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# FROZEN FOOD LOCKER AND FREEZER PROVISIONING INDUSTRY, 1965

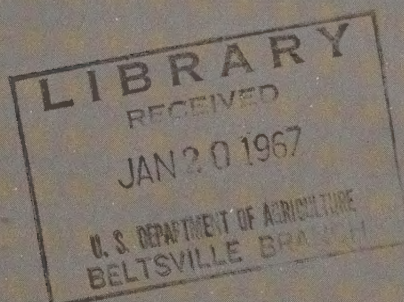
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Marketing Research Report No. 779

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FARMER COOPERATIVE SERVICE  
U.S. DEPARTMENT OF AGRICULTURE



FARMER COOPERATIVE SERVICE  
U.S. DEPARTMENT OF AGRICULTURE  
WASHINGTON, D.C. 20250

David W. Angevine, Administrator

Farmer Cooperative Service conducts research; advises directly with cooperative leaders and others; promotes cooperative organization and development through other Federal and State agencies; and publishes results of its research, issues News for Farmer Cooperatives, and other education material.

This work is aimed (1) to help farmers get better prices for their products and reduce operating expenses, (2) to help rural and small-town residents use cooperatives to develop rural resources, (3) to help these cooperatives expand their services and operate more efficiently, and (4) to help all Americans understand the work of these cooperatives.

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January 1967

## Preface

This is the tenth in a series of Farmer Cooperative Service studies on the frozen food locker and freezer provisioning industry. The first 9 studies were published in 1940-46, 1950, 1955, and 1960.

Farmer Cooperative Service conducted these studies at the request of, and in cooperation with, the National Institute of Locker and Freezer Provisioners. This work was also supported by a research advisory committee of the U.S. Department of Agriculture (USDA).

Information in this report on industry trends and changes will aid frozen food locker and freezer provisioners in making management plans and decisions. This report also furnishes data on size and scope of the industry for use by frozen food packers and distributors, manufacturers of homefreezers and wrapping materials, trade associations, and State and Federal agencies.

Paul C. Wilkins, former Chief of the Frozen Food Locker Branch, Farmer Cooperative Service, contributed to the planning and execution of this study.

We appreciate the cooperation of operators who returned questionnaires and thus made this study possible. We also appreciate the assistance of Robert L. Madeira, Executive Director of the National Institute of Locker and Freezer Provisioners, in addressing questionnaires and in soliciting the cooperation of operators.

This report supersedes MRR-545, "Frozen Food Locker and Freezer Provisioning Industry, 1960," published in June 1962.

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## Summary

The number of locker and freezer provisioning organizations operating in the United States in 1965 was estimated at 7,210, a decline from the peak of 11,600 in 1951. The size of the industry has decreased in terms of total sales, total patrons served, and total pounds of meat processed. Conversely, average sales, average number of patrons served, and average pounds of meat processed have increased.

Sales averaged \$98,000 per firm in 1964 compared to \$85,500 in 1959. Of this \$98,000, sale of meat and poultry accounted for 61 percent; sale of custom services, for 18 percent; and sale of homefreezers, other frozen foods, and miscellaneous, for the remaining 21 percent.

The average number of patrons served by each firm increased from 653 in 1960 to 665 in 1965. Firms in small towns generally served fewer patrons than firms in larger communities. For example, in 1964 firms in towns with less than 1,000 population served an average of 445 patrons, while firms in

cities with more than 25,000 people served an average of 1,020 patrons.

The average poundage of meat and poultry processed per firm increased 12 percent between 1959 and 1965. Almost 1 in 5 firms processed 400,000 or more pounds of meat and poultry in 1964 compared to approximately 1 in 10 in 1959.

Firms have continued to remove lockers during the past 15 years. In 1965, they averaged 344 lockers installed, or about 60 less than in 1960. About two-thirds of the lockers installed were rented.

The expansion in size of locker and freezer provisioning firms is expected to continue because of rises in standards of living, number of homefreezers in use, population, per capita consumption of foods, and consumer demand for convenience. Not all firms, however, are likely to capitalize on these developments.

The trend toward fewer but larger firms within the industry will probably continue.

# **FROZEN FOOD LOCKER and FREEZER PROVISIONING INDUSTRY, 1965**

**By Bert D. Miner, William R. Seymour, and  
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Frozen Food Locker Branch  
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Most of the data for this report were tabulated and analyzed on a national basis, although some breakdowns were made by regions, sizes of towns, and frequency distributions.

Questionnaires were mailed to approximately 8,500 locker and freezer provisioning firms, of which some 4,500 firms submitted usable responses. Then a random

sample of 400 firms stratified by size of town was drawn; these firms were surveyed to gage the nonresponse effect. Data obtained from this sample were used to adjust industry estimates originally projected on the basis of 4,500 firms.

The first section of this report contains information on the development of the industry since its inception 50 years ago; the following three indicate the size of the firm and industry in terms of storage capacity, sales, and processing volume; the next section discusses processing and merchandising; and the last discusses opportunities for growth and improvement.

## **Growth of the Industry**

The growth period of the locker and freezer provisioning industry spans more than half a century. Features of its growth include number and location of firms, homefreezers, ownership, affiliation, patronage, and employment.

### **Number of Firms**

Farmers on the Pacific Coast began storing meat and other perishable foods by freezing as early as 1908. That was the year Chico Ice and Cold Storage (a California firm)

initiated the first frozen food locker rental system on record.

