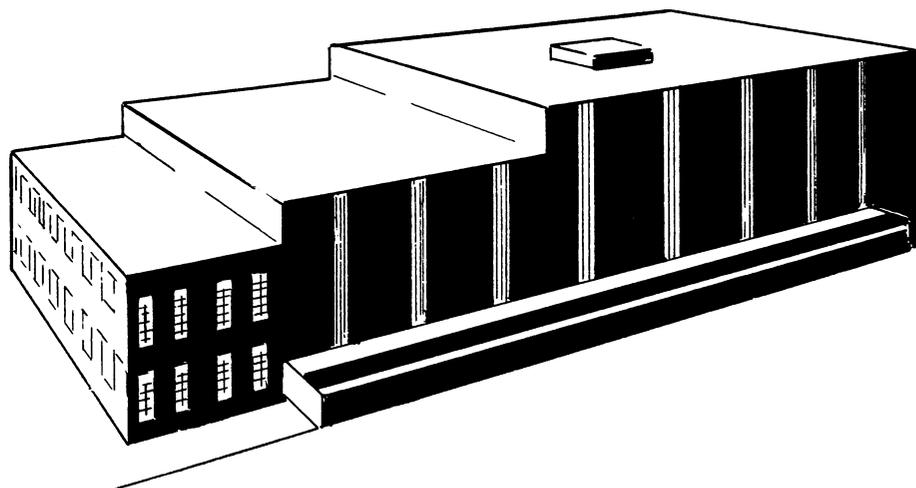


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CAPACITY OF REFRIGERATED WAREHOUSES

in the United States
October 1, 1961



UNITED STATES DEPARTMENT OF AGRICULTURE • WASHINGTON, D.C.

Co St 2 (62)

STATISTICAL REPORTING SERVICE
CROP REPORTING BOARD
AUGUST 1962

CONTENTS

Introduction	
Definitions	2
Summary	3
Gross Refrigerated Capacity	4
Freezer Capacity	7
Cooler Capacity	9
Public General Refrigerated Capacity	9
Private and Semiprivate Capacity	13
Meat Packing Warehouse Capacity	14
Apple House Capacity	14

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INTRODUCTION

Today's food preservation techniques and improved storage methods have created new marketing systems, expanded old market areas, increased food consumption, leveled out cyclical changes in supplies and prices, and--not the least of all--provided consumers with a wide variety of foods on a year-round basis.

In the Department of Agriculture, an informational program for disseminating statistics on national food holdings under refrigeration has been operative almost 48 years. A report on refrigerated apple stocks was first released in 1914. The initial survey on the capacity of refrigerated warehouses was on October 1, 1921, and from then on, a survey was made on each odd-numbered year.^{1/} This is a report on the findings of the 21st biennial capacity survey.

To insure reliable capacity coverage, every effort is made to include space in all known public, private, and semiprivate refrigerated facilities including one-product houses handling perishables; such as fish, vegetables, fruits, meats and dairy. The capacity surveys also account for rooms artificially cooled and used for storage purposes in certain frozen food processing plants.

These biennial surveys are concerned only with facilities having refrigerated space cooled to temperatures of 50° F. or below in which food stocks are held for 30 days or more. Space in wholesaler, jobber, retailer or other types of businesses used for holding products less than 30 days is not included. Also excluded is space maintained by locker plants, hotels, and the Armed Services.

Primary objectives of these space surveys are:

1. To provide a service to the warehousing industry whereby the statistical results will help industry members in planning an efficient and orderly expansion program in areas needing additional storage space and identifying areas where sufficient space already exists.
2. To determine the size of the national refrigerated capacity in order to obtain knowledge of trends, area changes, distribution of space, and other factors important to both industry and Government.
3. To provide a benchmark for checking the adequacy of storage occupancy data reported by the warehousing industry each month for the Cold Storage Report.

^{1/} The 1941 survey was made on June 1.

Prepared by M. R. Banks, Julius A. Brosa, and W. D. Bormuth, under the general supervision of I. E. Wissinger, Chief, Dairy Statistics Branch, Agricultural Estimates Division, Statistical Reporting Service.

4. To have a record of plant sites which may be used for locating refrigerated space for the preservation of perishable foods.

DEFINITIONS

The terms used in this report are defined as follows:

Public general cold storage--Any artificially cooled warehouse where the operator is engaged in storing food commodities for others for pay.

Private cold storage--Any artificially cooled warehouse where the operator conducts a warehousing business to facilitate his main function as a producer, processor, or distributor but does not store commodities for others for pay.

Semiprivate cold storage--Any artificially cooled warehouse where the operator uses part of the space to care for the storage of his own commodities and, in addition, stores in his plant various food commodities for others for pay.

Meat-packing establishment--Any plant engaged in processing dressed animal products for food. For this report and survey, only that space used for the storage of products is included. Refrigerated working space, chill rooms, coolers used exclusively for handling dressed carcasses prior to shipping, and smoking and curing rooms are excluded.

