the State of Iowa increased 21.2 percent during the study period. This increase was not uniform because of a slight decrease in sales during 1964. Service station sales for the seven surrounding cities and the Southwest Iowa Economic Area followed a somewhat

lower trend during the six-year period, experiencing only a seven percent increase in taxable retail sales during this time period, with a nine percent decrease in retail sales in 1964.

FIGURE 22-TREND IN TAXABLE RETAIL SALES OF SERVICE STATIONS FOR THE AVERAGE OF SEVEN CITIES, CORNING AND RED OAK



As shown in Figure 22, service station sales in Red Oak followed a similar trend, declining slightly in 1963, then showing a steady trend upward through the remaining years. Service station sales in Corning also declined slightly in 1963 and 1964, but increased moderately in the last two years of the study period. Both the study area and the control area followed a somewhat similar trend, showing a decline in the earlier years of the study period, with a moderate recovery and increase in the later years.

The comparisons in Figures 21 and 22 indicate that during this time period service stations in Red Oak and Corning have experienced the same general trend in sales as those stations in the average of the seven ^{cities} ~~communities~~ and the Southwest Iowa Economic Area. However, X the stations in Red Oak showed a greater increase in sales than those stations in Corning. It appears that in general the service stations in Southwest Iowa, including the study towns, have not experienced the growth in retail sales of those service stations located in the remainder of the state.

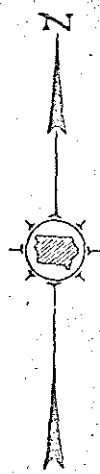
As previously indicated in this report, retail sales for service stations serve only as an indicator for the general prosperity of service stations, with the limitation being that no sales tax is paid on gasoline sales. More detailed information of service station activity in Corning and Red Oak was obtained from the Retail Sales Tax Division of the Iowa State Department of Revenue.





Service station sales are classified as "gross", "gasoline", "other", and "net". Net sales are the sales of those items subject to retail sales tax. Other sales are the sales of services and items not subject to retail sales tax. The sum of gasoline, other, and new⁺ sales are the gross sales. In order to provide a X more detailed analysis of the service station sales in Corning and Red Oak, a study was made of service station activity in these two communities.

T-72N

-55-

Plan Red



-  SERVICE STATIONS REMAINING UNDER SAME OWNERSHIP
-  SERVICE STATIONS WITH CHANGE OF OWNERSHIP
-  SERVICE STATIONS DISCONTINUING BUSINESS
-  NEW OR PROPOSED SERVICE STATION SITES

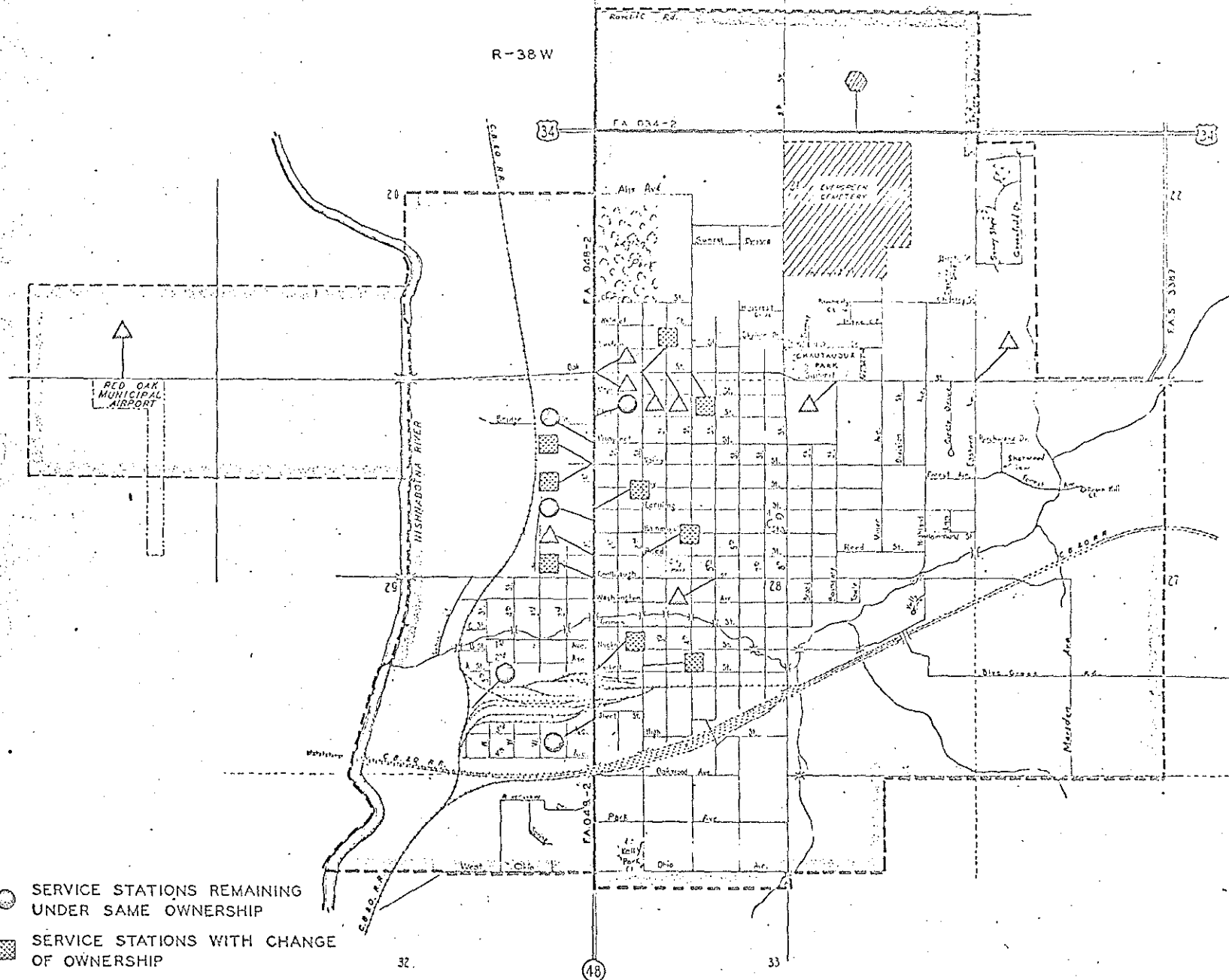


FIGURE 23 THE LOCATION OF RED OAKS SERVICE STATIONS DURING THE STUDY PERIOD

Service Stations - Red Oak

Figure 23 shows the number and the location of all service stations in Red Oak and illustrates the changes in ownership and operation of these stations during the study period. There were a total of twenty-three service stations operating in Red Oak from 1962 to 1967, eight of these stations were located on U.S. 34 and nine were located on Iowa 48. During this same time period there were three bulk plants in operation in Red Oak, one of which was located on Iowa 48, the remainder in off-highway locations.

As Figure 23 indicates, the number and the frequency of ownership changes for Red Oak service stations was rather high during the study period. Only six of the twenty-four stations remained in continuous operation, under the same ownership, during this time period. There were no stations along U.S. 34 that remained in continuous operation during the study period.

There were eight service stations that discontinued business during the six year study period. Five stations were razed and a new building was constructed or the existing structure was remodeled and converted to other commercial usage. Two stations are now used for storage facilities and the remaining station which closed in 1967 has since been reopened for business.

Table 3 shows the general operation of service stations and bulk dealers in Red Oak during the study period.

Table 3 - Selected Data for Service Stations
and Bulk Dealers, Red Oak, Iowa

YEAR	SALES		FIRMS OPERATING	OWNERSHIP CHANGES
	GROSS	NET		
1962	2,194,866	538,207	23	6
1963	2,104,164	539,559	20	4
1964	2,115,253	543,284	17	2
1965	2,237,858	523,581	17	2
1966	2,482,816	551,709	17	5
1967	2,535,568	564,381	17	2

As illustrated in Table 3, the gross sales of service stations and bulk dealers in Red Oak increased every year except 1962 and 1963. This decrease in 1962 can partially be attributed to the closing of three stations, of which one was a bulk dealer. Three other stations were also noted as having a large decrease in sales during this time period. One of these stations changed owners twice in 1963 and another closed the following year. As table 3 illustrates, net sales, which are sales subject to retail sales tax, showed a slight increase until 1965. However, since 1965, Red Oak stations have experienced an exceptional increase in net sales, indicating that many of these firms are now offering more merchandise to the local customer. X

Ownership and management changes were quite frequent during the study period. One station ^{on} of Iowa 48 changed ownership seven times from 1962 to 1967, with four changes occurring in 1966. Another station on Iowa 48 changed management three times in 1962 before finally discontinuing business. Bulk dealerships remained X

more stable during the study period. The only significant change was the discontinuance of a bulk dealer operation and the conversion of this operation to a tank wagon service in conjunction with another service station in 1962.

FIGURE 24 - DISTRIBUTION OF GROSS SALES BY LOCATION, SERVICE STATIONS AND BULK DEALERS, RED OAK, IOWA

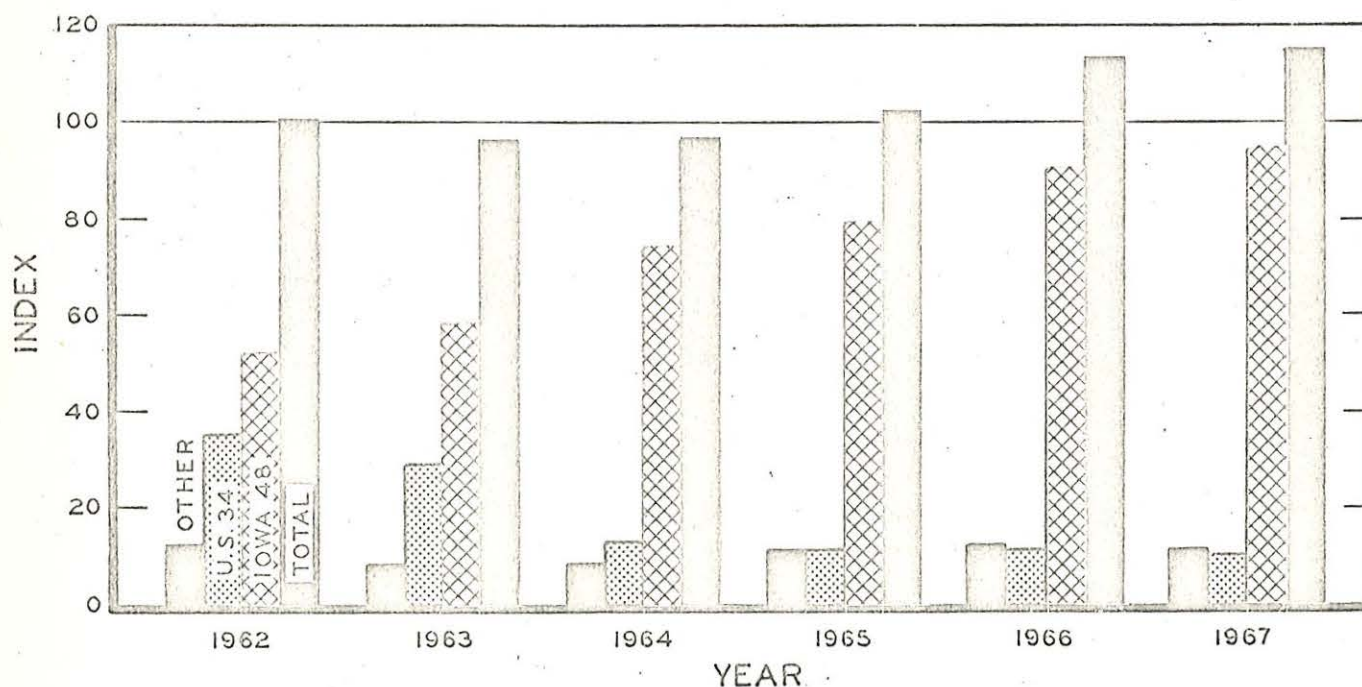


Figure 24 shows the gross sales of service stations and bulk dealers in Red Oak by U.S. 34, Iowa 48, and other city locations. Before the relocation of U.S. 34, Iowa 48 locations sold approximately 56 percent of Red Oak's total gross sales, while U.S. 34 locations sold 32 percent. The remainder was sold by other city locations. Prior to the relocation of U.S. 34, there were considerable changes in service station activity on U.S. 34. The majority of these changes occurred when a service station owner that

previously operated two stations, one on U.S. 34 and one on Iowa 48, moved his entire operation to an Iowa 48 location. This change occurred in 1963. This change, along with the closing of other stations on U.S. 34, decreased the total gross sales of service stations on U.S. 34 to approximately nine percent of the total gross sales for Red Oak stations in 1967. This reduced the gross sales of service stations on U.S. 34 locations to approximately the same level as those stations in other city locations. Except for a small decrease in gross sales in 1963, service stations in other city locations experienced very little change in business activity during the study period. However, with the operational change previously mentioned plus the remodeling and expansion of service stations on Iowa 48, the service stations located on this highway had a substantial increase in sales during the six year period. In 1967, service stations on this location constituted approximately 81 percent of the total gross sales of all Red Oak stations.

As illustrated in Figure 25, bulk dealers constituted a minimal and static percentage of total gross sales for Red Oak firms. With this type of business, bulk dealers rely primarily upon the local customer for their trade and the relocation of U.S. 34 has not affected their sales. The changes that have occurred in total gross sales of Red Oak firms ^{have} has been the result of changes in service station activity.

FIGURE 25- DISTRIBUTION OF GROSS SALES, SERVICE STATIONS, AND BULK DEALERS, RED OAK, IOWA

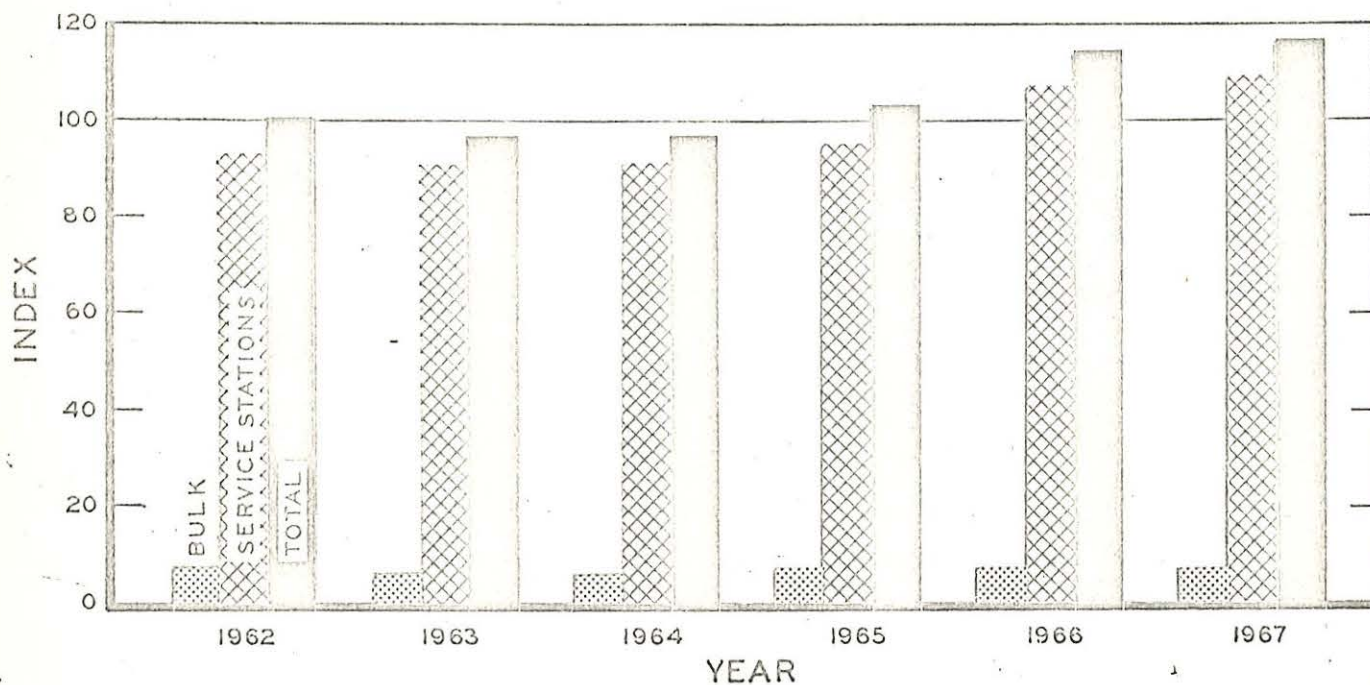


FIGURE 26- TREND IN GROSS SALES OF SERVICE STATIONS ALONG IOWA 48 BY TYPE OF OPERATION, RED OAK, IOWA

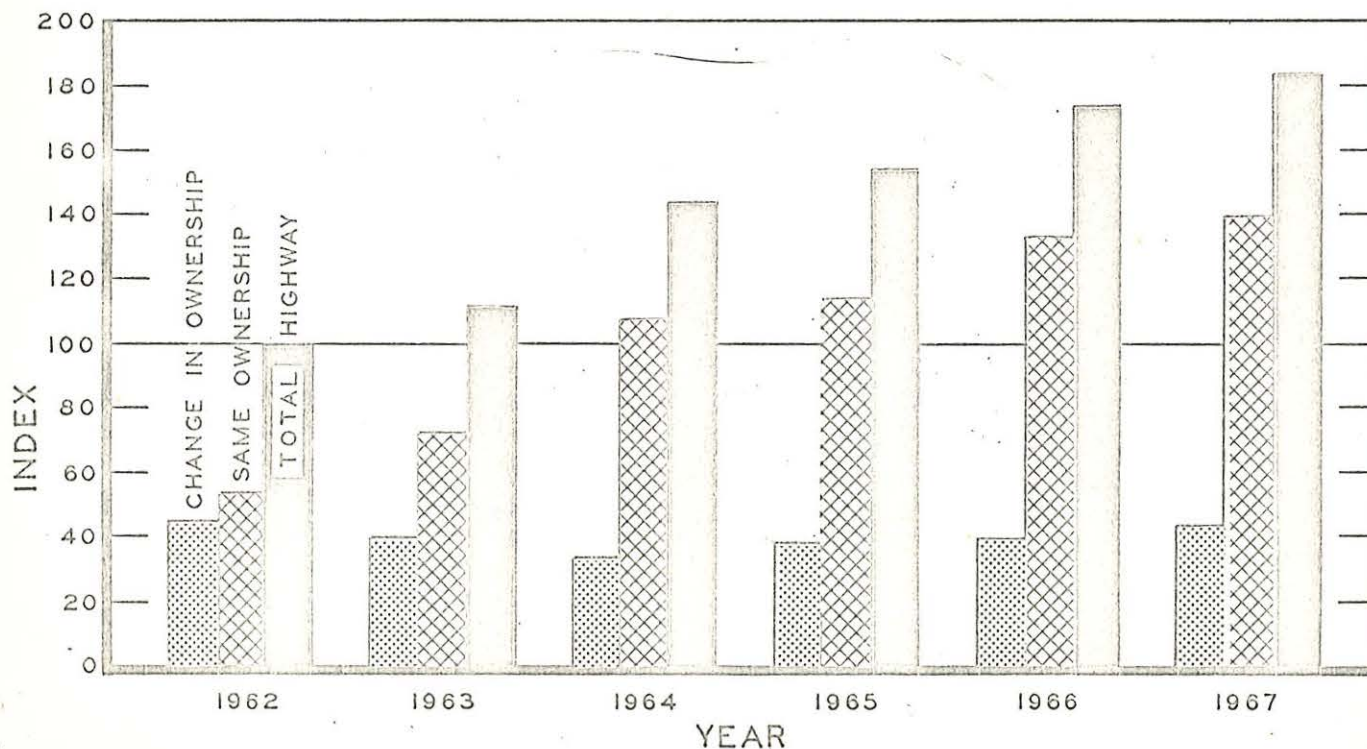


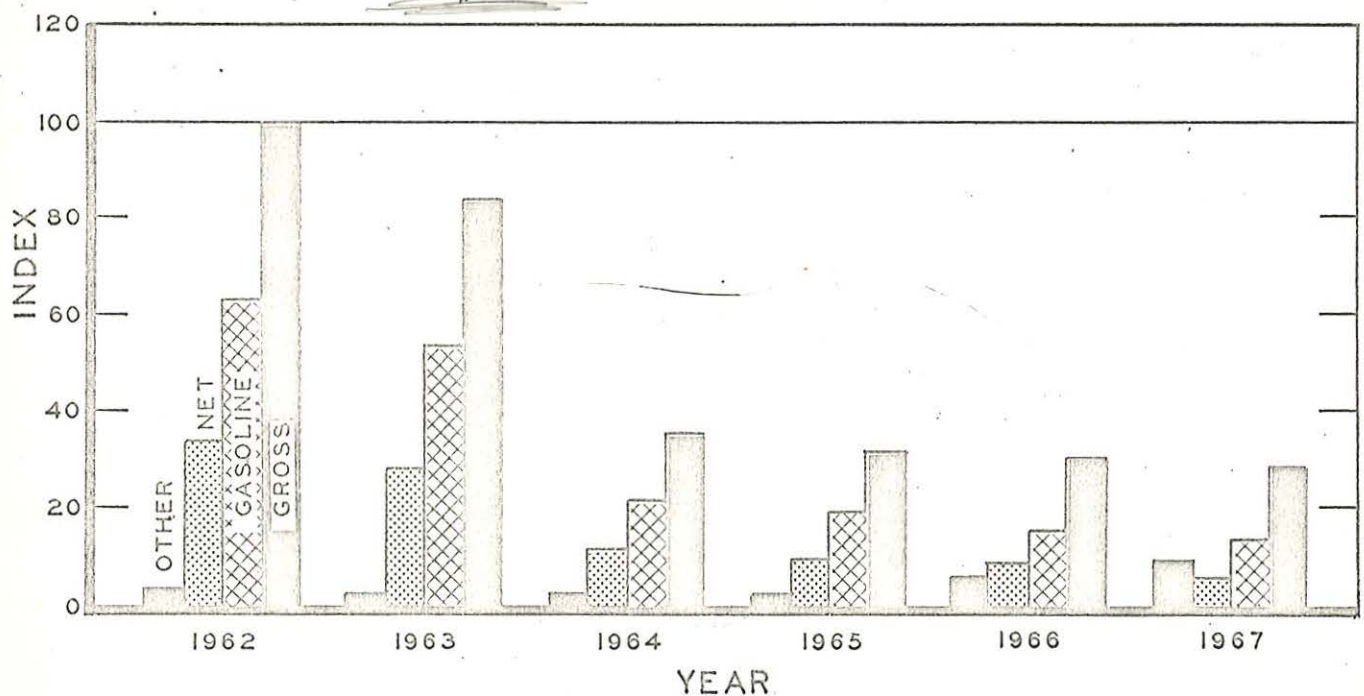
Figure 26 compares the gross sales of the service stations along Iowa 48 remaining in continuous operation during the study period to the gross sales of service stations along Iowa 48 with ownership changes. This figure illustrates how frequent ownership changes may affect the gross sales of service stations. Those service stations remaining under the same ownership did not have the erratic sales trends as shown by those stations with more frequent changes in ownership. Furthermore, those stations with the same ownership were able to establish a steady growth throughout the study period. (The stations remaining under the same ownership are more likely to have the constant patronage of the local residents and are not as dependent upon the seasonal tourist trade.) Those stations with frequent ownership changes will naturally be more susceptible to the loss in both local and tourist trade.

Figure 27 illustrates the distribution of service station sales on U.S. 34 locations in Red Oak. The decrease in sales by U.S. 34 located stations can be generally attributed to the operational changes made by one service station operator in Red Oak. This owner operated two service stations, one on Iowa 48 and one on Old U.S. 34. In 1962, sales made by this individual's station on U.S. 34 were approximately two-thirds of the total gross sales of all service stations located on U.S. 34. In late 1963 the operation of the station was discontinued and the business was transferred to the station on Iowa 48. This change is illustrated by the

decrease in gross sales shown in Figure 27. As this figure illustrates, there was also a continual decrease in gasoline sales by those stations located on U.S. 34. Much of this decline in gasoline sales is the result of the change in traffic patterns in Red Oak. There were additional closures of service stations on U.S. 34 during the study period, one in 1964, and two in 1967.

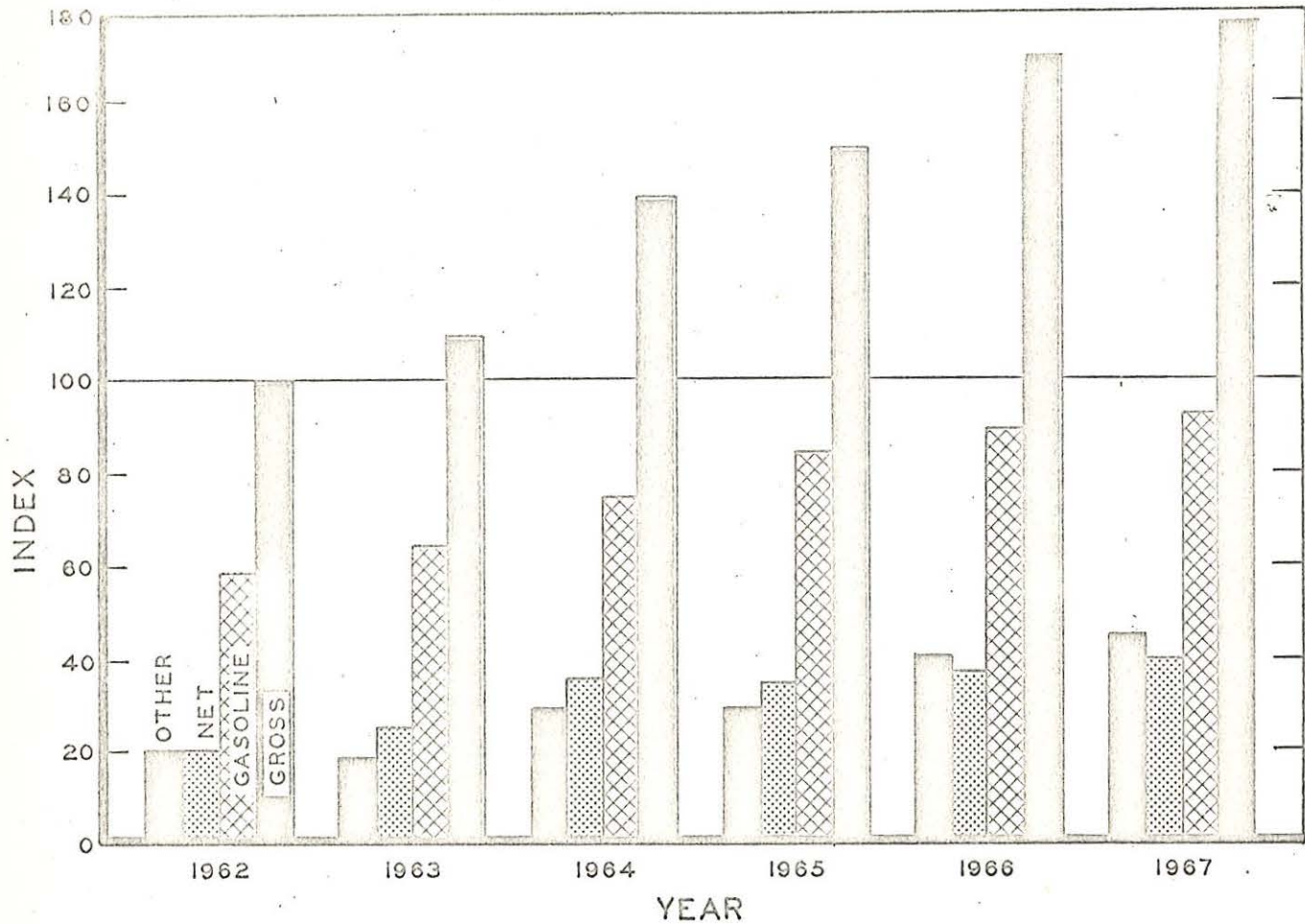
The increase in the "other" category indicates that the remaining stations are now offering more in the way of services to offset the decrease in sales of the "gasoline" and "net" categories resulting from the loss of through traffic customers due to the relocation of U.S. 34.