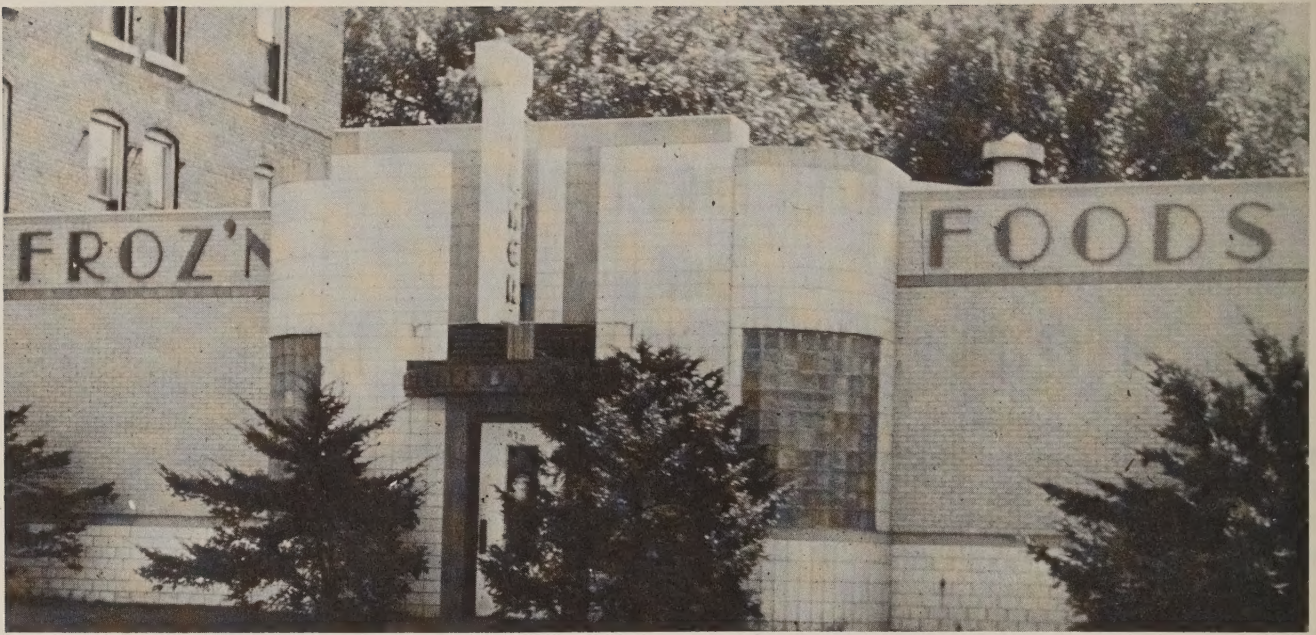
The 1920's and 1930's ushered in a period of rather rapid growth in the number of frozen food locker plants. Approximately 250 were operating by 1936, and by 1938 the number had jumped to 1,269.<sup>1</sup> The USDA has maintained an active interest in the industry ever since.

From 1938 to the beginning of World War II, the number of plants tripled. During the War

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<sup>1</sup> The figure for 1938 was established by a U.S. Department of Agriculture (USDA) survey.





A frozen food locker plant in the Midwest.

scarcity of building materials slowed the industry's growth, but during the early post-war years, locker plants sprang up all over the country. The industry reached a peak of 11,600 plants in 1951. Since then, it has been adjusting to changing economic conditions.

The advent of homefreezers in the late 1940's brought considerable change to the market environment of locker plants. Some operators were unable to adjust their operating methods to the changing environment and they, therefore, discontinued their locker plant business. Those operators who continued their locker business began serving the needs of homefreezer owners. At the same time, new firms sprang up that catered to homefreezer owners without offering locker service. These changes broadened the scope of the locker industry to include locker and freezer provisioning.

As of January 1960, the industry consisted of 9,875 locker and freezer provisioning firms. The number of firms in 1965 has been estimated at approximately 7,210. This number

does not include all food establishments that sell varying amounts of food directly to homefreezer owners; for example, supermarkets, meatpackers, and fruit and vegetable packers or distributors. It does include those firms that direct a major part of their business toward serving locker renters and homefreezer owners.

## Location of Firms

As mentioned earlier, the frozen food locker industry began in California shortly after the turn of the century and soon spread to Washington State and Nebraska. During the 1920's, a number of plants were built in Colorado, Idaho, Montana, Oregon, and Wyoming.

Locker plants came to Iowa in the mid-1930's. Of the approximately 250 firms operating in the United States in 1936, Iowa alone claimed 50.

Iowa provided a favorable environment for the development of the industry. The first



nonaffiliated plant began operating there in 1934. Iowa formed the first State locker association and held its first association convention at Iowa State College in 1936. The Iowa Refrigerated Locker Association hosted the first national convention at Hotel Fort Des Moines in 1939.

Locker plants also expanded rapidly in other parts of the Midwest, especially in Minnesota and Wisconsin. In January 1940, almost half of the 2,500 locker plants operating were in Iowa, Minnesota, and Wisconsin. The rest were scattered over 35 other States.