Apple house--Any warehouse--public, private, or semiprivate--where the operator is engaged mainly or exclusively in the storage of apples or pears.

Gross space--The space inside the refrigerated rooms, measured from wall to wall and floor to ceiling, excluding elevators, stairs, vestibules, and like enclosures.

Usable piling space--Space for the storage of commodities, that is, space inside rooms measured wall to wall and floor to ceiling, minus the space provided for ventilation (outside of pile), space occupied by coils, aisles, posts, sprinklers, and the like.

Number of plants--Represents the number of individual plant locations. Company plants of different address within a city or State, and plants having different intra-company designations are counted separately.

Cities--As used in this report, cities are standard metropolitan areas. Generally, these are major urban centers of 50,000 population or more and include all of the closely linked surrounding areas.

Geographic regions--The regions and States covered in the survey are as follows:

New England: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.

Middle Atlantic: New York, New Jersey, and Pennsylvania.

East North Central: Ohio, Indiana, Illinois, Michigan, and Wisconsin.

West North Central: Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas.

South Atlantic: Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida.

East South Central: Kentucky, Tennessee, Alabama, and Mississippi.

West South Central: Arkansas, Louisiana, Oklahoma, and Texas.

Mountain: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, and Nevada.

Pacific: Washington, Oregon, and California.

SUMMARY

On October 1, 1961, the national refrigerated storage capacity, excluding Alaska and Hawaii, totaled 1,024 million cubic feet, a gain of about 82 million since the October 1, 1959 survey. During this two year interval, a 5-percent gain in public general warehouse capacity--26 million cubic feet--raised space availability in such warehouses to 554 million; private and semiprivate capacity was up 37 million to 193 million cubic feet; the capacity in apple houses (rooms used primarily for apples and/or pears), augmented by 18 million cubic feet, totaled 225 million; and meat packers reported their storage capacity increased 1 million to a total of 52 million cubic feet.

The increase in national refrigerated capacity was distributed unevenly as to region and temperature. This was expected in view of the pattern of long term growth of freezer capacity and a declining need for cooler space in some areas. As a result, freezer space (0° F. or lower) was up 56 million to 516 million cubic feet since 1959 and cooler capacity (space that cannot hold temperatures of 0° F. or lower) gained 26 million to 508 million cubic feet during the same period. Increased demands for freezer space in the Nation is best illustrated by the following percentages. As late as 1951, freezer space was 30 percent of the national refrigerated capacity. By 1961, it had increased to 50.4 percent of the total. This was the first time on record that the national refrigerated capacity was more freezer than cooler space.

By and large, this change favoring freezer capacity was due to expansions within the public general warehousing industry. In the past 10 years, for example, about 303 million cubic feet of freezer space has been added to the national total. Of this, 212 million cubic feet was made available for public general use; 84 million for private and semiprivate use; and the remainder, 7 million cubic feet, was distributed through meat packing plants and fruit houses. According to the 1961 survey, approximately 381 million cubic feet, or 74 percent of the national freezer capacity, was classed as public general space; 113 million, or 22 percent, was for private and semiprivate use; and 4 percent was in meat packing and a small number of fruit houses.

Regionally, storage facilities in the Pacific, South Atlantic, and East North Central, in the order named, increased their capacity since 1959 substantially more than other regions of the country. Almost 59 million more gross cubic feet of space were reported in these three regions than two years earlier. Their share of the national increase during this period was 72 percent.

In summary, gross storage capacity increased in 38 States, decreased in 9, and was unchanged in 1 and the District of Columbia since the 1959 survey. California, with a 14-million cubic feet gain, and Florida, with 11 million, out-ranked gains in other States. Washington, California, New York, Illinois, and Florida were the leading States ranked in order of gross capacity.

Notwithstanding the general distribution of cold storage facilities--at least one plant in each State--there was a high degree of clustering of capacity in certain population centers. About 40 percent of the national capacity, for example, was in 728 plants in 36 metropolitan areas. Chicago, New York, Kansas City, Los Angeles, and Philadelphia, ranked in that order on the basis of total warehouse capacity, were the principal storage areas in the country.

GROSS REFRIGERATED CAPACITY

The National gross refrigerated storage capacity totaled 1,024 million cubic feet on October 1, 1961,^{2/} following an 82-million cubic feet gain since the 1959 survey. This increase, while double the 1957 to 1959 increase in gross capacity, was 7 million short of the capacity gain reported between the 1955 and 1957 surveys. Yet, it was one of the largest survey-year gains since 1945 (tables 1 and 2 and fig. 1).

Refrigerated storage capacity in the United States has been growing steadily for many years. In the last 10 years, for example, it increased 44 percent, equivalent to a 3.5 percent rate compounded annually. The percentage gain since 1959 was 8.7 percent. While this increase was unusually large, it was not shared equally in all regions. Rather, the gains seemed to be confined primarily to areas where frozen food industries predominated.