FIGURE 27-DISTRIBUTION OF SERVICE STATION SALES ON U.S. 34 LOCATIONS, RED OAK, IOWA



DARK RED

FIGURE 28-DISTRIBUTION OF SERVICE STATION SALES ON IOWA 48 LOCATIONS, RED OAK, IOWA



GREEN

As illustrated in Figure 28, the sales of service stations on Iowa 48 have shown substantial growth during the six year period. As mentioned previously, operational changes made by one service station owner played a major role in the growth of gross sales for service stations on Iowa 48; in 1962, gasoline sales were 58.6 percent of the gross sales, decreasing to 52.2 percent in 1967. However, the percentage of "other" and "net" sales has increased during the study period, indicating that these service stations are now offering more merchandise and service to the local customer.

FIGURE 29- DISTRIBUTION OF SERVICE STATION SALES IN
OTHER CITY LOCATIONS, RED OAK, IOWA

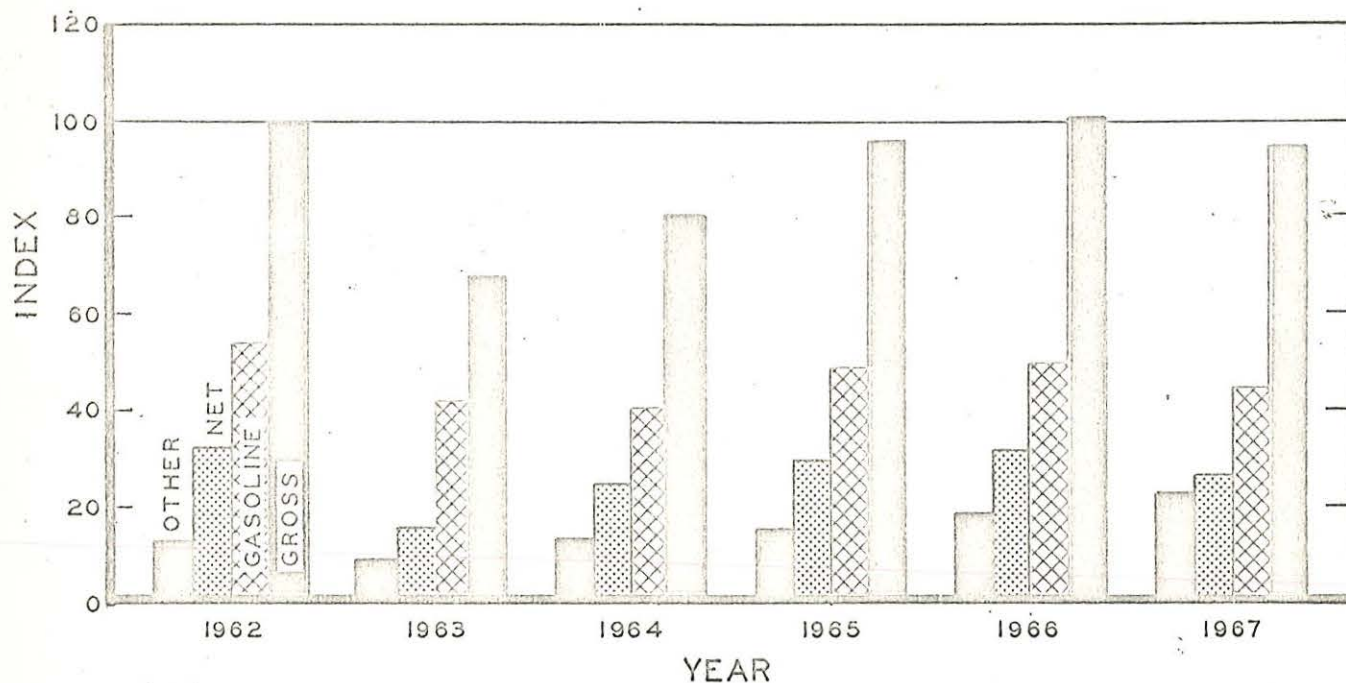


Figure 29 illustrates the distribution of service station sales in other city locations. The large decrease in gross sales from 1962 to 1963 was the result of two stations closing and one station changing ownership three times in the 1962 to 1963 period. The remaining stations show a recovery in gross sales during the 1964 to 1966 interval, but experienced a decrease in sales in 1967. This decrease was partially the result of one station discontinuing business in late 1967. From the data presented it does not appear that the relocation of U.S. 34 and the resultant traffic changes have had any appreciable effect upon the sales made by service stations in off-highway locations, but rather the changes that occurred were due to other social-economic factors existing in Red Oak.

MAP OF CORNING IOWA POPULATION 2041

- SAME OWNERSHIP
- ◻ CHANGE OF OWNERSHIP
- △ DISCONTINUED BUSINESS

LEGEND

SECTION LINES
 CORPORATION LINE
 STATE HIGHWAY SYSTEM U.S. NO.
 STATE HIGHWAY SYSTEM STATE NO.
 CITY STREETS AND LOCAL ROADS
 RAILROAD
 CENTRAL BUSINESS DISTRICT
 PUBLIC PARKS
 CEMETERY

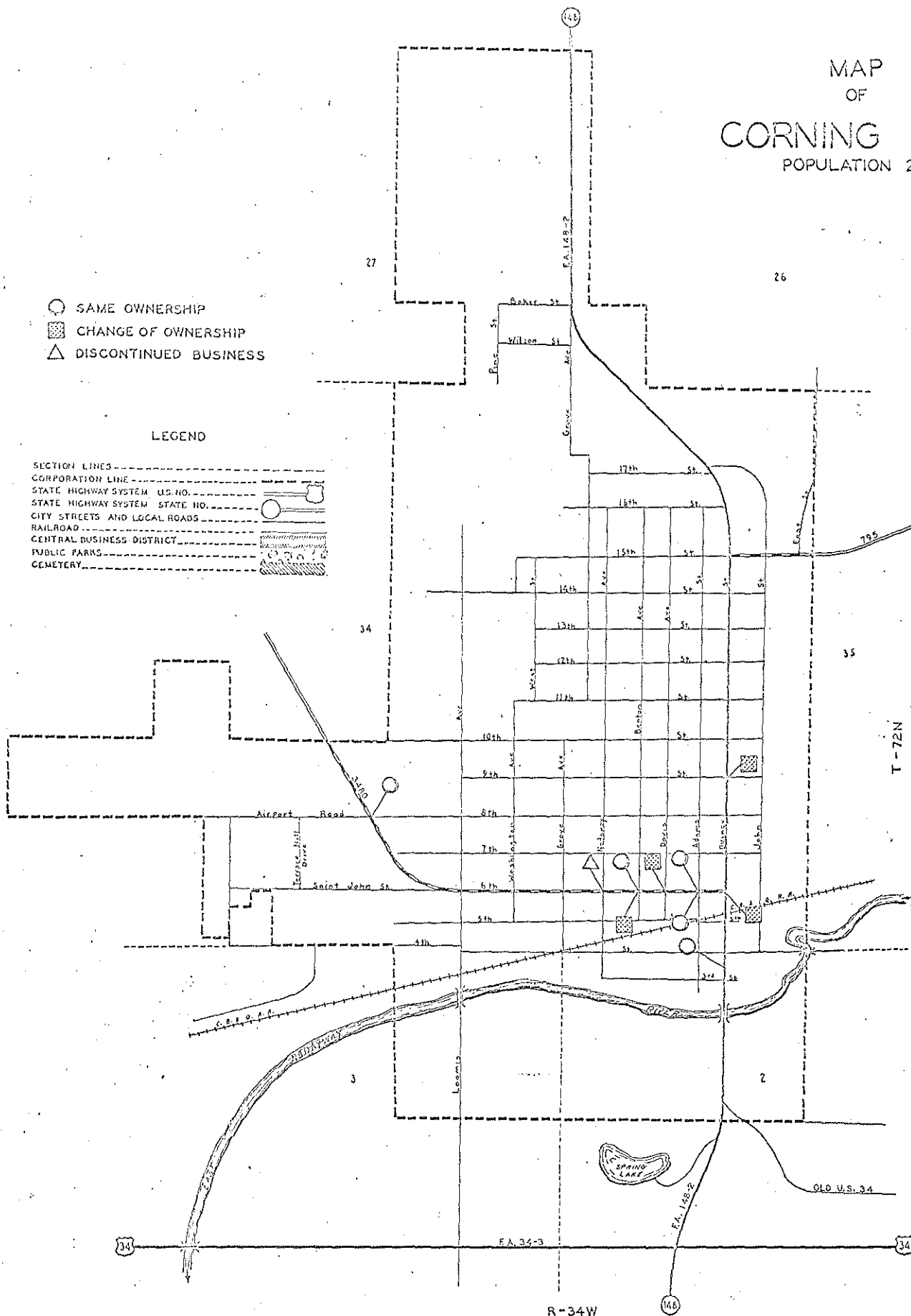


FIGURE 30 THE LOCATION OF CORNING'S SERVICE STATIONS DURING THE STUDY PERIOD

Service Stations - Corning

Figure 30 shows the number and the location of all service stations in Corning and illustrates the changes in ownership and operation of these stations during the study period. There were a total of ten stations operating in Corning from 1962 to 1967. Eight of these facilities were located on Old U.S. 34. While there were no individual bulk dealer operations in Corning, several service stations operated a tankwagon service in conjunction with their regular business.

As indicated in Figure 30, ownership of service stations remained fairly stable during the study period. Out of ten service stations, five remained in continuous operation under the same ownership during this six year interval. Of the five remaining stations, four changed ownership at least once, and one was permanently closed during the later years of the study period. This station was sold to a nearby church and has since been remodeled and repainted for use as a Parish Hall. Since the end of the study period, another station on Old Highway 34 has closed and part of it is being used as a repair shop. Several other stations have remodeled and expanded their facilities in order to be more competitive and provide better service.

Table 4 shows the general operation of service stations and bulk dealers in Corning during the study period.

Table 4 - Selected Data for Service Stations
and Bulk Dealers, Corning Iowa

YEAR	SALES		FIRMS OPERATING	OWNERSHIP CHANGES
	GROSS	NET		
1962	1,474,429	463,619	10	1
1963	1,437,823	453,697	10	1
1964	1,416,729	483,417	10	1
1965	1,423,705	459,694	10	0
1966	1,521,550	482,331	10	1
1967	1,507,225	457,645	9	3

As illustrated in Table 4, both gross and net sales of service stations in Corning did not increase appreciably during the study period. The highest year for gross sales was in 1966, just after the relocation of U.S. 34. In the earlier years of the study period, the fluctuation of gross sales was the result of economic factors, other than the change in traffic. Frequent ownership changes and the closing of one service station resulted in a decrease in total sales during 1967. However, frequent changes of ownership does not appear to be as strong a factor in gross sales of service stations in Corning as it is in many other areas. Service stations in Corning appear to have a substantial local trade with their tankwagon service. As a result, this type of service is not as susceptible to changes in tourist trade.

Figure 31 shows the gross sales of service stations and bulk dealers in Corning by on or off-highway locations. Out of ten service stations in Corning, eight are located on Old Highway 34, with the remaining two being located on Iowa Highway ¹⁴⁸ 48. These two

stations are included in the "other" column in Figure 31. The stations showing the highest volume of sales are those located on Old Highway 34. Several of these stations have a large bulk operation along with their service station sales. Since Corning is a rurally-oriented community, a large portion of the bulk gasoline sales are made to farmers. This large volume of tankwagon sales would have a definite effect on total sales of a service station and it also could be affected by seasonal changes and farm crop productivity. This may account for the variation in sales for several of the service stations in Corning.

FIGURE 31 - DISTRIBUTION OF GROSS SALES BY LOCATION, SERVICE STATIONS AND BULK DEALERS, CORNING, IOWA

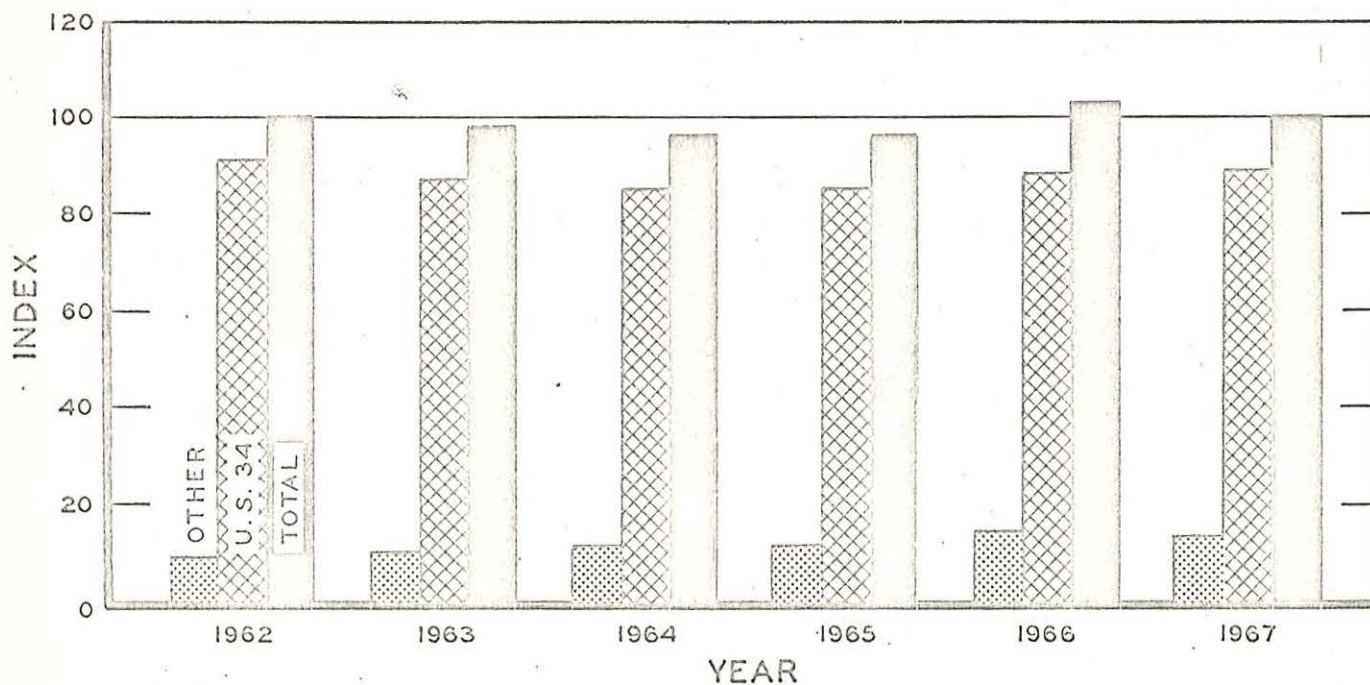


FIGURE 32-TREND IN GROSS SALES OF SERVICE STATIONS ALONG U.S. 34 BY TYPE OF OPERATION, CORNING, IOWA

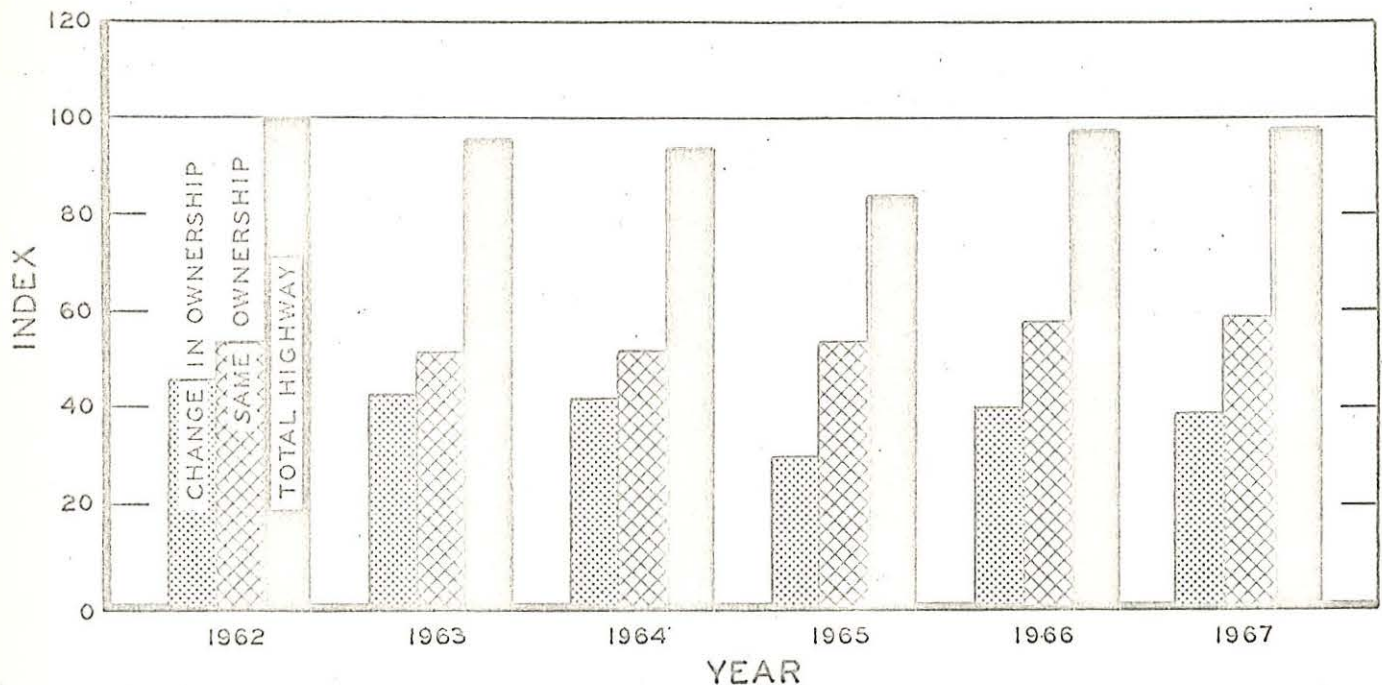


Figure 32 shows a comparison of the gross sales of the service stations along U.S. 34 by type of operation. The data presented illustrates the impact that ownership changes have on the gross sales of service stations. Those service stations remaining under the same ownership during the study period did not have the erratic sales trend that was experienced by service stations involved in more frequent changes of ownership and management. Those service stations not changing ownership are more likely to have built up a local trade, and are therefore not as dependent upon the traveling public for their business. Those service stations along U.S. 34 that had changes in ownership during the study period were the lowest in gross sales in 1965, the year that the relocation was completed. This would indicate that these stations had depended upon the traveling public for the majority of their sales.

FIGURE 33-DISTRIBUTION OF SERVICE STATION SALES ON U.S. 34
LOCATIONS, CORNING, IOWA

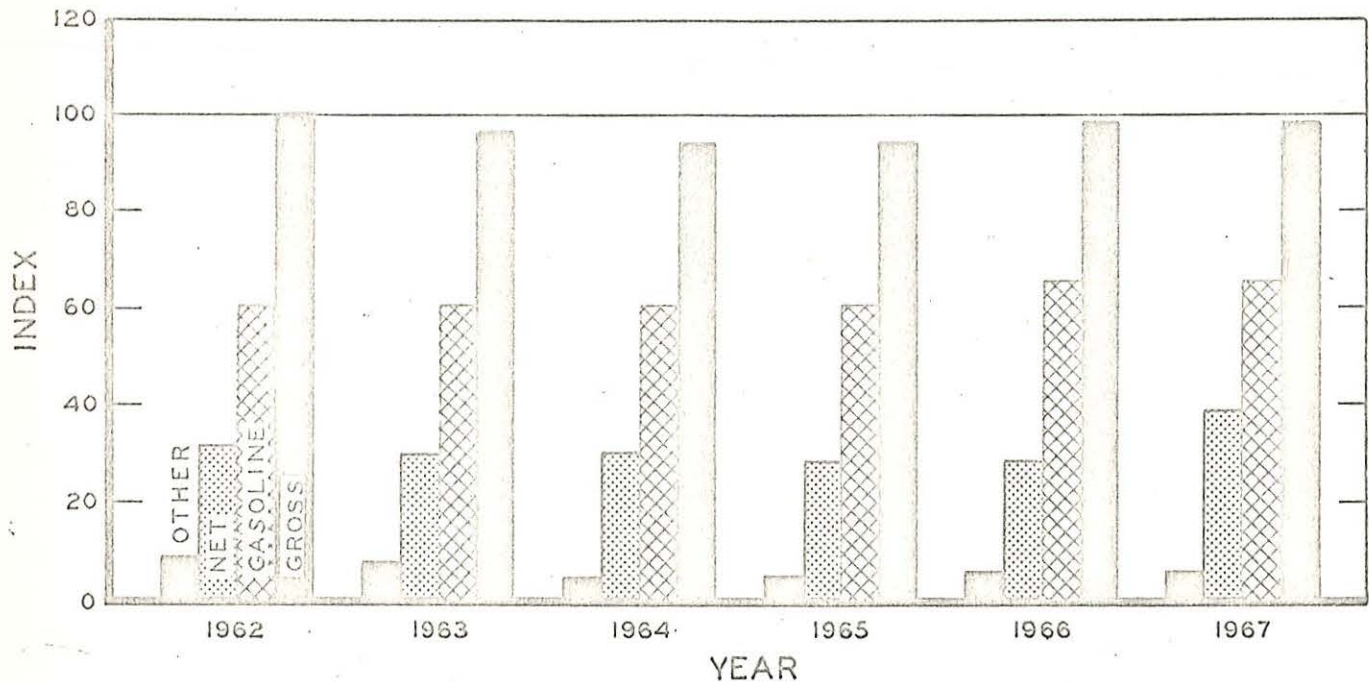
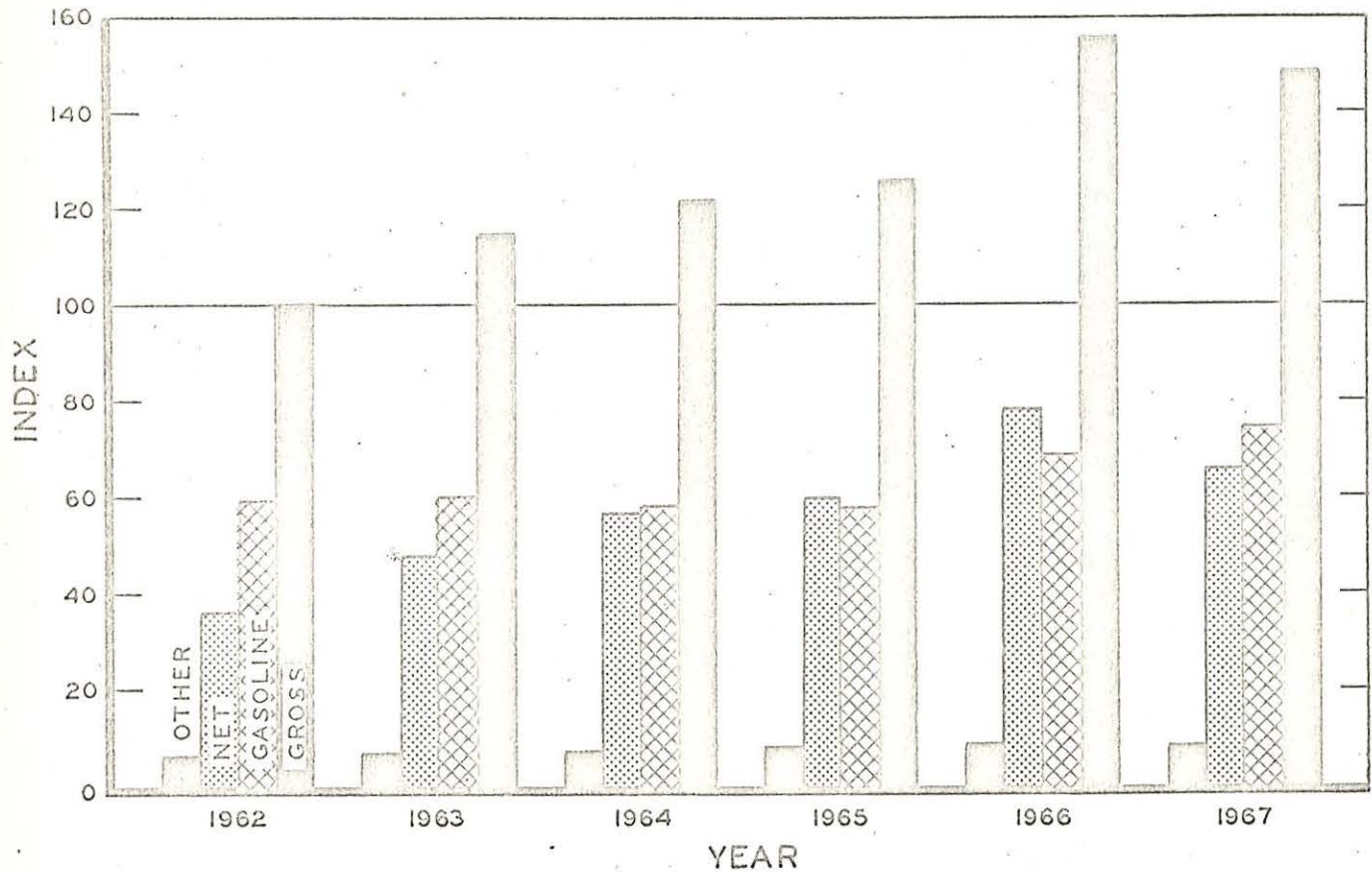


Figure 33 illustrates the distribution of sales for service stations with U.S. 34 locations. The data presented here indicates that gasoline sales for these service stations were relatively stable throughout the six year study period. The only significant changes were in 1966 and 1967 when they increased slightly. Net sales, which are sales subject to retail sales tax, followed a similar trend, decreasing slightly in the ^{latter} years of the study period. Other sales showed the greatest variation, decreasing nearly 4 percent during the study period, indicating the service stations on U.S. 34 sell mainly gasoline and oil products and do not deal in a large volume of services.

