

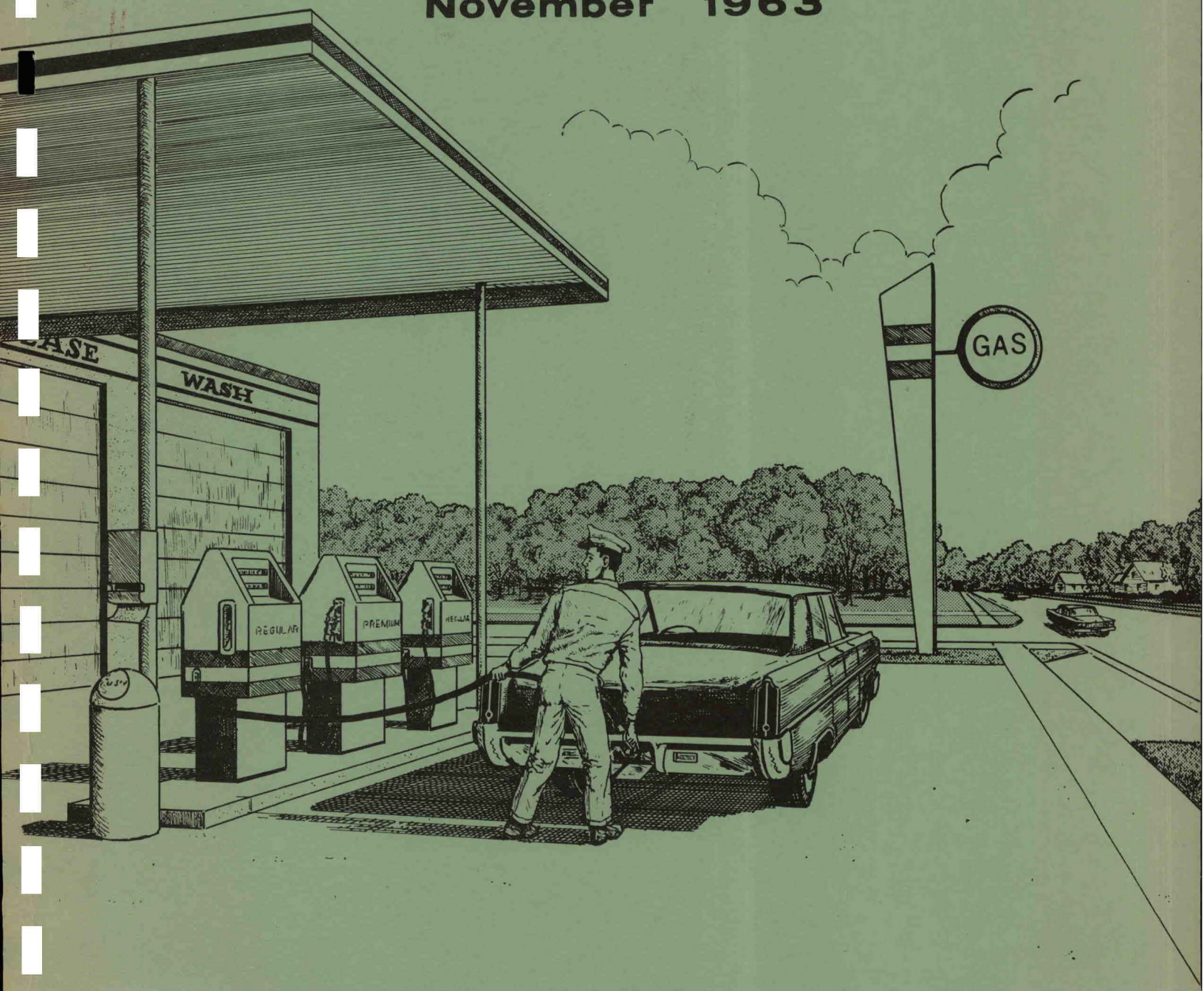
# Service Station Sales

in

## Eight Iowa Cities

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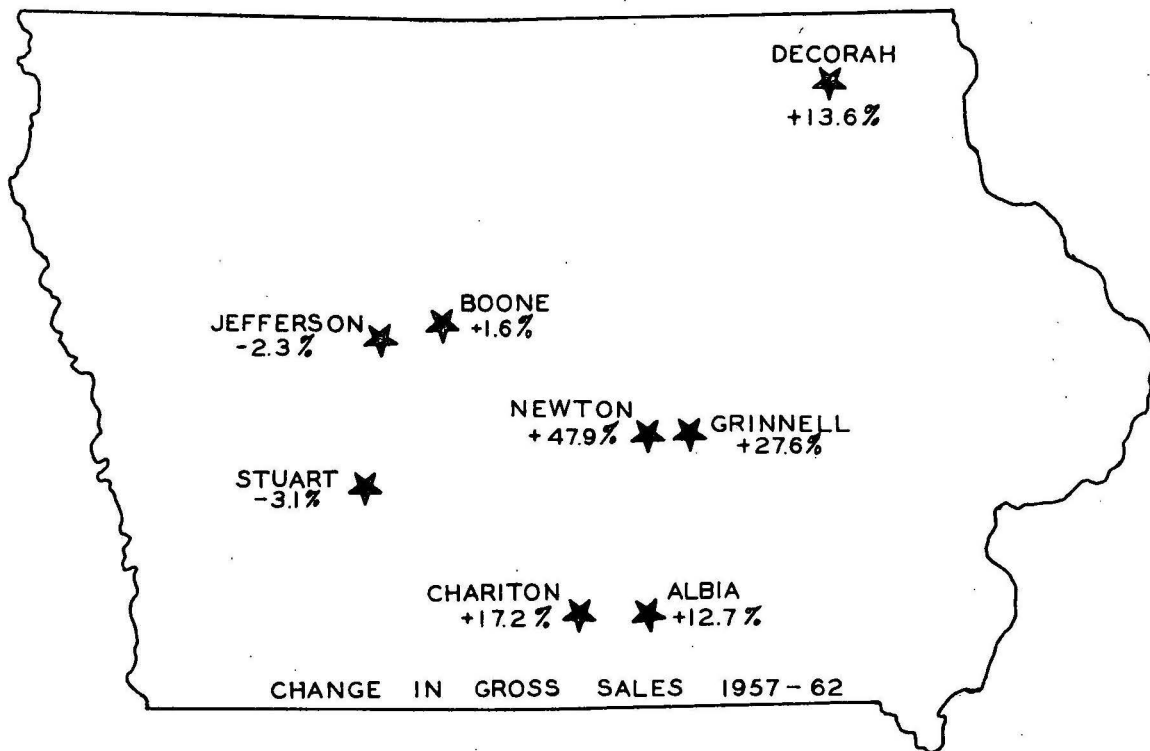
November 1963



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Iowa State Highway Commission

SERVICE STATION SALES  
IN  
EIGHT IOWA CITIES



November, 1963

Traffic and Highway Planning Department  
Division of Planning  
IOWA STATE HIGHWAY COMMISSION

In Cooperation With The  
Bureau of Public Roads  
UNITED STATES DEPARTMENT OF COMMERCE

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## INTRODUCTION

What is the trend in service station sales and how does a change in the traffic pattern affect this trend? This report is a study of service station sales in eight Iowa cities that are experiencing changes in traffic patterns. The cities are:

- |             |              |
|-------------|--------------|
| 1. Albia    | 5. Grinnell  |
| 2. Boone    | 6. Jefferson |
| 3. Chariton | 7. Newton    |
| 4. Decorah  | 8. Stuart    |

The Interstate Highway by-passes Newton, Grinnell and Stuart. Primary highways are being relocated around Boone, Decorah, and Albia. Primary highway relocations have been completed around Chariton and Jefferson. Table 1 shows the population, highway and traffic data on the eight cities.

Table 1. Population, Highway and Traffic Data on Eight Iowa Cities

City	1960 Population	Percent Change Population 1950-60	Highways Being By-Passed	Percent Change AADT 1957-62
Albia	4582	-5.3%	U.S. 34	-17.1%
Boone	12,468	+2.5	U.S. 30	+ 5.8
Chariton	5042	-5.2	U.S. 34	-37.1
Decorah	6435	+6.2	U.S. 52	+ 8.8
Grinnell	7367	+7.9	U.S. 6	+22.4
Jefferson	4570	+5.6	U.S. 30	-64.7
Newton	15,381	+31.2	U.S. 6	+28.9
Stuart	1486	-0.9	Iowa 90	-56.3

Data on the sales of service stations and bulk dealers were obtained from the Retail Sales Tax Division of the State Tax Commission. 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 sales of services and items not subject to retail sales tax, excluding gasoline. The sum of gasoline, other and net sales are the gross sales. This data was studied and is presented for review. Table 2 indicates the change in gross sales of service stations and bulk dealers in each city. This table also illustrates the highway construction period in each city.

Table 2. Percent Change in Annual Gross Sales of Service Stations and Bulk Dealers in Eight Iowa Cities (Base Year, 1957 = 100), Construction Period

City	1958	1959	1960	1961	1962
Jefferson	+2.9%	-2.7%	-2.3%	-3.1%	-2.3%
Stuart	+8.1	+13.1	+7.9	-0.8	-3.1
Chariton	+12.9	+13.2	+19.9	+24.4	+17.2
Newton	+23.9	+39.3	+43.9	+50.8	+47.9
Albia	+4.2	+5.2	+14.6	+7.6	+12.7
Grinnell	+12.1	+17.9	+21.8	+17.2	+27.6
Boone	+6.1	+6.5	+6.9	+3.9	+1.6
Decorah	+3.4	+10.2	+12.3	+13.9	+13.6

Data shown in Table 2 indicates that gross sales of service stations and bulk dealers experience an unusual increase during the construction period and show a decrease when the construction is completed and the by-pass is open to traffic. Cities showing this trend are Jefferson, Stuart, Chariton and Newton. The normal trend of gross sales is shown in Boone and Decorah,



since highway construction in these areas did not start until late 1962. Albia and Grinnell are experiencing an increase in gross sales during the highway construction period.

Table 3 shows the change in gross sales of service stations and bulk dealers located on highways being by-passes in each city and the highway construction period.

Table 3. Percent Change in Annual Gross Sales of Service Stations Located on Highways Being By-Passed in Eight Iowa Cities. (Base Year, 1957 = 100) Construction Period

City	1958	1959	1960	1961	1962
Jefferson	-2.2%	-16.8%	-28.9%	-20.9%	-17.9%
Stuart	+8.1	+16.2	+ 9.9	- 2.8	- 5.2
Chariton	+19.9	+27.1	+38.9	+49.0	+30.9
Newton	+25.1	+32.7	+39.2	+47.6	+36.8
Albia	+25.4	+17.6	+13.3	- 2.2	- 3.5
Grinnell	+29.1	+45.6	+53.9	+47.9	+74.5
Boone	+9.4	+ 8.8	+ 6.7	- 1.9	- 2.8
Decorah	+7.5	+16.2	+22.9	+23.6	+24.0

The change in gross sales of firms on highway locations is more impressive than the change in gross sales of total firms in the city. This is a reflection upon the change of the highway traffic pattern.

#### EXAMPLE

U.S. 30 (Lincoln Way) was relocated around Jefferson in 1958.



Gross sales of Lincoln Way service stations decreased 26.7 percent from 1957 to 1960. This was followed by an increase of 11.0 percent in gross sales from 1960 to 1962. This is a net decrease of 15.7 percent in gross sales during the 1957-62 study period. Traffic has also decreased during this period with the majority of traffic now driving on relocated U.S. 30. In studying gross sales of Lincoln Way stations in Jefferson, the major loss in gross sales occurs one to two years after the relocation with a return to normal growth coming after the two year loss.

Gross sales and changes in traffic patterns do not give the complete picture of service station activity in a city. Changes in gasoline sales and net taxable retail sales and their effect upon gross sales should be considered. The location of stations, ownership changes, closing and opening of existing stations and new stations constructed provide additional information. A comparison of service station sales on highway and off highway locations, along with a comparison of service station sales and bulk dealer sales, show changes in business conditions.

Since the circumstances involving service station sales vary with each city and to some extent are dependent upon the changes that occur within the city itself, the remainder of this report will consider the eight cities individually and compare the various factors contributing to the trend of service station sales in each city.

## ALBIA

Albia, located in southeast Iowa, is the county seat of Monroe County. It is served by U.S. 34 and Iowa 60 and 137. In 1960, construction began on a relocation of U.S. 34 between Ottumwa and Albia. The relocation was open to traffic, November, 1962. This relocation now terminates at the junction of Iowa 60, but a relocation of U.S. 34 completely by-passing Albia is scheduled for completion in 1964.

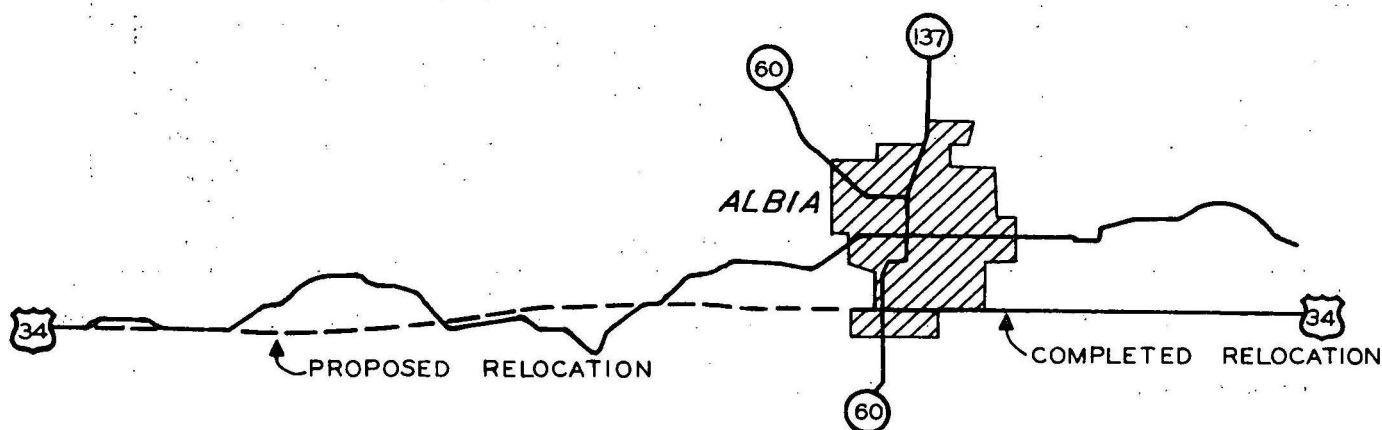


Table 4. Selected Data for Service Stations and Bulk Dealers, Albia.

Year Ending December 31	Sales		Firms Operating	Ownership Changes
	Gross	Net		
1957	\$1,093,881	\$267,586	18	2
1958	1,139,798	281,745	18	2
1959	1,151,711	283,090	17	3
1960	1,253,930	309,579	19	1
1961	1,177,508	279,451	19	3
1962	1,232,929	293,479	20	4

Service station activities in Albia have made significant changes during the study period. Gross sales of service stations and bulk dealers declined in 1961 as shown in Table 4. This decline reflects upon a general recession that occurred in 1961.



Service stations located on U.S. 34 show a loss in gross sales from 1957 to 1962. The average daily traffic on U.S. 34 also decreased during this period. There is a close relationship between the change in gross sales and the change in average daily traffic. This is illustrated in Table 5.

Table 5. Selected Data for Service Stations on U.S. 34  
Locations Albia, Iowa

Year Ending December 31	Sales		<u>Summer</u> Winter Gasoline Ratio	Average Daily Traffic
	Gross	Net		
1957	\$369,070	\$81,242	1.17	4100
1958	462,820	93,965	1.09	4400
1959	434,213	85,259	1.19	4700
1960	418,216	80,292	1.17	4300
1961	361,118	73,899	1.16	3900
1962	356,267	69,722	1.28	3400

A comparison of gasoline firms in Albia by type and location shows two significant items.

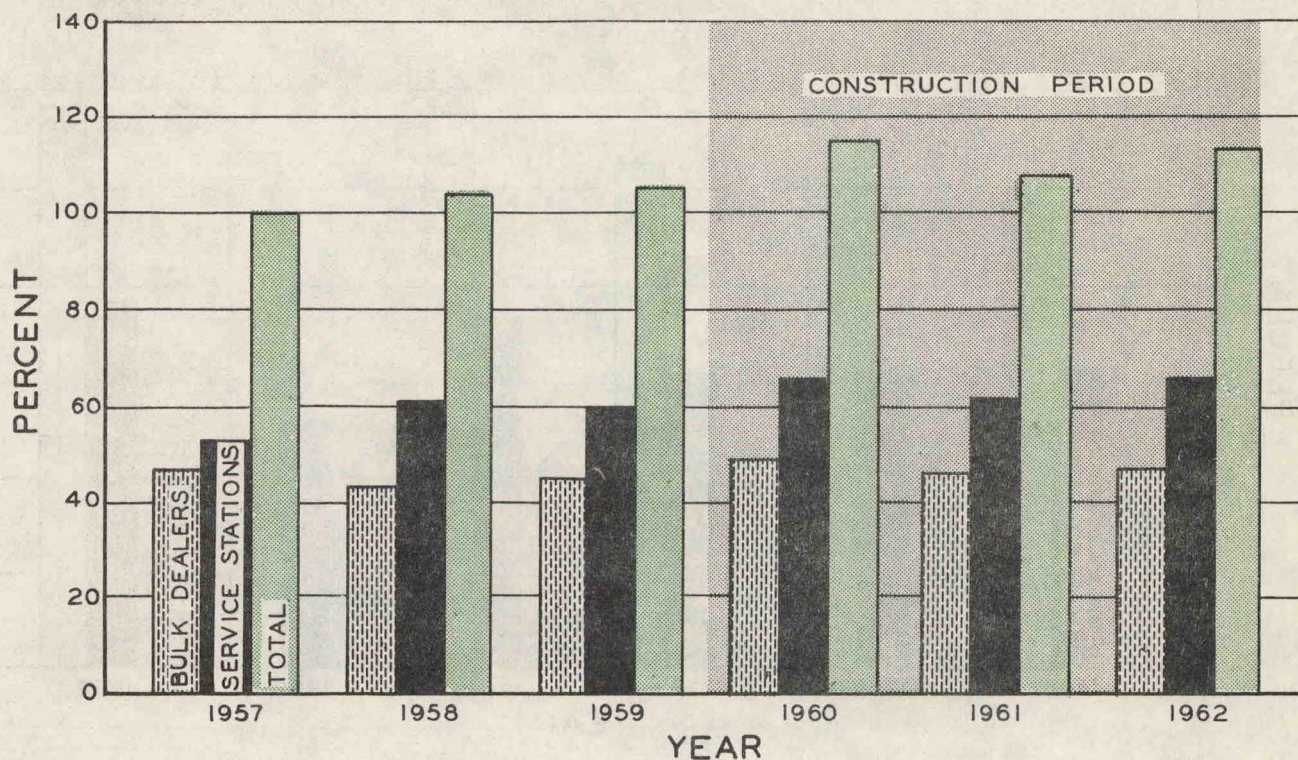
1. Service stations have experienced a greater degree of change in sales than bulk dealers. Bulk dealers rely on the local community and surrounding area for their business and are not as adversely affected by changes in traffic patterns as are service stations. This is illustrated in Table 6 and Figure 1.

Table 6. Gross and Net Sales of Service Stations and Bulk Dealers, Albia, Iowa

Year Ending December 31	Service Stations		Bulk Dealers	
	Gross	Net	Gross	Net
1957	\$582,027	\$129,620	\$511,854	\$137,966
1958	671,215	151,921	468,583	129,824
1959	658,811	143,541	492,900	139,549
1960	724,359	159,406	529,571	150,173
1961	681,825	146,699	495,683	132,752
1962	718,881	155,901	514,048	137,578



FIGURE 1. DISTRIBUTION OF GROSS SALES  
BY SERVICE STATIONS AND BULK DEALERS, ALBIA



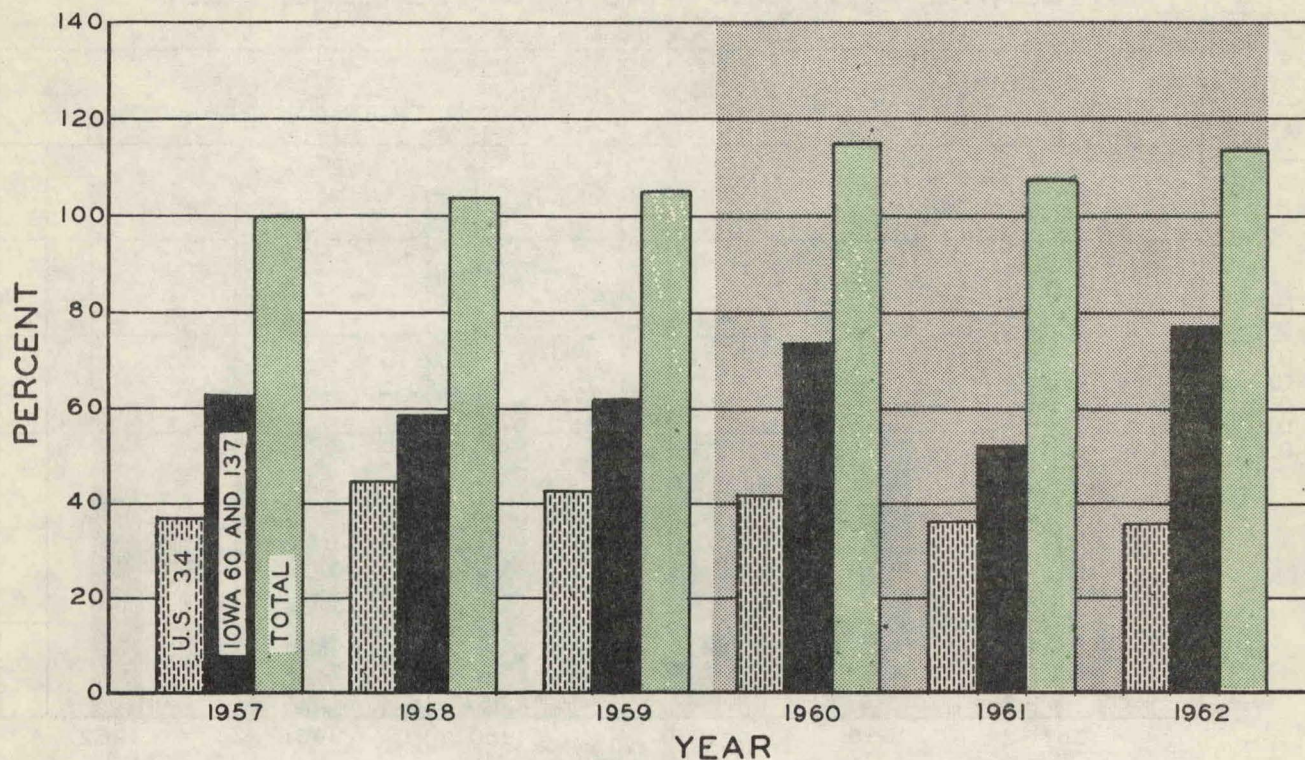
2. During the study period there has been a definite transfer in service station business from U.S. 34 locations to Iowa 60 and 137 locations. Gross sales of U.S. 34 stations declined 3.6 percent from 1957 to 1962, while gross sales of Iowa 60 and 137 stations rose 22.4 percent during the same period. This is illustrated in Table 7 and Figure 2.