Although locker and freezer provisioning firms are now operating in all 50 States, the industry is still concentrated in the Midwest (fig. 1). The North Central Region<sup>2</sup> has accounted for over half of all firms since 1940; the region reached a peak of 56 percent in 1965. The regional distribution of firms for 1965 is shown in the following tabulation:

North Atlantic	522
North Central	4,033
South Atlantic	414
South Central	865
Mountain	577
Pacific	799
United States	7,210

The locker industry grew up in rural communities and has changed its rural concentration little over the years (table 1). In 1965, 53 percent of all firms operating were serving rural communities with populations of 2,000 or less. This percentage was the same as in 1960.

The increase in percentage of firms serving communities with more than 25,000 people was mainly attributable to growth in number

of firms that catered to homefreezer owners but did not rent lockers. The percentage of firms in this category appears to have reached a peak around 1960. This is partly explained by the fact that many of these firms determined their role to be that of appliance dealers rather than food suppliers. Many of the appliance-type stores discontinued their "food plan" arrangements to concentrate on appliance sales.

Table 1.--Distribution of frozen food locker and freezer provisioning firms in communities of specified population, 1950, 1955, 1960, and 1965

Population of community	1950	1955	1960	1965
	Percent			
1,000 or under ...	40	39	36	36
1,001-2,000 .....	16	16	17	17
2,001-5,000 .....	16	16	15	16
5,001-10,000.....	9	10	9	9
10,001-25,000 ....	9	8	9	10
Over 25,000.....	10	11	14	12
Total.....	100	100	100	100

## Homefreezers

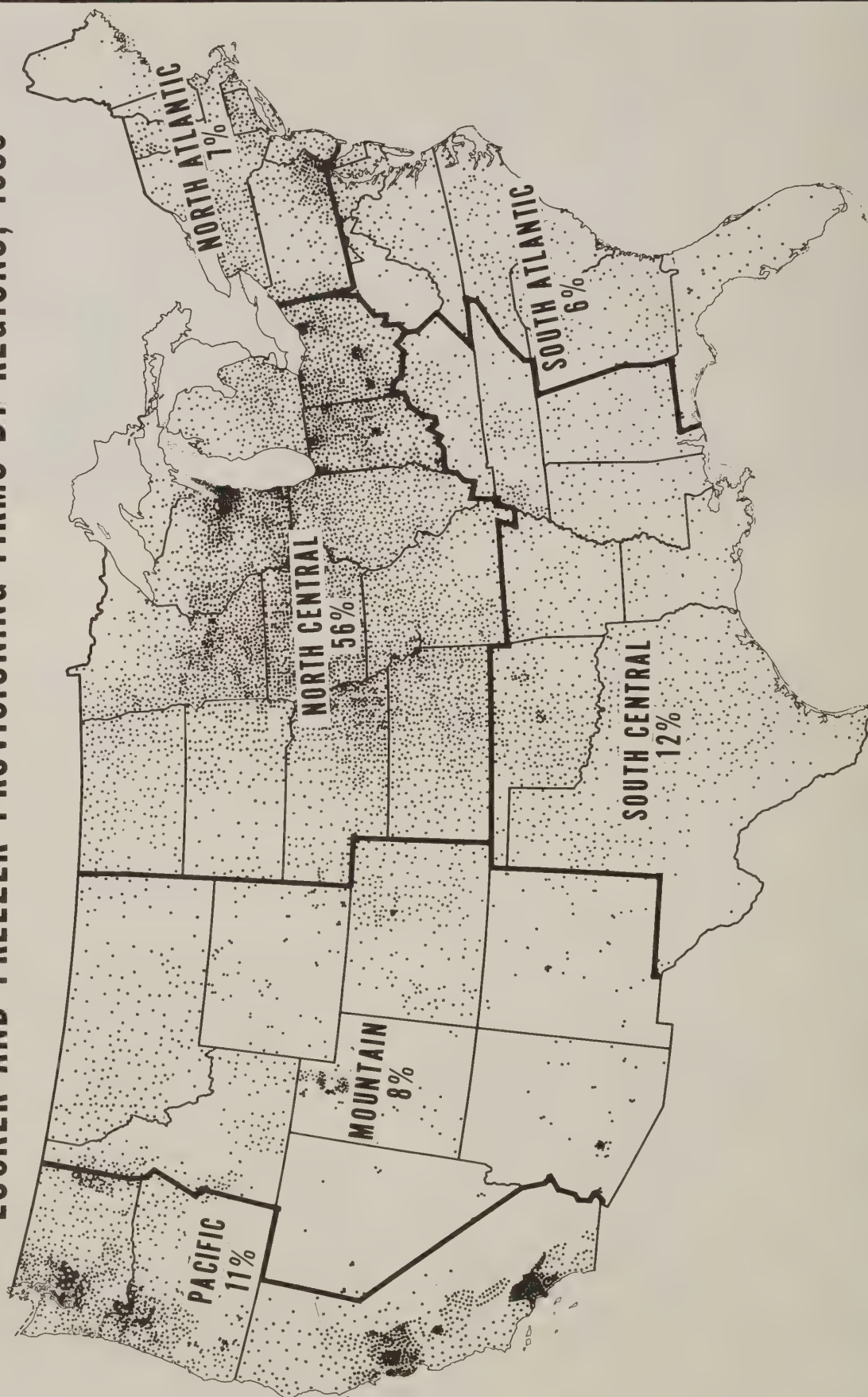
The homefreezer has greatly influenced shopping and eating habits. This appliance has made frozen juices, prepared dinners, pot pies, pastries, meats, vegetables, and fruits readily available. Purchases of these items in quantity usually mean fewer shopping trips and upgraded diets.