FIGURE 34-DISTRIBUTION OF SERVICE STATION SALES IN OTHER CITY LOCATIONS, CORNING, IOWA



GREEN

Figure 34 illustrates the distribution of service station sales in other city locations. These service stations are located on Iowa Highway 148 and have experienced an increase in overall sales during the study period. One firm operates a small grocery store in conjunction with the service station. Another station located on Iowa Highway 148 also sells some groceries along with appliances and lawn mowing equipment. More merchandise which is subject to retail sales tax is now being offered to local customers by these stations. Net sales by these firms have shown a substantial increase during the 6 year period. However, their gasoline sales are becoming a smaller

portion of the total gross sales. This trend of service stations to offer more merchandise is prevalent not only in Corning but in many areas of Iowa and the United States.

The results of the study made on Corning service stations indicate a moderate increase in total sales during the study period. Both on-highway and off-highway stations as a group, experienced a decline in sales during the earlier years of the study period and a general upward trend in the later years. Among the on-highway stations the increased sales trend is reflected in the sale of gasoline rather than services. For service stations located on Iowa Highway 148, gasoline sales have experienced little or no increase during the study period, with the ratio of gasoline sales to total gross sales gradually decreasing, especially during the latter years. This comparison indicates that these service stations have continued to show profits and growth in operation by offering a wider variety of merchandise and services subject to retail sales tax.

A stabilizing factor in service station sales and in the overall economy of Corning is continuing local trade. Corning is a rurally^xoriented community located in an agricultural area. This ^{merchandise} climate ^x has created the need for service stations that can not only provide gasoline and fuel-related products, but also goods and services to the rural consumer. Some of the service stations in Corning have expanded their ~~merchandise~~ facilities to meet this demand. It would appear that the minimal growth that has occurred in service station sales in Corning during the study period did result

from the loss in trade to the thru-traffic customers. However, this loss in trade has not affected those stations that relied upon the local customer for their trade and those stations that were able to expand their business and offer more merchandise subject to retail sales. Until gasoline sales stabilize in Corning, there will undoubtedly be more closures of those service stations that are presently operating with a low margin of profit. When service station sales have stabilized, those stations remaining can be expected to operate with a normal increase in business.

Service Stations - Summary

Service station activity in Red Oak and Corning and the resultant effect the relocation of U.S. 34 has had upon the sales made by these firms has been evaluated both on a "control area" basis and on a "before and after" basis with emphasis placed on the sales activity and operation of individual stations. While it is difficult to pinpoint the actual economic consequences resulting from a bypass, it has been possible through a detailed analysis of service station activity in Red Oak and Corning to determine the trends in retail sales of these firms and to relate these trends and changes to highway changes.

The result of this analysis indicates that those service stations, operating with a low margin of profit, undergoing frequent ownership and management changes, and having highway locations, were very susceptible to the highway change and most of these

stations suffered a loss in sales upon completion of the U.S. 34 relocation.

Those stations remaining under the same ownership during the study period had an opportunity to build up a local trade and were not as dependent upon the thru-traffic customer for their trade. Therefore, these stations were not severely affected by the changing traffic pattern. However, there has been a trend for service stations to offer more merchandise to the customer and not rely as much upon the sale of gasoline as their only source of income. This was true of many stations in Red Oak and Corning where increased sales of non-automotive related products occurred during the study period.

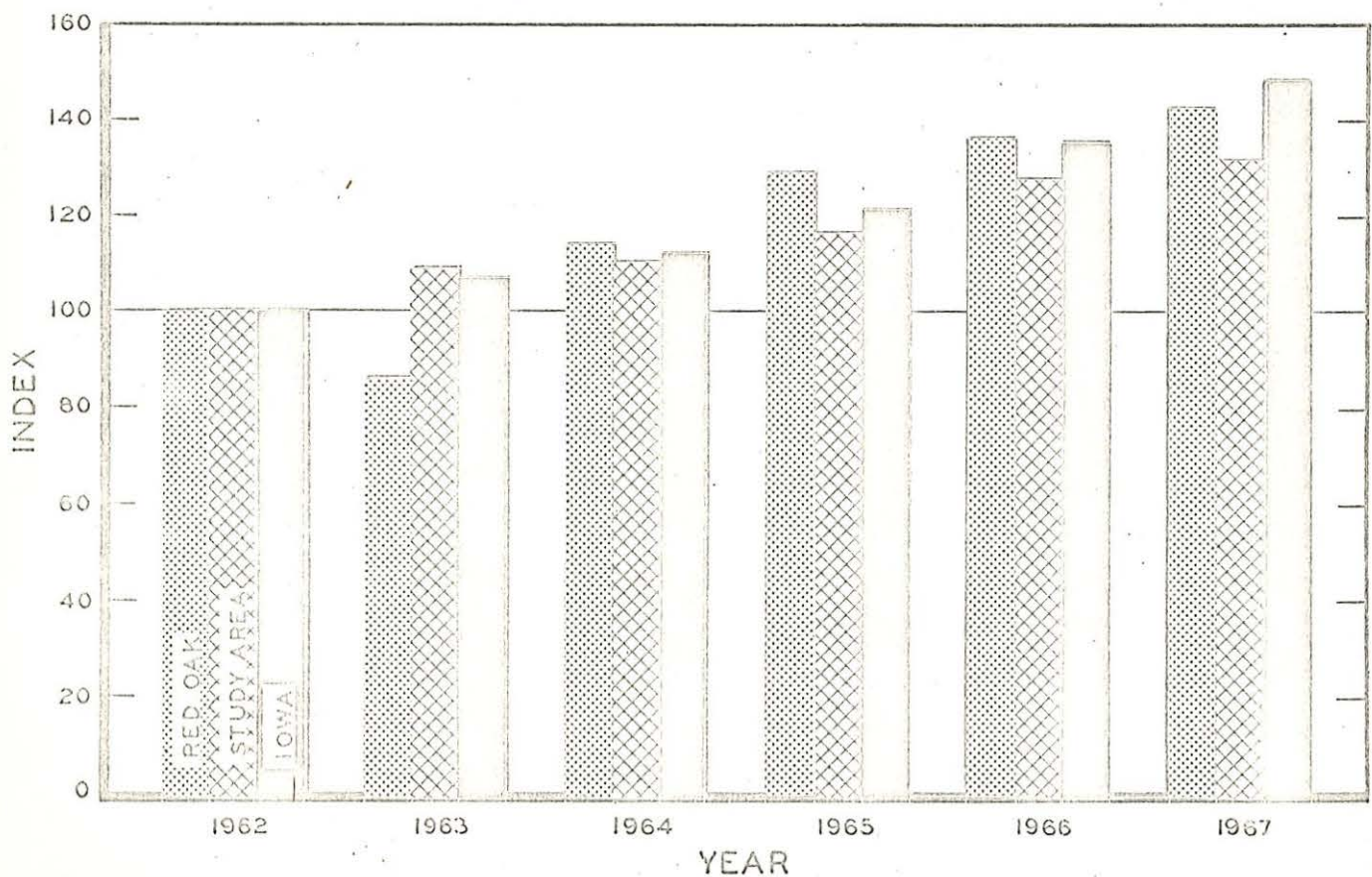
The major change that happened during the six year interval in Red Oak was the transfer of service station sales by location. Several stations previously located on U.S. 34 shifted their operations to Iowa 48 locations. In Corning, the closure of several stations operating with a low margin of profit and the additional sales of merchandise not previously sold, ^{have} ~~has~~ been the most significant changes occurring in service station activity.

It is anticipated that as long as there are still service stations operating with a low margin of profit and experiencing ownership changes, there will continue to be fluctuations in service station activity in Red Oak and Corning.

Cafes - Red Oak

Figure 35 shows the trend in taxable retail sales of the cafe group in Red Oak, the Southwest Iowa Economic Area, and the State of Iowa. This group includes all cafes and related eating establishments such as cafeterias, lunch counters, and fraternal organizations. It should be noted that retail sales here may include a limited number of "liquor-by-the-drink" sales and other incidentals that are not ordinarily sold by cafes. In Red Oak, cafes as a group experienced a 14.6 percent decrease in sales in the first

FIGURE 35-TREND IN TAXABLE RETAIL SALES OF THE CAFE GROUP IN RED OAK, THE SOUTHWEST IOWA ECONOMIC AREA AND THE STATE OF IOWA



year of the study period, increasing thereafter to ^{show}~~shown~~ a 42.5 percent growth for the entire study period. This compares to a steady overall growth of 30.5 percent for the Southwest Iowa Economic Area and a 48.4 percent for the State of Iowa.

A more detailed study of this group was made for the city of Red Oak, using only cafes, cafeterias, and other eating places; omitting night clubs, key clubs, and eating facilities for employees. This detailed study shows a 47.1 percent growth in sales over the study period. Further analysis of this comprehensive study indicates that while the relocation of U.S. 34 had little effect on total sales of cafes in Red Oak, it did affect the distribution of sales by location in Red Oak.

FIGURE 36-TREND IN CAFE SALES BY LOCATION, RED OAK, IOWA

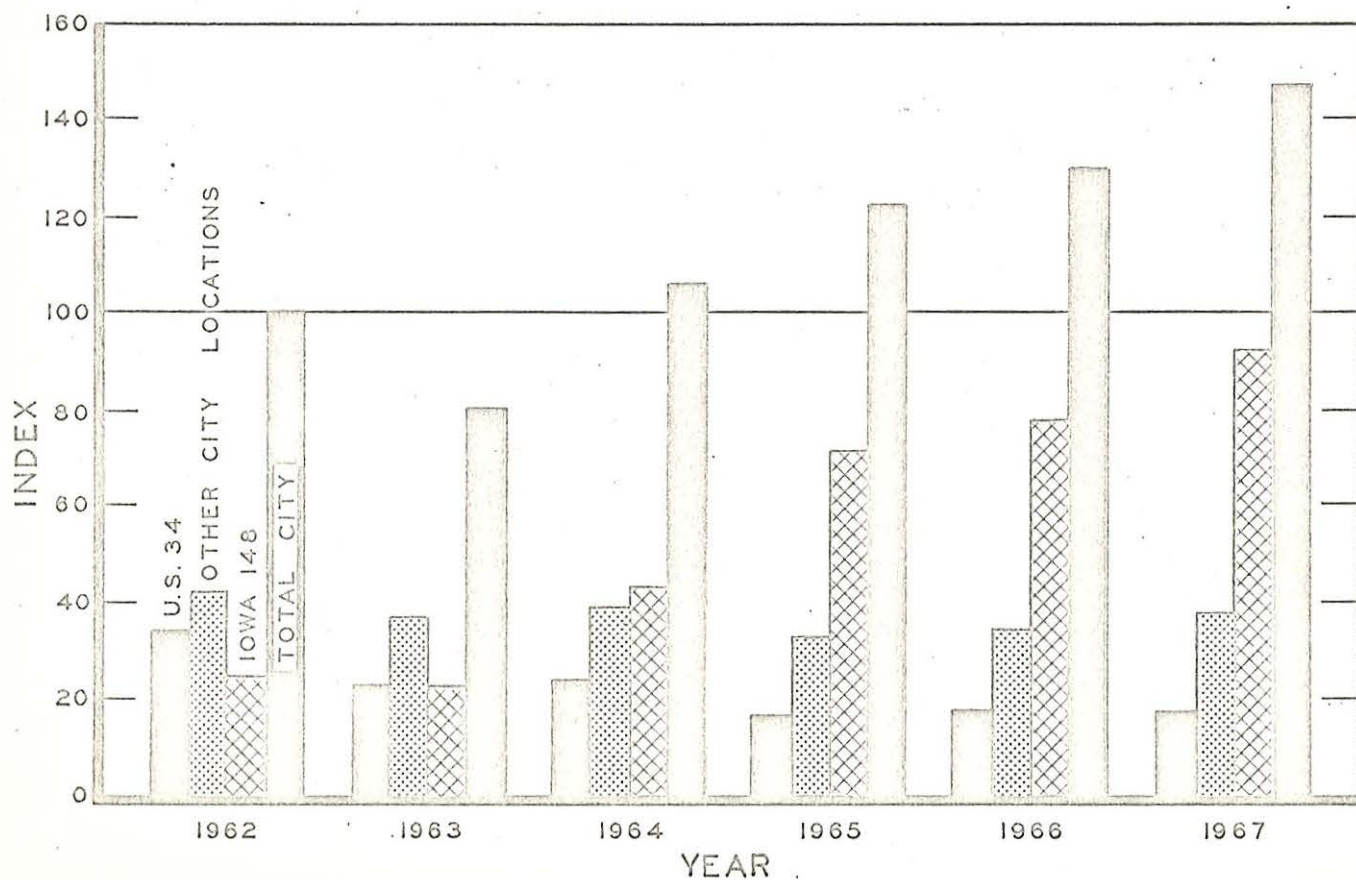


Figure 36 shows the retail sales comparison of cafes located along U.S. 34, Iowa 48, and those located in other city locations. The relocation of U.S. 34 and the resulting loss in trade to the traveling public did have an impact upon cafes in Red Oak, particularly those located on U.S. 34.

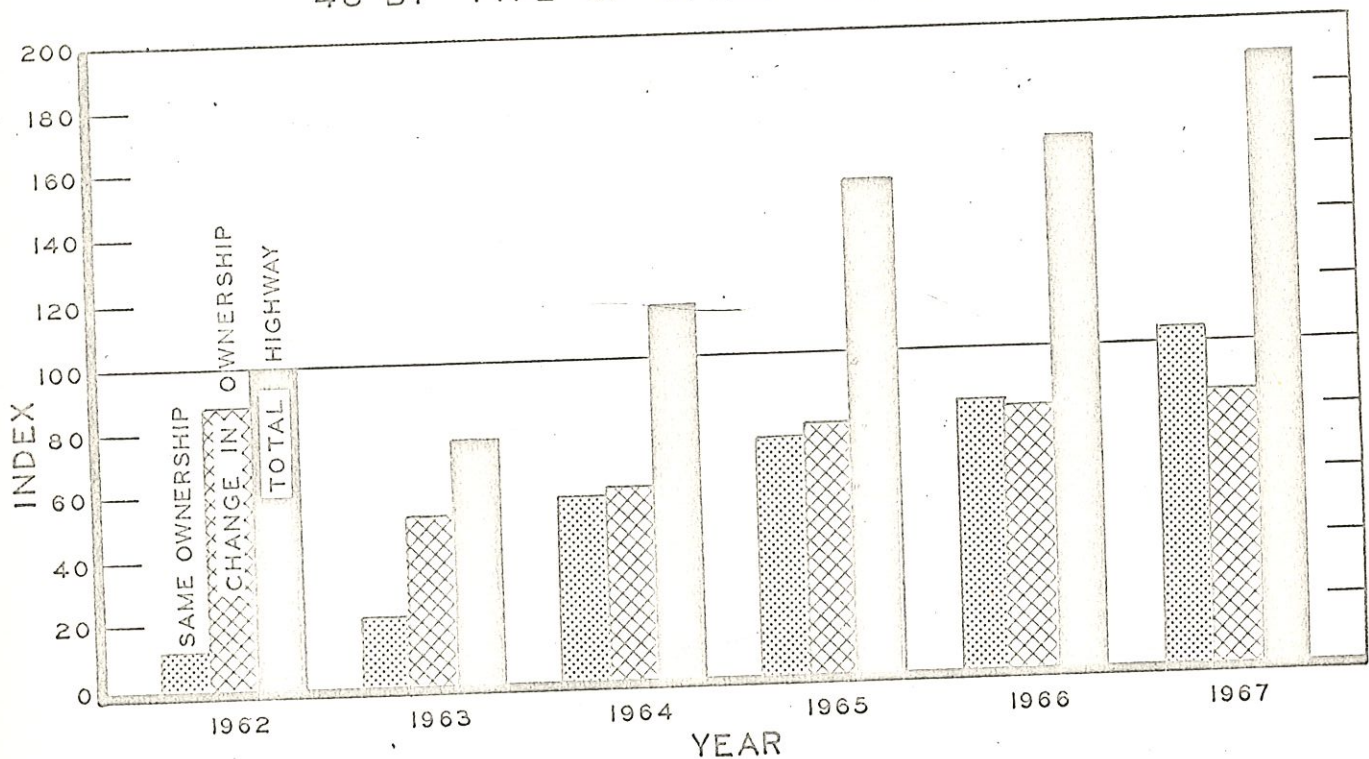
Cafe sales on U.S. 34 decreased twice during the study period, once in 1963 before the relocation took place, and again in 1965 immediately after the relocation. The first decrease was due to the temporary closing of a cafe with a high volume of sales. Since the relocation, the growth in cafe sales on U.S. 34 has been minimal. These decreases and the low growth now experienced can be attributed in part to the loss in trade to the thru traffic customer.

Iowa 48 now exists as the only primary highway through the center of Red Oak. This highway serves as one of the main collector roads for traffic from U.S. 34 to the Red Oak Area. This shift in traffic patterns has resulted in a change in cafe locations to Iowa 48 and an extensive growth in cafe sales on this highway. In 1962, cafe sales on Iowa 48 represented 24.1 percent of the total cafe sales in Red Oak. By 1967, Iowa 48 locations accounted for 61.7 percent of the total sales.

Cafe sales in other city locations were unstable during the entire study period. The slight overall decrease in sales by these firms during the six year period may be due in part to the development of other cafes on highway locations and the resulting change in cafe trade.

Changes in ownership or management will also influence cafe sales. As illustrated in Figure 37, those cafes remaining under the same ownership show a more stable rate of growth in sales than those that have experienced changes in ownership. Those businesses that remain under the same ownership tend to build up local patronage and are not as dependent upon tourist trade.

FIGURE 37- TREND IN CAFE SALES ALONG U.S. 34 AND IOWA 48 BY TYPE OF OPERATION, RED OAK, IOWA



GREEN

Cafes - Corning

Figure 38 shows the trend of taxable retail sales for the cafe group in Corning, the Southwest Iowa Economic Area, and the State of Iowa. This group includes all cafes and related establishments such as night clubs, cafeterias, lunch counters, etc. These Corning firms experienced a decrease in retail sales of about 29 percent from 1962 to 1966. This trend was reversed in 1967 when sales increased approximately 23 percent over 1966. This rise was partially due to the opening of a new cafe. The overall effect in the cafe group retail sales during the study period was a decline of about 13 percent.

FIGURE 38-TREND IN TAXABLE RETAIL SALES OF THE CAFE GROUP IN CORNING, STUDY AREA, AND THE STATE OF IOWA

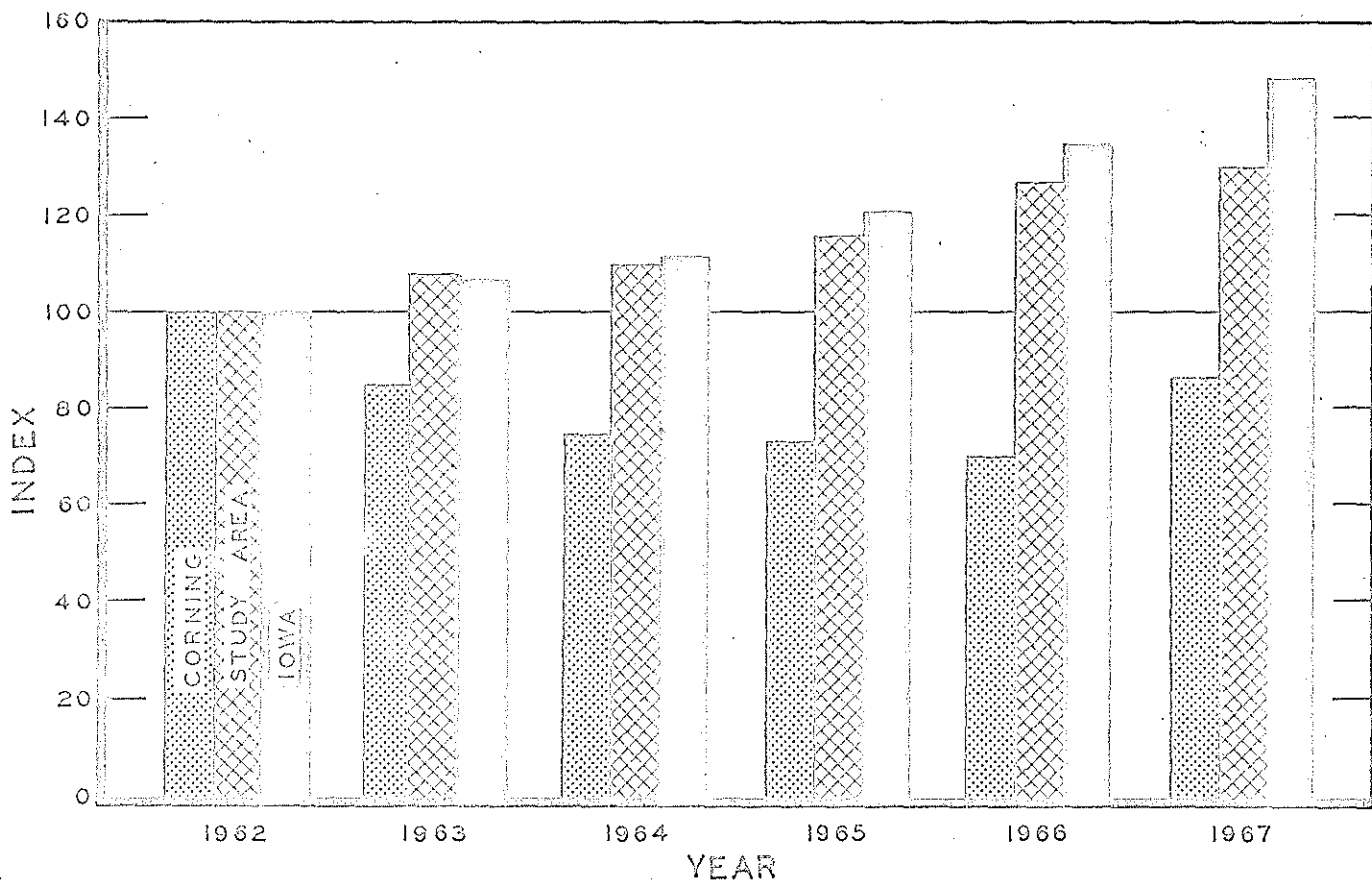
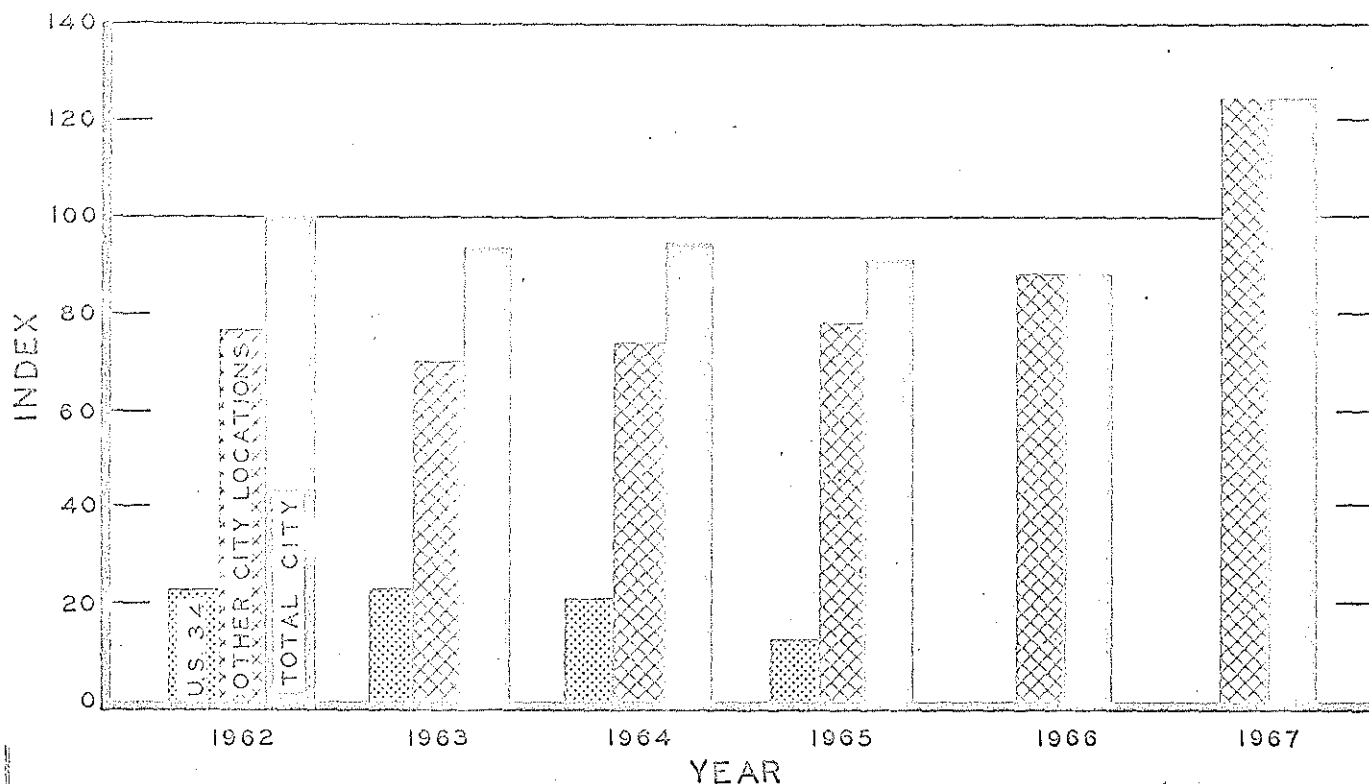


FIGURE 39-TREND IN CAFE SALES BY LOCATION, CORNING, IOWA



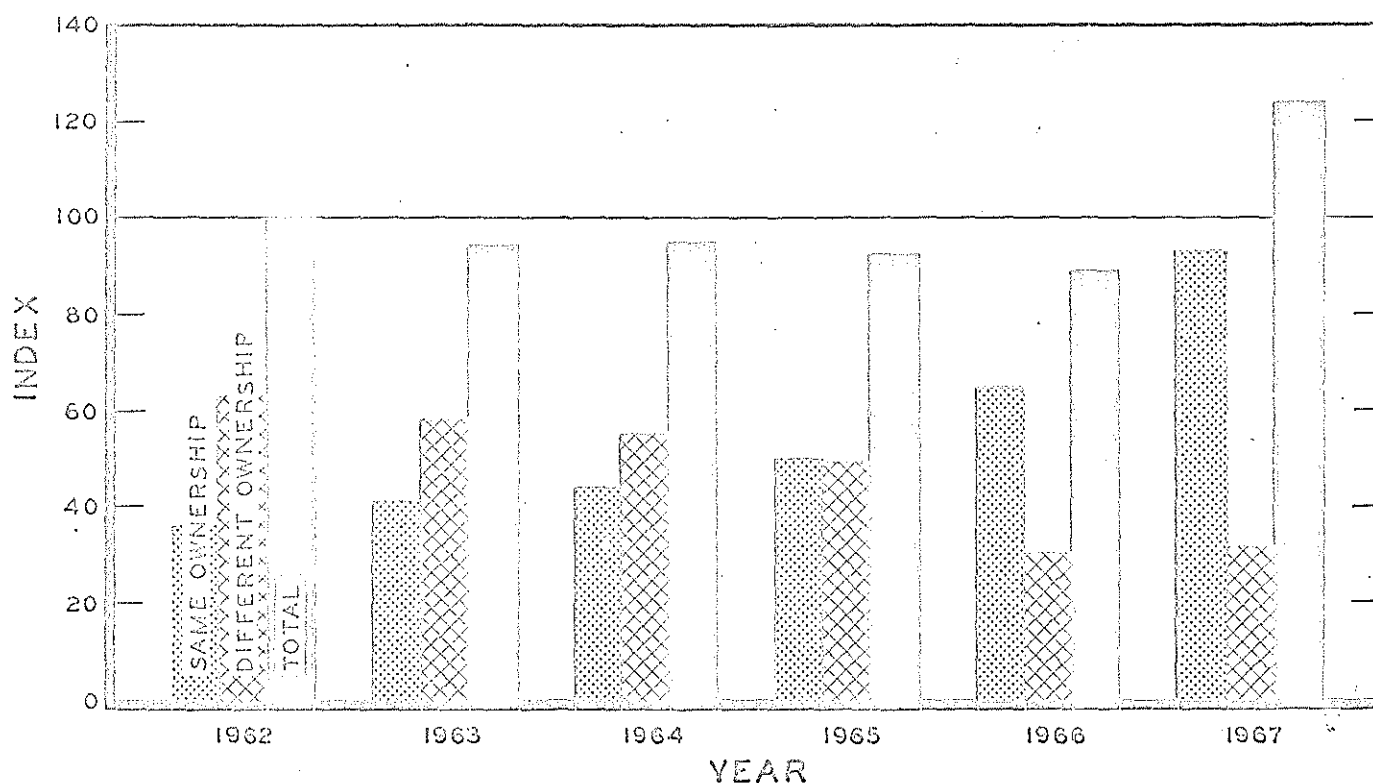
A more detailed study of cafe sales in Corning by location, omitting night clubs, fraternal organizations, etc., indicates a decreasing trend of cafe sales along U.S. 34. This trend is shown in Figure 39. The overall loss in sales of the cafe group can largely be attributed to the closing of a cafe along U.S. 34.