Table 7. Gross and Net Sales of Service Stations and Bulk Dealers, Albia, Iowa.

Year Ending December 31	U.S. 34 Locations		Iowa 60 and 137 Locations	
	Gross	Net	Gross	Net
1957	\$408,623	\$115,783	\$685,258	\$151,803
1958	495,225	123,626	644,573	158,119
1959	467,779	116,537	683,932	166,553
1960	457,819	117,643	796,111	191,936
1961	392,901	104,010	784,607	175,441
1962	393,791	102,700	839,138	190,779



FIGURE 2. DISTRIBUTION OF GROSS SALES BY LOCATION,  
SERVICE STATIONS AND BULK DEALERS, ALBIA



In order to give a better picture of the relative change in service station business between U.S. 34 locations and Iowa 60 and 137 locations, a comparison of gross, gasoline, and net sales should be made. Tables 8 and 9 and Figures 3 and 4 illustrate this comparison. The other sales shown are services and sales exempt from retail sales tax.

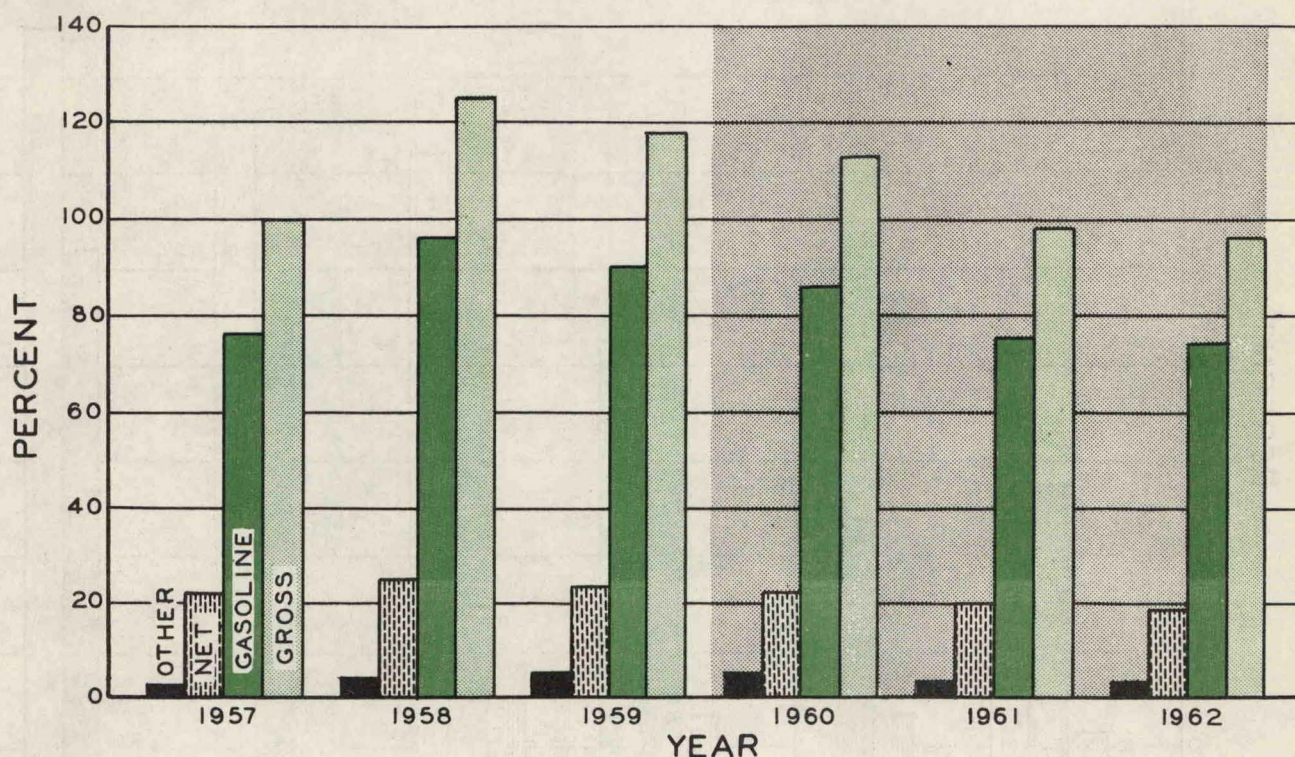
Table 8. Sales of Service Stations on U.S. 34 Locations,  
Albia, Iowa

Year Ending December 31	Gross	Gasoline	Other	Net
1957	\$369,070	\$281,591	\$6237	\$81,242
1958	462,820	353,348	15,507	93,965
1959	434,213	332,420	16,534	85,259
1960	418,216	317,421	20,503	80,292
1961	361,118	277,431	9,788	73,899
1962	356,267	276,075	10,470	69,722



In 1957, gasoline sales were 76 percent of gross sales for service stations located on U.S. 34. In 1962, gasoline sales were 77 percent of gross sales with a two percent variation during the time period. This would indicate that the gross sales are dependent upon the sales of gasoline.

FIGURE 3. DISTRIBUTION OF SERVICE STATION SALES  
ON U.S. 34 LOCATIONS, ALBIA



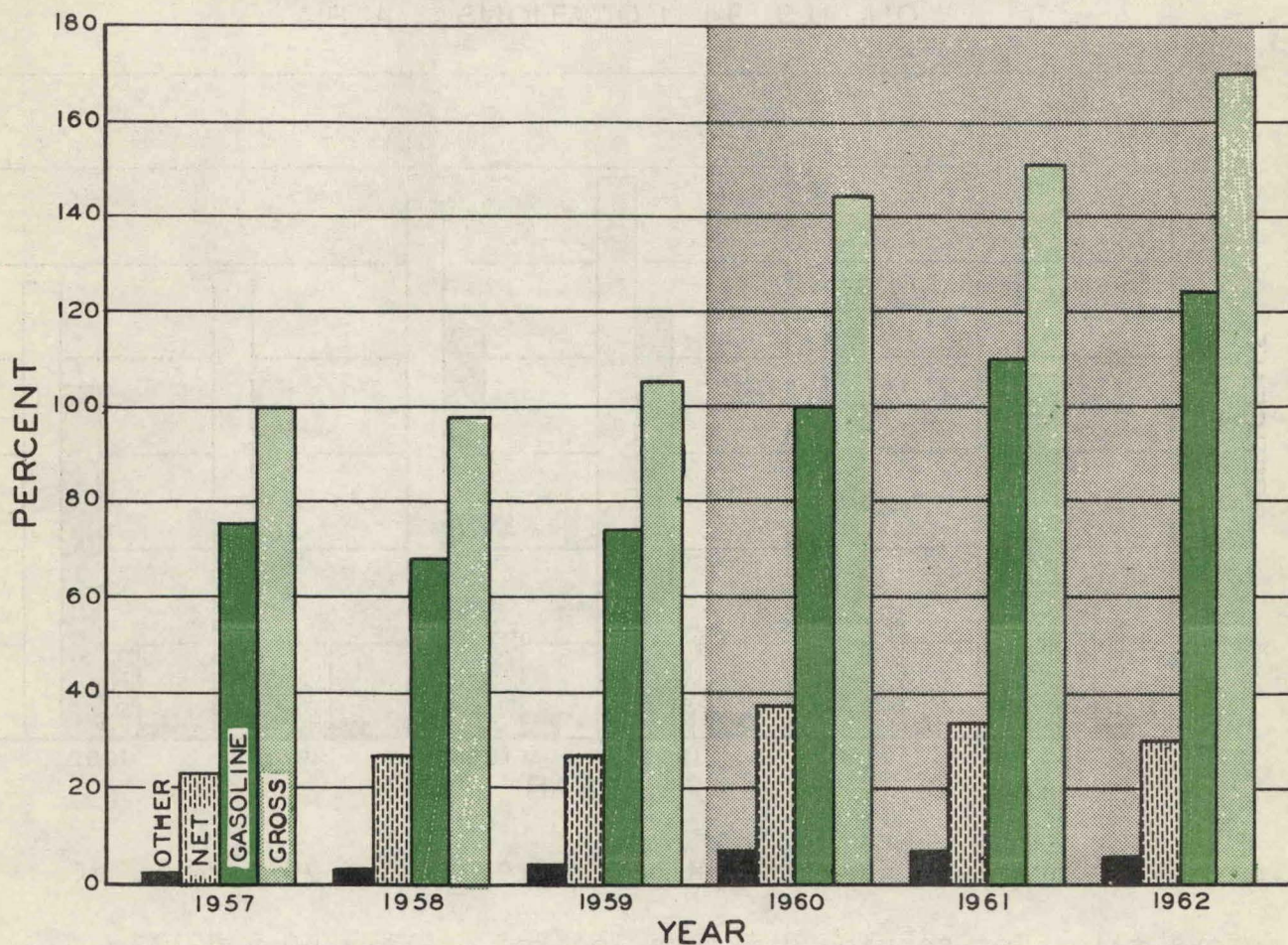
In comparison, gasoline sales, in 1957, were 75 percent of gross sales for service stations located on Iowa 60 and 137. This ratio dropped to 70 percent in 1958, 1959 and 1960 and rose to 73 percent in 1962. Therefore, it is also indicative that gross sales of service stations located on Iowa 60 and 137 are dependent upon sales of gasoline.



Table 9. Sales of Service Stations on Iowa 60 and 137 and Locations, Albia, Iowa

Year Ending December 31	Gross	Gasoline	Other	Net
1957	\$212,957	\$159,653	\$ 4926	\$48,378
1958	208,395	146,122	4317	57,956
1959	224,598	158,615	7701	58,282
1960	306,143	213,495	13,534	79,114
1961	320,707	235,493	12,414	72,800
1962	362,614	263,053	13,382	86,179

FIGURE 4. DISTRIBUTION OF SERVICE STATION SALES ON IOWA 60 AND 137 LOCATIONS, ALBIA



In table 8 and figure 3, a comparison of net and gross sales for service stations on U.S. 34 can be attained. In 1957, net sales were 22 percent of gross sales. In 1962 net sales were 20 percent of gross sales. From this comparison and the one made on gasoline sales, it is apparent that net sales and gross sales are both dependent upon gasoline sales.



Net sales of service stations on Iowa 60 and 137 were 23 percent of gross sales in 1957. In 1962, this ratio was 24 percent with fluctuations of 2 to 4 percent during this period. The relationship between net, gasoline, and gross sales of service stations on Iowa 60 and 137 locations is the same as it is for service stations on U.S. 34 locations.

When the relocation of U.S. 34 around Albia is completed, the net effect of the changing traffic pattern on service station sales will be more evident. The change in sales from service stations on U.S. 34 locations to service stations on Iowa 60 and 137 locations is anticipated to continue until service station sales on U.S. 34 locations will provide the service station operators with adequate incomes. Providing the public with satisfactory service requires a station to have adequate facilities. This will mean remodeling and modernizing of present facilities for some Albia service stations. Those stations not considering improvements will not be in a favorable position for customer competition. This could result in these service stations discontinuing business. When these changes have taken place and service station business returns to normal, the existing service stations can expect a normal increase in sales as would be expected in other Albia business establishments.



Tables 10, 11, and 12 present data on the operation of service stations and bulk dealers, summer/winter gasoline sales ratio and the average gross sales per firm.

Table 10. Operation of Service Stations and Bulk Dealers on U.S. 34, Albia

Year Ending December 31	1957	1958	1959	1960	1961	1962
Firms Operating	10	10	9	9	9	10
New Firms	1	-	-	-	-	-
Firms Closing	-	-	1	-	1	-
Firms Reopening	-	-	-	-	1	1
Ownership Changes	2	1	3	1	2	3

Table 11. Operation of Service Stations and Bulk Dealers on Iowa 60 and 137, Albia

Year Ending December 31	1957	1958	1959	1960	1961	1962
Firm Operating	8	8	8	10	10	10
New Firms	1	-	-	2	-	-
Firms Closing	-	-	-	-	-	-
Firms Reopening	-	-	-	-	-	-
Ownership Changes	-	1	-	-	1	1

Table 12. Average Gross Sales per Firm and Summer/Winter Gasoline Sales Ratio

Year Ending December 31	U.S. 34 Locations		Ia. 60 & 137 Locations	
	Average Gross	<u>Summer</u> Winter	Average Gross	<u>Summer</u> Winter
1957	\$40,862	1.17	\$85,657	1.10
1958	49,522	1.09	80,572	1.03
1959	51,975	1.19	85,496	1.18
1960	50,869	1.17	79,611	1.16
1961	43,656	1.16	78,460	1.04
1962	39,379	1.28	83,914	0.90

## BOONE

Boone is the county seat of Boone County. U.S. 30 (Lincoln Way) is the only Primary highway through the city. The proposed relocation of U.S. 30 around Boone received final approval in late 1960 and construction began in late 1962. The data available is for the years 1957 through 1962. Thus, service station business in Boone is not experiencing a change relating to the relocation of U.S. 30 around Boone, but more to the economic changes that are taking place within the city itself.

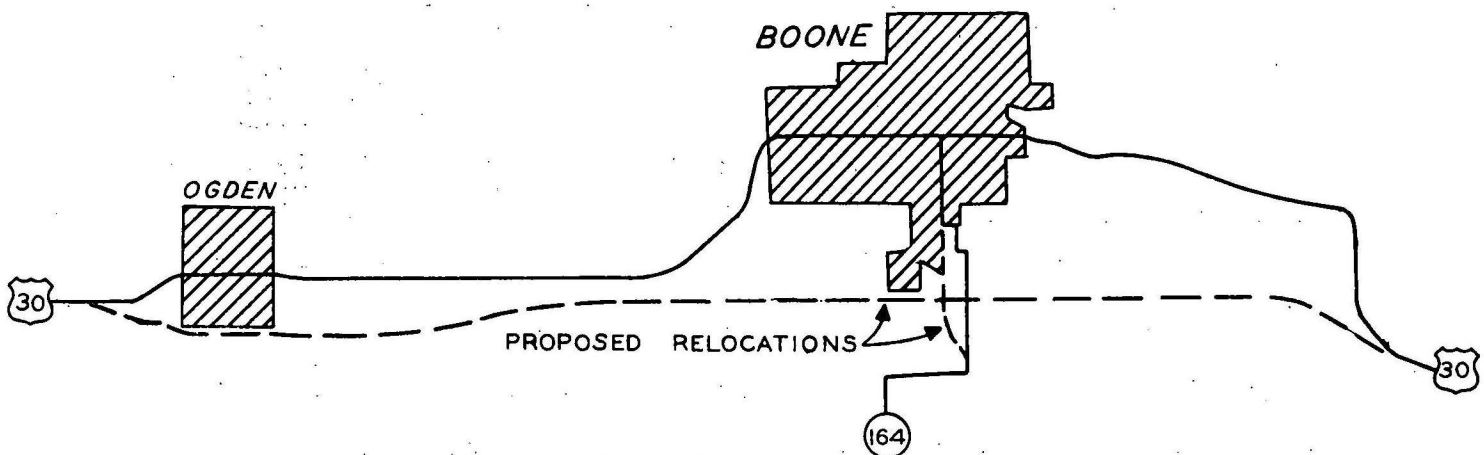


Table 13. Selected Data for Service Stations, Boone, Iowa

Year Ending December 31	Sales		Firms Operating	Ownership Changes
	Gross	Net		
1957	\$1,785,129	\$277,790	25	5
1958	1,894,769	305,879	25	5
1959	1,900,746	341,091	25	6
1960	1,907,735	327,545	25	6
1961	1,855,782	322,026	24	3
1962	1,813,532	338,341	24	3

Table 13 shows data relating to service station activity in Boone. Gross sales of service stations in Boone rose at a favorable rate until 1961 when a decrease in gross sales occurred.



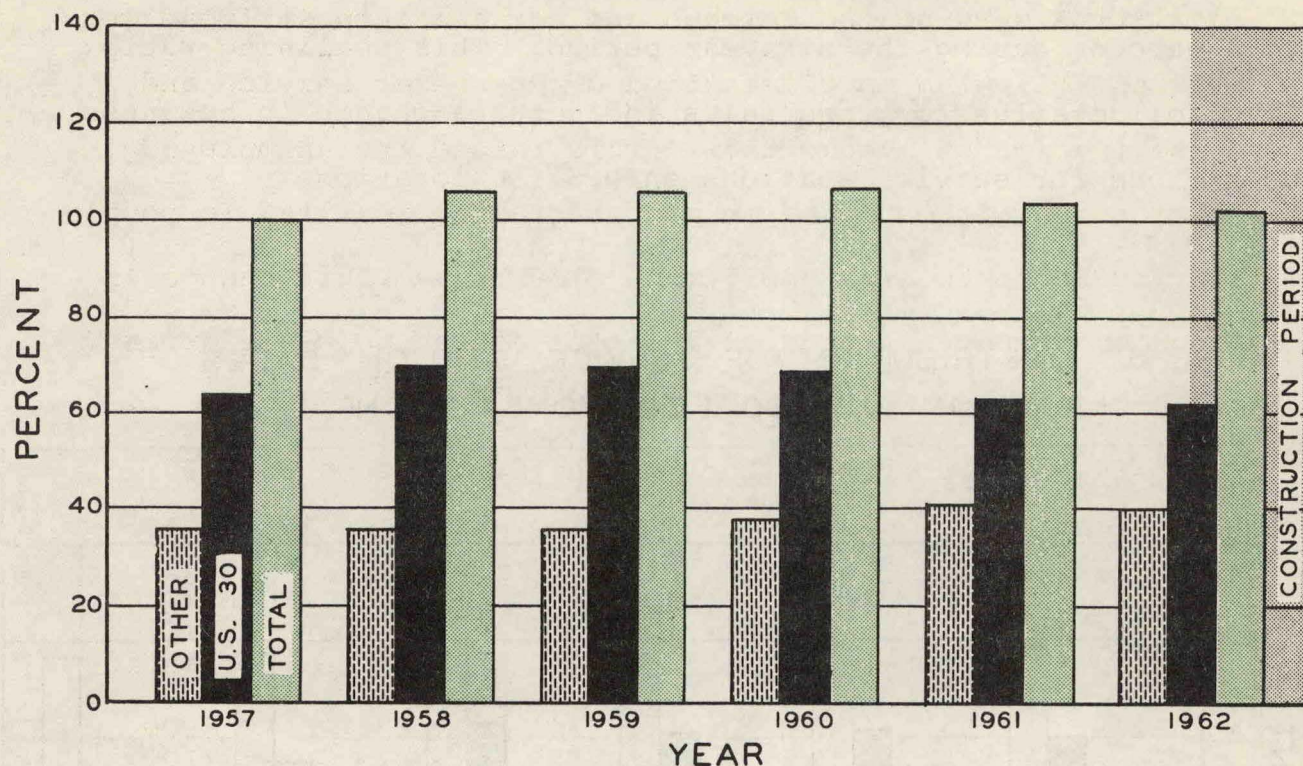
In this same time period the maintenance and repairing facilities serving the Chicago and Northwestern Railroad were reduced following an elimination of passenger service and dieselization of locomotives. This raised the unemployed labor force in Boone and in many instances resulted in people leaving Boone to seek employment elsewhere. This change in Boone's economy has made an apparent effect upon the gross sales of service stations in Boone.

Table 14. Selected Data for Service Stations on U.S. 30 Locations, Boone, Iowa.

Year Ending December 31	Sales		<u>Summer</u> <u>Winter</u> Gasoline Ratio	Average Daily Traffic
	Gross	Net		
1957	\$1,146,695	\$168,712	1.22	6900
1958	1,254,082	201,925	1.22	7100
1959	1,247,267	229,325	1.25	7400
1960	1,223,380	205,685	1.24	7400
1961	1,125,002	203,759	1.22	7300
1962	1,114,971	218,824	1.12	7300

From the data in Table 14, the service stations on U.S. 30 locations declined in sales in 1961 and 1962. This can be partially attributed to the changing economy in the city of Boone and a slight loss in the traffic volume on U.S. 30. This decrease in traffic is the result of Interstate 80 being partially completed in the Des Moines area and the traffic has changed from U.S. 30 to Interstate 80. Also the ratio in summer/winter gasoline sales has dropped, indicating a possible change in tourist traffic. Figure 5 indicates there has been a shift in gross sales of service stations from U.S. 30 locations to other city locations.

FIGURE 5. DISTRIBUTION OF GROSS SALES BY LOCATION,  
SERVICE STATIONS, BOONE



To make a more detailed investigation of service station sales in Boone, it is necessary to study the gasoline and net sales and their relationship to gross sales. Table 15 gives this information on sales of service stations on U.S. 30 locations.