The number of homefreezers in use has grown rapidly since the end of World War II. The number increased from about 500,000 in 1946 to between 13 and 14 million in 1965. Even so, the levels of market saturation, based on 56.4 million consumers of electric power in the United States, reached only 23 percent as of January 1, 1965. About a million

<sup>2</sup> Regions are delineated in Figure 1.

Figure 1

# LOCKER AND FREEZER PROVISIONING FIRMS BY REGIONS, 1965



units a year have been sold since 1955.<sup>3</sup> Of course, not all homefreezers that were sold are still in use.

The locker and freezer provisioning industry sold fewer homefreezers in 1964 than it did in 1959. It sold 230,000 or about 20 percent of all homefreezers sold in the United States in 1959; in 1964 it sold 85,200 or approximately 8 percent of the total.

The decline in percentage of firms selling homefreezers is shown in the following tabulation:

<u>Year</u>	<u>Percent</u>
1950	17
1955	15
1960	14
1965	8

Firms that continued to sell homefreezers after 1959 generally sold fewer. In 1959 over half of the firms selling homefreezers sold less than 50, and by 1964 nearly three-fourths of them sold less than 50. The percentage of firms selling 300 or more dropped from 15 percent to 7 percent during the period. These comparisons are shown in the next tabulation:

<u>Number of homefreezers sold</u>	<u>Firms selling homefreezers by sales volume in--</u>	
	<u>1959</u>	<u>1964</u>
	<u>Percent</u>	<u>Percent</u>
Under 50	57	74
50-99	11	6
100-199	11	7
200-299	6	6
300 and over	<u>15</u>	<u>7</u>
Total	100	100

<sup>3</sup> McGraw Hill Publishing Company. Merchandising Week 97 (4): 29, Jan. 25, 1965.

## Ownership

In 1965, 61 percent of locker and freezer provisioning organizations continued under individual ownership. This was a slight increase over the 1955 and 1960 percentages (table 2). The percentage of general business corporations also increased, while that of partnerships and cooperatives declined.

Table 2.--Distribution of frozen food locker and freezer provisioning firms, by type of ownership, 1955, 1960, and 1965

<u>Type of ownership</u>	<u>1955</u>	<u>1960</u>	<u>1965</u>
	----- <u>Percent</u> -----		
Individual.....	58	58	61
Partnership.....	22	20	16
General corporation.....	14	17	19
Cooperative.....	6	5	4
Total.....	100	100	100

The size of a community seemed to influence the type of ownership (table 3). In the larger communities, the percentage of firms individually and cooperatively owned decreased; the percentage of general corporations increased; and that of partnerships was apparently unaffected.

The relationship between sales volume and percentage of firms by type of ownership is shown in table 4. As the sales volume categories got larger, individual and cooperative firms made up a correspondingly smaller percentage of the total firms; general corporations made up a larger percentage; and partnerships, an increasing percentage up to a point and then a declining proportion. General corporations accounted for more than 9 out of 10 firms in the \$500,000 and over sales category. No individually or cooperatively owned firms reached this category.



Table 3.--Distribution of frozen food locker and freezer provisioning firms, by type of ownership and population, 1965

Population of community	Type of business ownership				
	Individual	Partnership	General corporation	Cooperative	Total
	-----Percent-----				
1,000 and under.....	70	16	9	5	100
1,001-2,000 .....	67	16	12	5	100
2,001-5,000 .....	62	18	16	4	100
5,001-10,000.....	56	18	23	3	100
10,001-25,000 .....	50	18	30	2	100
Over 25,000.....	43	16	40	1	100
United States .....	61	16	19	4	100

Table 4.--Distribution of locker and freezer provisioning organizations, by type of ownership and sales volume, 1965

Range of sales (dollars)	Type of business ownership				
	Individual	Partnership	General corporation	Cooperative	Total
	-----Percent-----				
Under 10,000 .....	67	14	13	6	100
10,000-24,999 .....	65	17	12	6	100
25,000-49,999 .....	65	18	12	5	100
50,000-74,999 .....	64	20	15	1	100
75,000-99,999 .....	61	20	17	2	100
100,000-199,999 .....	52	19	27	2	100
200,000-499,999 .....	31	18	50	1	100
500,000 and over .....	0	6	94	0	100
United States .....	61	16	19	4	100

## Affiliation

In 1965, almost half of the locker and freezer provisioning organizations in the United States were affiliated with other types of business. The following tabulation shows the nature and extent of affiliation within the industry:

<u>Affiliation status</u>	<u>Percentage of firms</u>
Affiliated:	
Grocery store	35
Ice and cold storage	6
Dairy plant	3
Miscellaneous	4
Total	48
Nonaffiliated	52
Total	100

## Patronage

Approximately 4.8 million people patronized locker and freezer provisioning establishments during 1964. This was a 25-percent decline from 1959, a decrease explained largely by the decline in number of firms. The average number of patrons served per firm increased between 1959 and 1964 as it had between 1954 and 1959:

<u>Year</u>	<u>Average number of patrons served per firm</u>
1954	478
1959	653
1964	665

Each of the firms in small towns served fewer patrons than those in larger communities in 1964. The firms in these smaller communities did, however, serve a larger proportion of the population than the firms in larger communities:

<u>Population of community</u>	<u>Average number of patrons served per firm</u>	<u>Percentage of community served<sup>1</sup></u>
1,000 and under	445	89
1,001-2,000	620	41
2,001-5,000	705	20
5,001-25,000	895	6
Over 25,000	1,020	1
United States	665	--

<sup>1</sup>Based on midpoint of population of community, except last category which is based on 100,000.