Figure 40 illustrates the effect that changes in ownership and management had upon the retail sales of cafes in Corning. As can be seen, changes in ownership can be quite an influence on cafe sales.

As Figure 40 demonstrates, those cafes that remained under the same ownership through the study period showed a consistently

upward sales trend. However, those cafes that had changes in ownership realized a steadily decreasing trend in sales. As was the case with service stations and other businesses, those firms remaining under the same ownership have built up their trade through patronage of local residents. They are not as dependent upon seasonal or transient trade of construction workers and tourists.

FIGURE 40-TREND IN CAFE SALES BY TYPE OF OPERATION,
CORNING, IOWA



Cafes - Summary

The relocation of U.S. 34 and the resulting change in traffic pattern in Red Oak have had a significant effect upon the sales of cafes and restaurants in Red Oak. However, only individual cafes have experienced an adverse change in sales, not cafes as a whole.

A major consequence of the relocation of U.S. 34 has been the redistribution of cafe sales to different locations within Red Oak. In 1962, cafe sales of Iowa 48 were approximately 57 percent of the cafe sales on U.S. 34 or in other city locations. By 1967, cafe sales on Iowa 48 were twice that of other city locations and five times that of U.S. 34 locations.

While there was no transfer of cafe operations by location in Corning, the removal of thru-traffic to relocated U.S. 34 did affect Corning's cafe sales. One of the major changes that occurred following the relocation was the closure of the only cafe located on U.S. 34. Other than this closure, cafe sales in Corning experienced a minimal amount of growth during the study period.

In both Red Oak and Corning, the importance of continued ownership is illustrated in the growth in retail sales enjoyed by these firms. It is anticipated that there will continue to be sporadic changes in cafe activity in both Red Oak and Corning until those cafes that are presently undergoing ownership and management changes have subsided and cafe sales return to normal.

LAND USE

Red Oak - Old U.S. 34

Old U.S. 34 is located for a greater part, near what was originally known as the "Old Blue Grass Trail" and was the first marked road across the State of Iowa. In Red Oak, from 8th Street west, the old highway is known as Oak Street, and from 8th Street east it is known as Summit Street.

The highway passes primarily through a residential area of Red Oak with a small commercial area extending for $4\frac{1}{2}$ blocks near the junction of Iowa 48 and a small industrial buildup west of this junction. The central business district is located eight blocks south of Old U.S. 34. The majority of the businesses located on Old U.S. 34 are highway-oriented firms such as restaurants, motels, and service stations and depend upon the motorist for much of their trade. Other commercial buildings located along the highway are a farm implement firm, a furniture and appliance company, and grocery stores.

With the high concentration of highway-oriented firms located on Old U.S. 34, detailed land use data was collected along this highway from 1959 to 1968 to see what changes would occur in land use with a change in traffic patterns. This data was collected at two year intervals, summarized and analyzed. The changes in land use are shown in Table 5 and illustrated in Figure 41.

As illustrated in Table 5, there were only minor changes in residences along Old U.S. 34 during the study period. A few residences were torn down to make way for commercial expansion and relocation of existing businesses. One commercial building was converted to an apartment. A few new houses and an apartment building were constructed during the study period.

Table 5 - Land Use Along Old U.S. 34 in Red Oak from 1959 to 1968.

Land Use	1959	1961	1963	1965	1966	1968
1. Residences	79	78	73	72	71	72
2. Public Buildings	6	7	7	7	7	7
3. Commercial Firms						
a. Highway-Oriented	17	17	13	13	12	9
b. Non-Highway Oriented	11	12	15	16	17	19
4. Industrial	1	1	1	1	1	1
5. Vacant	9	7	11	8	9	10
6. Agriculture	19	19	19	19	19	19
Total	142	141	139	136	136	137

There was very little change in public buildings. A new church was constructed on Old U.S. 34 on the east edge of Red Oak. The majority of the changes involved commercial firms. New commercial firms constructed along Old Highway 34 include a grocery store, a car wash, a restaurant and bar, a furniture store, and a bowling alley.

In addition to the construction mentioned above, several highway oriented business establishments changed ownership and became non-highway oriented firms. Both highway and non-highway oriented

businesses have closed during the study period. However, it is anticipated that some of these firms will reopen in the future.

Red Oak - Relocated U.S. 34

After the opening of relocated U.S. 34, considerable construction activity occurred in the area adjacent to the highway. On the north side of the highway a new 52 unit Holiday Inn was constructed along with a service station and cafe. A church and a light manufacturing plant that makes auto accessory parts has also been constructed along the north side of U.S. 34. A municipal cemetery borders a portion of relocated U.S. 34 on the south. New construction along the south side of the relocated highway includes a new high school, an apartment building, a body shop, and a truck garage. An antique shop was also opened in a previously vacant building. It would seem reasonable to assume that this trend in building development will continue in the future. All future commercial development will have access to relocated U.S. 34 via local roads under the expressway standards now adopted for U.S. 34.

Red Oak - Iowa 48

As shown in Table 6 and Figure 42, considerable land use changes have taken place on Iowa 48. However, the majority of these changes occurred south of Old U.S. 34. The relocation of U.S. 34 to the north and the resulting change in traffic pattern has had little effect upon land use changes in this area.

Table 6 - Land Use Along Iowa 48 in Red Oak from 1959 to 1968.

Land Use	1959	1961	1963	1965	1966	1968
1. Residences	44	42	42	42	42	41
2. Public Buildings	5	5	5	6	6	6
3. Commercial Firms						
a. Highway-Oriented	12	14	12	12	14	14
b. Non-Highway Oriented	29	27	32	32	32	34
4. Industrial	1	1	1	1	1	2
5. Vacant	6	8	8	7	6	3
6. Agriculture	21	21	20	20	19	19
Total	118	118	120	120	120	119

North of Old U.S. 34 and Iowa 48 several new buildings were constructed during the study period. Included are, new office buildings, a light manufacturing establishment, a welding supply store, and a drive-in restaurant. The only business that closed during the study period was a roller skating rink which was subsequently razed leaving the land vacant.

At the junction of Old U.S. 34 and Iowa 48, one service station and a drive-in restaurant were torn down and a car-wash was constructed in their place.

The relocation of U.S. 34 to the North of Red Oak and the improvement of Iowa 48 has opened up new land for commercial and Industrial development. As has been previously mentioned, much of this land has already been developed and it is anticipated that more development along Iowa 48 will occur in the future.

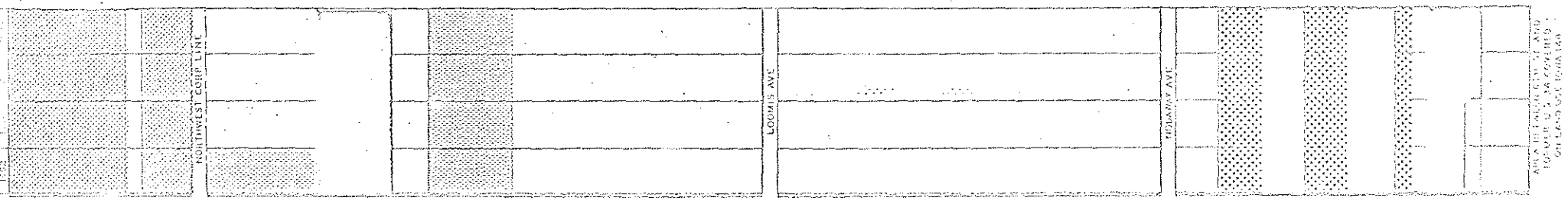
Corning - Old U.S. 34

Old Highway 34 has been the major east-west route through Corning. While commonly referred to as Highway 34, it is also known as West 6th Street. The route of Old U.S. 34 and Iowa 148 is duplicated for a short section in the south central portion of the city. The land use data on that portion of Old U.S. 34 where it is duplicated with Iowa 148 is included in the analysis of land use activity on Iowa 148.

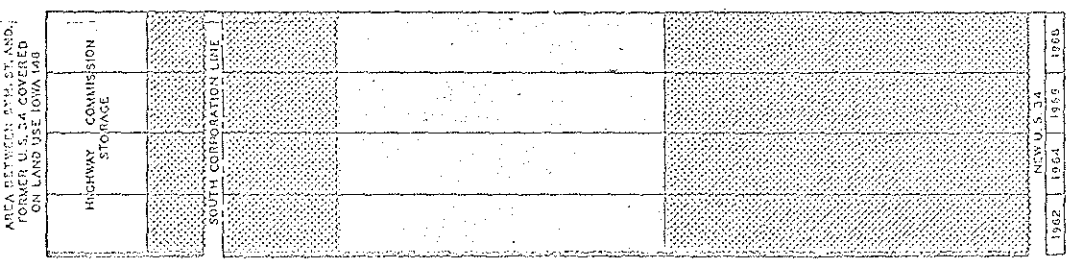
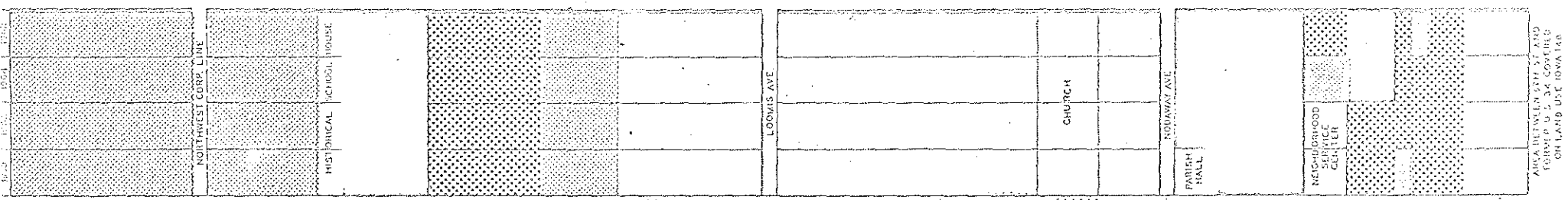
There have not been any major changes in land use along the highway during the study period. Old U.S. 34 still passes through a large residential area on the west and continues through the central business district for approximately three blocks. There is some residential and use just west of its junction with Iowa 148. The land use along the remaining section of Old U.S. 34 is primarily agricultural with isolated areas of commercial and residential development.

Land use data was collected on Old U.S. 34 from 1962 to 1969. This data was summarized and analyzed to determine the changes that occurred during this time period. These land use changes are shown in Table 7 and illustrated in Figure 43.

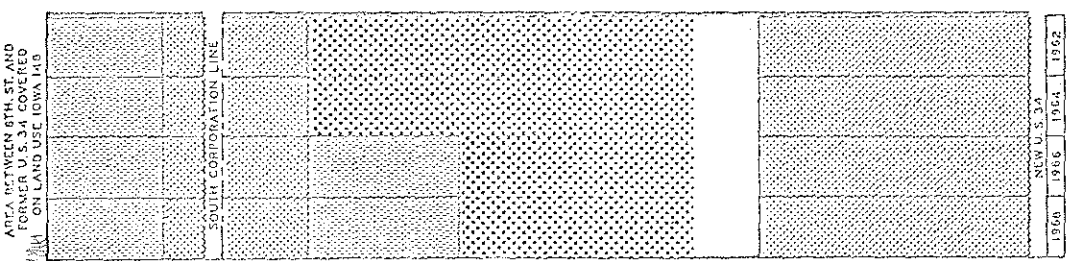
As illustrated in Table 7, there were minor changes in residences along Old U.S. 34 during the study period. One residence was torn down to make room for a parking lot adjacent to a commercial building, and a new mobile home park was developed in the northwest part of the city along Old U.S. 34.



FORMER U.S. 34



FORMER U.S. 34



LEGEND

- COMMERCIAL - HIGHWAY ORIENTED
- COMMERCIAL - NON-HIGHWAY ORIENTED
- INDUSTRIAL
- CHURCHES AND PUBLIC BUILDINGS
- PRIVATE RESIDENCE
- VACANT LOTS AND BUILDINGS
- AGRICULTURAL

FIGURE 43 LAND USE CHANGES ALONG FORMER U.S. 34, CORNING, IOWA, 1962 TO 1968

Table 7 - Land Use Along Old U.S. 34 in Corning from 1962 to 1969

Land Use	1962	1964	1966	1968	1969
1. Residences	56	57	56	56	56
2. Public Buildings	3	3	4	5	5
3. Commercial Firms					
a. Highway-Oriented	11	11	11	10	10
b. Non-Highway Oriented	15	15	14	13	13
4. Industrial	--	--	--	--	--
5. Vacant	4	3	4	5	5
6. Agriculture	11	11	11	11	11
Total	100	100	100	100	100

There were two new public buildings constructed during this interval. They are a neighborhood service center and a parish hall for a local church.

A car wash and an automotive garage were the only new business firms along the highway during the study period. During the same time period several businesses were discontinued and are now storage facilities or vacant. Most of these are non-highway oriented firms. This appears to be a result of the general decline of commercial activity in Corning. This decline is due, in part, to the decrease in population of the surrounding rural area, thus reducing the effective retail trade area of Corning. The relocation of U.S. 34 south of Corning has temporarily accelerated this decline. In all probability this decline will continue into the near future until such time as Corning is able to attract new industry. A new industrial area located south of Corning and adjoining relocated U.S. 34 is being planned for development in the future.

Corning - Iowa 148

Iowa 148 is the major north-south route through Corning, passing two blocks east of the central business district. Land use data was collected along this route during the study period. This data was summarized and analyzed to determine the changes that occurred in land use.

Table 8 - Land Use Along Iowa 148 in Corning from 1962 to 1969

Land Use	1962	1964	1966	1968	1969
1. Residences	77	78	74	74	75
2. Public Buildings	1	1	3	3	3
3. Commercial Firms					
a. Highway-Oriented	5	4	4	3	3
b. Non-Highway Oriented	4	6	8	9	9
4. Industrial	--	--	--	--	--
5. Vacant	11	11	12	13	13
6. Agriculture	18	17	15	15	15
Total	116	117	116	117	118

As Table 8 and Figure 44 illustrate, several land use changes have taken place on Iowa 148. However, the majority of these changes occurred north of Old U.S. 34. New buildings constructed along this section of Iowa 148 include a grocery store, nursing home, farm implement dealer, church, livestock buying station, and several new homes. Two service stations were closed during the study period, while one service station was remodeled and expanded, providing modern facilities to the residents of Corning. In

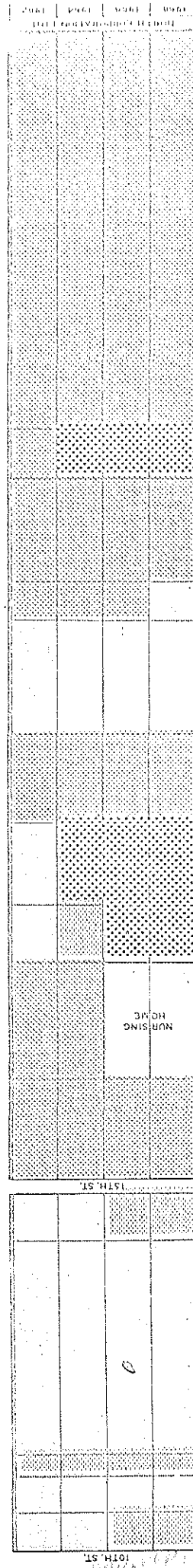
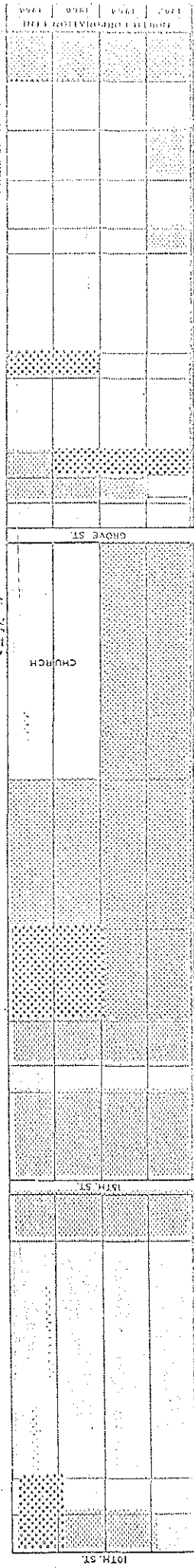
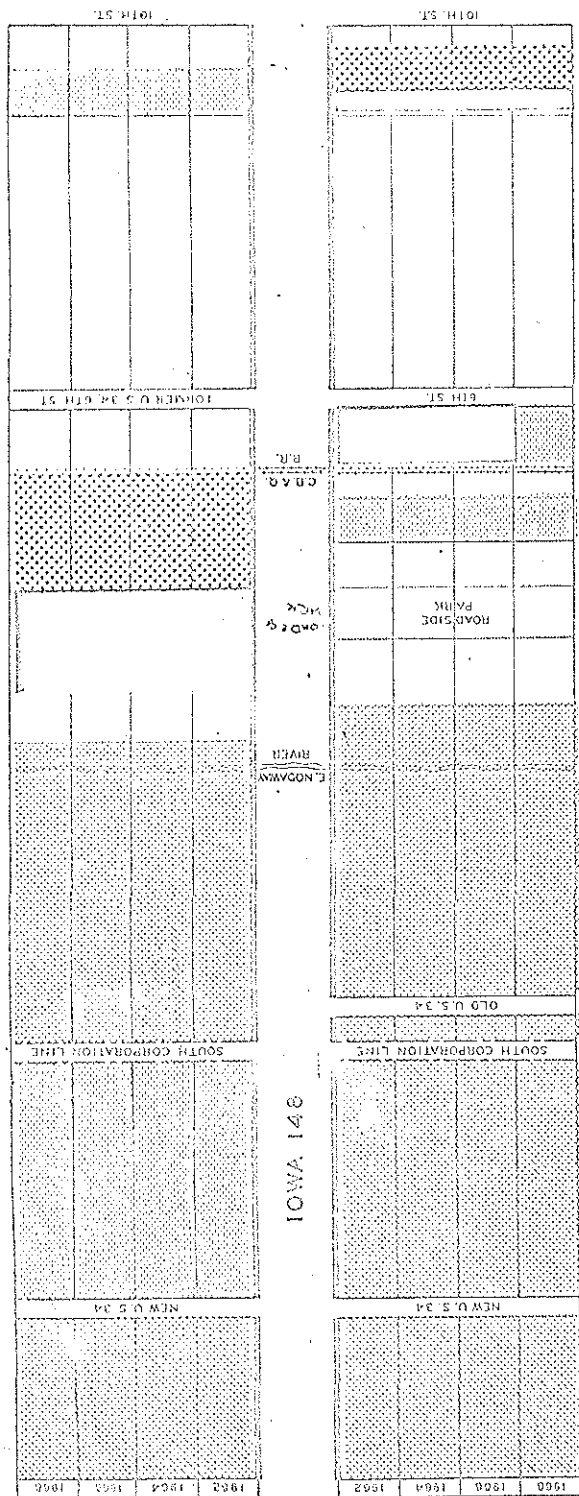


FIGURE 44 LAND USE CHANGES ALONG IOWA 148, CORNING, IOWA, 1962 TO 1968

addition several old residences were razed to provide space for the construction of some of the new buildings mentioned above.

ZONING

Red Oak

As can be seen from a comparison of the data shown in Figures 45 and 46, Red Oak has annexed tracts of land north and west of the city. The west corporate limits were once confined to the Old Nishnabotna River channel. Following the 1967 annexation, the city limits were extended to the present river channel and this land was zoned agricultural.

The area annexed to the north is primarily zoned for agriculture and industrial use. The construction of the new Senior High School and the expansion of the Evergreen Cemetery in this annexed area created the zone of "public buildings and grounds." In addition to the areas mentioned above, a small parcel of land was zoned residential.

With the relocation of U.S. 34, the city of Red Oak and various other agencies have realized the opportunities for development north of the old corporate limits. Additional industrial growth and development is anticipated for this area in the near future.

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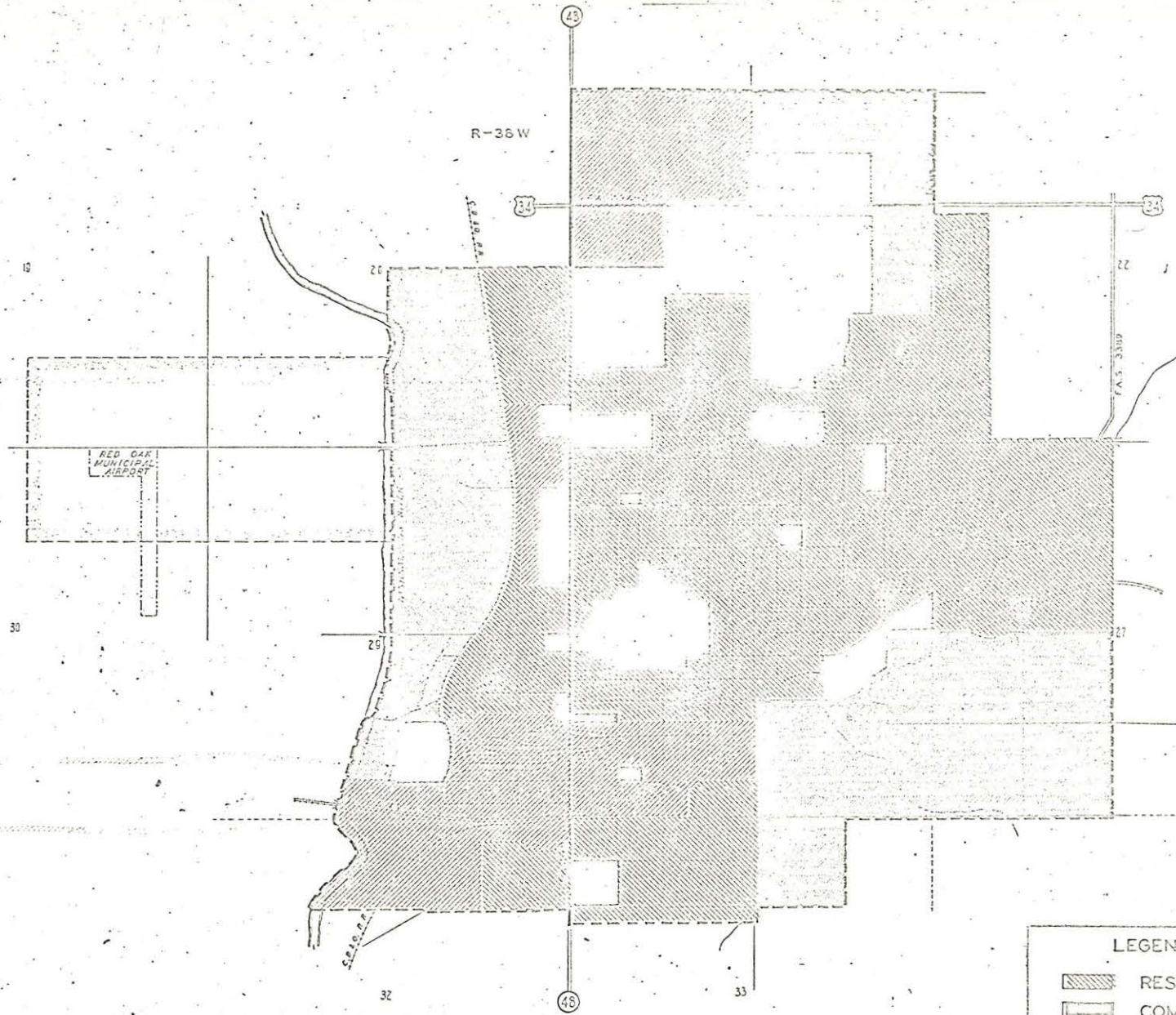
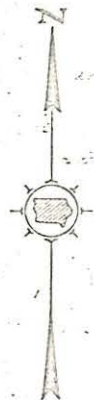







FIGURE 46- GENERAL LAND USE PATTERN, 1967, RED OAK, IOWA

LEGEND OF ZONING DISTRICTS

-  RESIDENTIAL
-  COMMERCIAL
-  INDUSTRIAL
-  AGRICULTURAL & UNCLASSIFIED
-  PUBLIC BLDGS. & GROUNDS

Corning

The area land use changes have not been extensive in Corning during the study period, 1961 to 1967. The major changes that have occurred were the expansion of the corporate limits and the change in land use of two large agricultural tracts. These changes are illustrated in Figures 47 and 48.