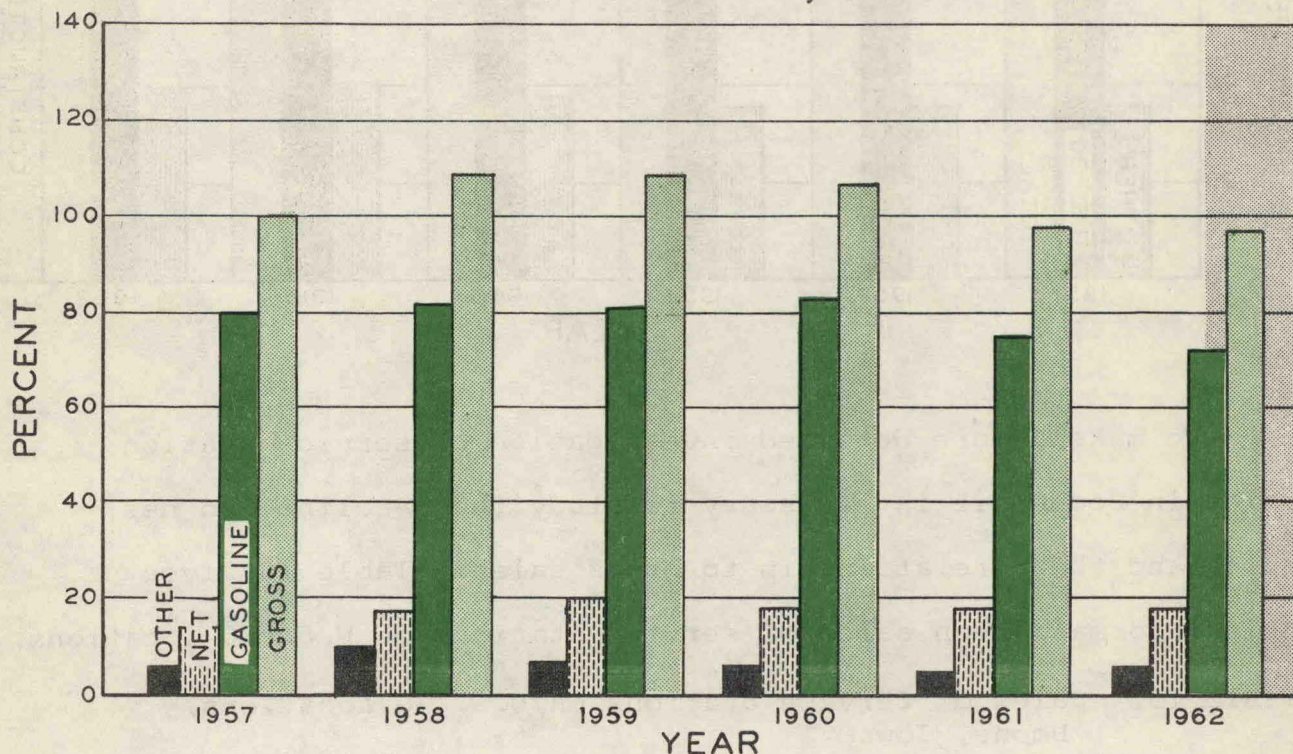
Table 15. Sales of Service Stations on U.S. 30 Locations,  
Boone, Iowa

Year Ending December 31	Gross	Gasoline	Services	Net
1957	\$1,146,695	\$911,869	\$66,114	\$168,712
1958	1,254,082	936,346	115,811	201,925
1959	1,247,267	941,806	76,132	229,325
1960	1,223,380	948,089	69,607	205,685
1961	1,125,002	861,071	60,172	203,759
1962	1,114,971	827,158	68,989	218,824



In 1957, gasoline sales were 80 percent of gross sales. In 1962, this figure dropped to 74 percent with fluctuations of 2 to 3 percent during the six year period. This declining ratio of gasoline sales to gross sales indicates a change in business operations for service stations on U.S. 30 locations.

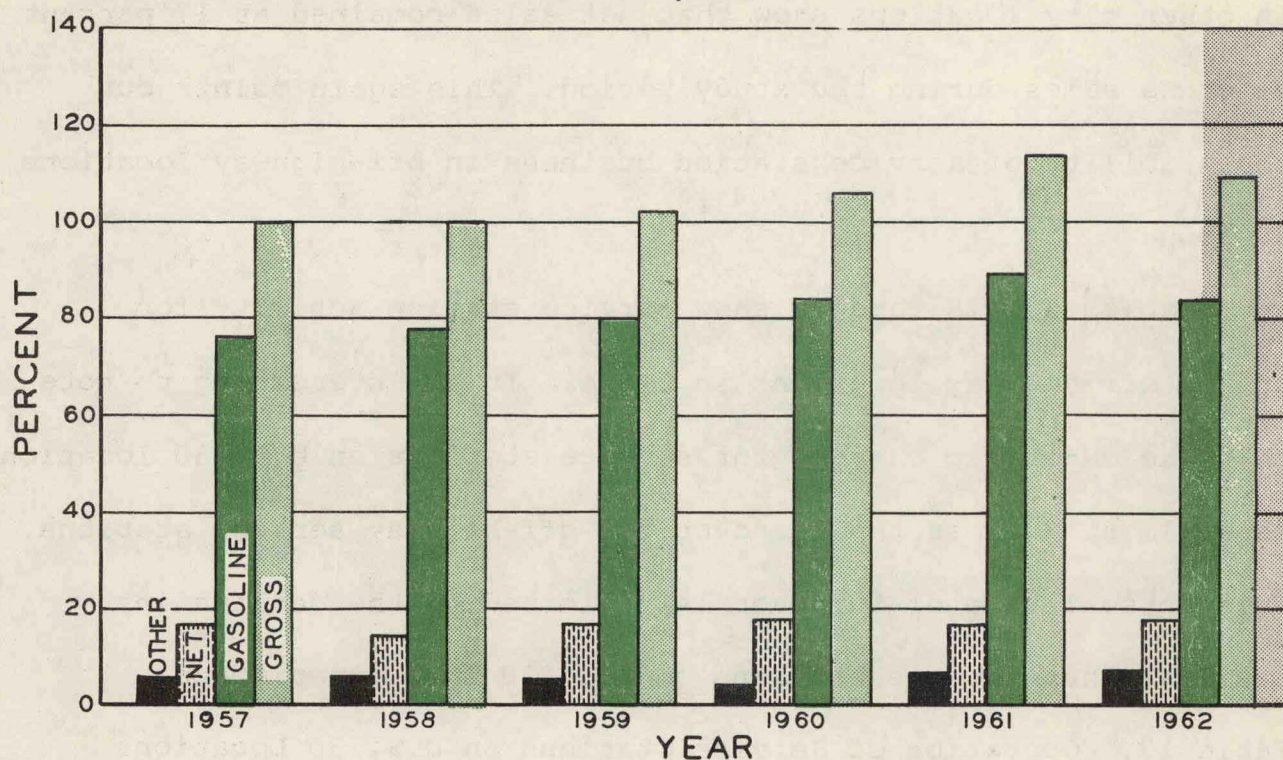
FIGURE 6. DISTRIBUTION OF SERVICE STATION SALES  
ON U.S. 30 LOCATIONS, BOONE



A study of net sales also points out changes in service station activity. The net sales of service stations on U.S. 30 were 15 percent of gross sales in 1957 and rose to 20 percent in 1962, despite a decrease in gross and gasoline sales during this period. Such a relative reversal indicates a change in sales made by service stations along U.S. 30. The stations appear to be selling more retail products and less gasoline. This comparison of gross, gas, and net sales for service stations on U.S. 30 locations is illustrated in Table 15 and Figure 6.



FIGURE 7. DISTRIBUTION OF SERVICE STATION SALES  
ON OTHER CITY LOCATIONS, BOONE



Gasoline sales of service stations in other city locations were 77 percent of gross sales in 1957. This ratio remained at 77 percent in 1962, with variance of only 1 percent during the six year period. This uniform ratio is a good indication that sales of service stations in off-Highway locations are relatively stable and their business has not suffered from existing and traffic changes in Boone. Table 16 and Figure 7 illustrate this trend.

Table 16. Sales of Service Stations in Other City Locations,  
Boone, Iowa

Year Ending December 31	Gross	Gasoline	Other	Net
1957	\$638,434	\$494,310	\$35,046	\$109,078
1958	640,687	500,545	36,188	103,954
1959	653,479	509,990	31,727	111,762
1960	684,355	535,027	27,467	121,861
1961	730,780	570,492	42,021	118,267
1962	698,561	534,658	44,386	119,517



A comparison of net sales to gross sales of service stations in other city locations show that net sales remained at 17 percent of gross sales during the study period. This again points out the stability of service station business in off-highway locations at Boone.

Tables 17, 18, and 19 show service station activity for on and off-highway locations in Boone. It is interesting to note that the ownership changes for service stations on U.S. 30 locations were almost 3 times the turnover for off-highway service stations. This unusual rate of turnover is reflected by the decline in business that service stations on U.S. 30 have experienced.

Table 17. Operation of Service Stations on U.S. 30 Locations  
Boone, Iowa

Year Ending December 31	1957	1958	1959	1960	1961	1962
Stations Operating	15	15	15	15	14	14
New Stations	-	-	-	-	-	-
Stations Closing	-	-	-	-	2	1
Stations Reopening	-	-	-	-	1	1
Ownership Changes	3	4	4	5	3	1

Table 18. Operation of Service Stations in other City Locations,  
Boone, Iowa

Year Ending December 31	1957	1958	1959	1960	1961	1962
Stations Operating	10	10	10	10	10	10
New Stations	-	-	-	-	-	-
Stations Closing	-	-	-	-	-	-
Stations Reopening	-	-	-	-	-	-
Ownership Changes	2	1	2	1	-	2



Table 19. Average Gross Sales per Station and Summer/Winter Gasoline Sales Ratio, Boone, Iowa

Year Ending December 31	U.S. 30 Locations		Other City Locations	
	Average Gross	<u>Summer</u> <u>Winter</u>	Average Gross	<u>Summer</u> <u>Winter</u>
1957	\$76,446	1.22	\$63,843	1.06
1958	83,605	1.22	64,069	1.01
1959	83,151	1.25	63,348	1.07
1960	81,559	1.24	68,036	1.05
1961	80,357	1.22	73,078	1.04
1962	79,641	1.12	69,856	0.97

It is anticipated that the 1963 and 1964 sales of service stations in Boone will not make any appreciable change from the 1962 sales. The increased business from the highway contractors should offset any loss made by the change in Boone's economy. Formerly Boone depended upon its railroad activity to provide support for its economy. When the railroad activity decreased in Boone, the result was high unemployment and a decline in Boone's economy.

When the relocation of U.S. 30 is completed in late 1964, there should be a definite change in the traffic pattern in Boone. As a result of this changing traffic pattern, it is anticipated that service station sales will decline. This decline should result in more competition between existing stations and cause some stations to discontinue business. This will enable remaining stations to continue in business making a substantial income.

## CHARITON

Chariton, the county seat of Lucas County, is located in south central Iowa. Manufacturing is an important factor in Chariton's economy. Manufacturing activity varies from whole-sale distribution of groceries to a wide variety of agricultural products. U.S. 34 and Iowa 14 provide Chariton with adequate transportation facilities, along with the Chicago, Burlington, and Quincy Railroad and the Chicago, Rock Island and Pacific Railroad. Construction of a by-pass of U.S. 34 south of Chariton started in the spring of 1960, and was open to traffic in the fall of 1961.

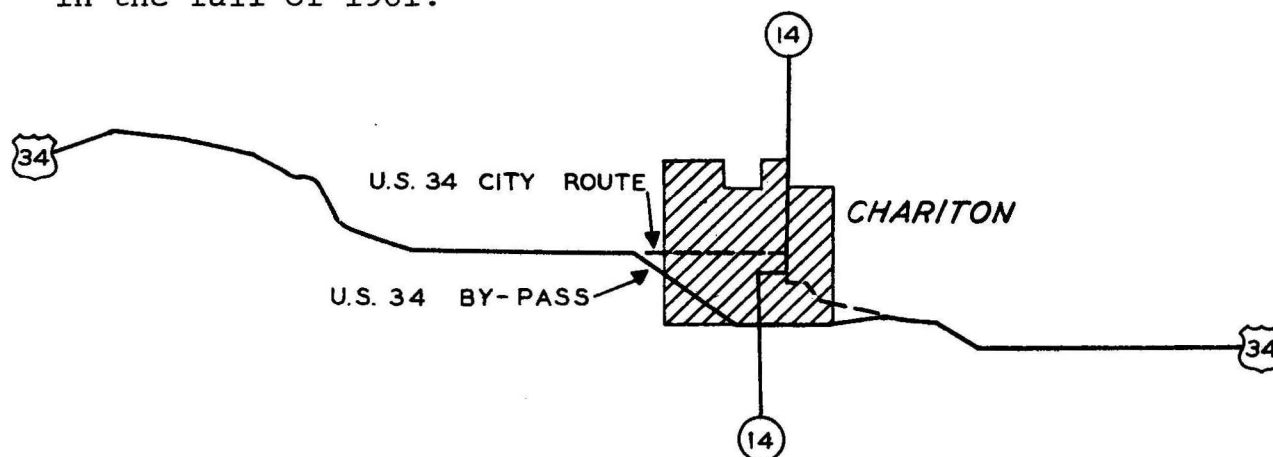


Table 20. Selected Data for Service Stations on U.S. 34  
Locations, Chariton, Iowa

Year Ending December 31	Sales		<u>Summer</u> Winter Gasoline Ratio	Average Daily Traffic
	Gross	Net		
1957	\$441,932	\$106,065	1.20	3500
1958	530,020	134,216	1.10	3600
1959	561,646	142,975	1.13	3700
1960	613,875	145,460	1.22	3900
1961	658,519	154,336	1.26	4000
1962	577,998	141,348	1.07	2200



The by-pass changed the pattern of traffic in Chariton as indicated on Table 20. This change in traffic pattern has also affected the sales of service stations on U.S. 34 locations and has reduced the ratio of summer/winter gasoline sales.

Table 21. Selected Data for Service Stations and Bulk Dealers, Chariton, Iowa

Year Ending December 31	Sales		Firms Operating	Ownership Changes
	Gross	Net		
1957	\$1,245,076	\$359,425	21	-
1958	1,406,214	402,904	22	1
1959	1,409,994	427,075	22	4
1960	1,492,655	447,279	21	2
1961	1,549,459	460,900	22	7
1962	1,458,652	436,047	21	5

It is interesting to note from Table 21 that the ownership changes in Chariton service stations increased sharply in 1961 and 1962 from what it had been in previous years. This ownership change could be caused by the increased competition for local business by Chariton service stations. During the construction period, service station sales were inflated by business from highway contractors and competition between stations was low. Figures 8 and 9 and Tables 22 and 23 illustrate the unusual increase in business during the construction period as well as a comparison on gross sales of firms by type and location. These illustrations represent the changes in gross sales that have taken place during the study period.



FIGURE 8. DISTRIBUTION AND CHANGE IN GROSS SALES OF  
SERVICE STATIONS AND BULK DEALERS, CHARITON.

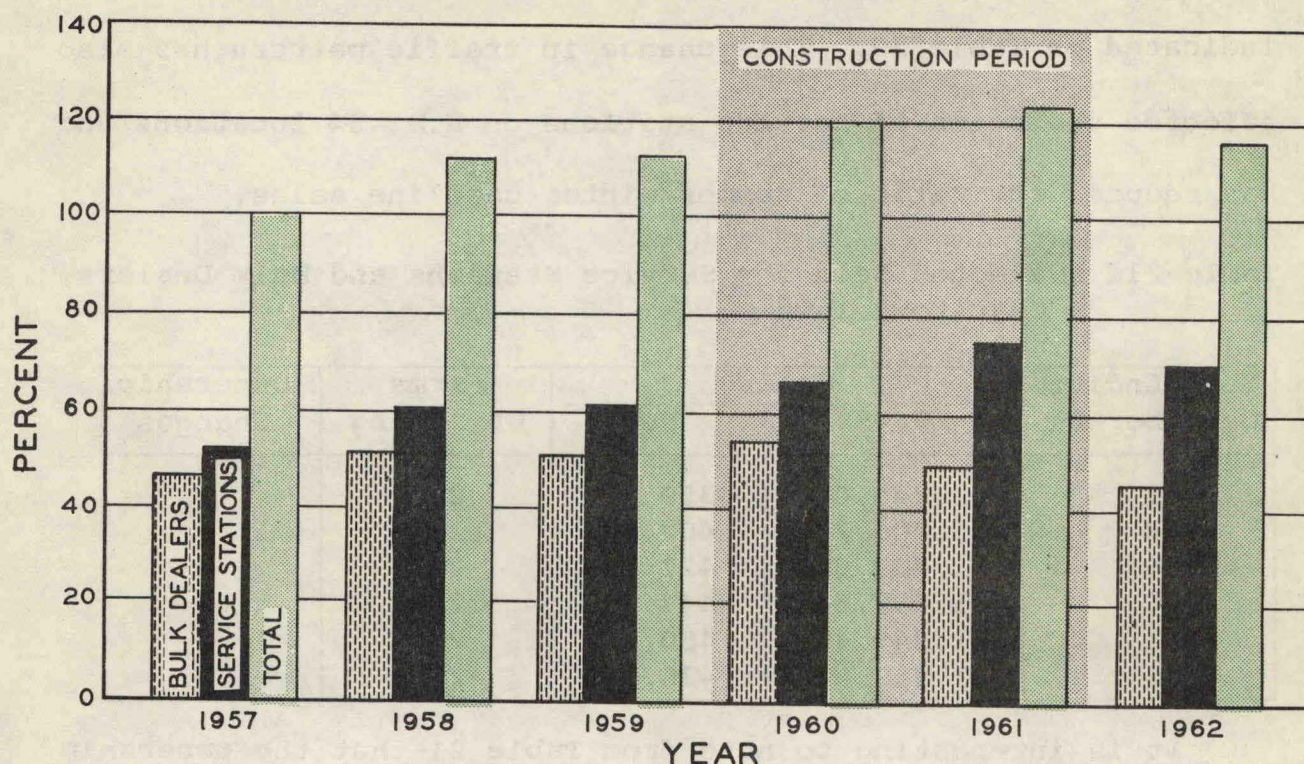


Table 22. Gross and Net Sales of Service Stations and Bulk Dealers, Chariton, Iowa

Year Ending December 31	Service Stations		Bulk Dealers	
	Gross	Net	Gross	Net
1957	\$665,777	\$156,319	\$579,299	\$203,106
1958	764,184	181,320	642,030	221,584
1959	772,735	187,311	637,259	239,764
1960	821,022	189,091	671,633	258,188
1961	928,559	228,258	620,900	232,642
1962	882,354	231,455	576,298	204,592

A review of Table 22 and Figure 8 shows that gross sales of service stations are higher than gross sales of bulk dealers and service station sales have increased during the study period while gross sales of bulk dealers have decreased.



FIGURE 9. DISTRIBUTION OF GROSS SALES BY LOCATION,  
SERVICE STATIONS AND BULK DEALERS, CHARITON

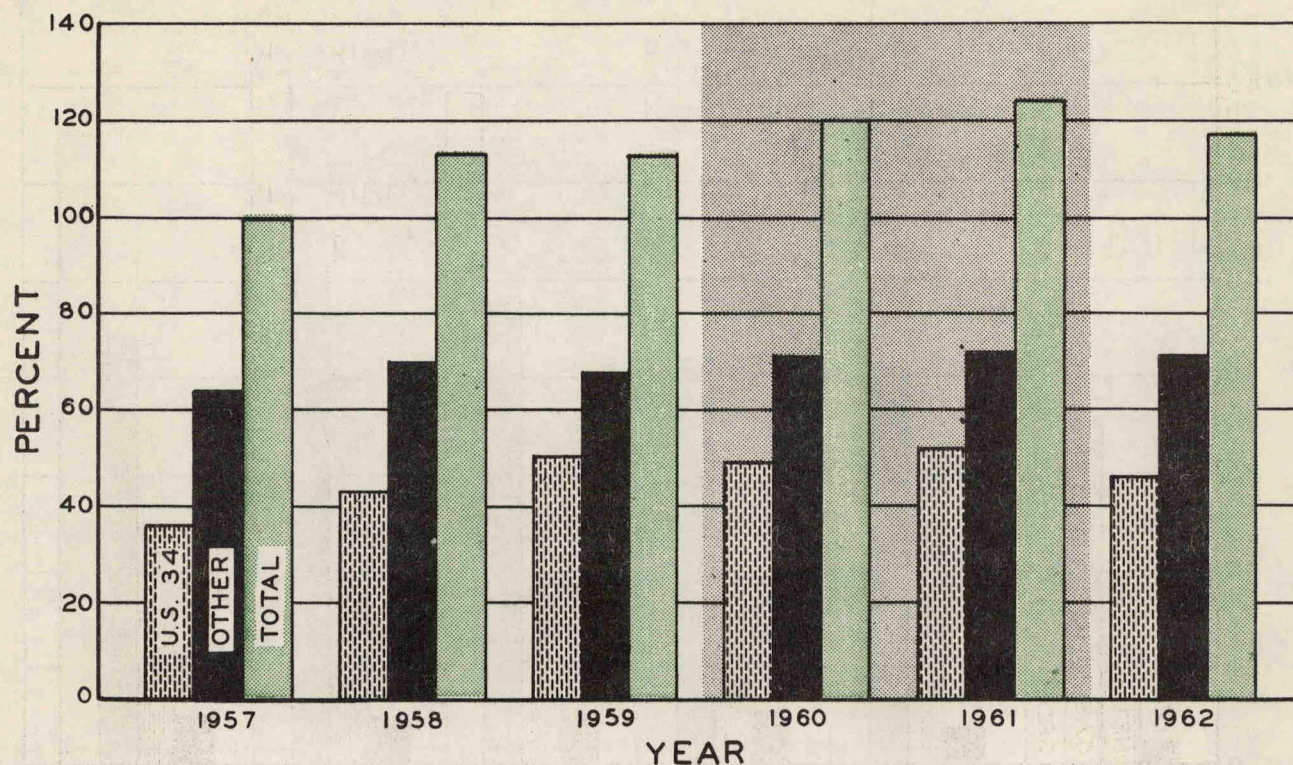


Table No. 23 Gross and Net Sales of Service Stations and Bulk Dealers, Chariton Iowa

Year Ending December 31	U.S. 34 Locations		Other City Locations	
	Gross	Net	Gross	Net
1957	\$443,025	\$106,618	\$802,051	\$252,807
1958	530,729	134,925	875,485	267,979
1959	562,289	143,318	847,705	283,757
1960	614,638	146,223	878,017	301,056
1961	659,147	154,964	891,312	305,936
1962	578,600	141,950	880,052	294,097

Comparing data on Table 23 and Figure 9, there is a higher percentage of gross sales by firms in other city locations than U.S. 34 locations. The majority of the bulk dealers are located in other city locations to explain the higher percentage.