In addition to serving locker and freezer patrons, 3 out of 5 firms in the industry have recently developed an institutional business. This includes a variety of activities, such as storing commodities for school lunch and other commercial accounts, and selling processed products to schools, hospitals, hotels, restaurants, and other institutions. Firms that have developed such a business served an average of 23 accounts in 1964, for a total of almost 100,000 accounts.



A frozen food locker employee transfers frozen meats from the rack to the patron's car.

## Employment

At the beginning of 1965, total employment in the locker and freezer provisioning industry was estimated at 38,200 people. The

average was 5 people per firm, the same as in 1960. Total employment for the industry, however, was down from the total in 1960 (46,600) because of the reduced number of firms in 1965.

## Storage Capacity and Use

Frozen food locker firms provided almost all the zero-degree storage capacity available to consumers up to the mid-1940's. Since then the tremendous growth in number of homefreezers has made available to consumers a large amount of zero-degree storage space in the home.

### Net Zero Storage

Net zero-degree storage space in locker and freezer provisioning firms and homefreezers was estimated at 235 million cubic feet in January 1965. Homefreezers accounted for over 80 percent of this space. This was an increase from 1960 when the ratio of space between homefreezers and lockers was 75 to 25, or 3 to 1.

These 235 million cubic feet of zero-degree storage space would hold approximately 7 billion pounds of frozen foods at one time, or 36 pounds per capita. Of course, the utility of the storage space could be greatly increased by turnover of products. For instance, turning over the stored products four times a year would quadruple the amount of products that could be handled through that amount of storage space.

### Gross Refrigerated Space

An estimated 113 million cubic feet of gross refrigerated space existed in locker and freezer provisioning establishments in 1965: 70 million cubic feet were devoted to zero-degree storage and 43 million cubic feet to 32° to 50° storage. This 113 million figure was down 45 million from 1960. Here again

the decline in number of firms was the main explanation.

### Locker Capacity, Installed, and Rented

Locker and freezer provisioning firms have seldom installed lockers in all available zero-degree storage space. They normally reserve some of this space to store frozen products they buy, to temporarily store customer food orders, or to store products for other businesses.

If lockers were installed in all zero-degree space, the average firm could hold approximately 490 lockers. This estimate has remained unchanged over the past 15 years. The actual number of lockers installed has been declining during the same period (table 5). Some firms removed lockers because they needed extra piling space to serve homefreezer owners, and others because they were unable to rent them. Other firms never installed lockers in the first place. Nearly one-fourth of the firms had no lockers in 1965.

The number of lockers rented as a percentage of lockers installed dropped from 84 to 69 percent between 1950 and 1960, even though each firm had an average of 55 fewer lockers installed during that time. Between 1960 and 1965, the average number of lockers installed per firm dropped from 404 to 344. The percentage rented was 67 percent.

Income from locker rentals is an important source of revenue. Since servicing a rented locker incurs few extra expenses over those for empty lockers, a rented locker can contribute \$10 to \$20 a year to net income.





A patron and his son take food out of their rented locker.

Table 5.--Average number of lockers installed and rented, and percentage rented for January 1950, 1955, 1960, and 1965

Year	Average number of lockers		Percentage rented of lockers installed
	Installed	Rented	
	<u>Number</u>	<u>Number</u>	<u>Percent</u>
1950.....	459	387	84
1955.....	433	340	78
1960.....	404	279	69
1965.....	344	230	67

If the average firm with 344 installed lockers rented 230 lockers at an annual cost of \$15 each, then annual gross income from locker rentals could amount to \$3,450. With a gross margin of 25 percent, a locker and

freezer provisioning firm would have to sell \$13,800 worth of beef to equal the above locker rental income. At 60 cents a pound, that would amount to sale of 23,000 pounds of beef.

## Standby Power Equipment

In both 1960 and 1965, less than 20 percent of the operators had provided standby power equipment to run their plants in case of electric power failure.

Providing standby power equipment is a form of insurance. Individual operators need to assess the cost and benefits of such insurance. The large number of electric power failures in recent years has emphasized the desirability of plant managers considering the need for such equipment.

# Sales of Products and Services

Dollar volume of business, an important indicator of the economic vigor of a firm, is a basic decision-making tool of management. Is dollar volume of business high enough to achieve optimum operation? What shares do various parts of the business contribute to total income? Should a particular item or activity be dropped because its contribution to total sales is small? Is dollar volume of business adequate to support a proposed expansion?

Dollar volume of business is also an important measure of size and rate of growth. Size of total sales must not be confused with size of net earnings, however. Income from custom services can greatly affect net earnings without adding materially to total sales. (This report contains no information on net earnings.)

As a measure of size, dollar volume of business has some limitations unless the value of the dollar is relatively stable or is adjusted in relation to a specific time period. The value of the dollar was relatively stable from 1959 through 1964.

## Total Industry Sales

Total industry sales for 1964 were estimated at \$705 million, a decrease from 1959 (\$845 million) because of the decline in number of firms. Average sales per firm, however, were up.