As can be seen from a comparison of these figures, the city of Corning has annexed areas in the western and northern parts of the city. The area annexed to the west included the municipal airport and agricultural land, along with some expansion of the existing residential land use. Rosary Hospital located in this area of the city expanded its facilities during the study period.

The area annexed to the north is primarily agricultural in nature with residential development along Iowa 148 and in the southern edge of this tract. A fifteen acre tract in the southwest part of the city, previously zoned agricultural, is now rezoned for industrial use. A new sewage treatment plant is now under construction in this area. The M^odaway River and the Chicago, Burlington, and Quincy Railroad pass through this tract.

A new elementary school has been constructed during the study period in the west central part of the city. This area was previously zoned for agricultural use. There has been a limited amount of commercial development along Iowa 148 in areas that were previously zoned residential.

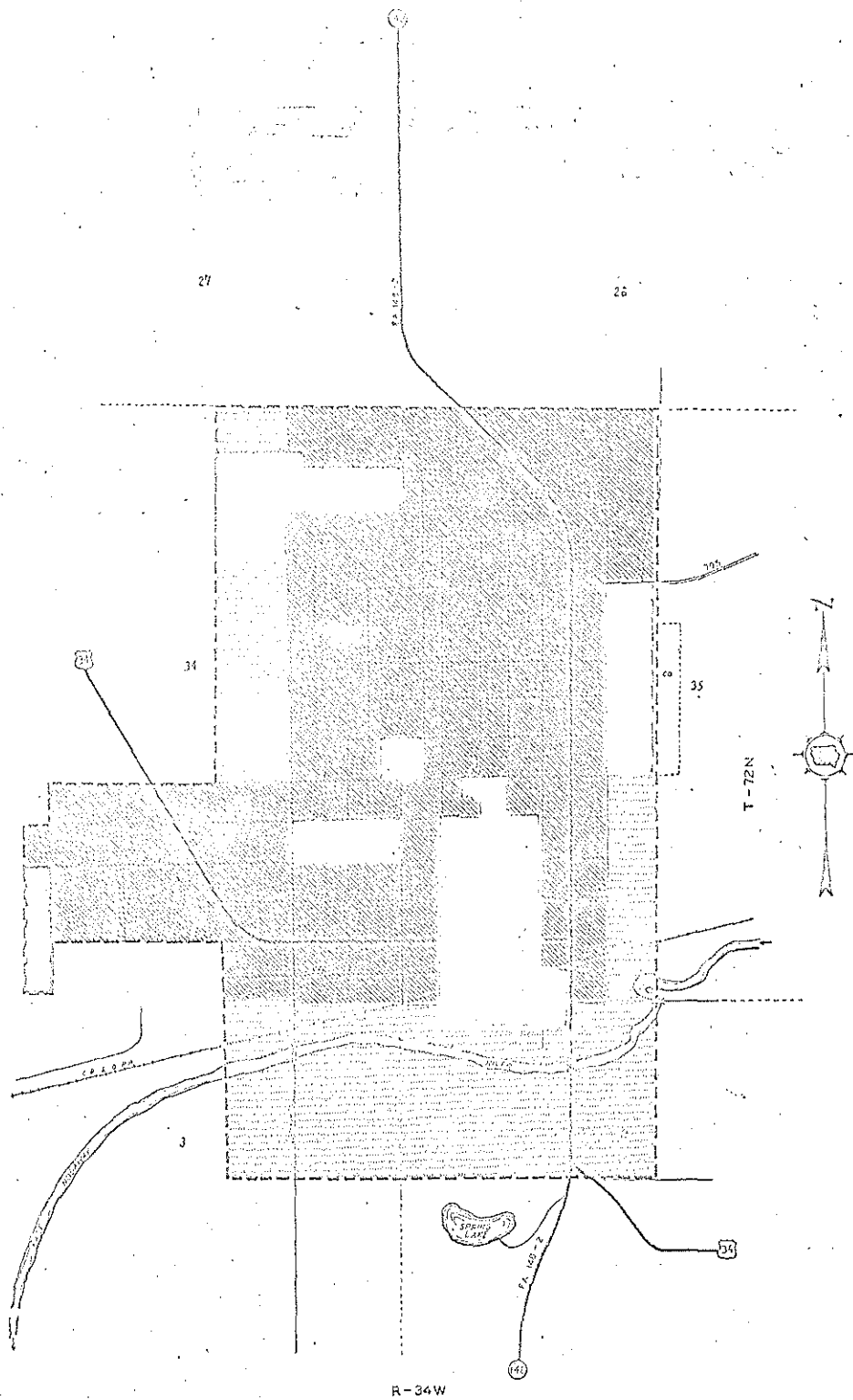


FIGURE 47- GENERAL LAND USE PATTERN, 1961, CORNING, IOWA

LEGEND OF ZONING DISTRICTS	
	RESIDENTIAL
	COMMERCIAL
	INDUSTRIAL
	AGRICULTURAL & UNCLASSIFIED
	PUBLIC BLDGS. & GROUNDS

INDUSTRY AND EMPLOYMENT

The previous pages of this report have covered retail sales tax data, land use, and zoning for Red Oak and Corning. While much of this information has served as a reliable indicator of the economic activity in a community, data such as employment and industry will provide additional information that can be utilized to measure the economy of a city. Many of the changes that occur in retail sales and land use can also be related to the changes in industry and employment.

Red Oak and Corning are located primarily in an agricultural area of Iowa, and while agriculture has continued to play an important part in the economy of these two cities, the decline in the number of individual farm operators and the effect that this has had upon the businesses in the communities cannot be overlooked in a study of this type. The increasing size of today's farms has resulted in a general decrease in the rural farm population and an increase in the overall labor force. As a result of this situation, many industries have now located in Iowa towns to take advantage of this available labor force.

Red Oak

Industry plays an important part in Red Oak's economy. One of Red Oak's major industries is Union Carbide, manufacturers of Eveready Batteries. This firm employs approximately 450 people,

many of which commute from the surrounding agricultural area. One of the earliest industries in Red Oak was the Thomas D. Murphy Co., producers of art calendars and related advertising specialities. This company has approximately 250 employees. Other industries are Wilson Concrete Company, manufactures of pre-stressed bridge beams and building facing, employing approximately 100 people; and Douglas and Lomason, producers of packaging equipment, with approximately 30 employees. There are numerous smaller industries in Red Oak employing between 10 and 30 persons.

One of the most significant changes that occur in a bypassed community is the change in land use and zoning in the area of the relocation. In Red Oak, Relocated U.S. 34 has opened up a new area for commercial and industrial development. The Red Oak industrial foundation now has an eighty acre tract in this area and at the present time several small industries are located in this tract. The industrial park offers complete utilities and access to the Chicago, Burlington, and Quincy Railroad. It is anticipated that this industrial area will continue to grow in the future as Red Oak attracts new industries.

Corning

As was briefly mentioned earlier in this report, the majority of Corning's industries are oriented towards serving the surrounding agricultural area. The National Farmers Organization (N.F.O.), the nation's largest agricultural collective bargaining

union has its national headquarters in Corning. This firm employs approximately 150 people.

Nodaway Valley Foods, a subsidiary of Allied Chemical of New York, employs approximately eighty persons. The major items produced by this industry are dairy products such as egg-nog, sour creams, puddings, cheese sauce, etc. Another industry in Corning of considerable size is the Farmer's Creamery which employs approximately fifty people.

Commuter employees play an important part in Corning's industry. There are approximately 130 people commuting from other cities to Corning for employment. Nodaway Valley Foods and the Farmer's Creamery employ approximately 23 commuters, while the N.F.O. attracts approximately 28 commuting employees. The remainder of the commuters are employed by the various retail establishments in Corning.

There are also approximately 110 Corning residents who commute to other cities for employment. The majority of these, approximately 55, commute to Red Oak for employment with 33 being employed by the Union Carbide Industry, and the remainder working at various other industries in Red Oak. Approximately 37 persons commute from Corning to an Area XIII Community College Center in Clarinda, approximately 31 miles southwest of Corning. There are approximately 18 Corning residents commuting to other cities in the vicinity for employment.

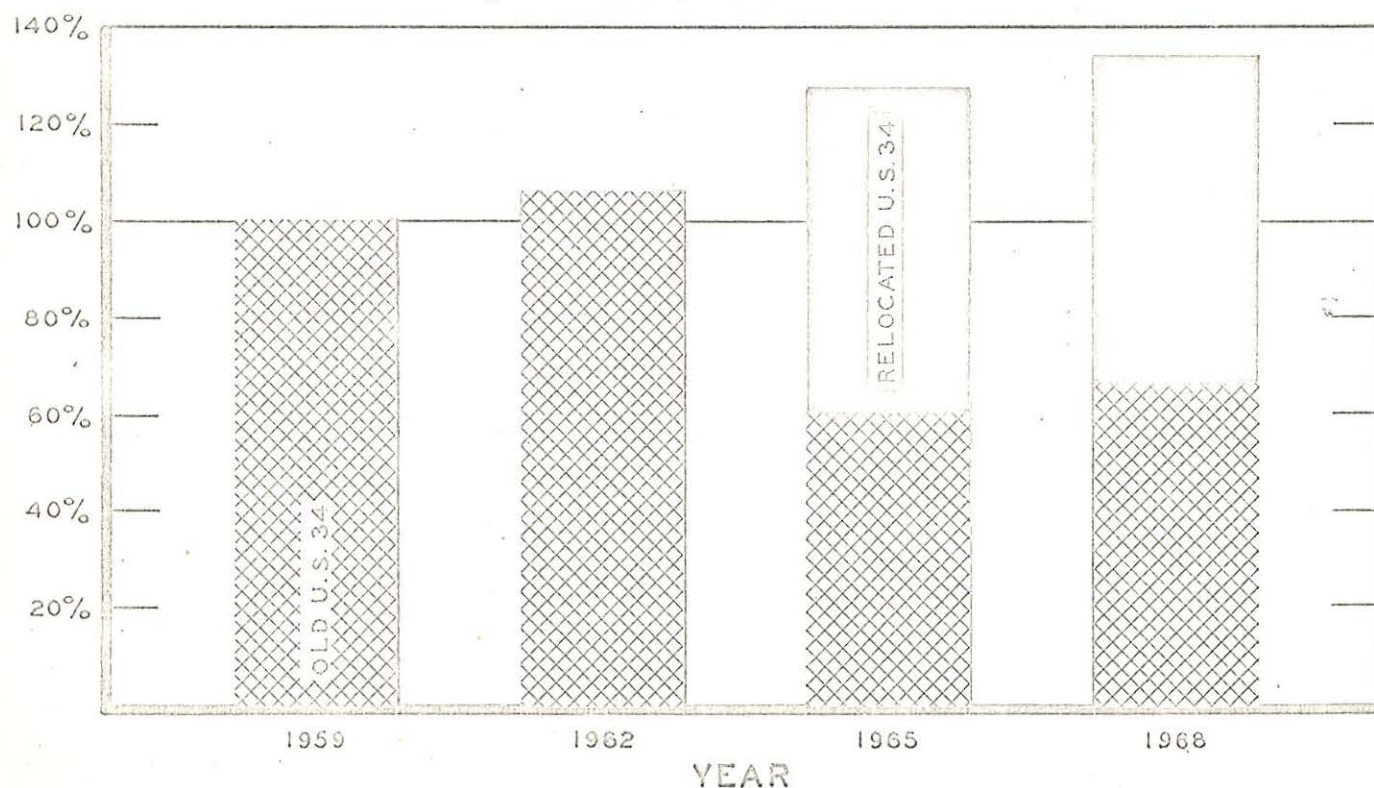
A 2000 acre recreational area with a 700 acre lake in the Walter Creek Area, approximately four miles north of Corning, is scheduled for completion in 1971. The recreational facilities offered by this resevoir, along with the added water supply that will be available, and the improved transportation network in the Corning area will provide additional incentives for future industries to locate in Corning.

TRAFFIC

Red Oak

In 1968, Old U.S. 34 carried an average annual daily traffic of 1,700 vehicles in and through the Red Oak area as compared to 2,600 in 1959. This decrease can be attributed to the relocation of U.S. 34 in 1964 and 1965. In 1968, however, the combined traffic on Old U.S. 34 and relocated U.S. 34 was 3,500 vehicles per day, showing an overall increase in traffic on both routes of approximately 34 percent during the study period. This trend in traffic is illustrated in Figure 49.

FIGURE 49-VOLUME TRENDS ON OLD U.S. 34 AND RELOCATED U.S. 34, RED OAK, IOWA

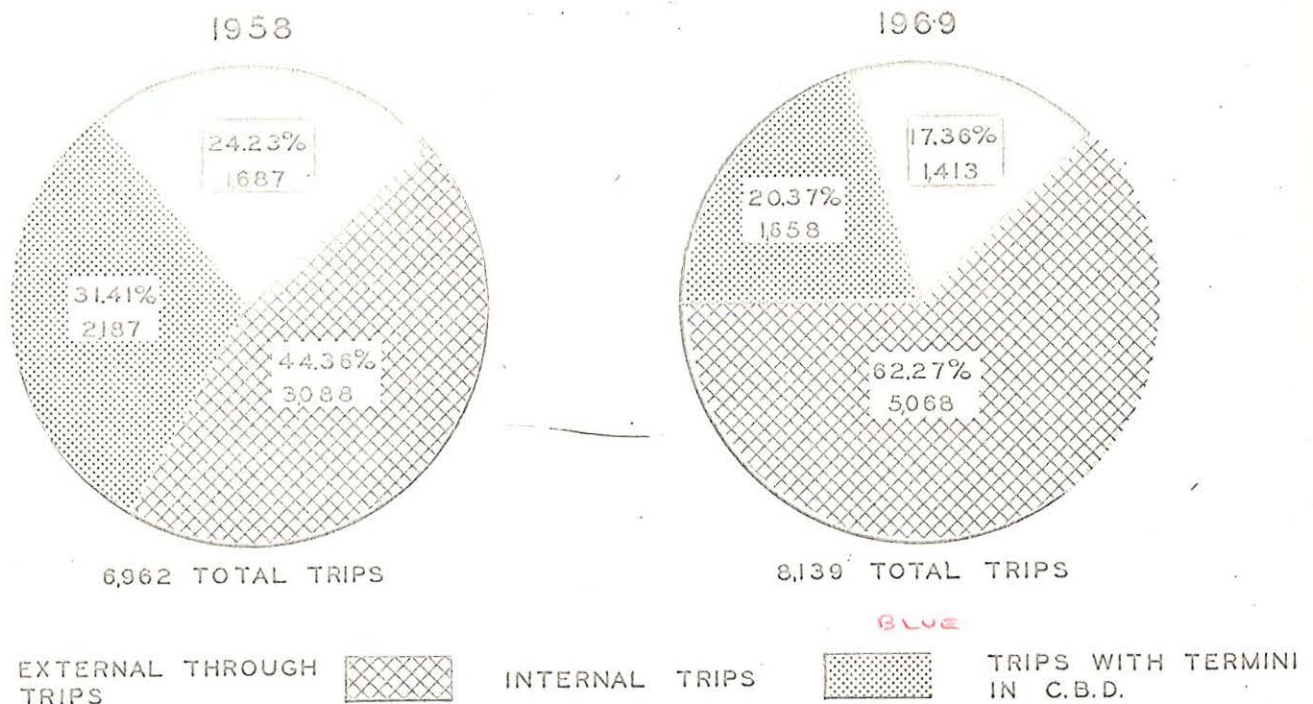


RED

BLUE

External origin and destination studies were conducted by the Iowa Highway Commission in Red Oak during June, 1958, prior to the relocation of U.S. 34 and during August, 1969, after the relocation was completed. Figure 50 illustrates the percent distribution of trips passing through the Red Oak area in both the 1958 and 1969 studies.

FIGURE 50-DISTRIBUTION OF TRIPS PASSING THROUGH THE RED OAK AREA IN THE 1958 AND 1969 ORIGIN AND DESTINATION STUDIES.



As the above figure illustrates, of the total 6,962 trips interviewed at all locations in 1958, 24.23 percent were external thru-trips; 22.28 percent of all the 5,824 trips interviewed at U.S. 34 locations were external thru-trips. When the study was

made in 1969, a total of 8,139 trips were interviewed at all external stations. Of this total, 17.36 percent were external thru-trips. There were a total of 6,171 trips passing through the external stations on both Old U.S. 34 and Relocated U.S. 34, of which 24.66 percent were external thru-trips.

While there has been some decrease in total external thru-trips in the Red Oak area, the external traffic on the U.S. 34 corridor has shown a slight increase during the 1958-1969 period. As indicated in Figure 50, there has been an overall increase in trips in and thru the Red Oak area of approximately 16 percent during this time period. It is anticipated that this local traffic growth will continue in the future.

Corning

In 1968, Old U.S. 34 carried an average annual daily traffic of approximately 920 vehicles in and through the Corning area as compared to approximately 1930 on Old U.S. 34 in 1959. This decrease can be attributed to the relocation of U.S. 34 in 1964 and 1965. In 1968, however, the combined traffic on Old U.S. 34 and relocated U.S. 34 was approximately 2,170, an overall increase in traffic on both routes of approximately ten percent during the 1959 - 1968 interval. Figure 51 illustrates this change in traffic during the study period.

FIGURE 51 - TRAFFIC VOLUME TRENDS ON OLD, U.S. 34 AND
RELOCATED U.S. 34, CORNING, IOWA

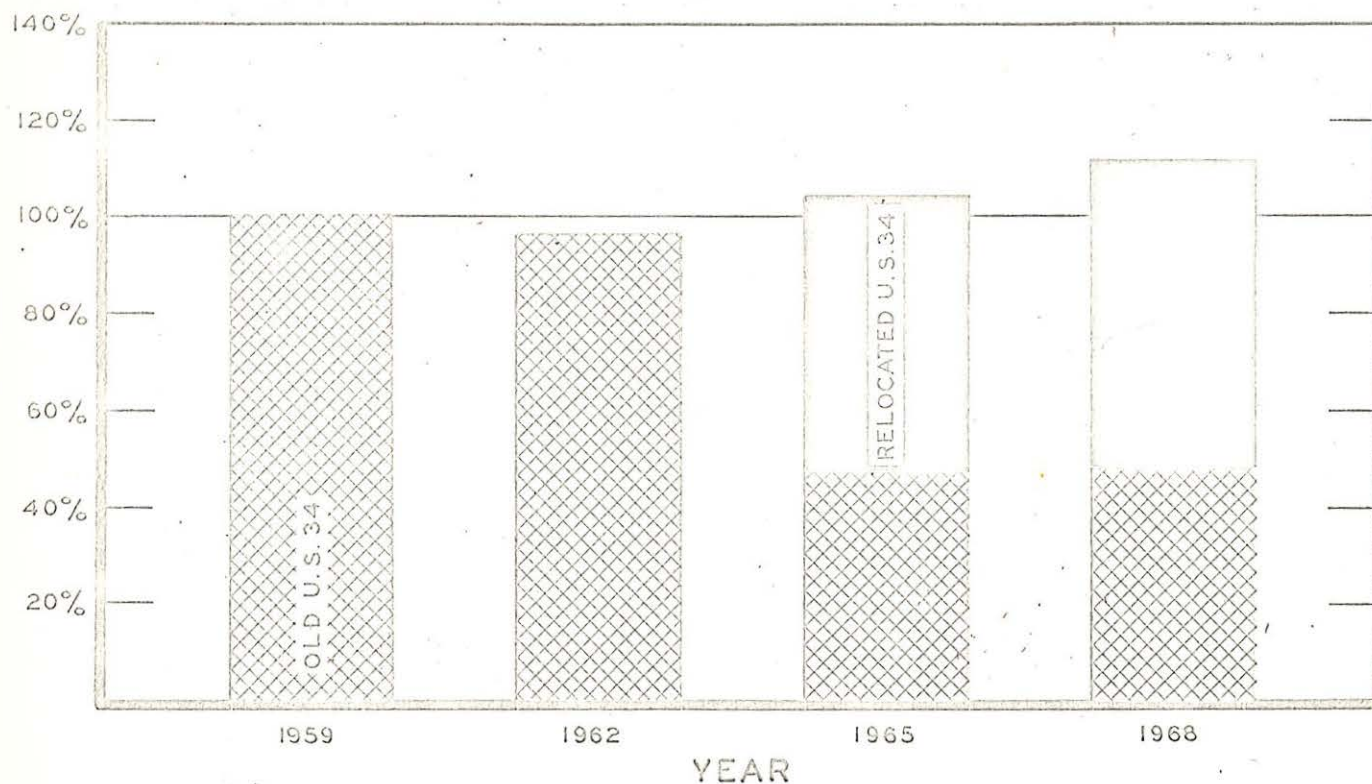
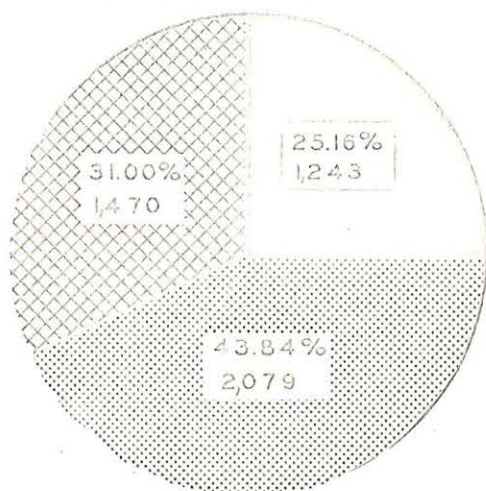


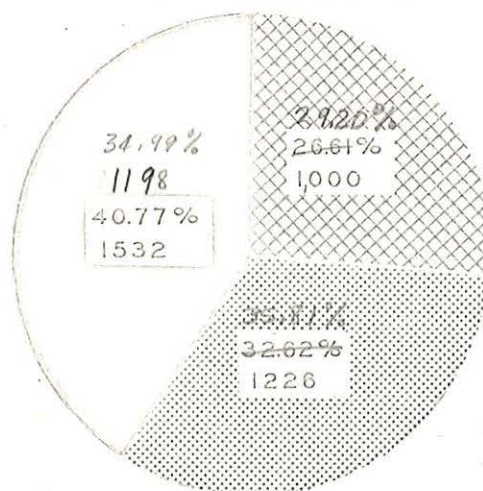
FIGURE 52-DISTRIBUTION OF TRIPS PASSING THROUGH THE
CORNING AREA IN THE 1958 ORIGIN AND
DESTINATION STUDY

ALL STATIONS



4,742 TOTAL TRIPS

U.S. 34 STATIONS



3,750 TOTAL TRIPS

3,424



EXTERNAL THROUGH
TRIPS



INTERNAL TRIPS



TRIPS WITH TERMINI
IN C.B.D.

Prior to the relocation of U.S. 34, an external origin and destination study was conducted in Corning during July, 1958. Data from this study indicated that approximately 25.16 percent of the trips passing through the Corning area were external thru-trips. This traffic data is reflected in Figure 52. A comparison of this data also illustrates the percent of thru-traffic on U.S. 34. Of the ^{3,424}~~3,758~~ trips entering the U.S. 34 stations, ^{1,198}~~1,753~~ trips or ^{34.99}~~40.77~~ percent were external thru-trips. Old U.S. 34 experienced a 45 percent decrease in traffic after the relocation was opened to traffic ^{in 1964} which is comparative to the percent of thru-trips on U.S. 34 in the ¹⁹⁵⁸ origin and destination study. Figure 51 also shows that Old U.S. 34 is now experiencing a slight growth in local traffic while relocated U.S. 34 has remained relatively constant.

The opening of Interstate 80 in Western Iowa approximately 35 miles north of Corning, and the overall deterioration of U.S. 34 prior to its improvement in the Red Oak - Corning area has influenced to some degree the overall growth in traffic on U.S. 34. However, it is anticipated that this shift in traffic patterns will decrease once Interstate 80 is completed, and traffic on relocated U.S. 34 through the Corning area will continue to grow at a normal rate as U.S. 34 is improved across the State of Iowa.