FIGURE 10. DISTRIBUTION OF SERVICE STATION SALES ON U.S. 34  
U.S. 34 LOCATIONS, CHARITON

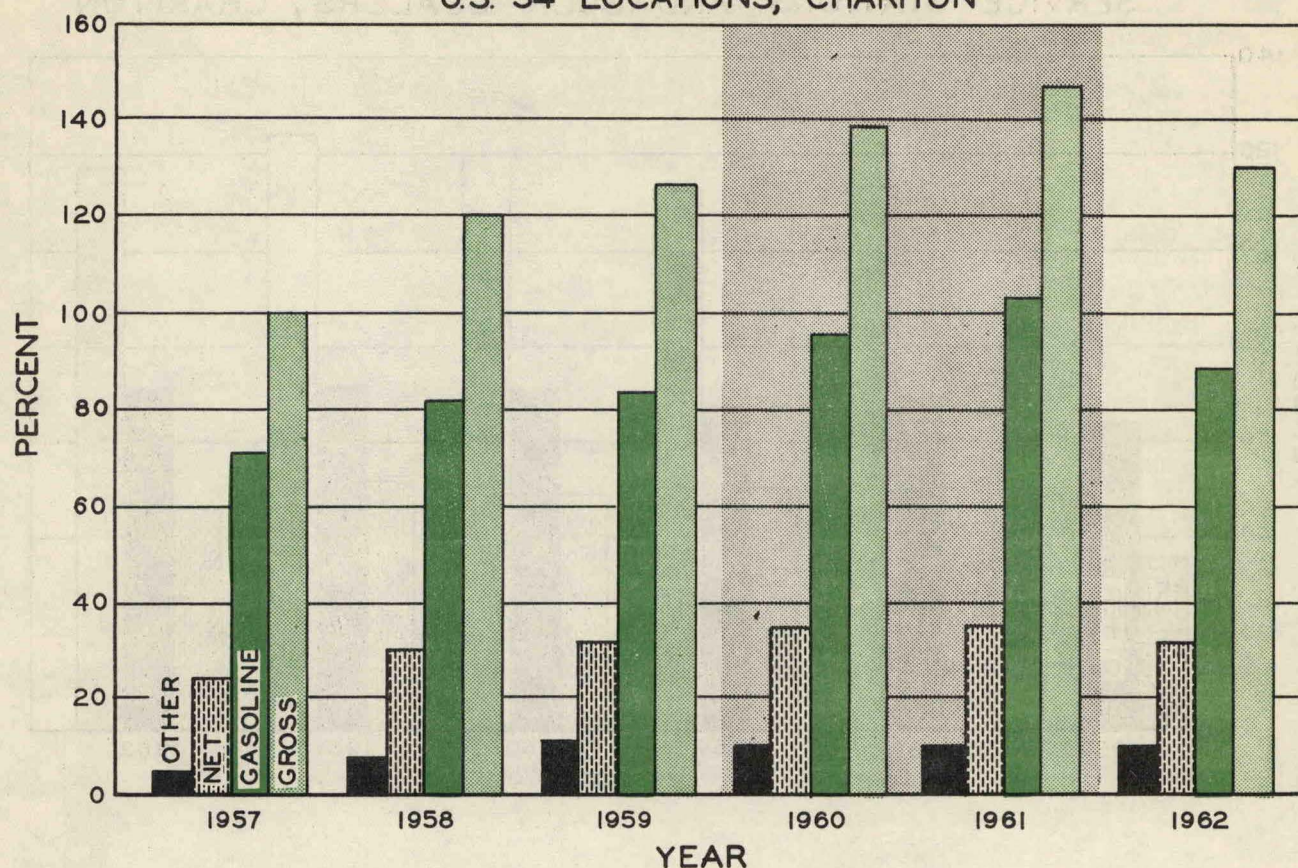


Table 24. Sales of Service Stations on U.S. 34 Locations,  
Chariton, Iowa

Year Ending December 31	Gross	Gasoline	Other	Net
1957	\$441,932	\$314,757	\$21,110	\$106,065
1958	530,020	361,704	34,100	134,216
1959	561,646	371,996	46,675	142,975
1960	613,875	423,635	44,780	145,460
1961	658,519	458,856	45,327	154,336
1962	577,998	396,547	40,103	141,348

As the gross sales of a station change, a similar change in gasoline and net sales of the station usually occurs. A check on gasoline sales of service stations on U.S. 34 locations shows that gasoline sales were 71 percent of gross sales in 1957 and 68 percent in 1962. Net sales of service stations on U.S. 34 locations remained at 24 percent of gross sales from 1957 to 1962. This constant ratio of net sales and the slight



decrease in gasoline sales ratio indicates that there has been an increase in services offered. A glance at other sales for service stations on U.S. 34, indicates that these sales have doubled in the 1957 to 1962 period.

FIGURE II. DISTRIBUTION OF SERVICE STATION SALES  
IN OTHER CITY LOCATIONS, CHARITON

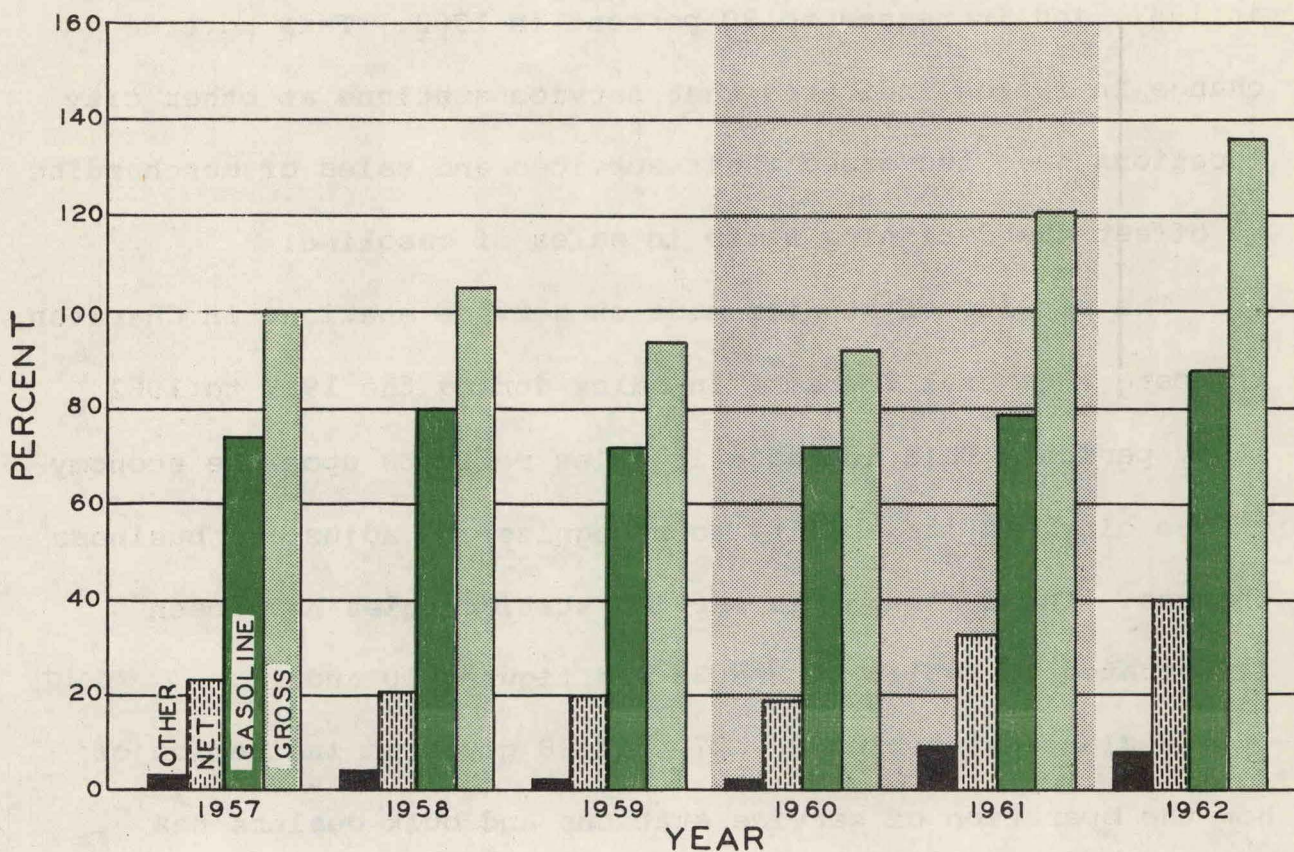


Table 25. Sales of Service Stations on other city Locations,  
Chariton, Iowa.

Year Ending December 31	Gross	Gasoline	Other	Net
1957	\$223,845	\$165,852	\$ 7,199	\$50,794
1958	234,164	179,323	7,737	47,104
1959	211,089	160,379	6,064	44,646
1960	207,147	160,822	2,694	43,631
1961	271,040	177,176	19,942	73,922
1962	304,356	196,808	17,441	90,107



Sales of service stations in other city locations do not show the same trend as sales of service stations on U.S. 34 locations. Gasoline sales for service stations at other city locations were 74 percent of gross sales in 1957, increased to 78 percent of gross sales in 1960 and dropped to 65 percent in 1961 and 1962. Net sales were 23 percent of gross sales in 1957, and increased to 30 percent in 1962. This adverse change in ratios indicates that service stations at other city locations have increased their services and sales of merchandise to offset the declining ratio in sales of gasoline.

The results of studies made on service stations in Chariton, indicate a general increase in sales during the 1957 to 1962 study period. This increase in sales reflects upon the economy of the city and its ability to recognize and adjust to business changes. These changes in service station sales have been illustrated in tables 24 and 25 and figures 10 and 11.

A glance at tables 26, 27, and 28 gives an indication of how the operation of service stations and bulk dealers has changed during the study period. Since the relocation of U.S. 34 has been open to traffic for only a year, it is difficult to determine what the final effect of the relocation will be on service station activity. However, if the business of service stations in Chariton continues in the future as it has in the past, the relocation should have no major effect upon service station activity in Chariton.



Table 26. Operation of Service Stations and Bulk Dealers  
on U.S. 34 Locations, Chariton, Iowa

Year Ending December 31	1957	1958	1959	1960	1961	1962
Firms Operating	10	10	10	9	10	10
New Firms	-	-	-	-	-	-
Firms Closing	1	-	1	1	-	-
Firms Reopening	1	-	-	-	1	-
Ownership Changes	-	1	4	1	3	4

Table 27. Operation of Service Stations and Bulk Dealers on  
Other City Locations, Chariton, Iowa

Year Ending December 31	1957	1958	1959	1960	1961	1962
Firms Operating	11	12	12	12	12	11
New Firms	-	1	-	-	-	-
Firms Closing	-	-	-	-	-	1
Firms Reopening	-	-	-	-	-	-
Ownership Changes	-	-	-	1	4	1

Table 28. Average Gross Sales per Firm and Summer/Winter  
Gasoline Sales Ratio, Chariton, Iowa

Year Ending December 31	U.S. 34 Locations		Other City Locations	
	Average Gross	<u>Summer</u> Winter	Average Gross	<u>Summer</u> Winter
1957	\$44,303	1.20	\$72,914	0.97
1958	53,729	1.10	72,957	0.99
1959	56,229	1.13	70,642	1.03
1960	68,293	1.22	73,168	0.98
1961	65,915	1.26	74,276	0.95
1962	57,860	1.07	80,005	0.96

## DECORAH

Decorah, located in scenic Northeast Iowa, is the center of many tourist attractions in that area. Luther College, a four-year liberal arts college, is located in Decorah. Its transportation services include highways U.S. 52, Iowa 9 and the Chicago, Milwaukee, St. Paul and Pacific Railroad. Construction of U.S. 52 relocation west of Decorah started in the fall of 1962, and should be completed by the fall of 1964.

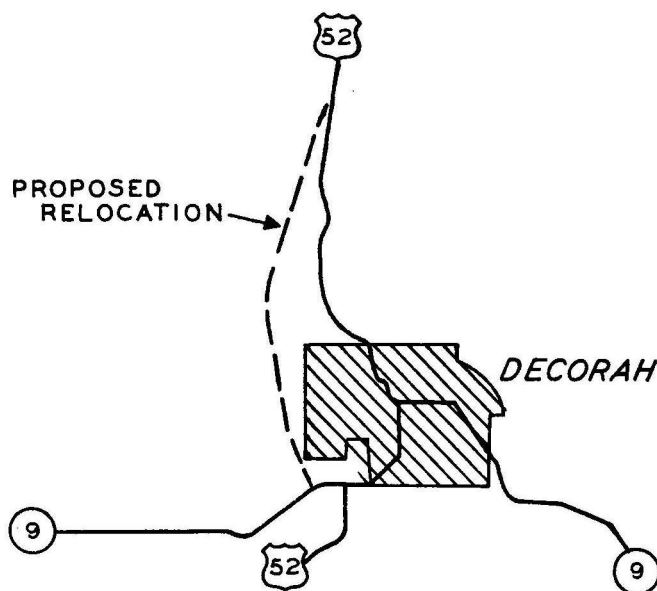


Table 29. Selected Data for Service Stations on U.S. 52  
Locations, Decorah, Iowa

Year Ending December 31	Sales		Summer Winter Gasoline Ratio	Average Daily Traffic
	Gross	Net		
1957	\$1,592,788	\$425,674	1.45	5700
1958	1,711,892	450,296	1.35	5900
1959	1,850,365	525,780	1.52	6100
1960	1,958,416	522,198	1.35	6100
1961	1,967,892	574,803	1.13	6200
1962	1,975,006	582,995	1.40	6200



Service Stations, on U.S. 52 locations in Decorah, show a steady rise in gross and net sales, with a corresponding increase in average daily traffic. This is to be expected as Decorah is a tourist community. The relatively high ratio of summer/winter gasoline sales is an indication of the tourist trade.

Table 30. Selected Data for Service Stations and Bulk Dealers, Decorah, Iowa

Year Ending December 31	Sales		Firms Operating	Ownership Changes
	Gross	Net		
1957	\$2,782,155	\$710,548	27	1
1958	2,877,909	753,221	28	4
1959	3,064,880	858,393	30	5
1960	3,137,678	845,385	28	4
1961	3,169,608	926,233	28	2
1962	3,160,357	909,056	27	3

Service station activity in Decorah has not made any major changes during the study period. The relationship between gross and net sales, firms operating and ownership changes has remained relatively stable, thus indicating that business conditions have been good.

Table 31. Gross and Net Sales of Service Stations and Bulk Dealers, Decorah, Iowa

Year Ending December 31	U.S. 52 Locations		Other City Locations	
	Gross	Net	Gross	Net
1957	\$1,706,059	\$437,952	\$1,076,096	\$272,596
1958	1,840,595	464,254	1,037,314	288,967
1959	1,966,362	535,871	1,098,518	322,522
1960	2,011,489	525,328	1,126,189	320,057
1961	1,971,105	578,016	1,198,503	348,217
1962	1,978,224	586,213	1,182,133	322,843

Gross sales of firms on U.S. 52 locations increased 15.9 percent from 1957 to 1962, while gross sales of firms in other city locations increased 9.8 percent during the same time period.



FIGURE 12. DISTRIBUTION OF GROSS SALES BY LOCATION,  
SERVICE STATIONS AND BULK DEALERS, DECORAH

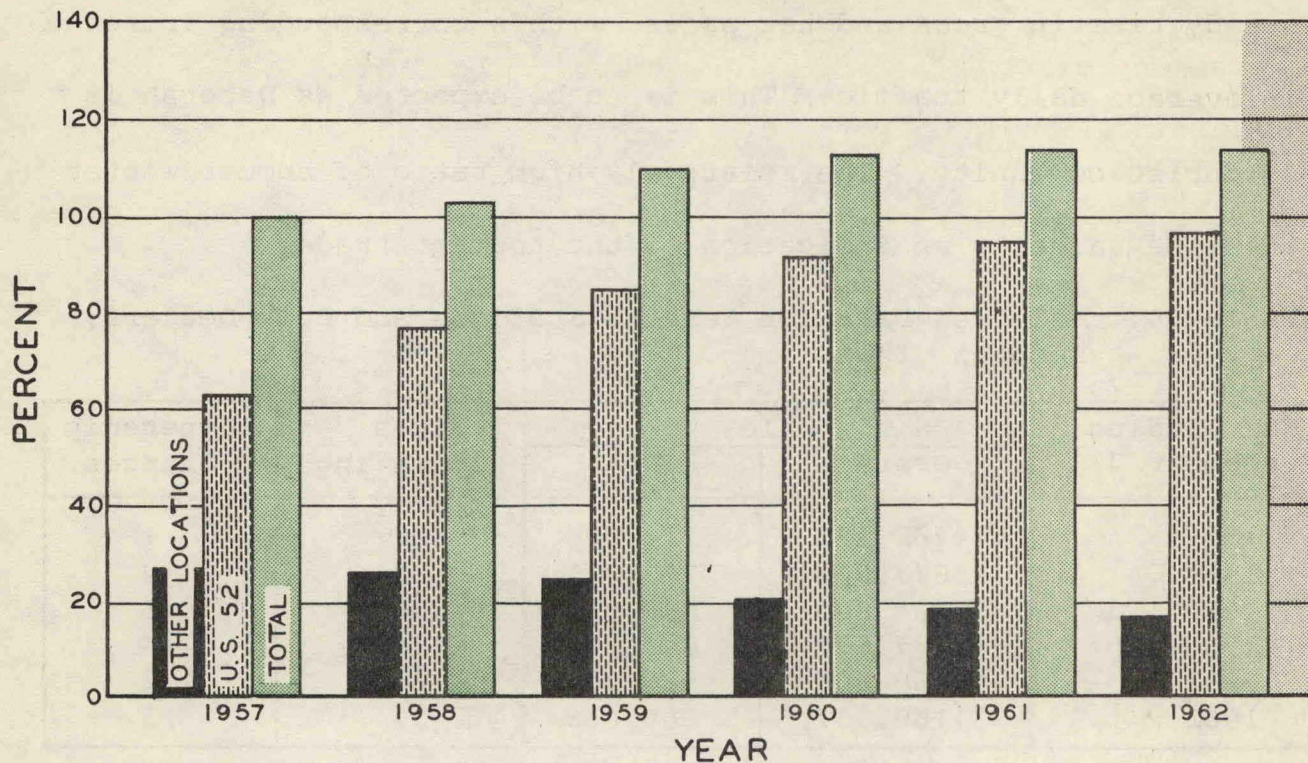


FIGURE 13. DISTRIBUTION OF GROSS SALES  
BY SERVICE STATIONS AND BULK DEALERS, DECORAH

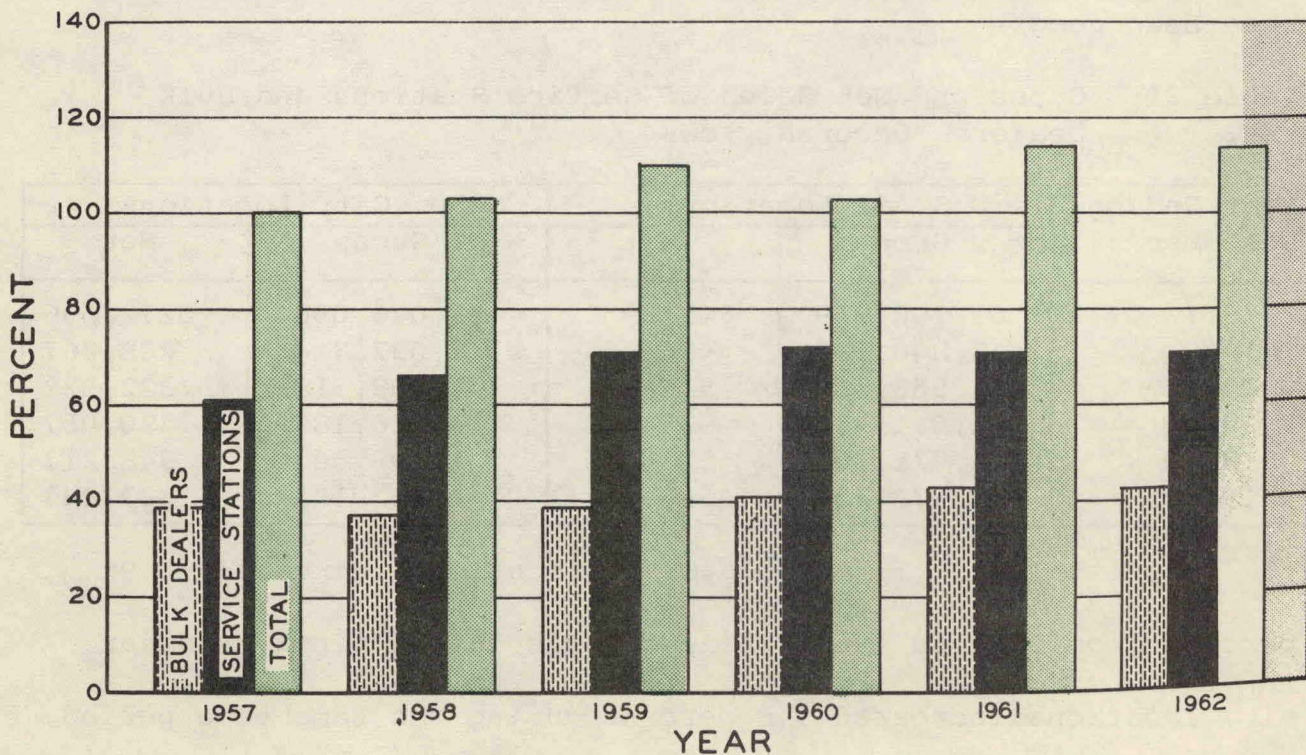




Table 32 is a comparison of gross and net sales of service stations and bulk dealers in Decorah. From 1956 to 1962 gross service station sales increased 32.2 percent, while bulk dealer sales decreased 37.2 percent during the same time period. These changes are illustrated in Figure 13.

Table 32. Gross and Net Sales of Service Stations and Bulk Dealers, Decorah, Iowa

Year Ending December 31	Service Stations		Bulk Dealers	
	Gross	Net	Gross	Net
1957	\$2,034,082	\$560,507	\$748,073	\$150,041
1958	2,155,928	595,393	721,981	157,828
1959	2,374,552	693,068	690,328	165,325
1960	2,558,016	704,695	579,663	140,690
1961	2,648,479	772,489	521,129	153,744
1962	2,690,609	772,673	469,749	136,383

It is interesting to compare the gasoline, net and other sales along with the gross sales of service stations. This is done in Tables 33 and 34 and Figures 14 and 15.