Sale of meat and poultry was the major source of total sales in both 1959 and 1964:

Source of sales	Percentage of total sales	
	1959	1964
Meat and poultry	56	61
Custom services	14	18
Homefreezers	19	9
Other frozen foods	9	8
All other	2	4
Total	100	100

Custom services held up well in the reallocation of percentage necessitated by the 10-percentage-point decline in homefreezer sales

between 1959 and 1964. Of those 10 points, custom services picked up 4; meat and poultry sales, 5; and all other sales, 1. (All other sales gained an additional 1 point from the decline for other frozen foods.)

## Average Sales of Firms

Firm sales for 1964 averaged \$98,000, nearly a 15-percent increase over 1959. The following tabulation shows the average sales and sources of sales for 1959 and 1964:

Source	1959	1964
Meat and poultry	\$47,900	\$59,800
Custom services	12,000	17,600
Homefreezers	16,200	8,800
Other frozen foods	7,700	7,900
All other	1,700	3,900
All sources	\$85,500	\$98,000

Sale of meat and poultry accounted for the largest share of average sales. These sales were handled through three general sales outlets; (1) Bulk quantities to locker and freezer patrons, (2) retail cuts over a meat counter in the plant to customers, and (3) wholesale to institutions, restaurants, and the like.

The proportion of meat sold through each of these outlets in 1964 was 70 percent, 9 percent, and 21 percent, respectively. Sales of goods and services averaged \$150 per patron in 1964. This was an average of \$19 more than in 1959. Even so, there is much opportunity for promoting repeat business and thereby increasing the average quantity of goods and services purchased per patron over a year's time. This is evident from the fact that for many patrons a food order for just 4 months is \$150 or more.

## Sales Volume Classifications

In 1964, sales volume among firms in the locker and freezer provisioning industry ranged from less than \$10,000 to millions of dollars. Almost 2 out of 3 firms had sales of under \$50,000. Three percent, or over 200 firms, had sales of \$500,000 or more.



A comparison between percentages of firms in specified sales categories for 1959 and 1964 is shown in the following tabulation:

<u>Sales range</u>	<u>1959</u>	<u>1964</u>
	<u>Percent</u>	
Under \$10,000	22	23
10,000-24,999	20	21
25,000-49,999	20	21
50,000-74,999	11	10
75,000-99,999	6	6
100,000-100,999	11	10
200,000-499,999	7	6
500,000 and over	<u>3</u>	<u>3</u>
Total	100	100

While the percentage of firms in the \$500,000 and over sales category remained unchanged between 1959 and 1964, the percentage under \$50,000 increased slightly. The percentage loss came in the sales categories between \$50,000 and \$499,999.

As expected, firms with the larger sales were usually located in the larger communities. Over half the firms with sales of under \$10,000 were located in communities with populations of 1,000 or less. At the other end, over half of the firms with sales of \$500,000 and over were located in communities with over 25,000 population.

## Processing Volume

Processing volume directly affects the freezer provisioner's potential for efficiency. To gain optimum efficiency, and thereby reduce unit costs, operators need to know the capacity of their plant and equipment and then to strive towards optimum volume consistent with this capacity.

Optimum processing capacity of the locker and freezer provisioning industry is not known. Information is available, however, on the volume of products processed during certain years. This information pertains to cutting, wrapping, and freezing meat and poultry; slaughtering livestock; and curing pork.

### Meat and Poultry

The locker and freezer provisioning industry processed (cut, wrapped, and froze) approximately 1.5 billion pounds of meat and poultry in 1964. This total was less than in 1959 or 1954 mostly because the number of processing firms had dropped by about 2,200.

During 1964, each firm in the industry processed an average of 227,500 pounds of

meat and poultry, an increase of 12 percent and 35 percent from 1959 and 1954, respectively. Average pounds of meat and poultry processed by firms having access to processing facilities for selected years were as follows:

<u>Year</u>	<u>Average pounds processed per firm</u>
1949	114,000
1954	167,600
1959	203,300
1964	227,500

A greater proportion of firms was processing 200,000 pounds or more of meat and poultry in 1964 than in 1959:

<u>Volume processed</u> (1,000 pounds)	<u>1959</u>	<u>1964</u>
	<u>Percent</u>	
Under 25	10	10
25-49	10	9
50-74	9	8
75-99	8	8
100-199	<u>27</u>	<u>19</u>
Total (under 200)	64	54
200-299	16	17
300-399	9	11
400 and over	<u>11</u>	<u>18</u>
Total (200 or more)	36	46
Total	100	100





Beef carcasses hanging in the aging room.

## Livestock Slaughter

Locker and freezer provisioning firms slaughtering livestock averaged about 850 head each during 1964 (table 6).

Table 6.--Average number of livestock slaughtered per firm operating slaughtering facilities, 1954, 1959, and 1964

Year	Species of livestock slaughtered			
	Cattle and calves	Hogs	Sheep and lambs	Total
	-----Number-----			
1954.....	407	402	16	825
1959.....	313	470	18	801
1964.....	445	385	20	850

This was a 6-percent increase over 1959. Cattle made up the largest share of slaughter volume (53 percent); hogs contributed 45 percent; and sheep, 2 percent.