APPENDIX

Appendix Table 1 - Distribution of Taxable Retail Sales by Business Classification, State of Iowa*

Business Group	1962	1963	1964	1965	1966	1967
1. Cafe	4.3	4.7	4.9	5.2	5.9	6.4
2. Motel - Hotel	-	-	-	0.3	0.7	0.8
3. Service Station	4.4	4.4	4.3	4.7	5.1	5.3
4. Food	22.6	23.2	23.9	24.9	26.6	27.8
5. General Merchandise	32.1	32.1	34.1	38.2	42.7	44.9
6. Motor Vehicle	5.3	5.4	5.7	6.3	6.5	7.2
7. Heavy Materials	9.6	10.1	10.5	11.4	12.7	12.8
8. Services	13.2	13.3	13.7	14.4	15.1	17.2
9. Miscellaneous	8.5	9.1	9.4	10.2	11.6	12.5
Total	100.0%	102.3%	106.5%	115.6%	126.9%	134.9%

Appendix Table 2 - Distribution of Taxable Retail Sales by Business Classification, South West Iowa Economic Area*

Business Group	1962	1963	1964	1965	1966	1967
1. Cafe	4.3	4.7	4.7	5.0	5.5	5.6
2. Motel - Hotel	-	-	-	0.2	0.4	0.7
3. Service Station	6.0	5.8	5.5	5.9	6.3	6.5
4. Food	24.2	24.8	25.8	26.8	28.2	29.3
5. General Merchandise	32.5	32.8	34.4	38.5	42.2	42.9
6. Motor Vehicle	5.7	6.0	6.5	7.0	8.0	8.7
7. Heavy Materials	6.7	8.2	8.8	8.7	9.4	9.3
8. Services	13.8	13.4	13.7	14.2	14.5	16.0
9. Miscellaneous	6.8	7.6	7.7	7.6	8.3	9.5
Total	100.0%	103.3%	107.1%	113.9%	122.8%	128.5%

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 3 - Distribution of Taxable Retail Sales by Business Classification, Average of Seven Cities*

Business Group	1962	1963	1964	1965	1966	1967
1. Cafe	4.2	5.1	5.0	5.1	5.7	5.7
2. Motel - Hotel	-	-	-	0.3	0.5	0.5
3. Service Station	3.7	3.7	3.4	3.6	3.8	4.0
4. Food	24.3	24.4	25.5	26.8	28.9	30.7
5. General Merchandise	35.4	36.1	36.9	40.0	43.4	44.2
6. Motor Vehicle	6.1	6.8	7.8	8.4	9.6	10.5
7. Heavy Materials	5.2	6.9	8.2	8.3	8.6	9.4
8. Services	14.7	14.2	14.6	15.2	15.8	17.0
9. Miscellaneous	6.4	6.7	7.1	6.9	7.6	8.7
Total	100.0%	103.9%	108.5%	114.6%	123.8%	130.7%

Appendix Table 4 - Distribution of Taxable Retail Sales by Business Classification, Corning, Iowa*

Business Group	1962	1963	1964	1965	1966	1967
1. Cafe	3.9	3.4	3.0	2.9	2.8	3.5
2. Motel - Hotel	-	-	-	.2	.2	.2
3. Service Station	8.5	8.3	8.4	8.3	8.7	8.1
4. Food	28.1	27.6	28.4	27.1	27.2	29.2
5. General Merchandise	23.5	21.5	22.9	23.2	29.1	30.0
6. Motor Vehicle	4.6	4.0	3.7	4.7	6.0	5.9
7. Heavy Materials	8.2	4.5	6.8	7.4	7.3	7.5
8. Services	17.5	18.8	19.6	20.7	19.4	23.6
9. Miscellaneous	5.7	5.1	6.5	6.2	8.0	11.3
Total	100.0%	93.2%	99.3%	100.7%	108.7%	119.3%

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 5 - Distribution of Taxable Retail Sales by Business
Classification Grouping, Red Oak, Iowa*

Business Group	1962	1963	1964	1965	1966	1967
1. Cafe	4.2	3.5	4.8	5.3	5.6	5.9
2. Motel - Hotel	-	-	-	.1	.6	2.0
3. Service Station	3.4	3.1	3.4	3.4	3.8	4.2
4. Food	24.7	26.0	26.8	28.2	28.2	28.3
5. General Merchandise	37.7	32.4	40.1	47.5	49.8	54.3
6. Motor Vehicle	6.0	7.6	6.6	6.4	8.3	9.0
7. Heavy Materials	5.9	10.8	8.4	6.1	10.2	7.4
8. Services	12.8	12.6	13.4	13.8	14.1	15.8
9. Miscellaneous	5.3	6.2	5.2	4.5	6.0	7.5
Total	100.0%	102.2%	108.7%	115.3%	126.6%	134.4%

Appendix Table 6 - Distribution of Taxable Retail Sales by Business
Classification Grouping, State of Iowa*

Group Number	1962	1963	1964	1965	1966	1967
1, 2, & 3	8.7	9.1	9.2	10.2	11.7	12.5
4 & 5	54.7	55.3	58.0	63.1	69.3	72.7
6, 7, 8, & 9	36.6	37.9	39.3	42.3	45.9	49.7
Total	100.0%	102.3%	106.5%	115.6%	126.9%	134.9%

Appendix Table 7 - Distribution of Taxable Retail Sales by Business
Classification Grouping, South West Iowa Economic Area*

Group Number	1962	1963	1964	1965	1966	1967
1, 2, & 3	10.3	10.5	10.2	11.1	12.2	12.8
4 & 5	56.7	57.6	60.2	65.3	70.4	72.2
6, 7, 8, & 9	33.0	35.2	36.7	37.5	40.2	43.5
Total	100.0%	103.3%	107.1%	113.9%	122.8%	128.5%

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 8 - Distribution of Taxable Retail Sales by Business
Classification Grouping, Average of Seven Cities*

Group Number	1962	1963	1964	1965	1966	1967
1, 2, & 3	7.9	8.8	8.4	9.0	10.0	10.2
4 & 5	59.7	60.5	62.4	66.8	72.2	74.9
6, 7, 8, & 9	32.4	34.6	37.7	38.8	41.6	45.6
Total	100.0%	103.9%	108.5%	114.6%	123.8%	130.7%

Appendix Table 9 - Distribution of Taxable Retail Sales by Business
Classification Grouping, Corning, Iowa*

Group Number	1962	1963	1964	1965	1966	1967
1, 2, & 3	12.4	11.7	11.4	11.4	11.7	11.8
4 & 5	51.6	49.1	51.3	50.3	56.3	59.2
6, 7, 8, & 9	36.0	32.4	36.6	39.0	40.7	48.3
Total	100.0%	93.2%	99.3%	100.7%	108.7%	119.3%

Appendix Table 10 - Distribution of Taxable Retail Sales by Business
Classification Grouping, Red Oak, Iowa*

Group Number	1962	1963	1964	1965	1966	1967
1, 2, & 3	7.6	6.6	8.2	8.8	10.0	12.1
4 & 5	62.4	58.4	66.9	75.7	78.0	82.6
6, 7, 8, & 9	30.0	37.2	33.6	30.8	38.6	39.7
Total	100.0%	102.2%	108.7%	115.3%	126.6%	134.4%

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 11 - Distribution of Taxable Retail Sales by Business
Classification Grouping on Iowa 148, Corning, Iowa*

Group Number	1962	1963	1964	1965	1966	1967
1, 2, & 3	12.5	13.9	12.0	11.7	13.6	15.7
4 & 5	77.7	66.1	103.2	101.5	170.3	131.3
6, 7, 8, & 9	9.8	14.6	16.3	17.8	16.0	21.9
Total	100.0%	94.6%	131.5%	131.5%	199.9%	168.8%

Appendix Table 12 - Distribution of Taxable Retail Sales by Business
Classification Grouping on Old U.S. 34, Corning,
Iowa*

Group Number	1962	1963	1964	1965	1966	1967
1, 2, & 3	44.2	42.8	43.4	42.8	45.4	39.7
4 & 5	42.8	33.4	36.6	27.5	22.4	35.6
6, 7, 8, & 9	13.0	9.6	13.3	13.4	20.3	20.3
Total	100.0%	85.8%	93.3%	83.7%	88.1%	95.6%

Appendix Table 13 - Distribution of Taxable Retail Sales by Business
Classification Grouping, Off Highway Locations,
Corning, Iowa*

Group Number	1962	1963	1964	1965	1966	1967
1, 2, & 3	4.1	3.3	2.9	3.1	3.5	4.4
4 & 5	53.5	53.0	54.0	55.4	62.9	64.2
6, 7, 8, & 9	42.4	38.3	43.5	46.2	46.1	56.1
Total	100.0%	95.1%	100.4%	104.7%	112.5%	124.7%

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 14 - Distribution of Taxable Retail Sales by Location,
Corning, Iowa*

Location	1962	1963	1964	1965	1966	1967
Iowa 148	9.0	6.6	7.0	6.0	5.5	8.0
U.S. 34	12.0	11.1	12.0	10.9	13.0	12.1
Off Highway	79.0	75.5	80.3	83.8	90.2	99.2
Total	100.0%	93.2%	99.3%	100.7%	108.7%	119.3%

Appendix Table 15 - Distribution of Taxable Retail Sales of the Highway
Oriented Group by Location, Corning, Iowa*

Location	1962	1963	1964	1965	1966	1967
Iowa 148	1.3	1.5	1.3	1.3	1.5	1.7
Old U.S. 34	73.1	70.7	71.6	70.6	75.0	65.5
Off Highway	25.6	20.9	18.3	19.6	21.7	27.2
Total	100.0%	93.1%	91.2%	91.5%	98.2%	94.4%

Appendix Table 16 - Distribution of Taxable Retail Sales of the Food
and General Merchandise Group by Location, Corning,
Iowa*

Location	1962	1963	1964	1965	1966	1967
Iowa 148	2.0	1.7	2.7	2.6	4.4	3.4
Old U.S. 34	17.1	13.3	14.6	11.0	8.9	14.2
Off Highway	80.9	80.2	81.8	83.9	95.2	97.2
Total	100.0%	95.2%	99.1%	97.5%	108.5%	114.8%

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 17 - Distribution of Taxable Retail Sales of the Motor Vehicle, Heavy Materials and Miscellaneous Group by Location, Corning, Iowa*

Location	1962	1963	1964	1965	1966	1967
Iowa 148	0.4	0.5	0.6	0.7	0.6	0.8
Old U.S. 34	7.4	5.5	7.6	7.7	11.6	11.6
Off Highway	92.2	84.3	94.4	100.2	100.3	122.0
Total	100.0%	90.3%	102.6%	108.6%	112.5%	134.4%

Appendix Table 18 - Distribution of Taxable Retail Sales by Business Classification Grouping on Iowa 48, Red Oak, Iowa*

Group Number	1962	1963	1964	1965	1966	1967
1, 2, & 3	11.5	14.8	25.2	29.7	33.5	37.6
4 & 5	71.8	67.4	63.4	45.2	46.3	46.4
6, 7, 8, & 9	16.7	17.8	16.4	16.0	20.2	19.3
Total	100.0%	100.0%	105.0%	90.9%	100.0%	103.3%

Appendix Table 19 - Distribution of Taxable Retail Sales by Business Classification Grouping on Old U.S. 34, Red Oak, Iowa*

Group Number	1962	1963	1964	1965	1966	1967
1, 2, & 3	12.5	69.9	3.9	4.7	6.5	11.4
4 & 5	84.7	72.3	98.6	125.7	123.8	139.0
6, 7, 8, & 9	2.8	26.6	8.0	2.5	8.0	8.3
Total	100.0%	105.8%	110.5%	132.9%	138.8%	158.7%

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 20 - Distribution of Taxable Retail Sales by Business
Classification Grouping, Off Highway Locations,
Red Oak, Iowa*

Group Number	1962	1963	1964	1965	1966	1967
1, 2, & 3	3.6	3.3	3.1	2.8	2.9	3.0
4 & 5	48.2	47.6	53.6	64.0	68.1	70.3
6, 7, 8, & 9	48.2	59.8	46.6	49.6	62.1	64.0
Total	100.0%	110.7%	103.3%	116.4%	133.1%	137.3%

Appendix Table 21 - Distribution of Taxable Retail Sales by Location,
Red Oak, Iowa*

Location	1962	1963	1964	1965	1966	1967
Iowa 148	19.0	19.5	21.0	18.0	20.0	20.0
U.S. 34	22.0	22.5	23.9	28.1	29.9	34.0
Off Highway	59.0	60.2	63.8	69.2	76.7	80.4
Total	100.0%	102.2%	108.7%	115.3%	126.6%	134.4%

Appendix Table 22 - Distribution of Taxable Retail Sales of the Highway
Oriented Group by Location, Red Oak, Iowa*

Location	1962	1963	1964	1965	1966	1967
Iowa 148	31.5	40.5	69.0	81.2	91.6	102.8
Old U.S. 34	37.0	20.6	11.6	13.5	19.2	33.8
Off Highway	31.5	28.8	26.7	24.6	25.9	26.9
Total	100.0%	89.9%	107.3%	119.3%	136.7%	163.5%

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 23 - Distribution of Taxable Retail Sales of the Food and General Merchandise Group by Location, Red Oak, Iowa*

Location	1962	1963	1964	1965	1966	1967
Iowa 148	22.7	21.3	20.0	14.3	14.6	14.7
Old U.S. 34	28.9	24.7	33.7	43.8	42.3	47.5
Off Highway	48.4	47.8	53.8	64.3	68.4	70.6
Total	100.0%	93.8%	107.5%	121.6%	125.3%	132.8%

Appendix Table 24 - Distribution of Taxable Retail Sales of the Motor Vehicle, Heavy Materials, and Miscellaneous Group by Location, Red Oak, Iowa*

Location	1962	1963	1964	1965	1966	1967
Iowa 148	10.9	11.6	10.7	10.5	13.2	12.6
Old U.S. 34	2.0	18.8	5.6	1.8	5.7	5.9
Off Highway	87.1	93.7	96.9	90.6	110.0	114.3
Total	100.0%	124.1%	113.2%	102.9%	128.9%	132.8%

Appendix Table 25 - Percent of Total Taxable Retail Sales of Groups 1, 2, & 3 for the Control and Study Areas*

Location	1962	1963	1964	1965	1966	1967
State of Iowa	8.7	8.9	8.6	8.8	9.2	9.3
SW Iowa E. A.	10.3	10.1	9.5	9.7	9.9	10.0
Seven Cities	7.9	8.5	7.7	7.9	8.1	7.8
Red Oak	7.6	6.5	7.5	7.6	7.9	9.0
Corning	12.4	12.6	11.5	11.3	10.8	9.9

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 26 - Percent of Total Taxable Retail Sales of Groups
4 & 5 for the Control and Study Areas*

Location	1962	1963	1964	1965	1966	1967
State of Iowa	54.7	54.1	54.5	54.6	54.6	53.9
SW Iowa E. A.	56.7	55.8	56.2	57.3	57.3	56.2
Seven Cities*	59.7	58.2	57.6	58.2	58.2	57.3
Red Oak	62.4	57.1	61.5	65.7	61.6	61.5
Corning	51.6	52.6	51.6	50.0	51.8	49.6

Appendix Table 27 - Percent of Total Taxable Retail Sales of Groups
6, 7, 8, & 9 for the Control and Study Areas*

Location	1962	1963	1964	1965	1966	1967
State of Iowa	36.6	37.0	36.9	36.6	36.2	36.8
SW Iowa E. A.	33.0	34.1	34.3	33.0	32.8	33.8
Seven Cities	32.4	33.3	34.7	33.9	33.6	34.9
Red Oak	30.0	36.4	31.0	26.7	30.5	29.5
Corning	36.0	34.8	36.9	38.7	37.4	40.5

Appendix Table 28 - Trend in Taxable Retail Sales of Service Stations
in Corning, Red Oak, Average of Seven Cities, South
West Iowa Economic Area, and the State of Iowa*

Location	1962	1963	1964	1965	1966	1967
Corning	100.0%	97.5	96.1	96.5	103.2	102.2
Red Oak	100.0%	95.9	96.4	101.9	113.2	115.5
Average of Seven Cities	100.0%	98.9	92.4	97.0	102.3	106.8
SW Iowa E. A.	100.0%	95.9	91.9	97.7	104.5	107.3
State of Iowa	100.0%	101.4	99.8	107.6	116.8	121.2

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 29 - Gross and Net Sales of Service Stations and Bulk Dealers, Red Oak, Iowa*

Year	Service Stations		Bulk Dealers	
	Gross	Net	Gross	Net
1962	\$2,036,282 *	\$522,995	\$158,584	\$15,212
1963	1,962,073	525,892	142,091	13,667
1964	1,989,670	529,879	125,583	13,405
1965	2,078,865	508,827	158,993	14,754
1966	2,330,293	536,298	152,523	15,411
1967	2,375,786	544,393	159,782	19,988

Appendix Table 30 - Gross and Net Sales of Service Stations and Bulk Dealers by Location - U.S. 34, Red Oak, Iowa*

Year	U.S. 34 Locations		Other City Locations	
	Gross	Net	Gross	Net
1962	\$774,396	\$265,006	\$263,597	\$34,399
1963	646,978	213,522	179,783	25,692
1964	282,050	94,283	213,271	36,996
1965	248,979	79,579	251,882	43,421
1966	238,823	70,947	266,720	50,110
1967	227,927	42,327	250,945	60,474

Appendix Table 31 - Gross and Net Sales of Service Stations and Bulk Dealers by Location - Iowa 48, Red Oak, Iowa*

Year	Iowa 48 Locations		Other City Locations	
	Gross	Net	Gross	Net
1962	\$1,156,873	\$238,802	\$263,597	\$34,399
1963	1,277,403	300,345	179,783	25,692
1964	1,619,932	412,005	213,271	36,996
1965	1,736,997	400,581	251,882	43,421
1966	1,977,273	430,652	266,720	50,110
1967	2,056,696	461,580	250,945	60,474

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 32 - Sales of Service Stations on U.S. 34 Locations,
Red Oak, Iowa*

Year	Gross	Gasoline	Other	Net
1962	\$774,396	\$488,619	\$20,771	\$265,006
1963	646,978	416,208	17,248	213,522
1964	282,050	170,889	16,878	94,283
1965	248,979	152,920	16,480	79,579
1966	238,823	123,352	44,524	70,947
1967	227,927	110,393	75,207	42,327

Appendix Table 33 - Sales of Service Stations on Iowa 48 Locations,
Red Oak, Iowa*

Year	Gross	Gasoline	Other	Net
1962	\$1,156,873	\$ 679,026	\$239,045	\$238,802
1963	1,277,403	751,874	225,184	300,345
1964	1,619,932	874,319	333,608	412,005
1965	1,736,997	987,153	349,263	400,581
1966	1,977,273	1,047,412	499,209	430,652
1967	2,056,696	1,075,086	520,030	461,580

Appendix Table 34 - Sales of Service Stations on Other City Locations,
Red Oak, Iowa*

Year	Gross	Gasoline	Other	Net
1962	\$263,597	\$141,481	\$87,717	\$34,399
1963	179,783	110,875	43,216	25,692
1964	213,271	109,217	67,058	36,996
1965	251,882	128,681	79,780	43,421
1966	266,720	131,432	85,178	50,110
1967	250,945	118,742	71,729	60,474

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 35 - Gross and Net Sales of Service Stations on
Iowa 48 Locations by Type of Operation, Red
Oak, Iowa*

Year	Continued Operation Under Same Ownership		Continued Operation Under Different Ownership	
	Gross	Net	Gross	Net
1962	\$ 352,710	\$107,100	\$563,252	\$127,570
1963	716,471	171,546	522,477	124,915
1964	1,111,715	278,514	473,415	129,976
1965	1,179,525	277,698	509,571	118,045
1966	1,373,666	321,023	550,696	104,285
1967	1,466,802	324,404	524,122	130,533

Appendix Table 36 - Operation of Service Stations and Bulk Dealers
on U.S. 34 Locations, Red Oak, Iowa*

Year	1962	1963	1964	1965	1966	1967
Firms Operating	8	7	5	4	4	4
New Firms	0	0	0	0	0	0
Firms Closing	1	0	1	0	0	2
Firms Reopening	0	0	0	0	0	0
Ownership Changes	1	1	1	0	1	0

Appendix Table 37 - Operation of Service Stations and Bulk Dealers
on Iowa 48 Locations, Red Oak, Iowa*

Year	1962	1963	1964	1965	1966	1967
Firms Operating	9	9	8	9	9	9
New Firms	0	0	0	1	0	0
Firms Closing	0	1	0	0	1	0
Firms Reopening	0	0	0	0	1	0
Ownership Changes	5	1	0	2	4	1

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 38 - Operation of Service Stations and Bulk Dealers
in Other City Locations, Red Oak, Iowa*

Year	1962	1963	1964	1965	1966	1967
Firms Operating	6	4	4	4	4	4
New Firms	0	0	0	0	0	0
Firms Closing	2	0	0	0	0	1
Firms Reopening	0	0	0	0	0	0
Ownership Changes	0	2	1	0	0	1

Appendix Table 39 - Gross Sales for Service Stations and Average Sales
Per Station by Location - U.S. 34, Red Oak, Iowa*

Year	U.S. 34 Locations		Other City Locations	
	Gross	Average	Gross	Average
1962	\$ 774,396	\$ 96,800	\$145,924	\$48,641
1963	646,978	92,425	76,147	38,074
1964	282,050	56,410	122,490	61,245
1965	248,979	62,245	140,790	70,395
1966	238,823	59,706	167,108	83,554
1967	227,927	56,982	156,935	78,468

Appendix Table 40 - Gross Sales for Service Stations and Average
Sales Per Station by Location - Iowa 48, Red Oak,
Iowa*

Year	Iowa 48 Locations		Other City Locations	
	Gross	Average	Gross	Average
1962	\$1,115,962	\$123,996	\$145,924	\$48,641
1963	1,238,948	137,661	76,146	38,074
1964	1,585,130	198,141	122,490	61,245
1965	1,689,096	187,677	140,790	70,395
1966	1,924,362	213,818	167,108	83,554
1967	1,990,924	221,214	156,935	78,468

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 41 - Gross Sales for Service Stations and Average Sales Per Station by Type of Operation, Red Oak, Iowa*

Year	Continued Operation Under Same Ownership		Other Stations	
	Gross	Average	Gross	Average
1962	\$ 552,710	\$184,237	\$1,483,572	\$87,269
1963	716,471	238,824	1,245,602	83,040
1964	1,111,715	370,572	877,955	73,163
1965	1,179,525	393,175	899,340	74,945
1966	1,373,666	457,889	956,627	79,719
1967	1,466,802	488,934	908,984	75,749

Appendix Table 42 - Gross and Net Sales of Service Stations and Bulk Dealers, Corning, Iowa*

Year	Service Stations		Bulk Dealers
	Gross	Net	
1962	\$1,474,429	\$463,619	Note: No separate bulk operation in Corning; several stations have tank wagons.
1963	1,437,823	453,697	
1964	1,416,729	483,417	
1965	1,423,705	459,694	
1966	1,521,550	482,331	
1967	1,507,225	457,645	

Appendix Table 43 - Gross and Net Sales of Service Stations and Bulk Dealers by Location, Corning, Iowa*

Year	U.S. 34 Locations		Other City Locations	
	Gross	Net	Gross	Net
1962	\$1,343,640	\$417,125	\$130,789	\$ 46,494
1963	1,287,070	391,509	150,753	62,188
1964	1,257,988	409,457	158,741	73,960
1965	1,258,186	381,144	165,519	78,550
1966	1,317,110	380,637	204,440	101,694
1967	1,312,702	371,863	194,523	85,782

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 44 - Sales of Service Stations on U.S. 34 Locations, Corning, Iowa*

Year	Gross	Gasoline	Other	Net
1962	\$1,343,640	\$812,035	\$144,022	\$417,125
1963	1,287,070	800,160	119,604	391,509
1964	1,257,988	806,613	63,355	409,457
1965	1,258,186	819,163	61,322	381,144
1966	1,317,110	864,938	75,202	380,637
1967	1,312,702	877,824	63,015	371,863

Appendix Table 45 - Sales of Service Stations on Other City Locations, Corning, Iowa*

Year	Gross	Gasoline	Other	Net
1962	\$130,789	\$77,069	\$ 7,226	\$ 46,494
1963	150,753	78,911	9,654	62,188
1964	158,741	75,868	8,913	73,960
1965	165,519	75,955	11,014	78,550
1966	204,440	90,654	12,092	101,694
1967	194,523	98,548	10,193	85,782

Appendix Table 46 - Gross and Net Sales of Service Stations on U.S. 34 Locations by Type of Operation, Corning, Iowa*

Year	Continued Operation Under Same Ownership		Continued Operation Under Different Ownership	
	Gross	Net	Gross	Net
1962	\$721,547	\$246,097	\$622,093	\$171,028
1963	705,916	238,395	581,154	153,114
1964	694,481	223,252	563,507	186,205
1965	725,418	233,899	532,768	147,245
1966	777,658	244,052	539,452	136,585
1967	788,036	239,590	524,666	132,273

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 47 - Gross Sales for Service Stations and Average Sales Per Station by Location, Corning, Iowa*

Year	U.S. 34 Locations		Other City Locations	
	Gross	Average	Gross	Average
1962	\$1,343,640	\$167,955	\$130,789	\$ 65,394
1963	1,287,070	160,884	150,753	75,377
1964	1,257,988	157,249	158,741	79,370
1965	1,258,186	157,273	165,519	82,760
1966	1,317,110	164,639	204,440	102,220
1967	1,312,702	187,529	194,523	97,262

Appendix Table 48 - Gross Sales for Service Stations and Average Sales Per Station by Type of Operation, Corning, Iowa*

Year	Continued Operation Under Same Ownership		Other Stations	
	Gross	Average	Gross	Average
1962	\$812,357	\$162,471	\$662,072	\$110,345
1963	812,528	162,506	625,295	104,216
1964	811,811	162,362	604,918	100,820
1965	851,488	170,298	572,217	95,370
1966	933,904	186,781	587,646	97,941
1967	931,089	186,218	576,136	115,227

Appendix Table 49 - Operation of Service Stations and Bulk Dealers on U.S. 34 Locations, Corning, Iowa*

Year	1962	1963	1964	1965	1966	1967
Firms Operating	8	8	8	8	8	7
New Firms	0	0	0	0	0	0
Firms Closing	0	0	0	0	1	0
Firms Reopening	0	0	0	0	0	0
Ownership Changes	1	1	1	0	1	2

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 50 - Operation of Service Stations and Bulk Dealers
in Other City Locations, Corning, Iowa*

Year	1962	1963	1964	1965	1966	1967
Firms Operating	2	2	2	2	2	2
New Firms	0	0	0	0	0	0
Firms Closing	0	0	0	0	0	0
Firms Reopening	0	0	0	0	0	0
Ownership Changes	0	0	0	0	0	1

Appendix Table 51 - Taxable Retail Sales of the Cafe Group in Corning,
Red Oak, South West Iowa Economic Area, and the
State of Iowa*

Year	Taxable Retail Sales (\$1,000)			
	Corning	Red Oak	SW Iowa E. A.	Iowa
1962	220	587	4,398	157,375
1963	188	502	4,777	168,150
1964	167	673	4,822	175,577
1965	162	753	5,088	189,830
1966	156	796	5,569	212,050
1967	192	837	5,741	233,572

Appendix Table 52 - Trend in Taxable Retail Sales of Cafes in Corning,
Red Oak, South West Iowa Economic Area, and the
State of Iowa*

Location	1962	1963	1964	1965	1966	1967
Corning	100.0%	85.4	75.5	73.4	70.9	87.3
Red Oak	100.0%	85.5	114.5	128.0	135.6	142.5
SW Iowa E. A.	100.0%	108.6	109.6	115.7	126.6	130.5
State of Iowa	100.0%	106.8	111.6	120.6	134.7	148.4

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 53 - Distribution of Cafe Sales by Location, Red Oak, Iowa*

Location	1962	1963	1964	1965	1966	1967
U.S. 34 Locations	33.7	21.9	24.5	17.0	18.1	18.5
Iowa 48 Locations	24.1	21.7	42.7	71.9	77.3	90.7
Other City Locations	42.2	36.7	39.0	33.4	33.7	37.9
Total	100.0%	80.3%	106.2%	122.3%	129.4%	147.1%

Appendix Table 54 - Distribution of Cafe Sales Along U.S. 34 and Iowa 48, by Type of Operation, Red Oak, Iowa*

Operation	1962	1963	1964	1965	1966	1967
Same Ownership	11.6	22.4	56.7	74.9	84.5	104.2
Change in Ownership	88.4	53.1	59.7	79.1	80.7	84.9
Total	100.0%	75.5%	116.4%	154.0%	165.2%	189.1%

Note: No Cafes along Old U.S. 34 remained under the same ownership during the study period.