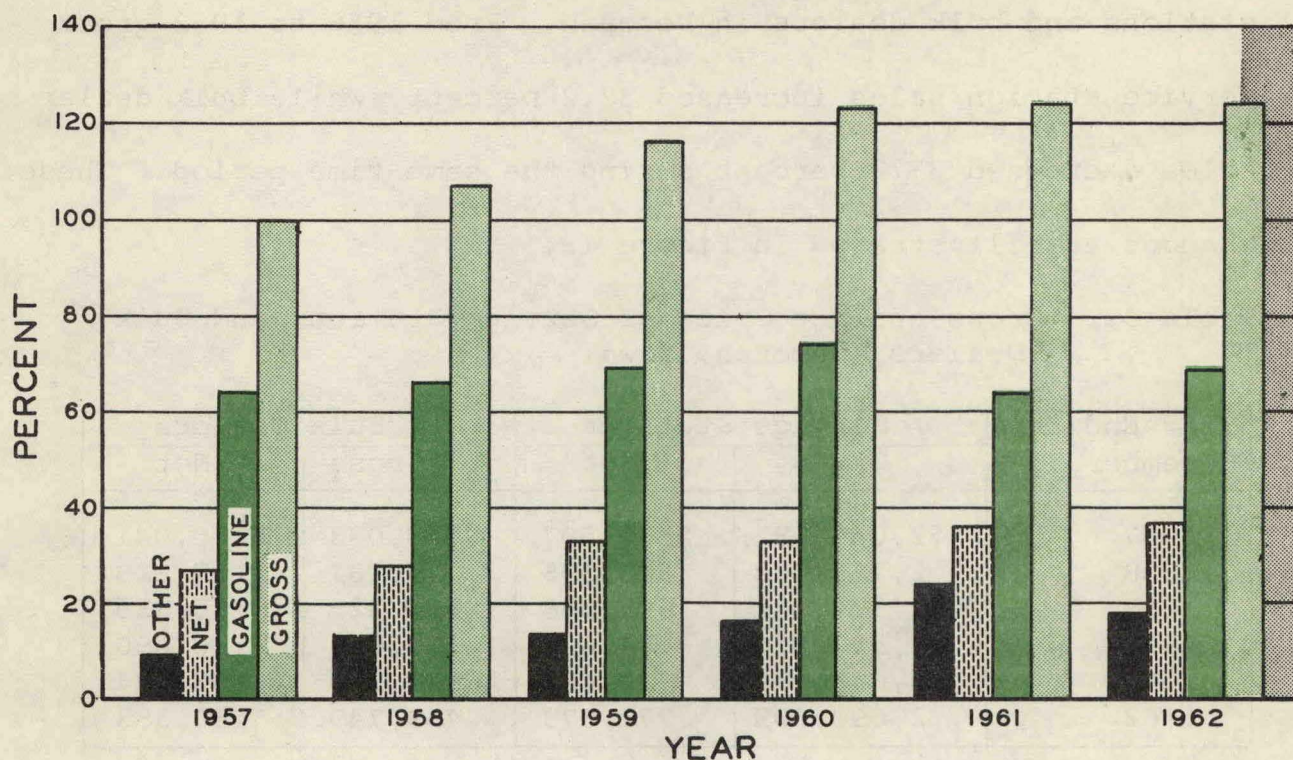
Table 33. Sales of Service Stations on U.S. 52 Locations, Decorah, Iowa.

Year Ending December 31	Gross	Gasoline	Other	Net
1957	\$1,592,788	\$1,016,265	\$150,849	\$425,674
1958	1,711,892	1,059,126	202,470	450,296
1959	1,850,365	1,096,956	228,009	525,400
1960	1,958,416	1,176,260	259,958	522,198
1961	1,967,892	1,025,074	368,015	574,803
1962	1,975,006	1,106,075	285,936	582,995

Gasoline sales of service stations on U.S. 52 locations decreased from 63.8 percent of gross sales in 1957 to 56.0 percent in 1962.



FIGURE 14. DISTRIBUTION OF SERVICE STATION SALES  
ON U.S. 52 LOCATIONS, DECORAH



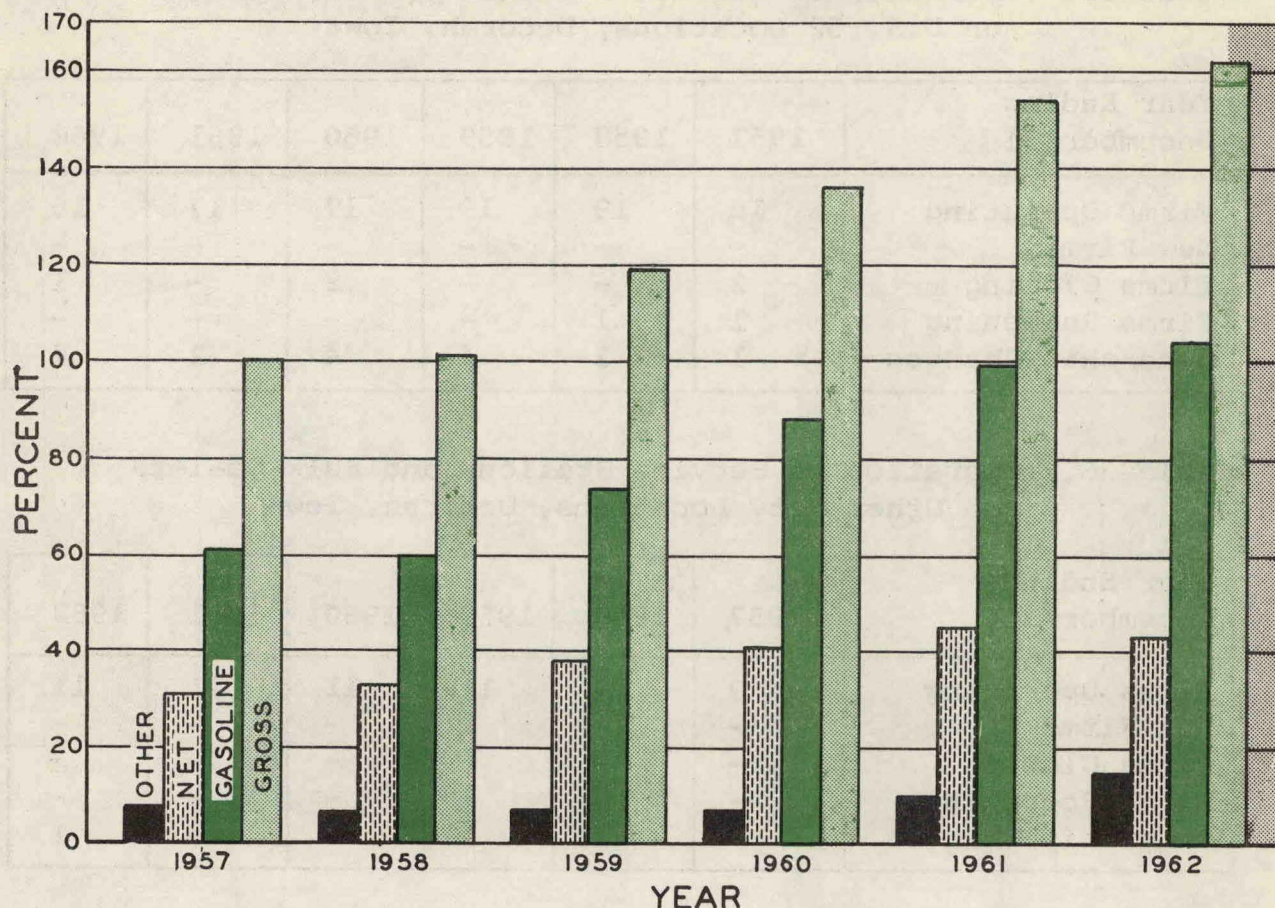
This change in the gas, net, and other sales illustrate that the stations on U.S. 52 locations are not selling as high a percentage of gasoline in 1962 as in 1957 but they are offering more services and have increased their net sales to offset this declining ratio of gasoline sales.

Table 34. Sales of Service Stations on Other City Locations, Decorah, Iowa

Year Ending December 31	Gross	Gasoline	Other	Net
1957	\$441,294	\$269,206	\$37,255	\$134,833
1958	444,036	268,976	29,963	145,097
1959	524,186	328,019	28,880	167,287
1960	599,600	388,506	28,597	182,497
1961	680,587	438,360	44,542	197,685
1962	715,602	458,503	67,420	189,679



FIGURE 15. DISTRIBUTION OF SERVICE STATION SALES  
IN OTHER CITY LOCATIONS, DECORAH



In comparing the sales of service stations in other city locations, gasoline sales increased from 61.0 percent of gross sales in 1957 to 64.0 percent in 1962. Net sales decreased from 30.6 percent of gross sales in 1957 to 26.5 percent in 1962. Other sales have increased during this time period.

A glance at Tables 35, 36, and 37 gives an indication of how service station and bulk dealer operations have changed during the study period. Since the relocation has only started, it is difficult to forecast the exact change that will take place in service station operations after the relocation is completed. However, since Decorah is a tourist area and has many tourist attractions within the city, a major change in service station sales is not expected.



Table 35. Operation of Service Stations and Bulk Dealers  
on U.S. 52 Locations, Decorah, Iowa

Year Ending December 31	1957	1958	1959	1960	1961	1962
Firms Operating	18	19	19	17	17	16
New Firms	-	-	-	-	-	-
Firms Closing	2	-	-	2	-	1
Firms Reopening	1	1	-	-	-	-
Ownership Changes	1	3	4	4	2	2

Table 36. Operation of Service Stations and Bulk Dealers  
on Other City Locations, Decorah, Iowa

Year Ending December 31	1957	1958	1959	1960	1961	1962
Firms Operating	9	9	11	11	11	11
New Firms	-	-	2	-	-	-
Firms Closing	-	-	-	-	-	-
Firms Reopening	-	-	-	-	-	-
Ownership Changes	-	1	1	-	-	1

Table 37. Average Gross Sales per Firm and Summer/Winter  
Gasoline Sales Ratio, Decorah, Iowa

Year Ending December 31	U.S. 52 Locations		Other City Locations	
	Average Gross	<u>Summer</u> Winter	Average Gross	<u>Summer</u> Winter
1957	\$94,781	1.45	\$119,566	1.35
1958	96,873	1.35	115,257	1.35
1959	103,492	1.52	99,865	1.44
1960	118,323	1.35	102,381	1.22
1961	115,947	1.13	109,247	1.19
1962	123,639	1.40	107,467	1.24



# GRINNELL

Grinnell, a city of industry, agriculture, education and culture, is located in Poweshiek County, approximately 50 miles east of Des Moines. Its transportation facilities include U.S. 6, Iowa 146 and partially completed Interstate 80, along with the Chicago, Rock Island and Pacific Railroad and the Minneapolis and St. Louis Railroad. Construction of Interstate 80 in the Grinnell area began in the fall of 1961 and should be completed in the summer of 1964.

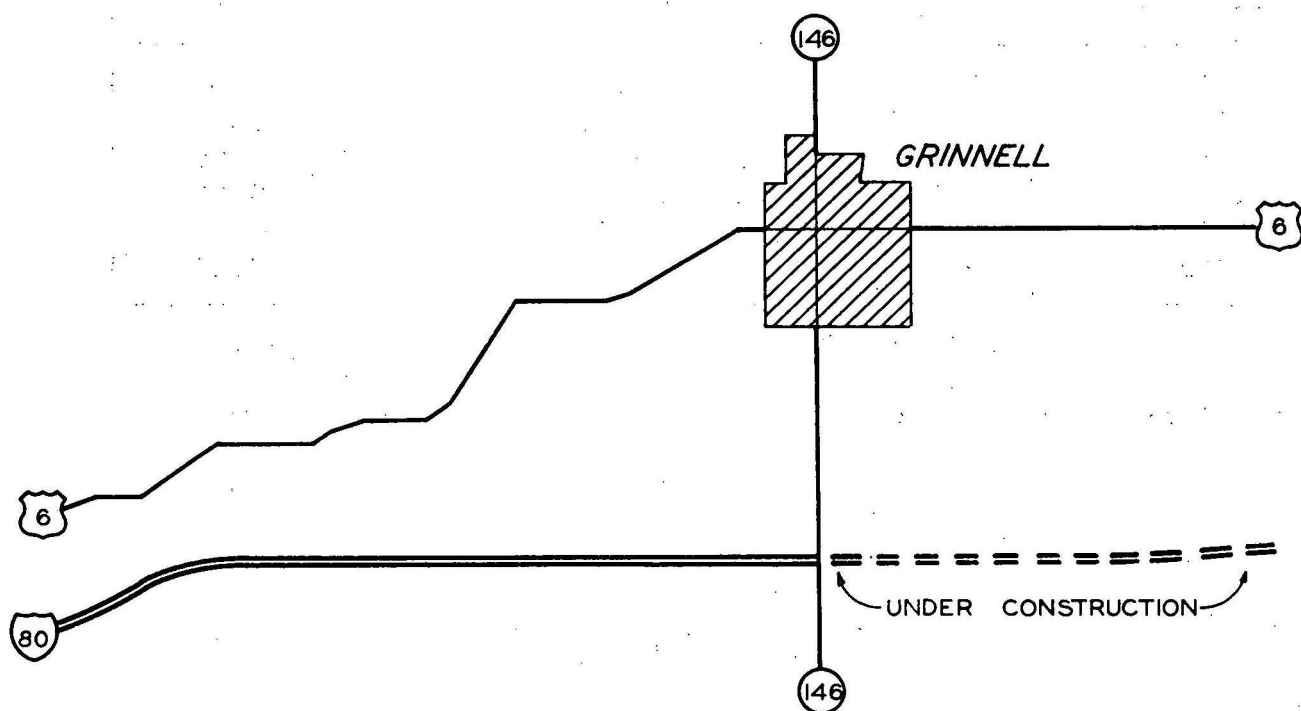


Table 38. Selected Data for Service Stations and Bulk Dealers, Grinnell, Iowa

Year Ending December 31	Sales		Firms Operating	Ownership Changes
	Gross	Net		
1957	\$2,154,166	\$422,507	20	1
1958	2,413,765	474,039	21	5
1959	2,540,747	517,431	21	3
1960	2,624,711	521,770	21	4
1961	2,523,725	499,909	21	1
1962	2,749,302	534,236	23	2



Table 38 gives data on operation and sales of service stations and bulk dealers in Grinnell. The data indicates that sales of firms have shown a steady increase during the study period from 1957 to 1962. The number of firms operating and changes in ownership have been relatively stable during this period.

Table 39. Selected Data for Service Stations on U.S. 6 Locations, Grinnell, Iowa

Year Ending December 31	Sales		<u>Summer</u> Winter Gasoline Ratio	Average Daily Traffic
	Gross	Net		
1957	\$525,805	\$ 77,174	1.09	5800
1958	678,777	113,012	1.14	5900
1959	765,504	131,990	1.14	6300
1960	809,357	140,727	1.19	6600
1961	777,710	136,555	1.11	6800
1962	917,492	148,139	1.07	7100

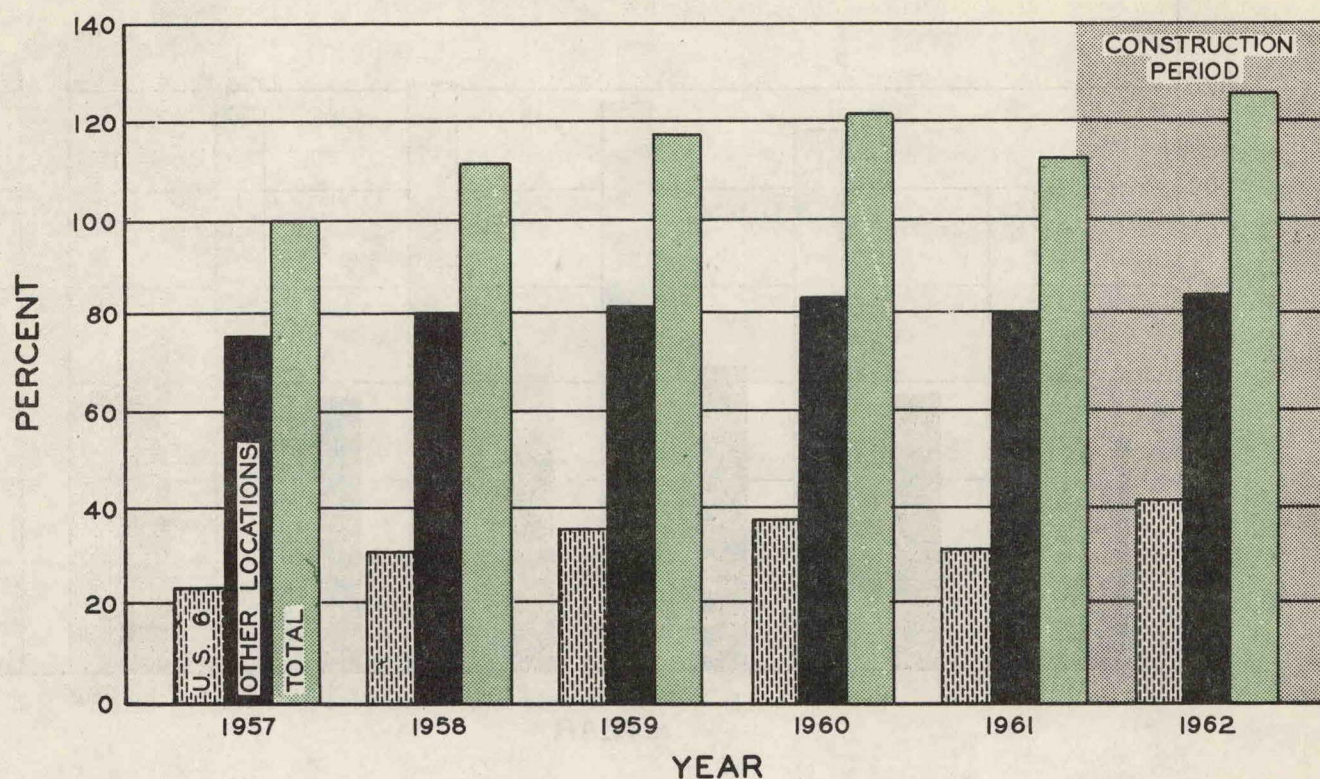
As illustrated in Table 39, the gross sales of service stations on U.S. 6 locations have increased 27.6 percent from 1957 to 1962. The average daily traffic on U.S. 6 in Grinnell has increased 22.4 percent during the same time period.

Table 40. Gross and Net Sales of Service Stations and Bulk Dealers, Grinnell, Iowa

Year Ending December 31	U.S. 6 Locations		Other City Locations	
	Gross	Net	Gross	Net
1957	\$525,805	\$ 77,174	\$1,628,361	\$345,333
1958	678,777	113,012	1,734,988	361,027
1959	765,504	131,990	1,775,243	385,441
1960	809,357	140,727	1,815,354	381,043
1961	777,710	136,555	1,746,015	363,354
1962	917,492	148,139	1,831,810	386,097



FIGURE 16. DISTRIBUTION OF GROSS SALES BY LOCATION, SERVICE STATIONS AND BULK DEALERS, GRINNELL.



Tables 40 and 41 and Figures 16 and 17 show the relative changes in sales of service stations and bulk dealers by type and location. The decrease in gross sales during 1961 is a reflection of a general recession that occurred in 1961. Bulk dealer activity in Grinnell has remained the same from 1960 to 1962, while the general recession is noticed more in the gross sales of service stations. This change is shown in Figure 17.



FIGURE 17. DISTRIBUTION OF GROSS SALES BY SERVICE STATIONS AND BULK DEALERS, GRINNELL.

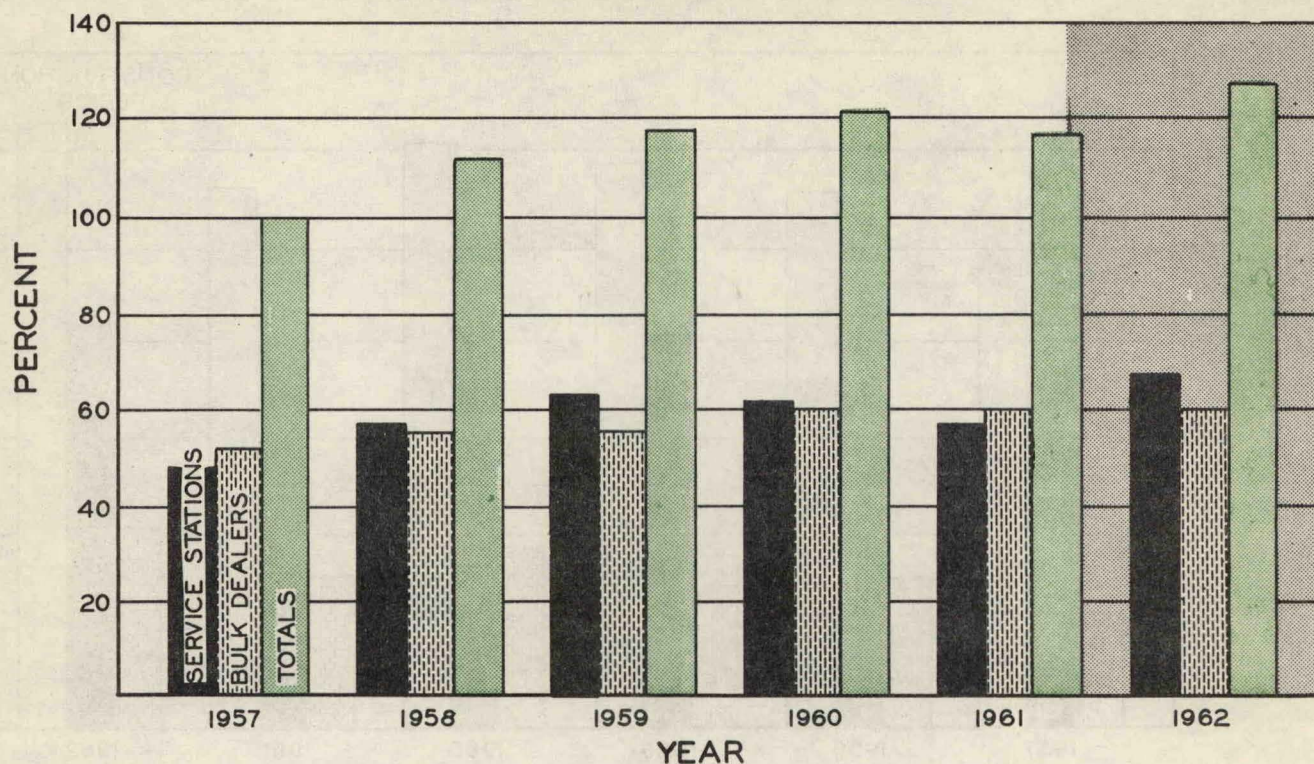


Table 41. Gross and Net Sales of Service Stations and Bulk Dealers, Grinnell, Iowa

Year Ending December 31	Service Stations		Bulk Dealers	
	Gross	Net	Gross	Net
1957	\$1,043,101	\$202,439	\$1,111,065	\$220,068
1958	1,222,011	241,644	1,191,754	232,395
1959	1,349,717	265,514	1,191,030	251,917
1960	1,333,649	259,480	1,291,062	262,290
1961	1,223,889	235,094	1,299,836	264,815
1962	1,444,318	266,053	1,304,984	268,183

To further evaluate the sales of service stations, the trend in gasoline and net sales compared to gross sales should be studied. For stations located on U.S. 6 in Grinnell, the gasoline sales has remained 79 percent of the gross sales from 1957 to 1962. The net sales remained 16 percent of gross sales during the same period. The steadiness in the ratio of



gasoline and net sales to gross sales for these stations point out that gross and net sales are dependent upon gasoline sales. These comparisons are shown on Table 42 and Figure 18.