In 1964, the proportion of cattle and hogs slaughtered was quite different than in 1959 or 1954. Part of the explanation is found in changing livestock prices. When cattle prices are low compared to prices for hogs, farmers slaughter cattle for their own use and sell their hogs. Conversely, when hog prices are low compared to those for cattle, farmers slaughter hogs for their own use and sell their cattle. Thus, relatively large numbers of hogs were slaughtered in 1959 when their price was low relative to the price of cattle. Just the reverse happened in 1964.

The tabulation following on page 13 compares the percentages of firms



slaughtering specified volumes of cattle and calves in 1959 and 1964:

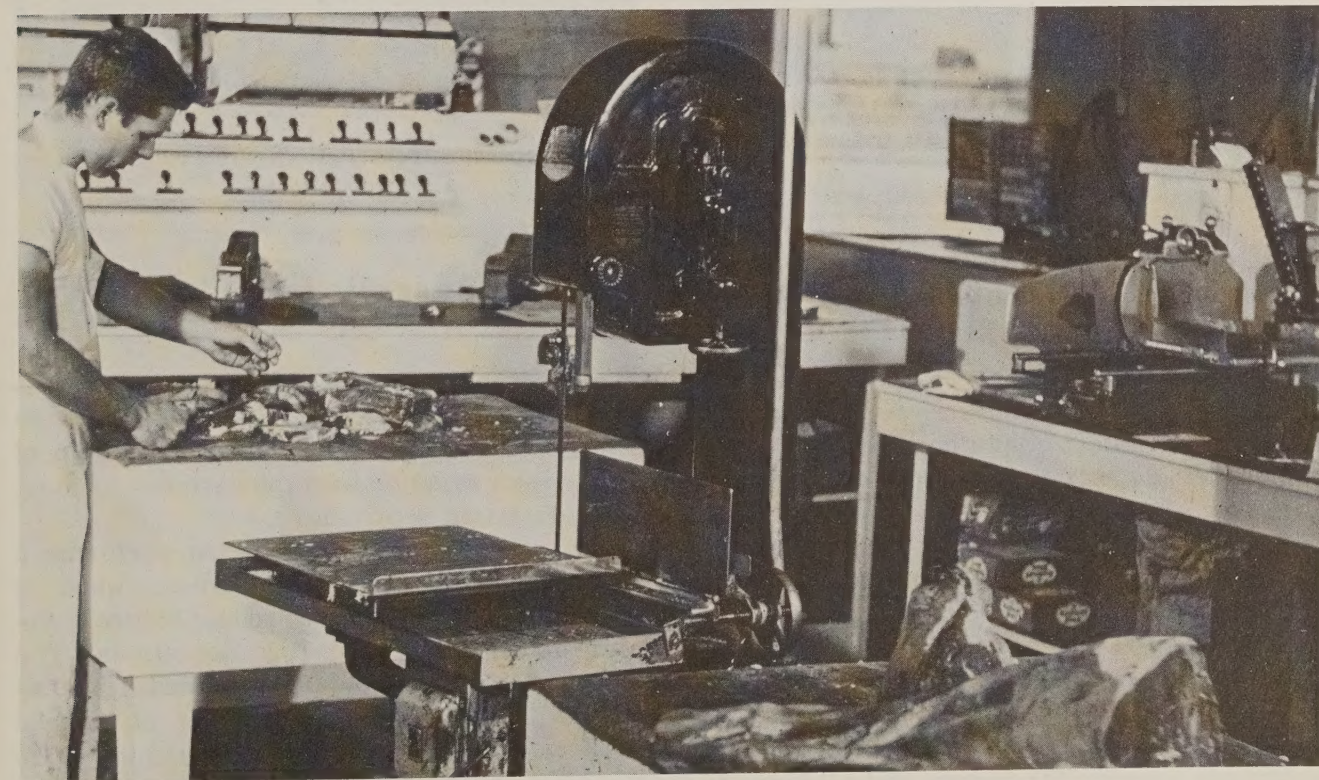
Specified slaughter volume, cattle and calves	1959	1964
Head	Percent	
None <sup>1</sup>	1	0
Under 200	37	24
200-399	33	27
Total (under 400)	71	51
400-599	14	16
600-799	6	11
Total (under 800)	20	27
800-999	3	10
1,000-1,199	2	2
1,200 and over	4	10
Total (800 or more)	9	22
Total	100	100

<sup>1</sup> Firms slaughtered hogs but not cattle.

The next tabulation compares the percentage of firms slaughtering specified volumes of hogs in 1959 and 1964:

Specified slaughter volume, hogs	1959	1964
Head	Percent	
None <sup>1</sup>	2	5
Under 200	21	29
200-399	27	23
Total (under 400)	50	57
400-599	19	13
600-799	11	7
800-999	6	4
Total (under 1,000)	36	24
1,000-1,499	6	5
1,500-1,999	3	3
2,000 and over	5	11
Total (1,000 or more)	14	19
Total	100	100

<sup>1</sup> Firms slaughtered cattle and calves but not hogs.



A hindquarter, after it has been aged, is broken down into retail cuts.



Both of the preceding tabulations showed increases in the proportion of firms in the three highest volume categories--13 and 5 percentage points, respectively. Such was not the case, however, for the three lowest volume categories for cattle, none through 399, which dropped from 71 percent to 51 percent. During the same period, the percentage of firms in these three categories for hogs increased from 50 percent to 57 percent.