Appendix Table 55 - Distribution of Cafe Sales for Off Highway Locations by Type of Operation, Red Oak, Iowa*

Operation	1962	1963	1964	1965	1966	1967
Same Ownership	9.0	16.7	22.2	35.5	51.0	68.2
Change in Ownership	91.0	70.2	70.1	43.4	29.4	21.6
Total	100.0%	86.9%	92.3%	78.9%	80.4%	89.8%

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 56 - Operation of Cafes by Locations and Type of Operation, Corning, Iowa*

Year	Continued Operation Under Same Ownership		Other Operations	
	On Highway	Off Highway	On Highway	Off Highway
1962	0	1	1	2
1963	0	1	1	2
1964	0	1	1	2
1965	0	1	1	1
1966	0	1	0	1
1967	0	1	0	2

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 57 - Taxable Retail Sales for Nine Iowa Communities in South West Iowa*

Community	Taxable Retail Sales (\$1,000's)					
	1962	1963	1964	1965	1966	1967
Bedford	3,530	3,556	3,425	3,514	3,536	3,738
Clarinda	10,378	11,161	11,840	12,208	13,887	14,584
Corning	5,553	5,175	5,517	5,593	6,034	6,625
Creston	14,969	15,380	16,376	17,687	19,199	20,632
Glenwood	5,526	5,635	5,838	6,387	6,798	6,981
Mt. Ayr	4,496	4,771	5,021	5,326	5,850	6,212
Red Oak	14,138	14,448	15,370	16,291	17,903	19,004
Shenandoah	14,649	15,100	15,870	16,513	17,606	18,282
Sidney	1,813	1,881	1,710	1,750	1,729	1,826

* Source: Iowa Department of Revenue, Retail Sales Tax Division

Appendix Table 58 - Average Net Millages Levied in Corning 1962 - 1968*

Year	State	County	City	School	Total
1962	0.360	13.129	27.855	38.339	79.683
1963	0.350	13.434	29.386	39.409	82.579
1964	0.340	13.143	29.481	38.999	81.963
1965	0.320	13.320	29.005	39.383	82.028
1966	0.050	15.193	27.338	46.434	89.015
1967	0.310	13.415	33.333	43.943	91.001
1968	0.000	12.929	35.840	48.290	97.059

* Source: Adams County Assessor's Report

Appendix Table 59 - Average Net Millages Levied in Red Oak 1962 - 1968*

Year	State	County	City	School	Total
1962	0.400	9.100	28.958	33.796	72.254
1963	0.360	7.574	29.024	34.359	71.317
1964	0.340	8.262	32.040	36.319	76.961
1965	0.320	8.114	32.411	38.380	79.225
1966	0.050	8.878	35.655	45.083	89.666
1967	0.310	9.915	34.454	37.700	82.379
1968	0.000	9.667	43.571	39.216	92.454

Appendix Table 60 - Valuation of All New Construction in Corning*

Year	Number of Permits	Valuation
1961	25	\$191,179
1962	23	83,761
1963	14	67,753
1964	16	95,593
1965	27	261,040
1966	27	155,118
1967	23	151,026

Appendix Table 61 - Valuation of New Residential and Commercial Buildings in Red Oak*

Year	Residential		Commercial	
	Number of Permits	Valuation	Number of Permits	Valuation
1962	N.A.	N.A.	N.A.	N.A.
1963	N.A.	N.A.	N.A.	N.A.
1964	10	\$132,300	11	\$ 334,770
1965	16	227,650	5	102,025
1966	21	298,945	10	546,376
1967	17	242,166	9	552,255
1968	15	236,078	2	1,221,002

* Source: Adams and Montgomery County Assessors, Corning and Red Oak

Appendix Table 62 - Assessed Valuation of all Real Estate Property
in Corning and Red Oak 1962 - 1968*

Year	Corning	Red Oak
1962	\$1,899,982	\$9,191,975
1963	1,909,022	9,314,137
1964	1,905,882	9,471,703
1965	2,057,462	9,400,505
1966	2,313,080	9,487,841
1967	2,282,762	9,728,225
1968	2,243,296	9,058,133

* Source: Montgomery County Assessor, Red Oak

Appendix Table 63 - Bank Deposits for Nine Communities in Southwest Iowa*

Community	Bank Deposits (\$1,000's)						
	1962	1963	1964	1965	1966	1967	1968
Bedford	4665	5141	5593	6417	7071	6964	7440
Clarinda	10806	10769	11662	11974	13354	14376	15186
Corning	4894	4763	4894	5425	6933	7535	10032
Creston	11429	12423	13363	15105	15611	18948	22882
Glenwood	5522	5603	5785	6547	6343	6089	6559
Mt. Ayr	2888	2918	2969	3226	3517	4259	5736
Red Oak	17577	18999	19794	22537	24599	24895	27635
Shenandoah	11479	12052	12827	12891	13019	13692	14193
Sidney	3039	3417	3508	3853	4139	4767	5410

* Source: Annual Reports of the Superintendent of Banking

Appendix Table 64 - Annual State Bank Deposits and Taxable Retail Sales
in Iowa*

Year	Bank Deposits (\$1,000's)	Taxable Retail Sales (\$1,000's)
1961	\$1,813,369	\$3,497,244
1962	1,964,236	3,621,172
1963	2,092,842	3,704,074
1964	2,235,055	3,856,974
1965	2,481,770	4,184,593
1966	2,703,014	4,596,894
1967	2,912,644	4,884,614

* Source: Iowa Department of Revenue, Retail Sales Tax Division
Annual Reports of the Superintendent of Banking

Appendix Table 65 - Automobile Registration in Iowa, South West Iowa
Economic Area, Adams County and Montgomery County*

Year	Iowa	Southwest Iowa Economic Area	Adams County	Montgomery County
1961	1,084,709	38,994	3,044	5,987
1962	1,122,869	39,966	3,049	6,186
1963	1,147,577	40,472	3,009	6,266
1964	1,187,706	41,209	3,095	6,330
1965	1,232,608	42,103	3,076	6,548
1966	1,270,887	43,088	3,095	6,676
1967	1,288,000	42,884	3,118	6,639

* Source: Iowa Department of Public Safety, Motor Vehicle Registration Division

Appendix Table 66 - Population in Iowa, South West Iowa Economic
Area and Adams County*

Year	Iowa	Southwest Iowa Economic Area	Adams County
1910	2,224,771	126,737	10,437
1920	2,404,021	128,276	10,521
1930	2,470,939	130,885	10,998
1940	2,538,268	122,124	10,156
1950	2,621,073	112,345	8,753
1960	2,727,537	98,200	7,468

* Source: United States Bureau of Census

Appendix Table 67 - Population in Montgomery County, Red Oak, and
Corning, Iowa*

Year	Montgomery	Red Oak	Corning
1910	16,604	4,830	1,702
1920	17,048	5,578	1,840
1930	16,752	5,778	2,026
1940	15,697	5,763	2,162
1950	15,685	6,526	2,104
1960	14,467	6,421	2,041

* Source: United States Bureau of Census

Appendix Table 68 - Population for Seven Cities in South West Iowa*

Cities	1910	1920	1930	1940	1950	1960
Bedford	1,883	2,073	2,100	2,151	2,000	1,807
Clarinda	3,832	4,511	4,962	4,905	5,086	5,901
Creston	6,924	8,034	8,615	8,033	8,317	7,667
Glenwood	4,052	3,862	4,269	4,501	4,664	4,783
Mount Ayr	1,646	1,738	1,704	1,930	1,793	1,738
Shenandoah	4,976	5,255	6,502	6,846	6,938	6,567
Sidney	1,019	1,154	1,074	1,290	1,132	1,057

* Source: United States Bureau of Census

Appendix Table 69 - Farm Occupancy and Size, Adams County, 1962 - 1968*

Year	Number of Persons Living on Farms	Number of Farms	Average Size of Farms	Total Land in Farms (Acres)
1962	3,673	1,225	221	270,863
1963	3,532	1,186	228	270,948
1964	3,467	1,143	237	270,990
1965	3,389	1,017	264	268,375
1966	3,266	996	268	266,648
1967	3,148	972	274	266,012
1968	2,987	931	284	264,195

* Source: Iowa Annual Farm Census

Appendix Table 70 - Farm Occupancy and Size, Montgomery County,
1962 - 1968*

Year	Number of Persons Living on Farms	Number of Farms	Average Size of Farms	Total Land in Farms (Acres)
1962	4,223	1,232	217	267,496
1963	3,974	1,200	223	268,000
1964	3,973	1,155	231	267,236
1965	3,967	1,113	239	266,323
1966	3,758	1,091	249	271,885
1967	3,622	1,049	258	270,840
1968	3,440	1,010	267	269,448

* Source: Iowa Annual Farm Census

Appendix Table 71 - Farm Tenure in Adams County, 1962 - 1968*

Year	Owned by Operator		Rented by Operator	
	Acreage	Percent of Total Land	Acreage	Percent of Total Land
1962	153,752	56.8	117,111	43.2
1963	158,444	58.5	112,504	41.5
1964	156,876	57.9	114,114	42.1
1965	147,875	55.1	120,500	44.9
1966	156,836	58.8	109,812	41.2
1967	148,541	55.8	117,471	44.2
1968	157,647	59.7	106,548	40.3

Appendix Table 72 - Farm Tenure in Montgomery County, 1962 - 1968*

Year	Owned by Operator		Rented by Operator	
	Acreage	Percent of Total Land	Acreage	Percent of Total Land
1962	121,630	45.5	145,866	54.5
1963	121,951	45.5	146,049	54.5
1964	125,312	46.9	141,924	53.1
1965	127,036	47.7	139,287	52.3
1966	134,193	49.4	137,692	50.6
1967	130,063	48.0	140,777	52.0
1968	137,318	51.0	132,130	49.0

Appendix Table 73 - Livestock Production in Iowa*

Year	Livestock Production (1,000's Head)		
	Cattle	Hogs	Sheep
1962	3055	2565	853
1963	3290	2474	840
1964	3348	2378	856
1965	3521	2426	732
1966	3739	2501	696
1967	3952	2444	647
1968	4165	2410	600

* Source: Iowa Annual Farm Census

Appendix Table 74 - Livestock Production in South West Iowa*

Year	Livestock Production (1,000's Head)		
	Cattle	Hogs	Sheep
1962	151	131	29
1963	162	126	27
1964	176	120	27
1965	185	128	32
1966	195	133	54
1967	207	131	38
1968	211	131	20

Appendix Table 75 - Livestock Production in Adams County*

Year	Livestock Production (1,000's Head)		
	Cattle	Hogs	Sheep
1962	10	13	3
1963	11	17	2
1964	11	17	1
1965	12	16	2
1966	15	17	1
1967	15	18	1
1968	16	17	1

Appendix Table 76 - Livestock Production in Montgomery County*

Year	Livestock Production (1,000's Head)		
	Cattle	Hogs	Sheep
1962	29	21	4
1963	33	20	4
1964	34	20	6
1965	37	22	14
1966	38	22	38
1967	41	22	20
1968	43	23	5

* Source: Iowa Annual Farm Census

Appendix Table 77 - Iowa Production of Corn, Oats, and Soybeans*

Year	Production (1,000's Bushels)		
	Corn	Oats	Soybeans
1962	748,236	126,880	92,072
1963	858,225	122,404	107,785
1964	768,988	110,598	119,722
1965	812,816	102,707	123,965
1966	902,179	103,822	144,413
1967	981,344	99,578	140,728
1968	879,967	104,543	174,111

Appendix Table 78 - South West Iowa Economic Area Production of Corn, Oats, and Soybeans*

Year	Production (1,000's Bushels)		
	Corn	Oats	Soybeans
1962	38,807	3,015	5,600
1963	48,760	3,627	6,488
1964	36,878	2,751	6,578
1965	41,660	2,370	7,486
1966	47,105	2,938	9,241
1967	48,222	3,234	7,762
1968	39,095	3,496	10,029

Appendix Table 79 - Adams County Production of Corn, Oats, and Soybeans*

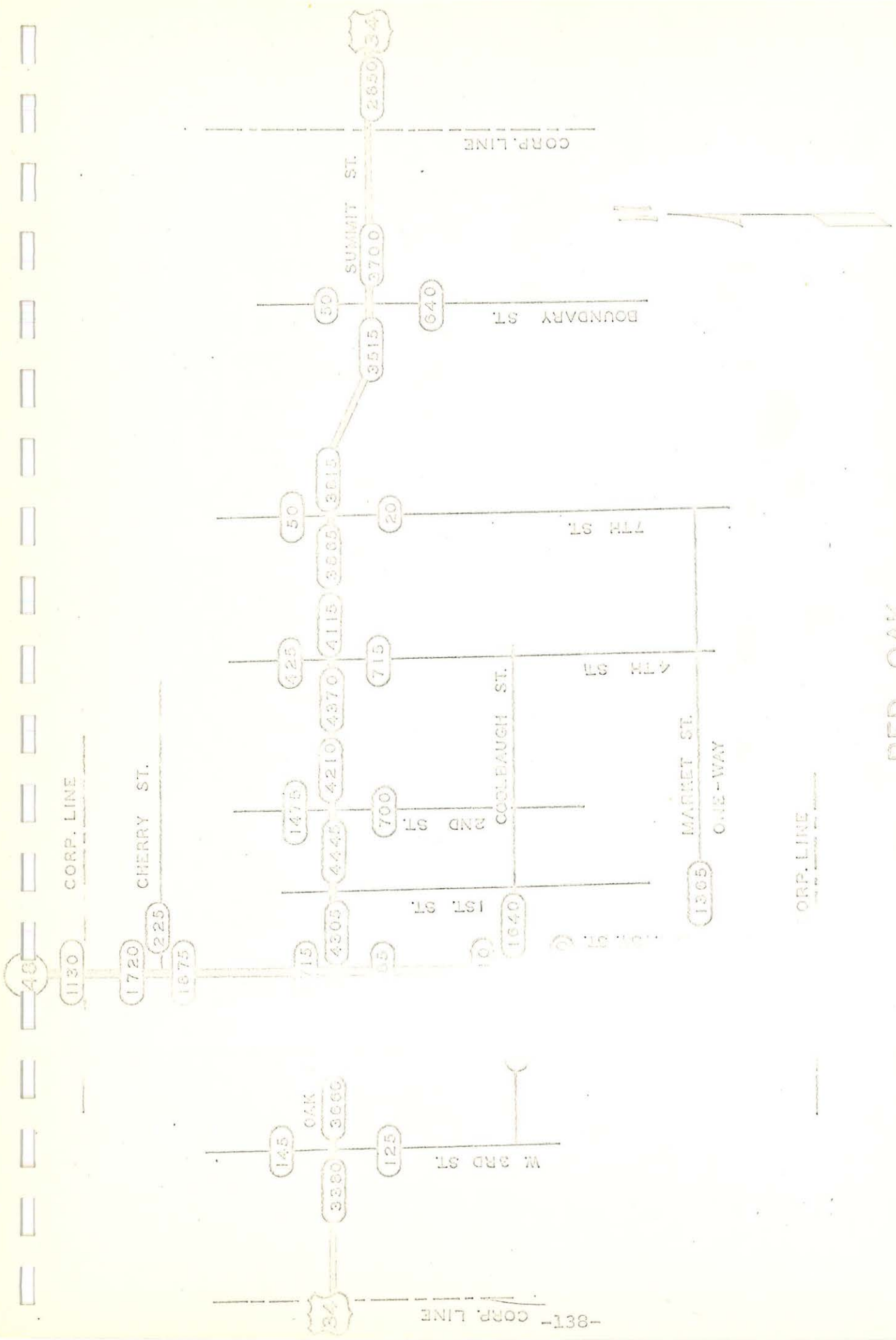
Year	Production (1,000's Bushels)		
	Corn	Oats	Soybeans
1962	3,761	559	486
1963	4,591	672	575
1964	3,741	562	601
1965	3,961	486	651
1966	5,115	575	832
1967	4,841	598	723
1968	5,050	655	1,168

* Source: Iowa Annual Farm Census

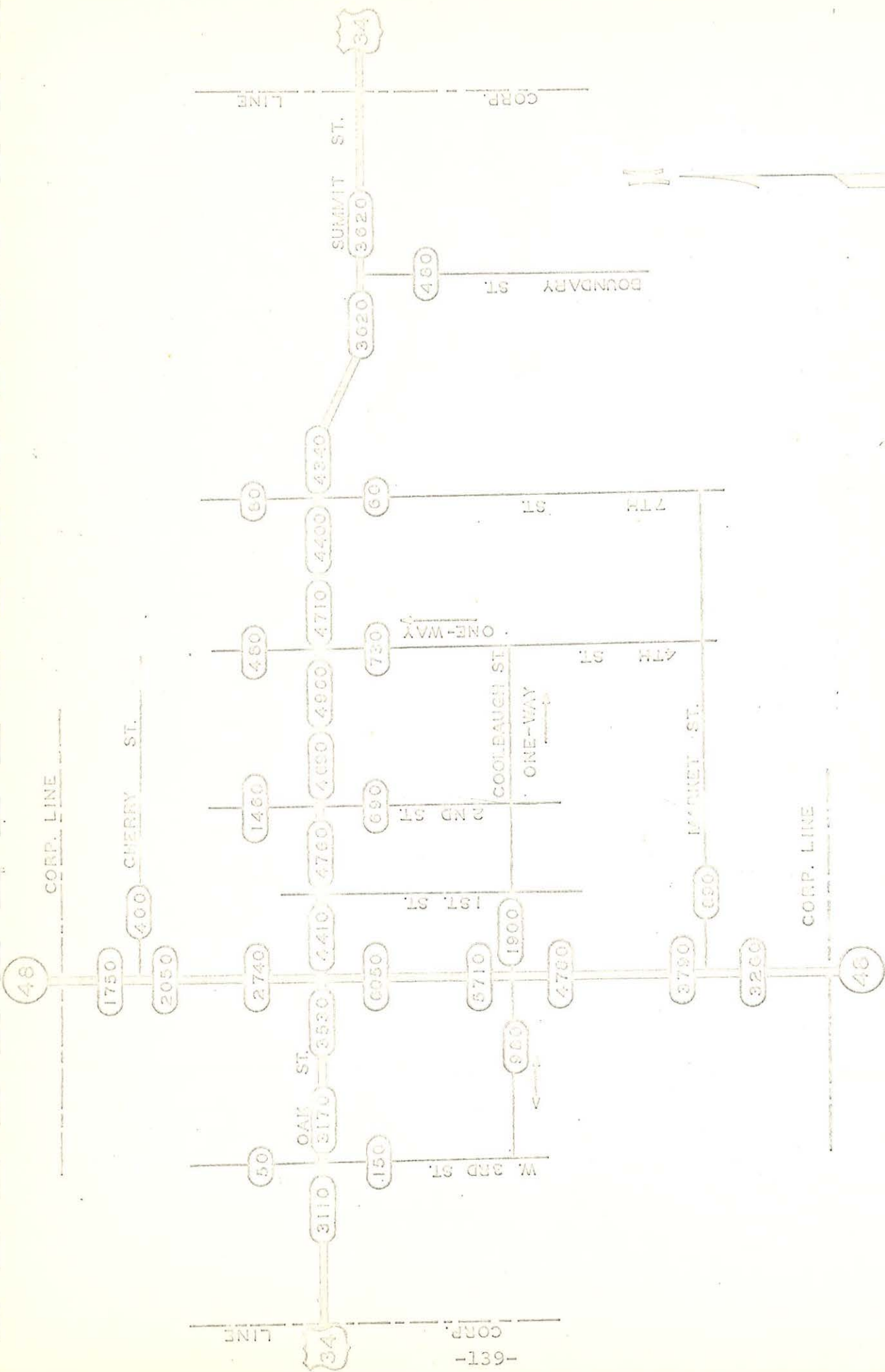
Appendix Table 80 - Montgomery County Production of Corn, Oats, and Soybeans*

Year	Production (1,000's Bushels)		
	Corn	Oats	Soybeans
1962	6,125	571	466
1963	7,199	582	583
1964	5,461	463	696
1965	6,557	364	830
1966	6,950	436	1,089
1967	7,453	428	987
1968	5,089	347	1,206

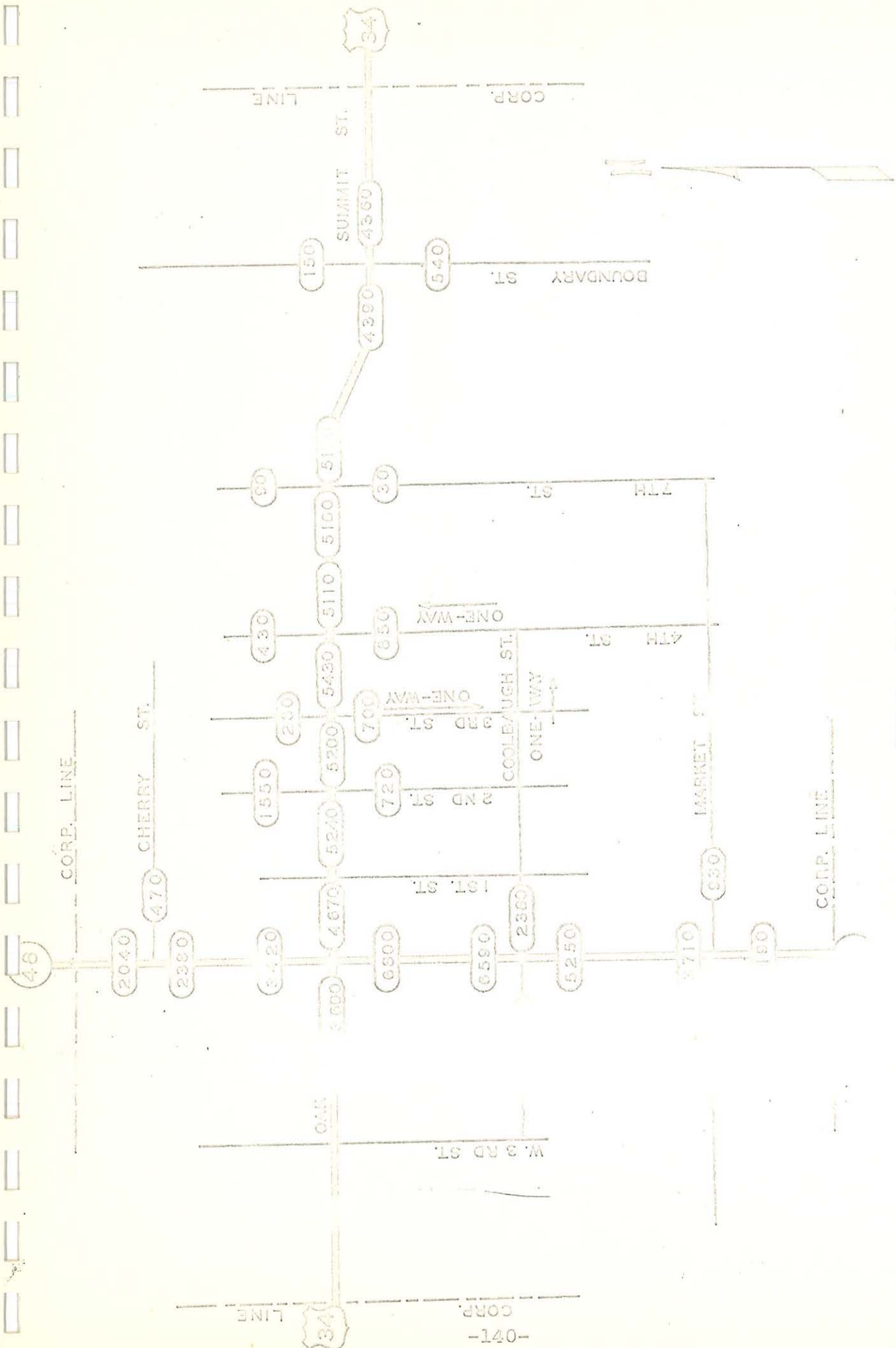
* Source: Iowa Annual Farm Census



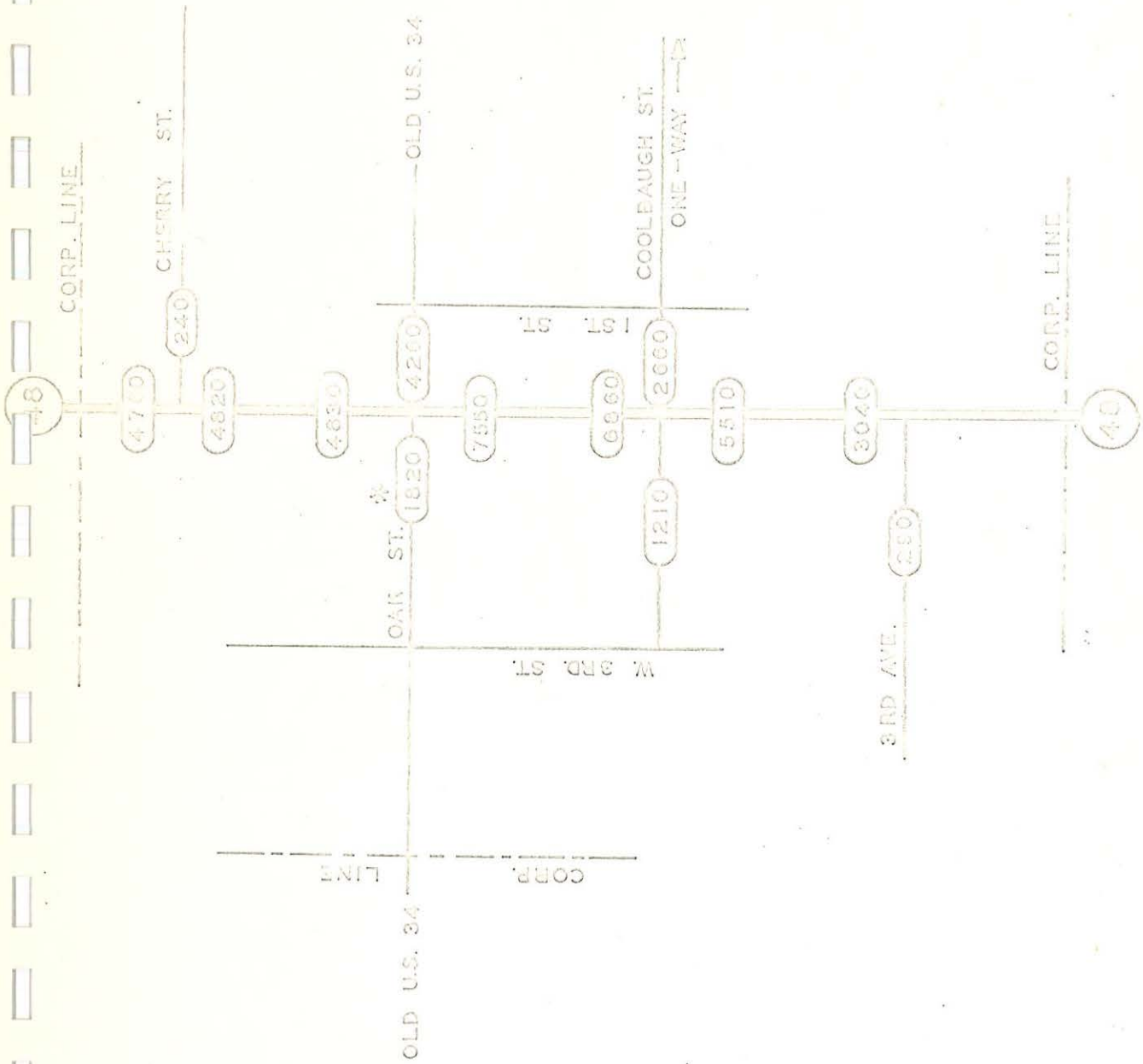
RED OAK
 MONTGOMERY COUNTY
 DAILY ANNUAL TRAFFIC-1938