Table 42. Sales of Service Stations on U.S. 6 Locations, Grinnell, Iowa.

Year Ending December 31	Gross	Gasoline	Other	Net
1957	\$525,805	\$426,889	\$21,742	\$77,174
1958	678,777	535,718	30,047	113,012
1959	765,504	602,372	31,142	131,990
1960	809,357	638,799	29,831	140,727
1961	777,710	602,309	38,846	136,555
1962	917,492	724,415	44,938	148,139

FIGURE 18. DISTRIBUTION OF SERVICE STATION SALES ON U.S. 6 LOCATIONS, GRINNELL.

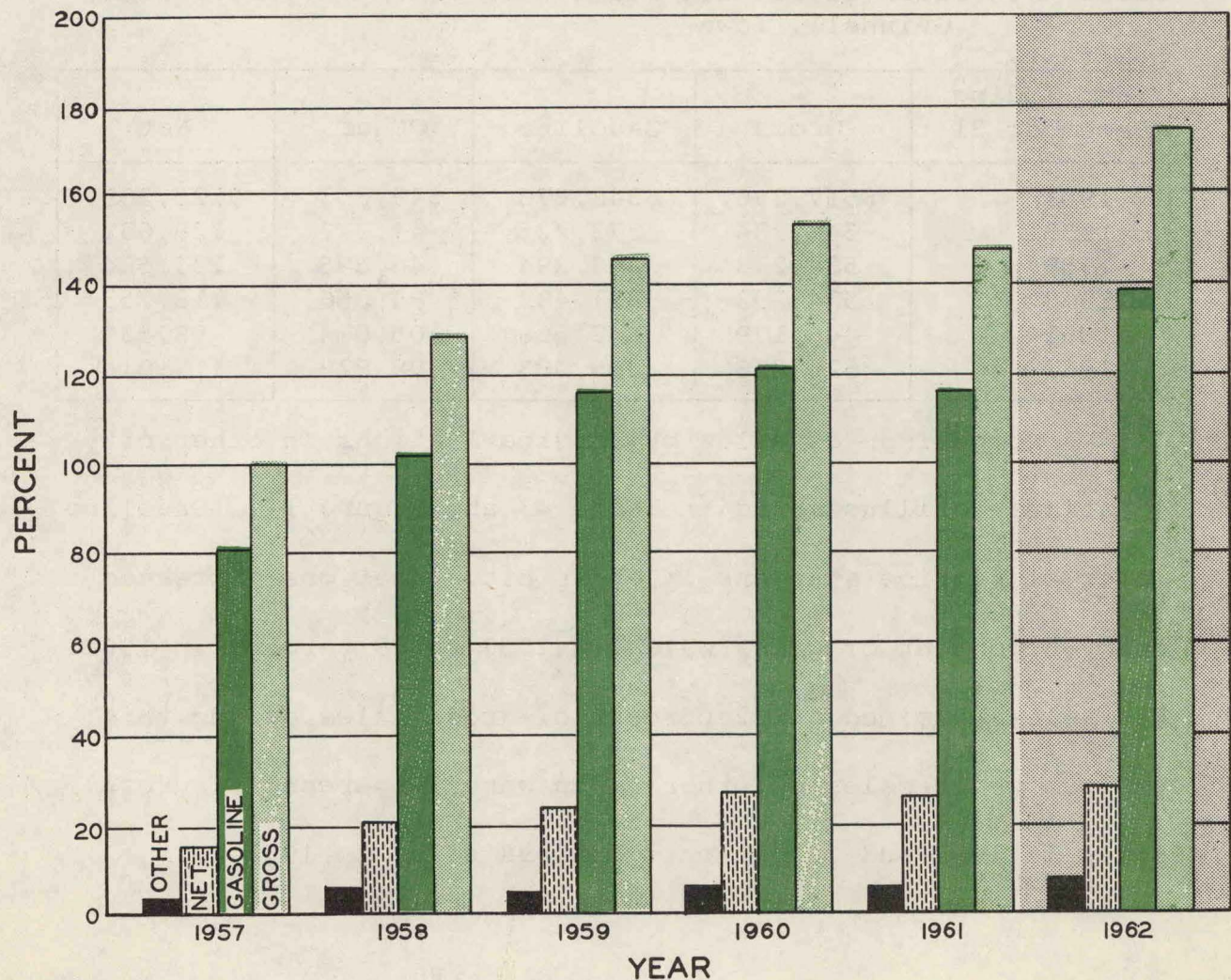




FIGURE 19. DISTRIBUTION OF SERVICE STATION SALES IN OTHER CITY LOCATIONS, GRINNELL.

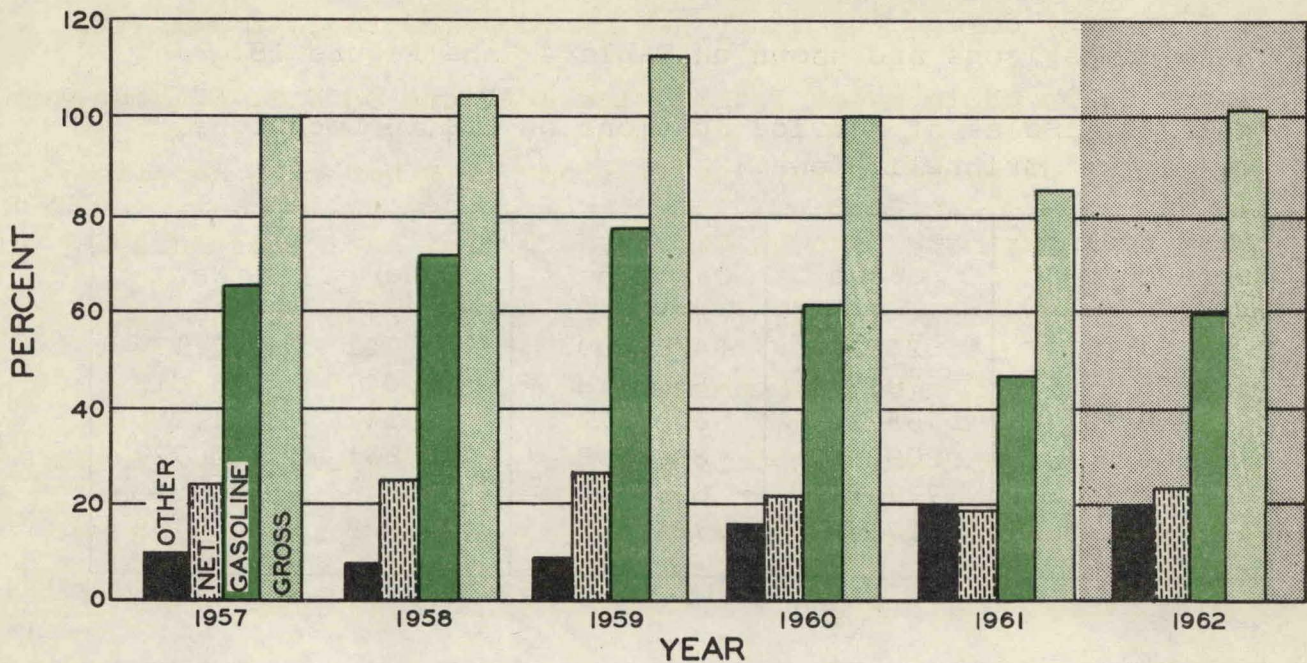


Table 43. Sales of Service Station on other City Locations, Grinnell, Iowa

Year Ending December 31	Gross	Gasoline	Other	Net
1957	\$517,296	\$342,678	\$49,353	\$125,265
1958	543,234	373,225	41,377	128,632
1959	584,213	403,794	46,895	133,524
1960	524,292	321,483	84,056	118,753
1961	446,179	242,566	105,074	98,539
1962	526,826	309,083	99,829	117,914

A comparison of sales by Service Stations in other city locations is illustrated in Table 43 and Figure 19. Gasoline sales of service stations in other city locations decreased from 66 percent of gross sales in 1957 to 59 percent in 1962. Net sales remained at 22 percent of gross sales during this period, while sales of other items were 10 percent of gross sales in 1957 and 20 percent of gross sales in 1962.



The gross sales of these service stations only increased 1.8 percent during the study period compared to 27.6 percent increase in gross sales for service stations on U.S. 6 locations. The study of sales by service stations in other city locations show that business through the study period has remained the same with the loss in gasoline sales being offset by the sale of services and other merchandise.

Service stations in Grinnell have experienced a prosperous business period since 1961. This prosperity is influenced by two factors. One is the increased traffic resulting from motorists traveling Interstate 80, which terminates South of Grinnell on Ia. 146, and the increase in business from the contractors building the Interstate. When the Interstate is completed around Grinnell, this prosperity can be expected to decrease. It is anticipated that with a decrease in sales, competition between stations will increase. As a result of the increased competition, some stations will discontinue business. Those stations remaining in business after the adjustment period should make substantial incomes.



Table 44, 45, and 46, illustrate the operation and average sales of service stations in Grinnell.

Table 44. Operation of Service Stations and Bulk Dealers on U.S. 6 Locations, Grinnell, Iowa

Year Ending December 31	1957	1958	1959	1960	1961	1962
Firms Operating	10	11	11	9	9	10
New Firms	2	1	1	0	--	--
Firms Closing	1	-	1	4	--	1
Firms Reopening	1	-	-	2	--	2
Ownership Changes	1	4	3	2	--	1

Table 45. Operation of Service Stations and Bulk Dealers on Other City Locations, Grinnell, Iowa

Year Ending December 31	1957	1958	1959	1960	1961	1962
Firms Operating	10	10	10	12	12	13
New Firms	-	-	1	1	1	-
Firms Closing	-	-	1	-	1	-
Firms Reopening	-	-	-	1	-	1
Ownership Changes	-	1	-	2	1	1

Table 46. Average Gross Sales per Firm and Summer/Winter Gasoline Sales Ratio, Grinnell, Iowa.

Year Ending December 31	U.S. 6 Locations		Other City Locations	
	Average Gross	<u>Summer</u> Winter	Average Gross	<u>Summer</u> Winter
1957	\$52,580	1.09	\$162,836	1.24
1958	61,707	1.14	173,499	1.19
1959	69,591	1.14	177,524	1.40
1960	89,928	1.19	151,279	1.23
1961	86,412	1.11	137,168	0.93
1962	91,749	1.07	140,908	0.77



## JEFFERSON

Jefferson, an agricultural community with a 1960 population of 4750, is the county seat of Greene County. In the fall of 1958, the relocation of U.S. 30 North of Jefferson was completed and open to traffic. The study of Jefferson service station sales illustrates the economic adjustment period for service stations affected by a highway relocation.

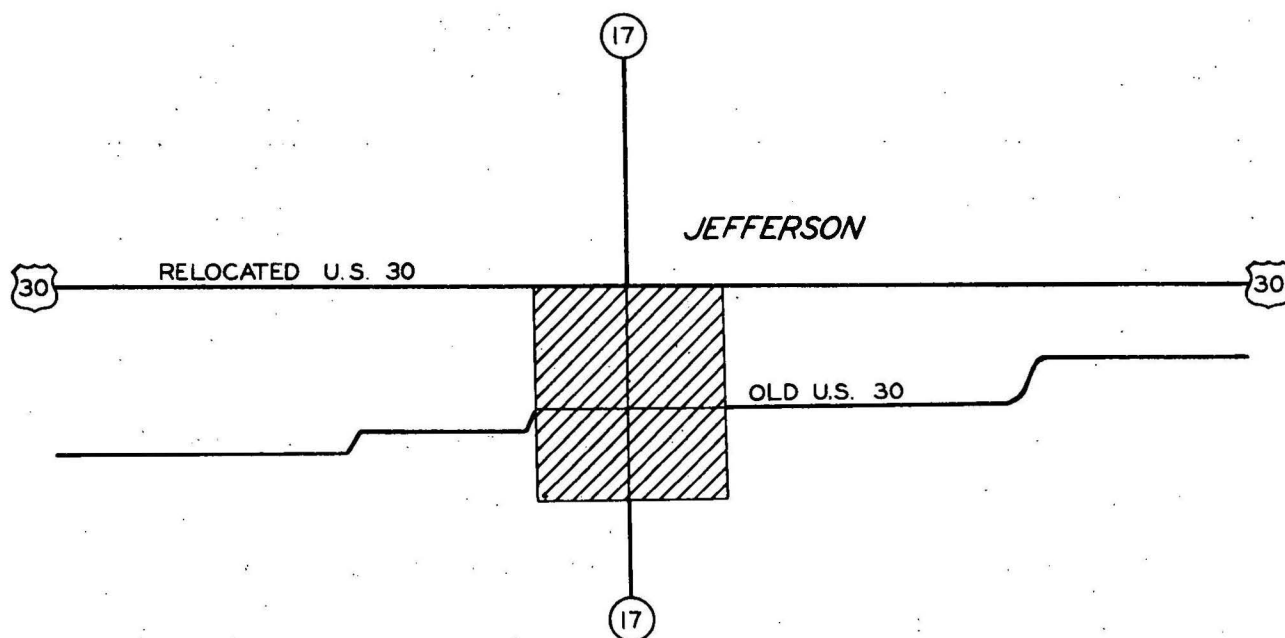


Table 47. Selected Data for Service Stations and Bulk Dealers, Jefferson, Iowa

Year Ending December 31	Sales		Firms Operating	Ownership Changes
	Gross	Net		
1957	\$1,125,438	\$276,599	12	-
1958	1,158,069	288,536	13	1
1959	1,095,381	258,586	12	2
1960	1,099,853	259,885	11	-
1961	1,034,725	262,888	11	2
1962	1,099,910	264,687	11	-



Table 47 shows the change in sales and operations of service stations and bulk dealers in Jefferson from 1957 to 1962. Gross sales reached a low in 1959 and have risen slowly since then, except for a decline in 1961. This decline is the result of a general recession that occurred in 1961. There are now fewer firms operating, which can be expected, and the ownership changes are low.

Table 48. Selected Data for Service Station's on Lincoln Way Locations, Jefferson, Iowa

Year Ending December 31	Sales		<u>Summer</u> Winter Gasoline Ratio	Average Daily Traffic
	Gross	Net		
1957	\$251,071	\$75,947	1.28	5100
1958	245,646	97,044	1.29	5000
1959	208,912	94,214	1.08	2100
1960	178,363	102,841	1.02	2000
1961	198,635	105,120	1.06	1900
1962	205,964	105,967	1.02	1800

Table 48 shows how business has changed during the study period for service stations located on Lincoln Way (previously U. S. 30). The gross sales reached a low in 1960 and have continued to rise since that time. The loss in traffic on Lincoln Way is reflected in the decreased Summer/Winter gasoline sales ratio. With the reduction in average daily traffic, the service stations on Lincoln Way are relying more on the local customer for their trade than the traveling motorist.



Table 49 Gross and Net Sales of Service Stations and Bulk Dealers, Jefferson, Iowa

Year Ending December 31	Service Stations		Bulk Dealers	
	Gross	Net	Gross	Net
1957	\$647,885	\$130,955	\$477,553	\$145,644
1958	705,979	154,944	452,090	133,592
1959	669,850	143,643	425,531	114,943
1960	662,456	141,359	437,397	118,526
1961	687,957	145,339	346,768	117,549
1962	705,500	148,950	394,410	115,737

FIGURE 20. DISTRIBUTION OF GROSS SALES BY SERVICE STATIONS AND BULK DEALERS, JEFFERSON.

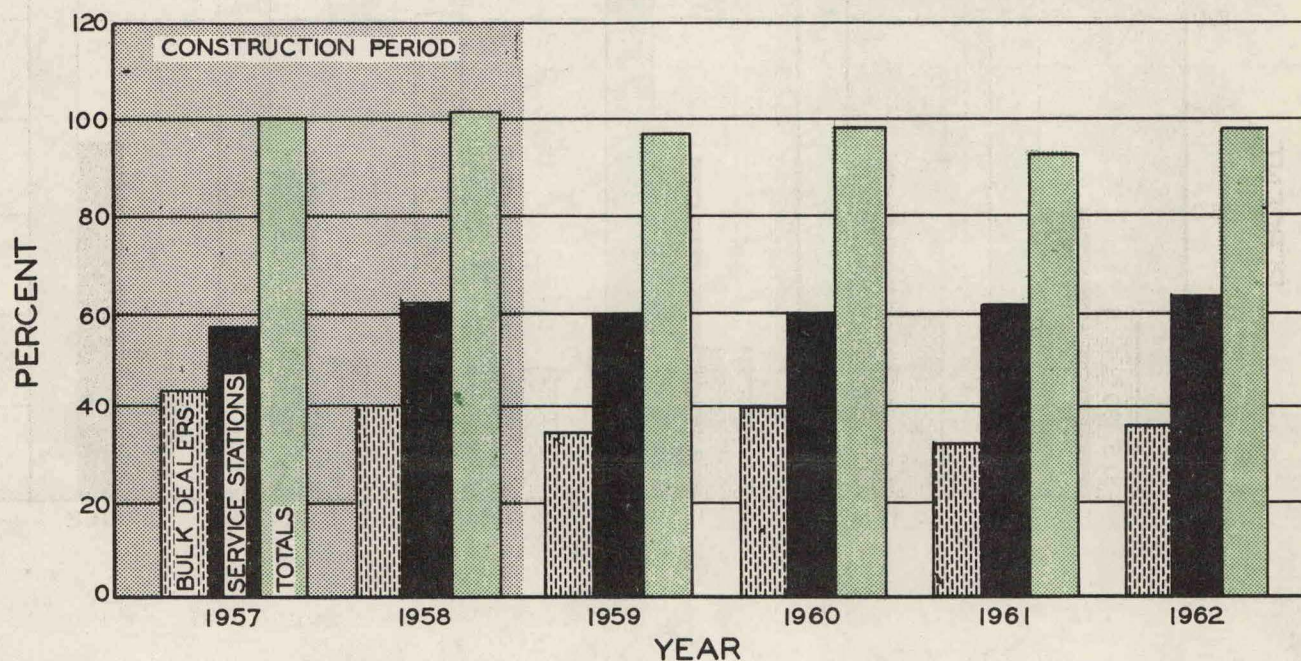
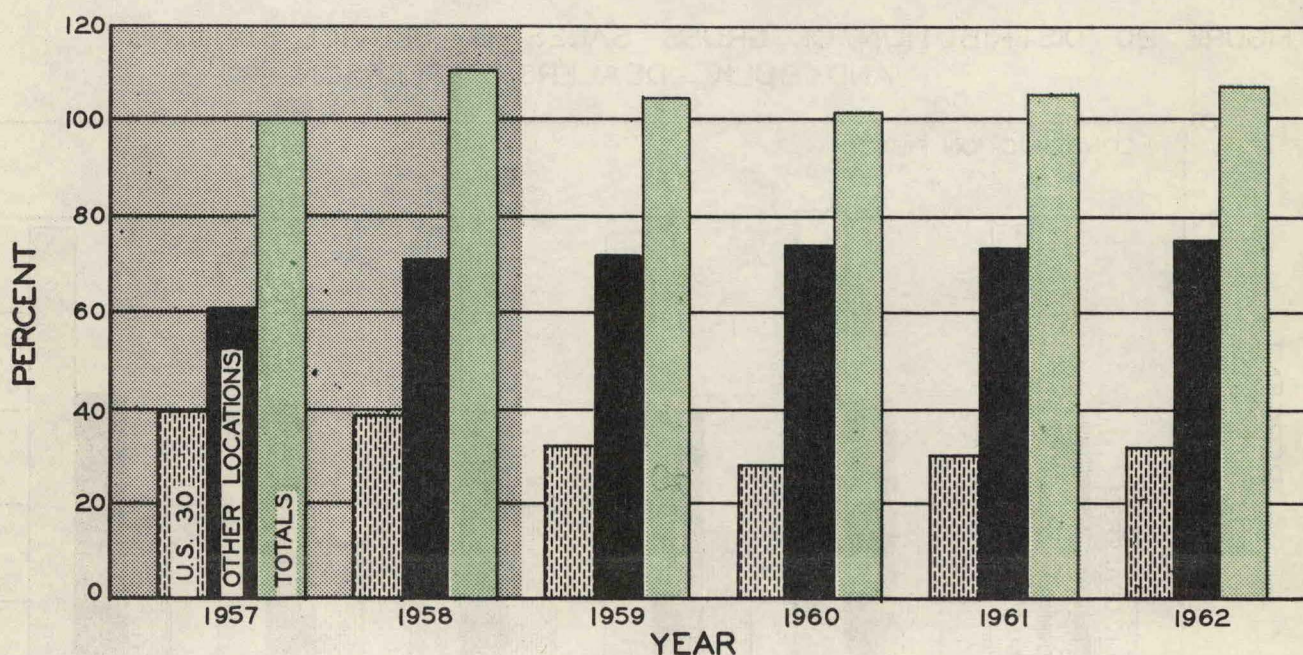


Table 49 and Figures 20 and 21 illustrate the changes made in the sales of service stations and bulk dealers in Jefferson from 1957 to 1962. Gross sales of service stations increased 8.2 percent from 1957 to 1958. After the relocation was open in 1958, gross sales decreased 6.2



percent from 1958 to 1960. In 1961 and 1962, the business returned to normal and gross sales increased 6.4 percent from 1960 to 1962. The gross sales of bulk dealers has declined from 1957 to 1961 and show a slight increase in 1962.

FIGURE 21. DISTRIBUTION OF GROSS SALES BY LOCATION, SERVICE STATIONS AND BULK DEALERS. JEFFERSON.



From Figure 21 the sales of service stations on Lincoln Way locations and those in other city locations do not show the same changes during the study period. The gross sales of service stations in other city locations show a steady increase while the sales of Lincoln Way service stations have decreased as the highway and traffic patterns have changed.



The changes in gross sales of service stations do not always tell what the trend of gasoline and net sales has been. Tables 50 and 51 and Figures 22 and 23 illustrate the distribution of gross, gasoline and net sales of Jefferson service stations.