More firms slaughtered larger numbers of cattle in 1964 than in 1959. At the same time, more firms slaughtered no hogs or few hogs. This decline in hog slaughter probably resulted from the general decline in per capita pork consumption, and from the high prices of hogs relative to cattle prices.

### Curing Pork

The relatively high price of hogs in 1964 had the same impact on the amount of pork cured as on the volume of hogs slaughtered. In 1964, the percentage of firms curing pork was down from previous years. The volume cured per firm decreased from 29,000 in 1959 to 25,600 pounds in 1964. The impact of these combined decreases since 1959 is shown in the following tabulation:

<u>Year</u>	<u>Millions of pounds cured</u>
1949	151
1954	129
1959	135
1964	63



A locker operator from North Carolina inspects bacon in the smoke house.

## Processing and Merchandising Operations

The economic vitality of the locker and freezer provisioning industry derives largely from the operators' addition of new and expansion of old processing and merchandising services. Trends and levels of activities discussed in this section will enable management to appraise changes and to adjust its operations accordingly.

### Processing

Most locker and freezer provisioning establishments provide (1) custom and (2) for sale or commercial processing services.

A firm provides custom services when it performs, for a fee, certain operations on a product owned by a patron. Ownership of the product remains with the patron.

The provisioning organization performs a for sale or commercial service when it acquires ownership of a product before completing certain processing operations. The charge for performing the processing operation is incorporated in the price of the end product. For instance, a provisioning firm buys a hog, slaughters it, and uses it to make "whole-hog" sausage. Ownership remains with



the provisioning establishment until a patron buys the end product--sausage. The charge for slaughtering and processing is incorporated in the price of the sausage.

The main custom services offered by locker and freezer provisioners are (1) slaughtering livestock, (2) curing and smoking pork, and (3) cutting, wrapping, and freezing meat. A comparison of the percentage of firms providing these services in 1955, 1960, and 1965 is shown in the following tabulation:

Year	Custom services		
	Slaughter livestock	Cure and smoke pork	Cut, wrap, and freeze meat
1955	32	53	89
1960	36	47	89
1965	41	41	93

More and more locker and freezer provisioning establishments are processing products for sale (table 7). In some cases, more firms are beginning to process for

sale products that others have been selling for some time. In other cases, some firms are experimenting with relatively new or different products. The products listed in table 7 are only examples of the commercial operations conducted by locker and freezer provisioners. Actually, many different products are produced for sale.

## Merchandising

Merchandising is assuming an increasingly important role in locker and freezer provisioning. Operators are continuously seeking additional merchandising techniques that will help improve their business performance. This section provides operators with information on the more important merchandising activities in the industry (table 8).

In most cases, a larger percentage of firms is currently engaging in specified merchandising activities. On the other hand, the number of firms specializing in sales of frozen foods packed by others and in sales of home-freezers has been declining over the past 10 years. Operators discovered that selling

Table 7.--Distribution of locker and freezer provisioning firms engaged in selected commercial operations in 1955, 1960, and 1965

Commercial operation	1955	1960	1965
	-----Percent-----		
Buy livestock for slaughter and resale .....	24	26	30
Produce cured meats for sale.....	26	34	34
Produce pork sausage for sale.....	34	42	47
Produce portion control meats <sup>1</sup> .....	( <sup>2</sup> )	12	14
Produce meat loaves for sale .....	( <sup>2</sup> )	( <sup>2</sup> )	6

<sup>1</sup> Individual meat serving of equal weight.

<sup>2</sup> Data on these services were not collected for the specified years.

Table 8.--Distribution of locker and freezer provisioning firms engaged in selected merchandising activities in 1955, 1960, and 1965

Merchandising activity	1955	1960	1965
	-----Percent-----		
Sell packer slaughtered meat in wholesale cuts.....	54	54	65
Sell frozen food packed by other plants.....	54	51	48
Finance or arrange financing for 60 days or more for bulk food purchases .....	16	31	36
Provide food delivery service.....	(1)	25	28
Sell frozen meat in pre-packed meat boxes or bundles .....	(1)	20	25
Maintain inventory of retail meat cuts to fill orders .....	(1)	13	16
Sell homefreezers .....	15	14	9
Charge a membership fee in a freezer provisioning operation .....	(1)	4	5
Rent homefreezers to patrons.....	(1)	(1)	3

<sup>1</sup> Data on these activities were not collected in these years.

homefreezers was a complex operation requiring considerable skill. Apparently, the complexities and strong competition in this industry caused many operators to discontinue

the sale of homefreezers. Competition from supermarkets is making it increasingly difficult for operators to make a profit on handling frozen foods packed by other firms.

## Industry Implications

Information on trends and changes in the industry will enable management to augment its growth opportunities and to increase the efficiency of its services to producers and consumers.

If present industry trends continue, the following conditions will prevail:

- The decline in average number of lockers rented will continue, but likely at a reduced rate.
- Number of firms in the industry, as presently defined, will probably continue to decline.

- Size of the average firm will probably continue growing--more patrons, greater sales, and more meat processed.
- Processing meat for sale and the associated merchandising programs will probably increase, while custom activities will decline.

In addition to these industry trends, many locker and freezer provisioners may need to consider developments such as the expanding use of homefreezers; growing acceptance of frozen foods; rising standards of living; increasing demand for convenience foods; growing and changing population; changing composition of food consumption; changing structure of agriculture; and increasing emphasis on meat inspection.