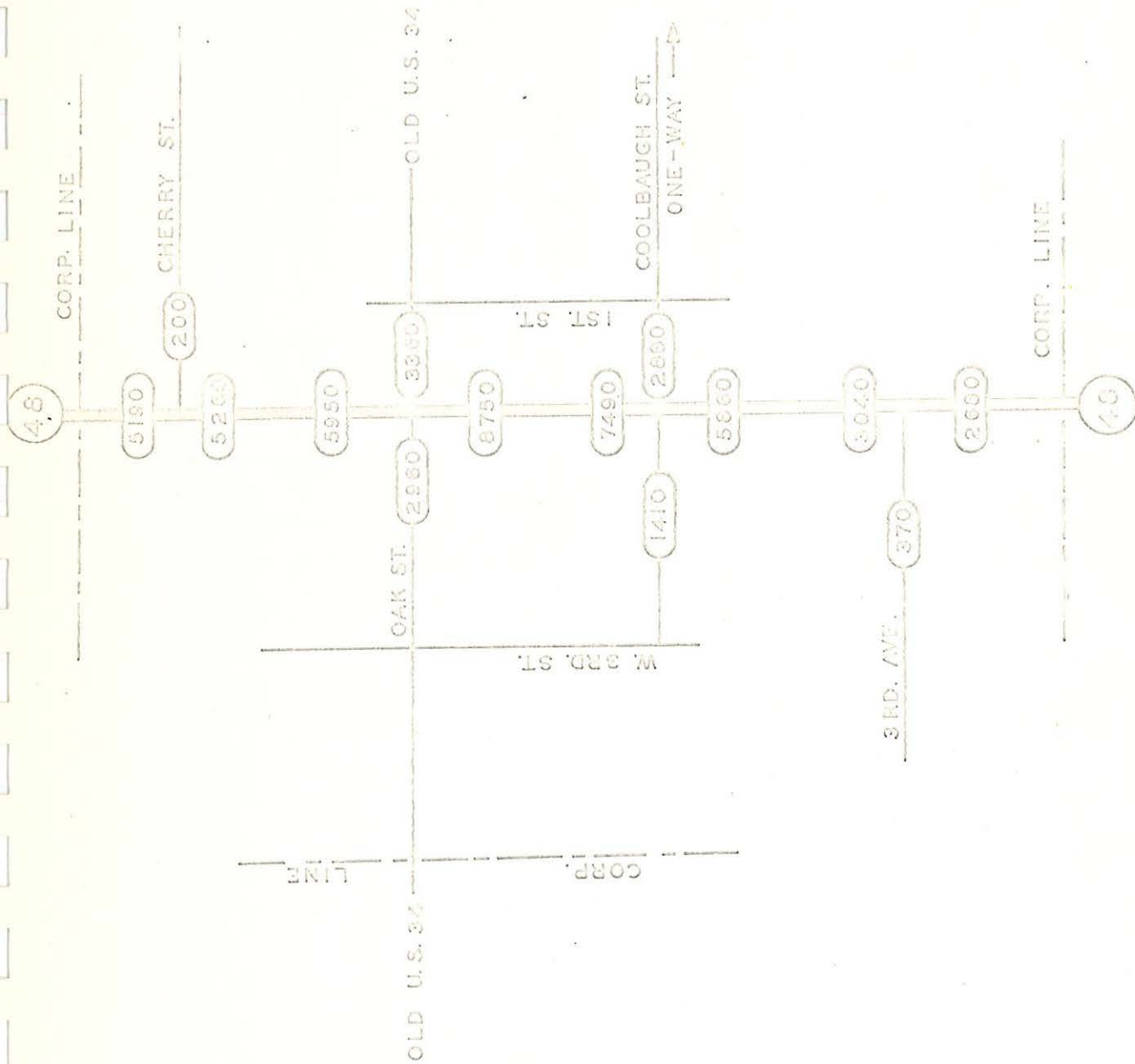
RED OAK
MONTGOMERY COUNTY
AVERAGE ANNUAL DAILY TRAFFIC - 1961



RED OAK
 MONTGOMERY COUNTY
 DAILY ANNUAL TRAFFIC - 1963
 APPENDIX FIGURE



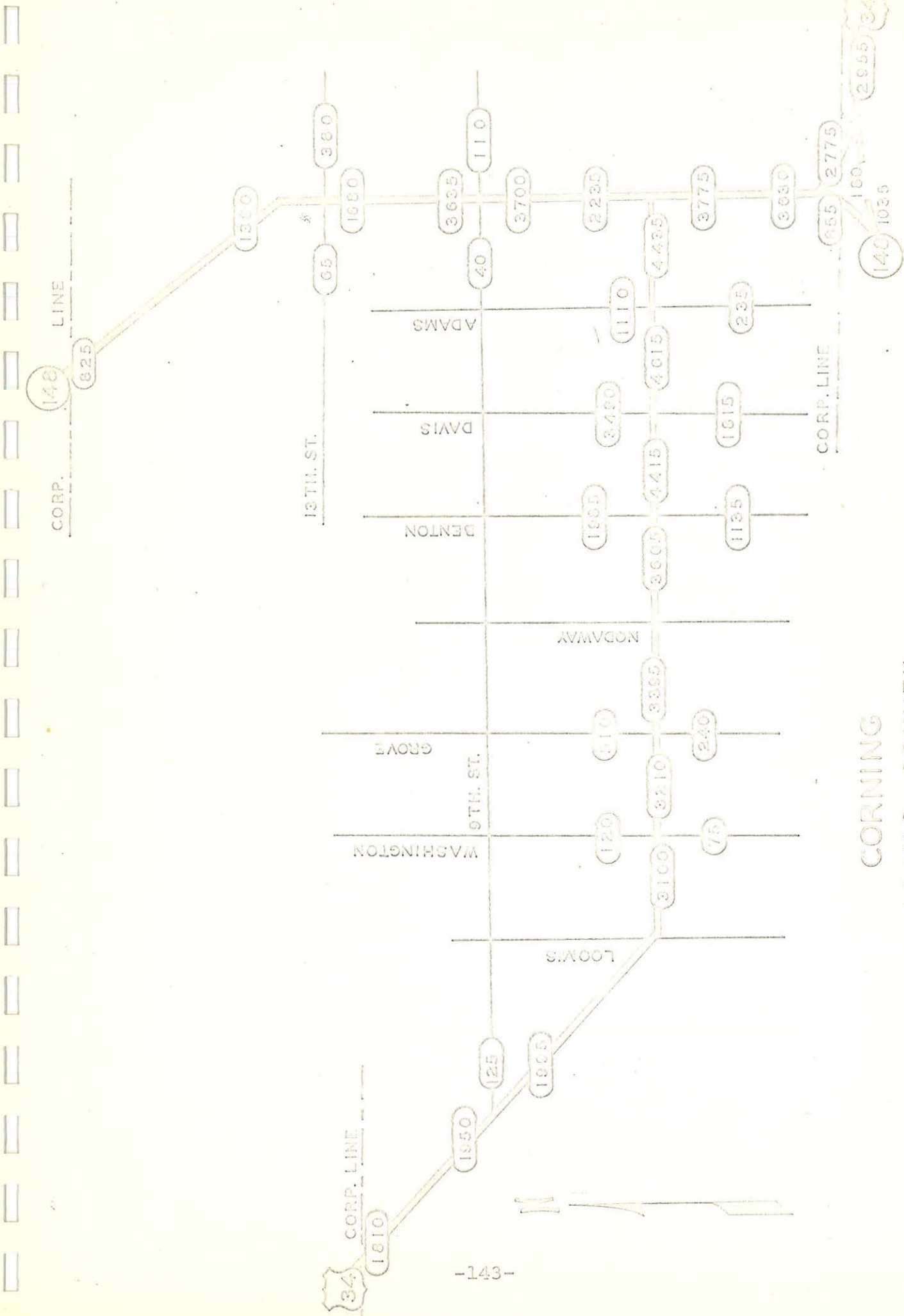
RED OAK
 MONTGOMERY COUNTY
 AVERAGE ANNUAL DAILY TRAFFIC - 1900
 * WEST LEG OPEN TO LOCAL TRAFFIC ONLY

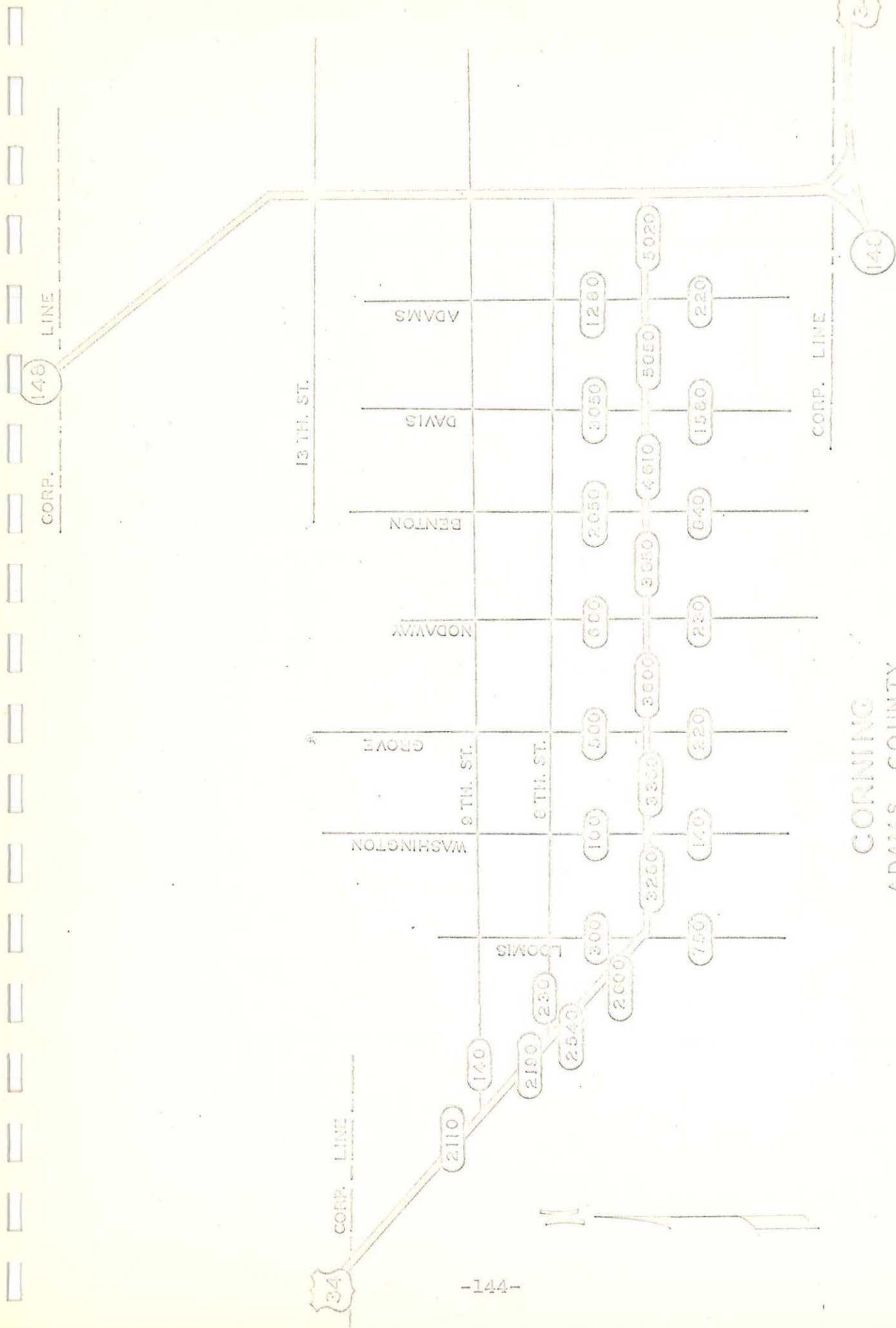


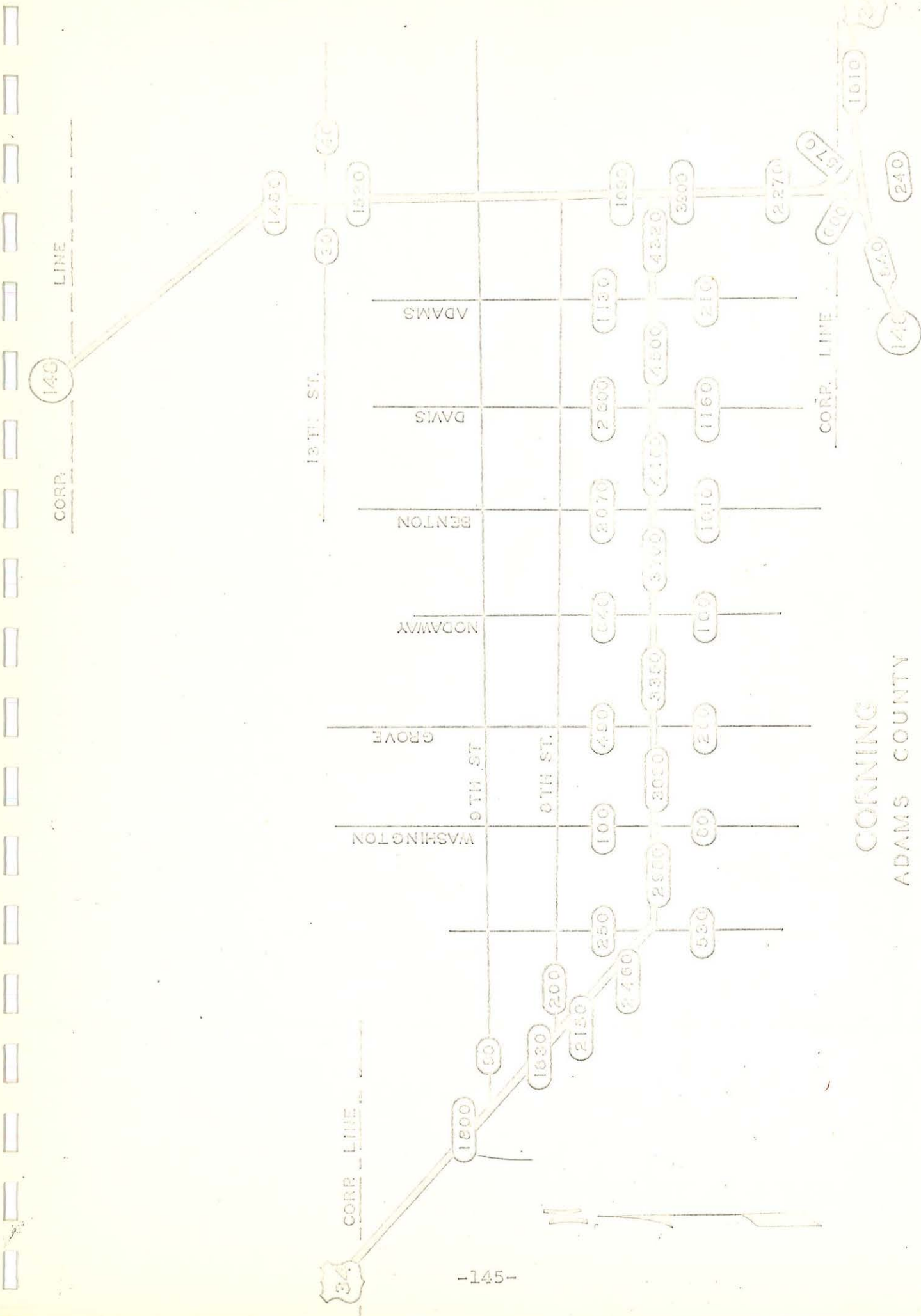
RED OAK

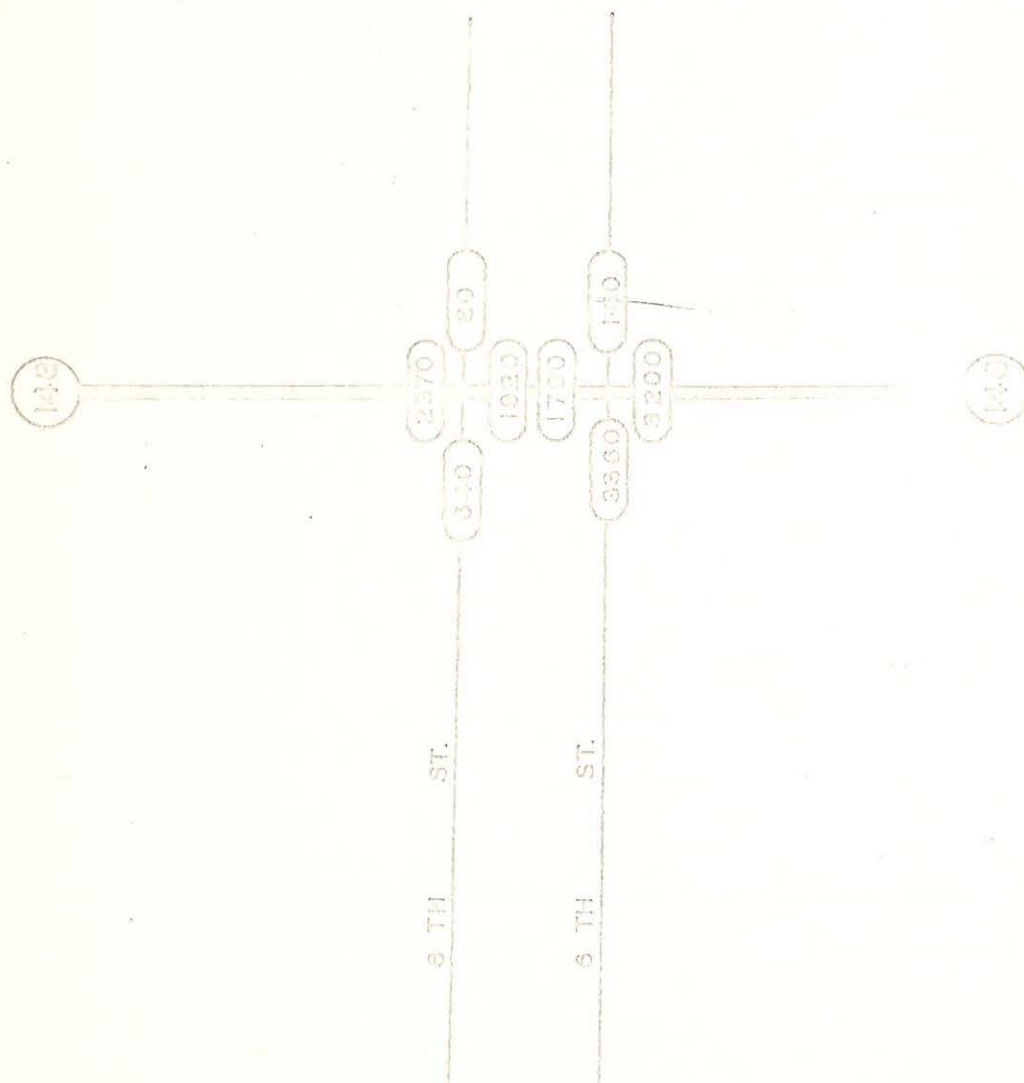
MONTGOMERY COUNTY

APPENDIX FIGURE 1 TRAFFIC ANNUAL DAILY TRAFFIC-1969





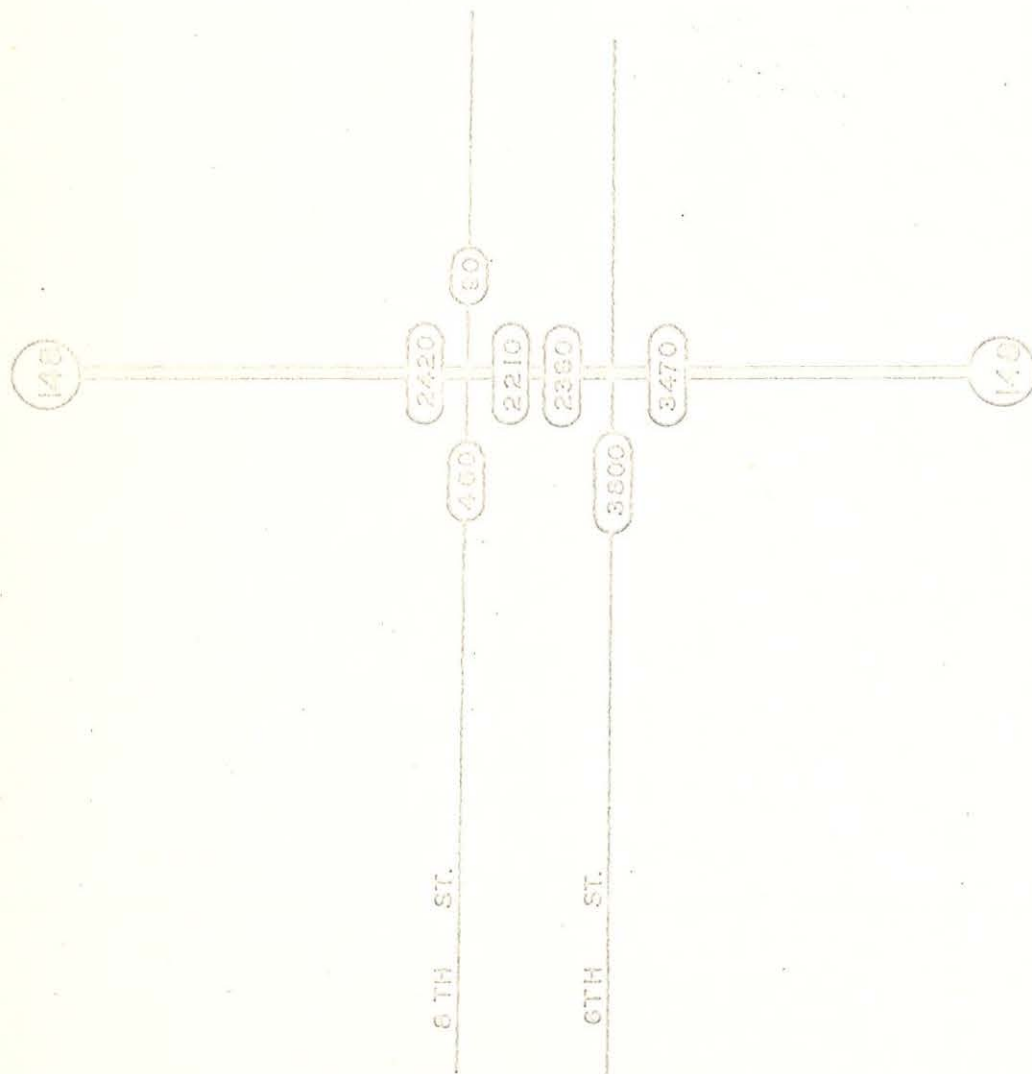




CORNING

ADAMS COUNTY

APPENDIX FIGURE 8 AVERAGE ANNUAL DAILY TRAFFIC-1987



CORNING

ADAMS COUNTY

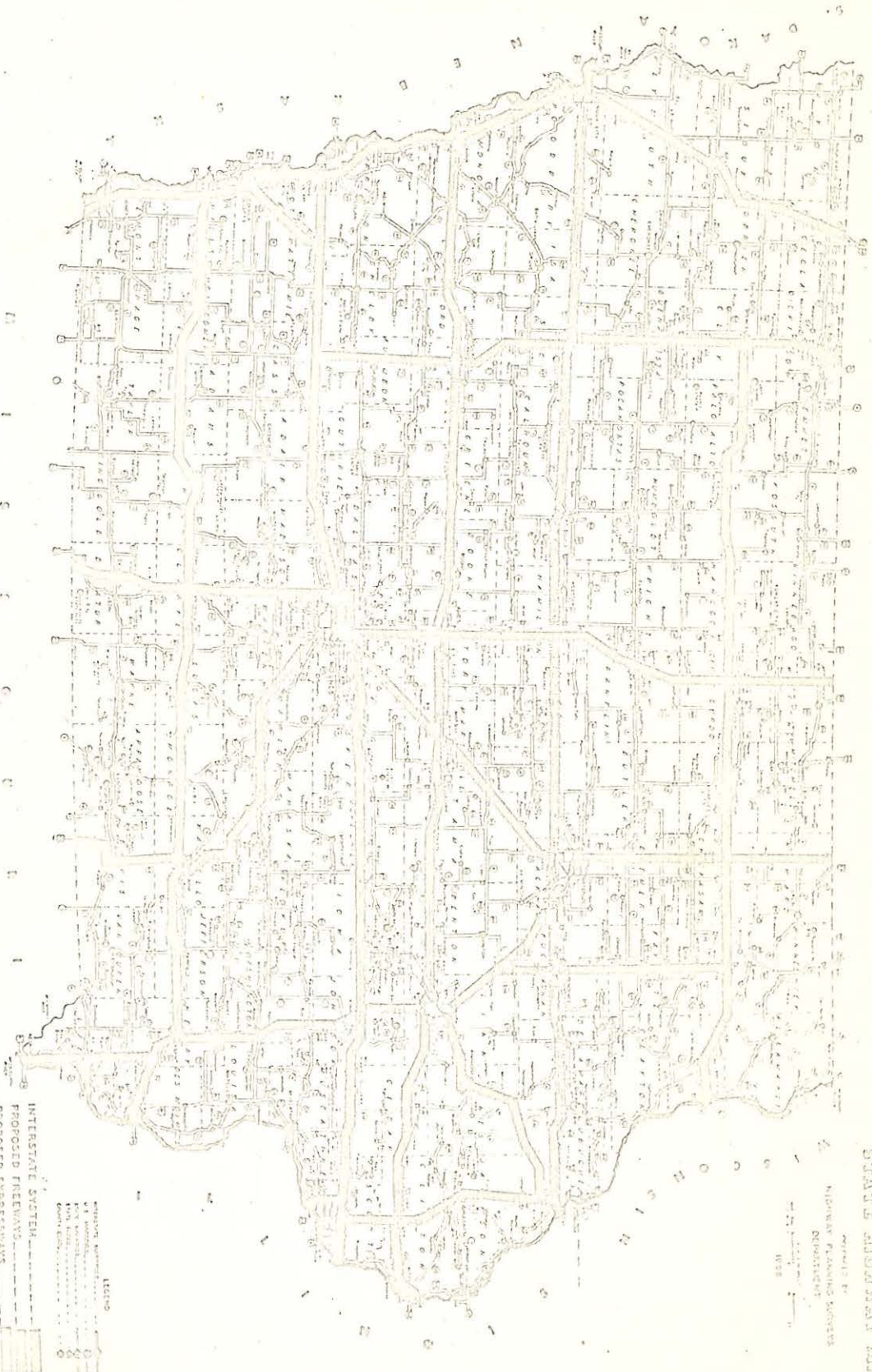
AVERAGE ANNUAL DAILY TRAFFIC-1969

APPENDIX FIGURE 10

IOWA'S PROPOSED NETWORK OF
FREEWAYS AND EXPRESSWAYS

I O W A
STATE HIGHWAY MAP

DESIGNED BY
HIGHWAY PLANNING BOARD
DEPARTMENT
1958



Appendix Figure 11

EXISTING
PROPOSED
PROPOSED
FEBRUARY 1958