FIGURE 22. DISTRIBUTION OF SERVICE STATION SALES ON LINCOLN WAY LOCATIONS, JEFFERSON

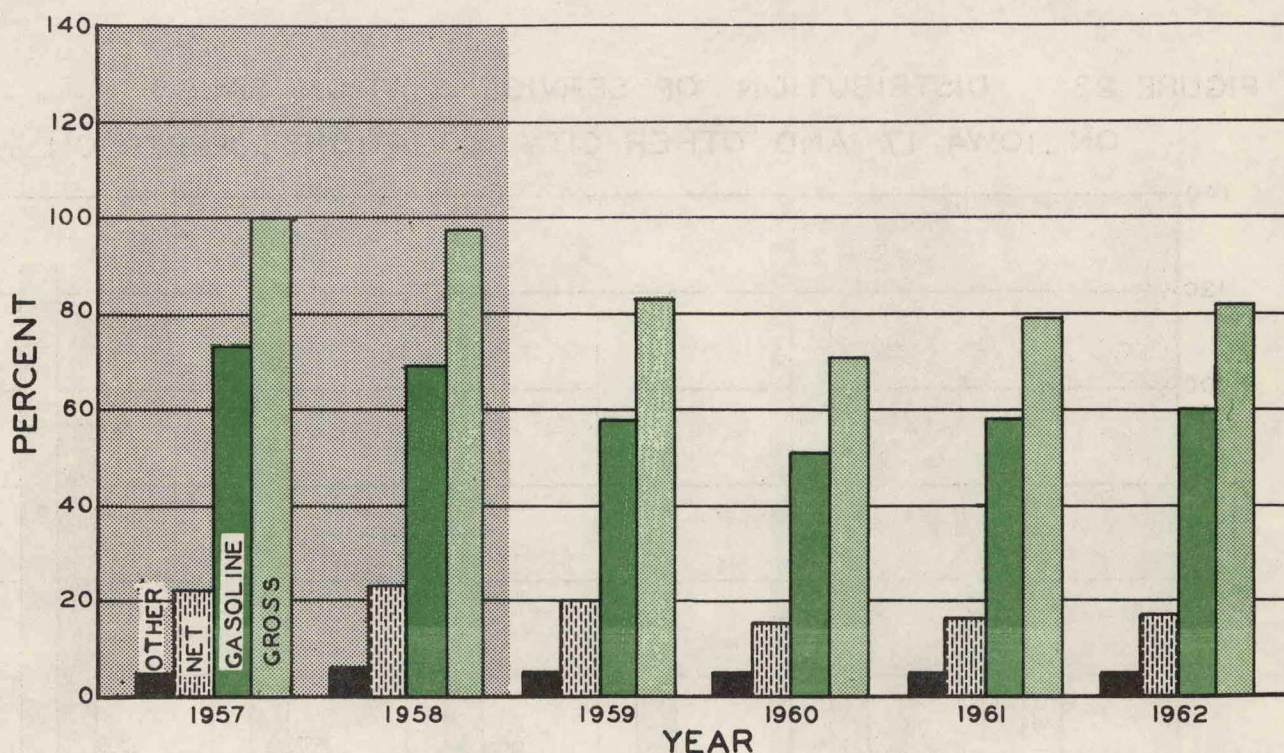


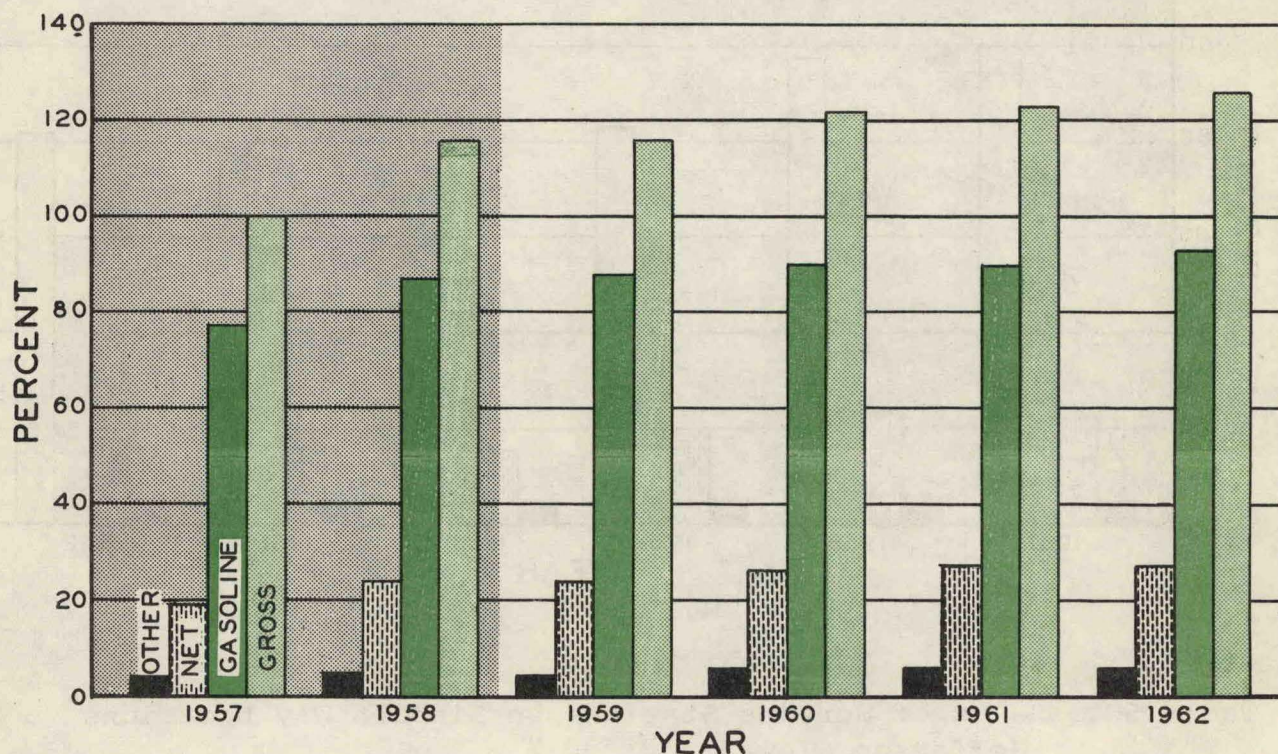
Table 50. Sales of Service Stations on Lincoln Way Locations Jefferson, Iowa

Year Ending December 31	Gross	Gasoline	Other	Net
1957	\$251,071	\$182,319	\$13,744	\$55,008
1958	245,646	173,740	14,006	57,900
1959	208,912	147,010	12,473	49,429
1960	178,363	128,762	11,083	38,518
1961	198,635	146,340	12,076	40,219
1962	205,964	149,987	12,994	42,983



Gasoline sales of service stations on Lincoln Way locations stayed at 72 percent of gross sales from 1957 to 1962. Net sales remained at 21 percent of gross sales during the same period. This constant ratio of gasoline sales to net and gross sales of service stations on Lincoln Way locations shows that the business of these stations is dependent upon the sale of gasoline and not the sale of services and other merchandise.

FIGURE 23. DISTRIBUTION OF SERVICE STATION SALES ON IOWA 17 AND OTHER CITY LOCATIONS, JEFFERSON



The relationship between gross, gasoline and net sales of service stations in other city locations is illustrated in Table 51 and Figure 23. Gasoline sales of stations at



these locations were 78 percent of gross sales in 1957 and 73 percent of gross sales in 1962. Net sales were 19 percent of gross sales in 1957 and increased to 22 percent of gross sales in 1962. The ratio of other sales to gross sales remained at 5 percent during the study period. This decline in ratio of gasoline sales to gross sales and the increased ratio in net sales represents a greater share of taxable merchandise now being sold in these service stations.

Table 51. Sales of Service Stations on Iowa 17 and Other City Locations, Jefferson, Iowa

Year Ending December 31	Gross	Gasoline	Other	Net
1957	\$396,814	\$305,962	\$14,905	\$75,947
1958	460,333	345,293	17,996	97,044
1959	460,938	348,100	18,624	94,214
1960	484,093	358,156	23,096	102,841
1961	489,322	356,012	28,190	105,120
1962	499,536	367,734	25,835	105,967

Now that the volume of through traffic in Jefferson has decreased, the service stations must rely upon the local people for their sales. From the studies made on service station sales in Jefferson, it is very evident that some service stations have suffered by the loss of U.S. 30 through Jefferson. Other stations have prospered and will probably continue to prosper. Keen competition between the Jefferson service stations accelerated the declining sales of those stations that were not successfully competing for customers prior to the highway relocation. Successful competition, along with good management are definite assets for a prosperous business



A glance at Tables 52, 53 and 54 give an indication of how the operation of service stations and bulk dealers has changed during the study period.

Table 52. Operation of Service Stations and Bulk Dealers on Lincoln Way Locations, Jefferson, Iowa

Year Ending December 31	1957	1958	1959	1960	1961	1962
Firms Operating	7	7	6	5	5	5
New Firms	-	-	-	-	-	-
Firms Closing	-	-	1	3	-	-
Firms Reopening	-	-	-	2	-	-
Ownership Changes	-	1	1	-	1	-

Table 53. Operation of Service Station and Bulk Dealers on Iowa 17 and Other City Locations, Jefferson, Iowa

Year Ending December 31	1957	1958	1959	1960	1961	1962
Firms Operating	5	6	6	6	6	6
New Firms	-	1	-	-	-	1
Firms Closing	-	-	-	-	-	1
Firms Reopening	-	-	-	-	-	-
Ownership Changes	-	-	1	-	1	-

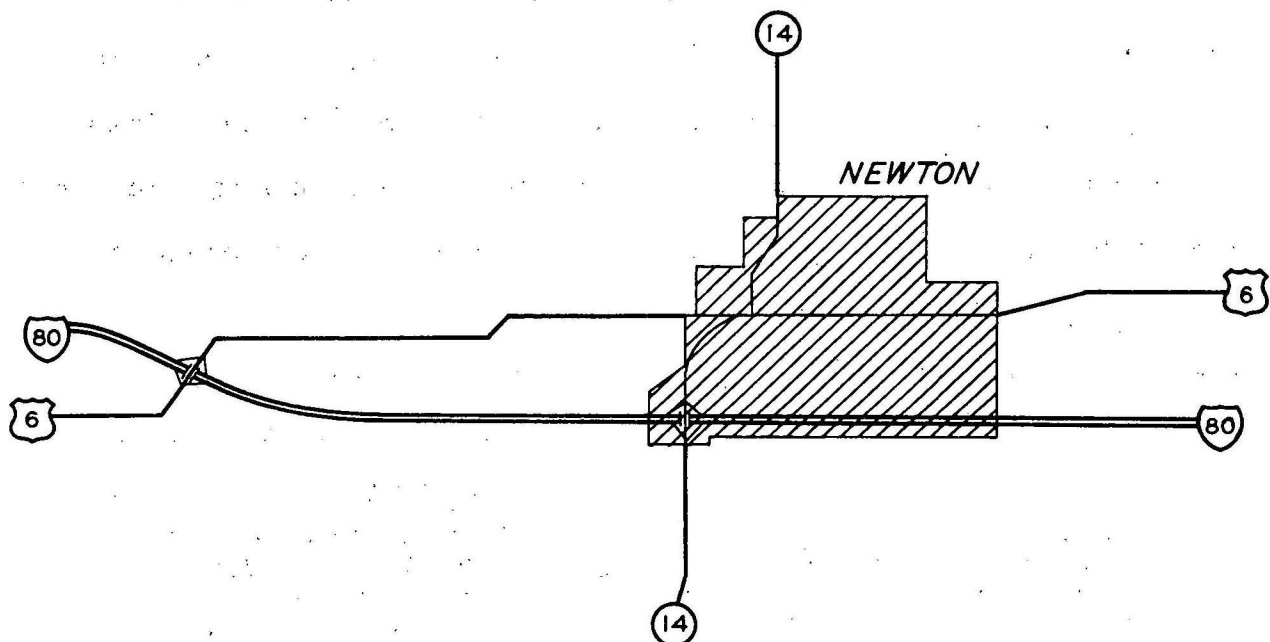
Table 54. Average Gross Sales per Firms and Summer/Winter Gasoline Sales Ratio, Jefferson, Iowa

Year Ending December 31	Lincoln Way Locations		Other City Locations	
	Average Gross	<u>Summer</u> Winter	Average Gross	<u>Summer</u> Winter
1957	\$35,867	1.28	\$79,363	1.29
1958	35,092	1.29	76,722	1.28
1959	34,819	1.08	76,823	1.19
1960	35,673	1.02	80,682	1.16
1961	39,727	1.06	81,554	1.20
1962	41,193	1.02	83,256	1.17



## NEWTON

Newton, located in central Iowa, approximately thirty miles east of Des Moines, is a fast growing community. The population of Newton increased from 11,723 in 1950 to 15,381 in 1960, an increase of 31.2 percent. Manufacturing is an important factor in Newton's economy. Newton is sometimes called the washing machine center of the world. The Maytag Company has manufactured washing machines in Newton since 1907. There are numerous other industrial establishments in Newton with a total industrial employment of approximately 6000 people.



U.S 6 and Iowa 14 intersect in Newton and Interstate Route 80 passes just south of the city. Other transportation facilities include the Rock Island Railroad and a municipal airport. Construction of Interstate 80 south of Newton began in the summer of 1960 and was completed in the fall of 1962. A relocation of Iowa 14 is proposed around the northwest side of Newton.



Table 55. Selected Data for Service Stations and Bulk Dealers, Newton, Iowa

Year Ending December 31	Sales		Firms Operating	Ownership Changes
	Gross	Net		
1957	\$2,576,944	\$648,870	35	1
1958	3,182,543	783,459	34	7
1959	3,576,018	863,924	35	3
1960	3,677,161	860,438	37	9
1961	3,872,745	847,364	40	5
1962	3,796,719	841,699	38	6

From the information presented in Table 55, it is evident that Newton service station business has been quite active. During 1961, 40 firms were operating and gross sales totaled \$3,872,745. This is an increase of 50.8 percent in gross sales from 1957, when 35 firms were in operation. Also during this period there were 25 changes of ownership. This ownership change is relatively high, but with a growing business and high competition, a certain amount of ownership changes can be expected.

Table 56. Selected Data for Service Stations on U.S. 6 Locations, Newton, Iowa

Year Ending December 31	Sales		<u>Summer</u> Winter Gasoline Ratio	Average Daily Traffic
	Gross	Net		
1957	\$1,752,694	\$420,095	1.04	7600
1958	2,192,691	510,477	1.02	8300
1959	2,326,097	571,673	1.07	9000
1960	2,439,882	586,471	1.07	9500
1961	2,587,769	559,465	1.20	10000
1962	2,398,106	523,709	1.18	9800



An increase in public demand for services and products provided by service stations has been the major reason for the increase in gross sales of service stations in Newton. The construction of Interstate 80 and increased traffic on U.S. 6 in Newton have contributed to this increase in public demand. With the loss of business from Interstate construction and the shift in traffic from U.S. 6 to Interstate 80, the public demand for service station facilities declined. This is reflected in the decrease in gross sales from 1961 to 1962.

FIGURE 24. DISTRIBUTION OF GROSS SALES BY SERVICE STATIONS AND BULK DEALERS, NEWTON

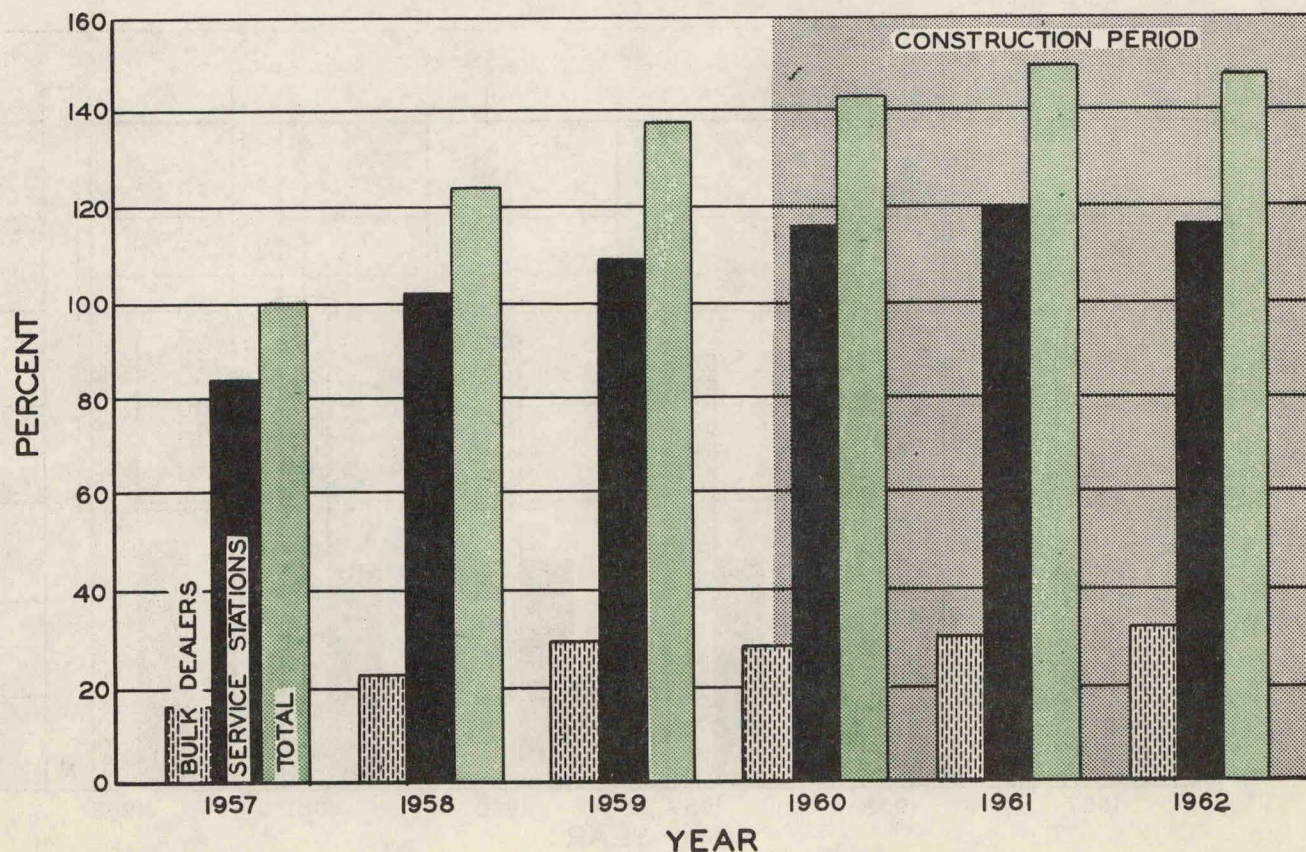




Table 57. Total Gross Sales of Service Stations and Bulk Dealers, Newton, Iowa.

Year Ending December 31	Service Stations		Bulk Dealers	
	Gross	Net	Gross	Net
1957	\$2,153,153	\$556,598	\$423,791	\$92,272
1958	2,626,724	648,150	555,819	135,309
1959	2,833,155	722,785	742,863	141,139
1960	2,969,977	743,073	707,184	117,365
1961	3,115,527	717,960	757,218	129,404
1962	2,974,574	690,934	822,145	150,765

From the data in Table 57 and Figure 24 the sales of both service stations and bulk dealers increased during the 1957-62 study period, but the sales of Bulk Dealers did not decline from 1961 to 1962. Bulk dealers rely on the local community and surrounding area for their business, while service stations are somewhat dependent upon the traveling public for their business.

FIGURE 25. DISTRIBUTION OF GROSS SALES BY LOCATION, SERVICE STATIONS AND BULK DEALERS, NEWTON.

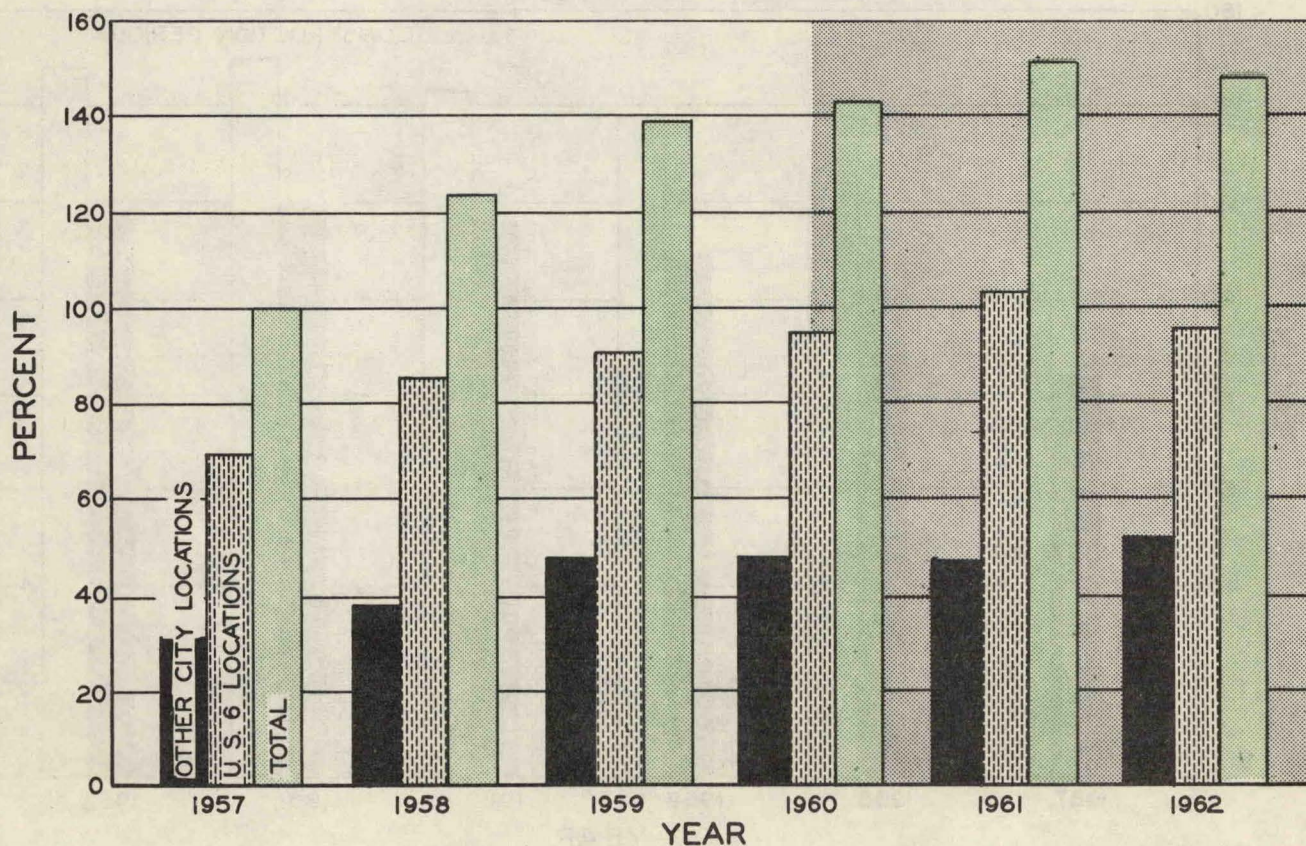




Table 58. Gross and Net Sales of Service Station and Bulk Dealers, Newton, Iowa

Year Ending December 31	U.S. 6 Locations		Other City Locations	
	Gross	Net	Gross	Net
1957	\$1,769,089	\$428,822	\$807,855	\$220,048
1958	2,212,963	524,109	969,580	259,350
1959	2,333,725	577,333	1,242,293	286,591
1960	2,439,882	586,471	1,237,279	273,967
1961	2,654,409	574,361	1,218,336	273,003
1962	2,471,817	545,252	1,324,902	296,447

A review of the data in Table 58 and Figure 25 shows that sales of firms located on U.S. 6 and in other city locations increased their sales approximately 10 percent annually from 1957 to 1961. In 1962, sales of service stations on U.S. 6 locations decreased 7.3 percent from 1961 while sales of service stations in other locations increased 8.7 percent.

This comparison of sales by service stations in different locations shows that stations located on a highway where traffic patterns change will be more directly affected by the changing traffic patterns than stations located off the highway. Most sales of service stations located off the highway are to local people and they generally have a long established business and trade. Service stations on highway locations rely on the traveling motorist for most of their sales and if there are fewer motorists, the result is fewer sales. Those service stations located on the highway, that cater primarily to local trade for their business, should not be adversely affected by a change in traffic patterns.



FIGURE 26. DISTRIBUTION OF SERVICE STATION SALES ON U.S. 6 LOCATIONS, NEWTON.

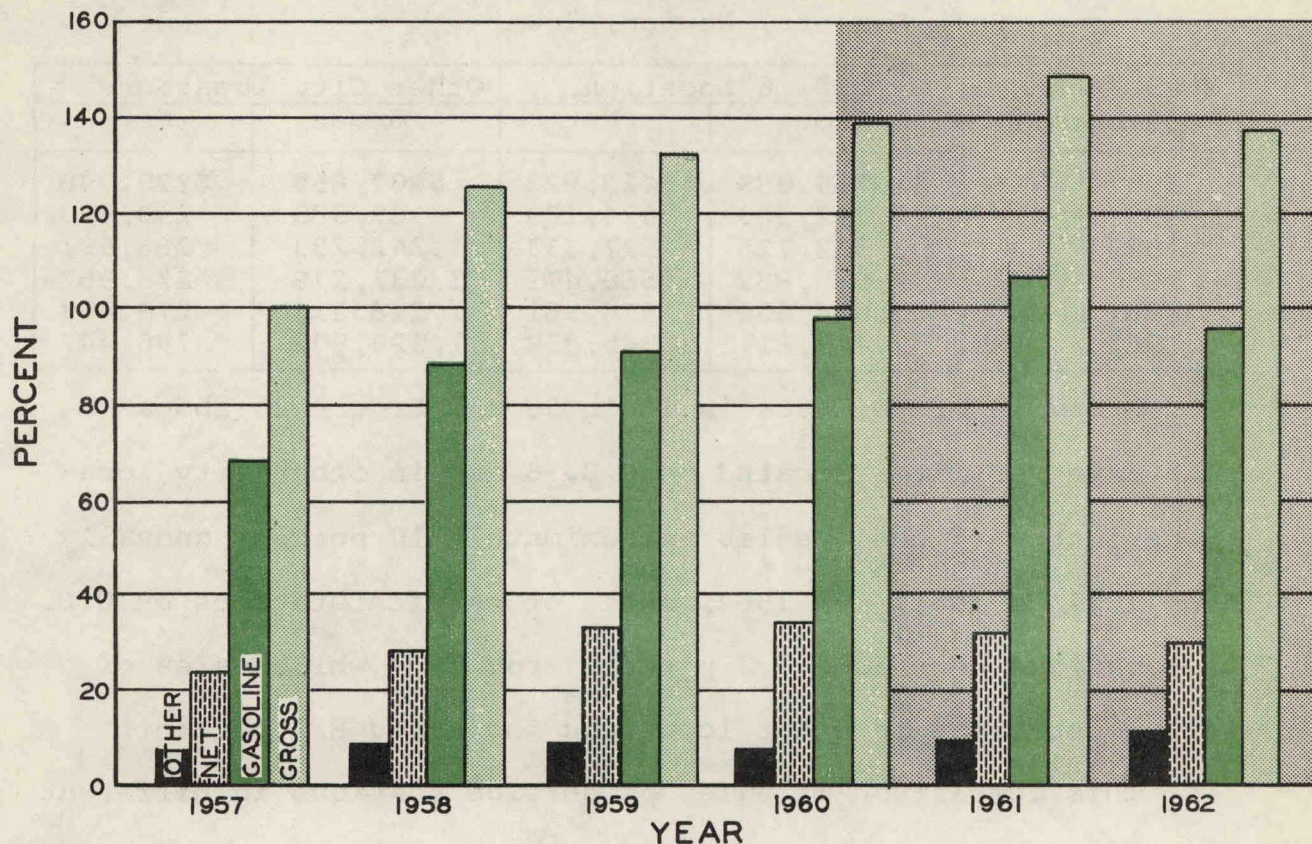


Table 59. Sales of Service Stations on U.S. 6, Newton, Iowa

Year Ending December 31	Gross	Gasoline	Other	Net
1957	\$1,752,694	\$1,191,666	\$140,933	\$420,095
1958	2,192,691	1,524,194	158,020	510,477
1959	2,326,097	1,592,721	161,703	571,673
1960	2,439,882	1,711,988	141,423	586,471
1961	2,587,769	1,856,012	172,292	559,465
1962	2,398,106	1,689,513	184,884	523,709

A comparison of gross, gasoline, and net sales for service stations on U.S. 6 locations is made in Table 59 and Figure 26. Gasoline sales remained at 69 percent of gross sales from 1957 to 1962. Net sales were 23 percent of gross sales during the study period,



and sales of other items and services were 8 percent of gross sales. This is illustrated in Figure 26. This stable relationship between the gross, gasoline and net sales of these service stations indicate that the sale of gasoline is the predominant factor in determining the gross and net sales of service stations on U.S. 6 locations.

FIGURE 27. DISTRIBUTION OF SERVICE STATION SALES AT OTHER CITY LOCATIONS, NEWTON.

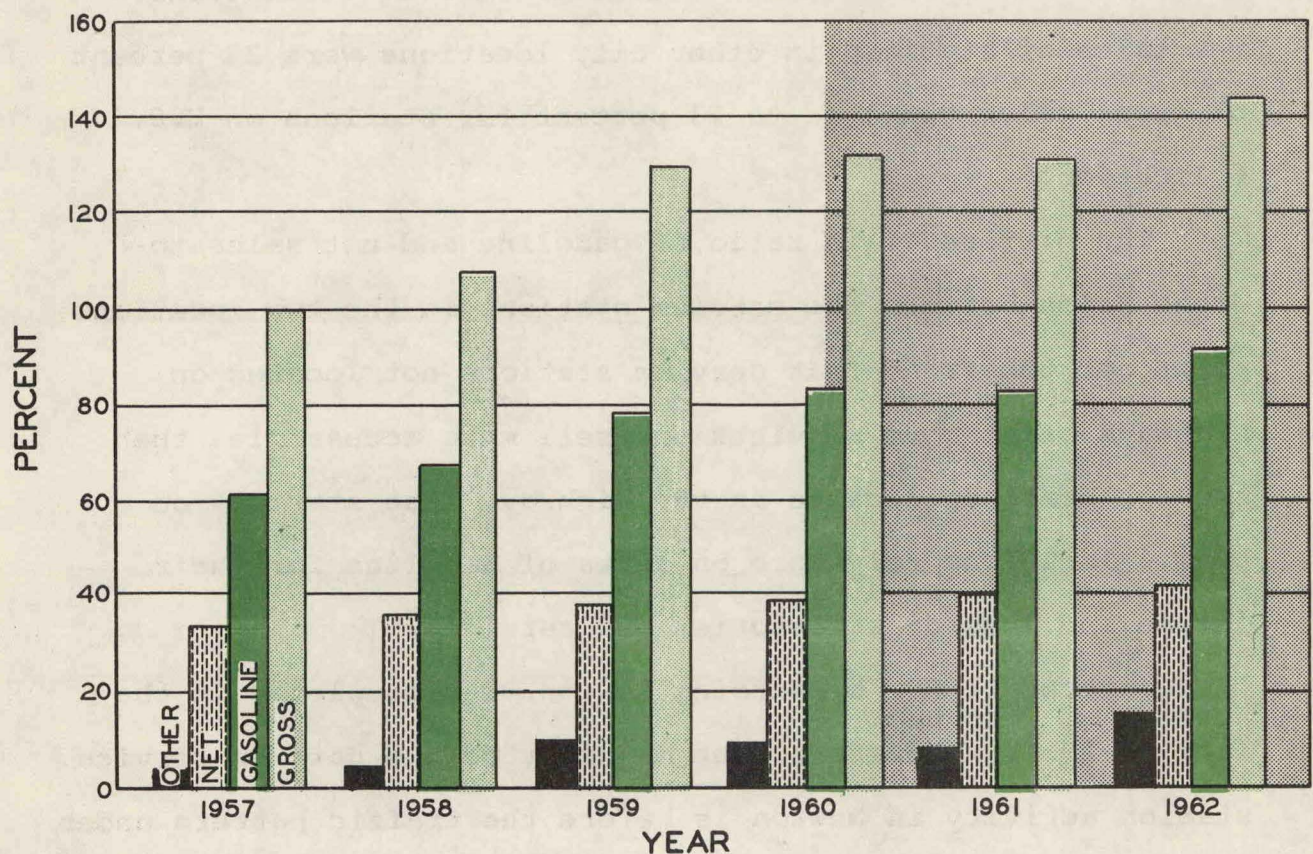


Table 60. Sales of Service Stations in other City Locations, Newton, Iowa

Year Ending December 31	Gross	Gasoline	Other	Net
1957	\$400,459	\$248,078	\$15,878	\$136,503
1958	434,033	272,991	23,369	137,673
1959	507,058	316,020	39,926	151,112
1960	530,095	337,657	35,836	156,602
1961	527,758	332,357	36,906	158,495
1962	576,468	366,004	43,239	167,225



The comparisons of gross, gasoline, and net sales in Table 60 and Figure 27 is for service stations at other city locations in Newton. The stable ratio between gross, gasoline, and net sales for these stations is the same as it is for stations located on U.S. 6.

However, gasoline sales of stations in other city locations were 62 percent of gross sales during the study period compared with 69 percent for stations on U.S. 6 locations. Net sales of stations in other city locations were 32 percent of gross sales compared to 23 percent for stations on U.S. 6 locations.

The difference in ratio of gasoline and net sales to gross sales between the service stations in the two locations point out the trend that service stations not located on highways offer more services and sell more accessories than service stations located on the highway. The stations on U.S. 6 locations rely more on sales of gasoline for their income and less on accessories and services.

Interstate 80, by-passing Newton, was completed in the fall of 1962. Therefore, the majority of the data on service station activity in Newton is before the traffic pattern underwent a major change in through traffic from U.S. 6 to Interstate 80. The 1962 decrease in service station sales can be attributed to the slight loss in traffic from 1961 and also the loss in business from contractors involved in Interstate construction.



It is anticipated that sales of service stations will decline further in 1963, and continue to decline as long as the public demand for service station facilities declines. Competition in the past has not been strong among service stations in Newton, because with the high volume of traffic, the public demand for facilities was high, and most stations operated under profitable conditions. With the decline in traffic and fewer customers, the competition will become much greater and eventually result in the closing of several stations. After a new demand has been established, those stations operating can expect to progress at a normal rate of growth.

Tables 61, 62, and 63 show the trend of service station and bulk dealer operations in Newton.

Table 61. Operation of Service Stations and Bulk Dealers on U.S. 6 Locations, Newton, Iowa

Year Ending December 31	1957	1958	1959	1960	1961	1962
Firms Operating	27	25	26	28	30	29
New Firms	8	-	1	2	2	-
Firms Closing	-	2	1	1	-	1
Firms Reopening	-	-	1	1	-	-
Ownership Changes	1	7	3	8	4	5

Table 62. Operation of Service Stations and Bulk Dealers in Other City Locations, Newton, Iowa

Year Ending December 31	1957	1958	1959	1960	1961	1962
Firms Operating	8	9	9	9	10	9
New Firms	-	-	-	-	1	1
Firms Closing	-	-	-	-	-	2
Firms Reopening	-	-	-	-	-	-
Ownership Changes	-	-	-	1	1	1



**Table 63. Average Gross Sales per Firm and Summer/Winter Gasoline Sales Ratio, Newton, Iowa**

Year Ending December 31	U.S. 6 Locations		Other City Locations	
	Average Gross	<u>Summer</u> Winter	Average Gross	<u>Summer</u> Winter
1957	\$65,522	1.04	\$100,982	1.20
1958	88,518	1.02	107,731	1.14
1959	89,759	1.07	138,032	1.27
1960	87,139	1.07	137,475	1.18
1961	88,847	1.20	121,834	1.14
1962	85,235	1.18	147,211	1.00



## STUART

Stuart is located on the Guthrie - Adair County line, approximately thirty-five miles south-west of Des Moines. Iowa 90 passes directly through the town while Interstate 80 passes just south of the town. Construction on Interstate 80 in the Stuart area started in the spring of 1958 and was open to traffic in the fall of 1960.

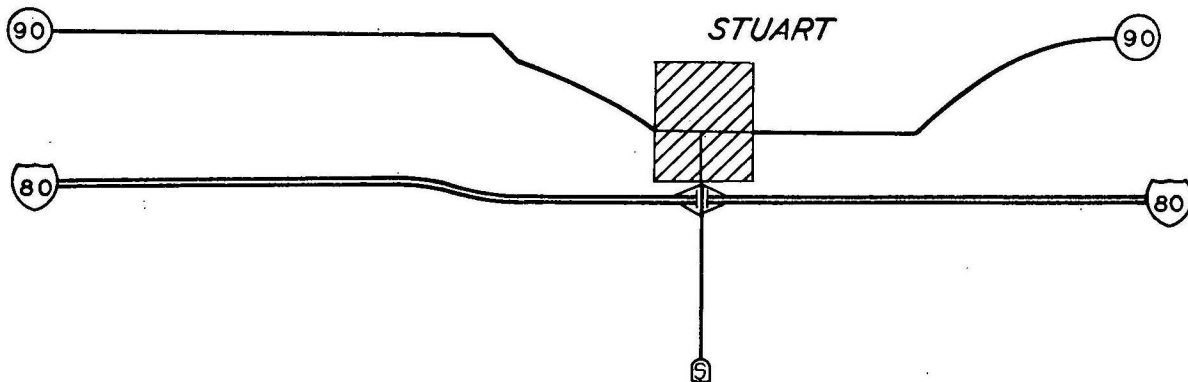


Table 64. Selected Data for Service Stations and Bulk Dealers, Stuart, Iowa

Year Ending December 31	Sales		Firms Operating	Ownership Changes
	Gross	Net		
1957	\$560,913	\$122,053	10	--
1958	606,241	139,733	10	2
1959	651,745	153,897	11	3
1960	616,524	146,066	10	2
1961	556,352	149,048	9	2
1962	543,735	170,221	9	-

Due to the construction of Interstate 80 and the change in traffic patterns, service stations in Stuart experienced a change in their sales. Data from Table 64 shows the trend in service station and bulk dealer business from 1957 to 1962.



During 1959 when interstate construction stimulated Stuart's economy and traffic volume on U.S. 6 was at a maximum, gross sales of eleven firms increased 16.2 percent above gross sales in 1957. In 1961, one year after the Interstate was open to traffic, gross sales decreased 14.6 percent below gross sales in 1959 and 0.8 percent below gross sales in 1957. In 1961 only nine firms were in operation. This change in sales is also reflected in the decline of summer/winter gasoline sales ratio from 1959 to 1962.

Table 65. Selected Data for Service Stations, Stuart, Iowa

Year Ending December 31	Sales		<u>Summer</u> Winter Gasoline Ratio	Average Daily Traffic
	Gross	Net		
1957	\$560,913	\$122,053	1.05	3200
1958	606,241	139,483	1.03	3200
1959	636,048	150,008	1.19	3500
1960	605,308	140,796	1.15	2800
1961	545,213	144,629	1.17	1400
1962	531,916	166,072	1.08	1400

Gross sales do not always give the complete picture of service station and bulk dealer activity. Table 66 and Figure 28 show the relationship between gasoline, net and gross sales for service stations in Stuart. Gasoline sales were 57 percent of gross sales in 1957 and 53 percent of gross sales in 1961. The gasoline sales dropped to 48 percent of gross sales in 1962. Net sales remained at 23 percent of gross sales from 1957 to 1960, then increased to



31 percent of gross sales in 1962. This increasing ratio of net sales and the decreasing ratio of gasoline sales and a decline in gross sales indicate service stations in Stuart are selling less gasoline and more merchandise subject to retail sales tax.

FIGURE 28. DISTRIBUTION OF SERVICE STATION SALES, STUART.

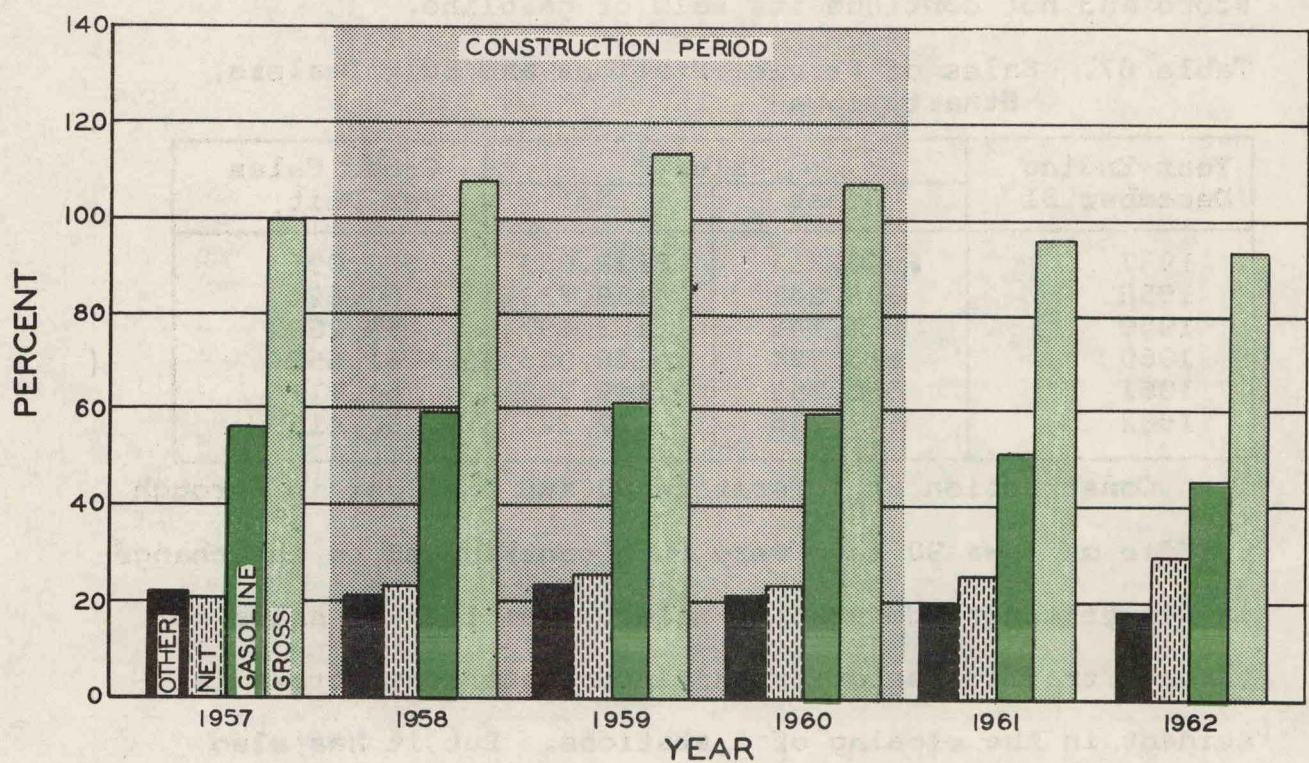


Table 66. Sales of Service Stations, Stuart, Iowa

Year Ending December 31	Gross	Gasoline	Other	Net
1957	\$560,913	\$318,195	\$120,665	\$122,053
1958	606,241	336,702	130,056	139,483
1959	636,048	346,954	139,086	150,008
1960	605,308	340,365	124,147	140,796
1961	545,213	288,205	112,379	144,629
1962	531,916	260,290	105,554	166,072



A service station in Stuart prior to 1961 had sold a high volume of gasoline and accessories. In 1961 it changed its method of operations and started to sell more merchandise subject to retail sales tax. In 1962, the sale of gasoline became a sideline with this station and more and more sales of merchandise subject to retail sales tax were sold. In time this station will probably convert to a retail sales store and not continue its sale of gasoline.

Table 67. Sales of Service Stations and Bulk Dealers, Stuart, Iowa

Year Ending December 31	Sales		Gross Sales Per Unit
	Gross	Net	
1957	\$560,913	\$122,053	\$56,091
1958	606,241	139,733	60,624
1959	651,745	153,897	59,250
1960	616,524	146,066	61,652
1961	556,352	149,048	61,817
1962	543,735	170,221	60,415

Construction of Interstate 80 and the loss in through traffic on Iowa 90 have very much contributed to the change in Stuart's service station sales. The loss in sales to through traffic customers and Interstate contractors is evident in the closing of 2 stations. But it has also prompted the existing stations into realizing that this is a permanent loss and in order to maintain their business, they will have to rely on local trade. This resulted in more competition between stations. One station was completely rebuilt with modern facilities, while others have done minor remodeling and made changes in operations to improve their sales.



The sales of Stuart service stations will probably decrease for one more year with possibly one or two stations discontinuing business. When this low point is reached the existing stations should continue to operate with a normal increase in sales.