The 1961 survey showed the largest capacity gains were in the Pacific, South Atlantic, and East North Central Regions. Collectively, these three areas accounted for 59 percent of the gross national capacity and 72 percent of the national growth since 1959. Figures 2 and 3 illustrate distribution of gross capacity by States and net change from the previous survey.

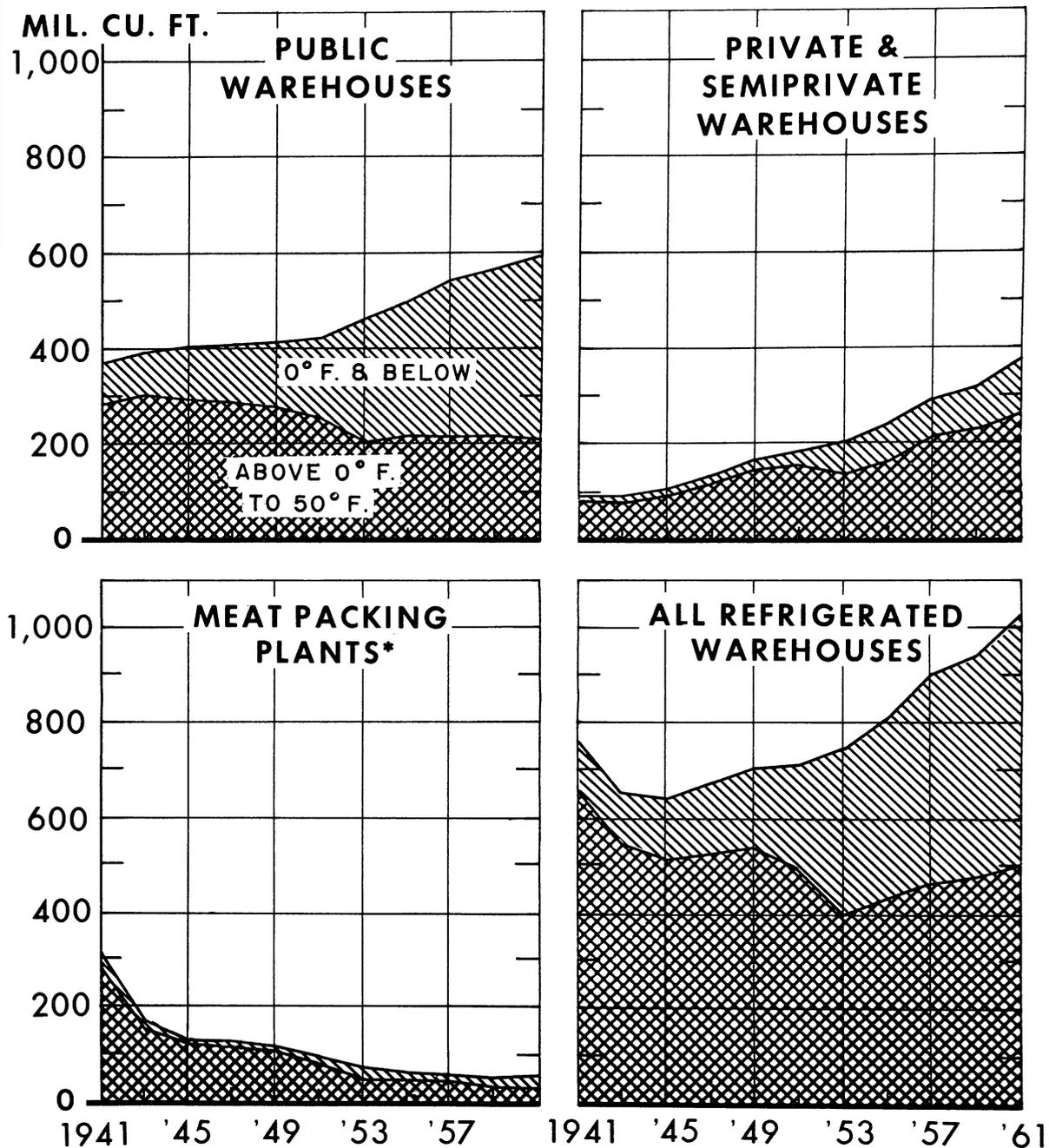
A further indication of the impact of the frozen food industry upon the warehousing industry was the distribution of capacity according to temperature capability. Prior to World War II, space capable of holding 0° F. or lower (freezer) was only 14 percent of the total storage capacity. The 1961 survey showed that freezer space, which totaled 516 million cubic feet, accounted for 50.4 percent of the total (fig. 4). For the first time on record, the national freezer capacity was greater than cooler capacity

Cooler capacity (space that can only hold temperatures above 0° F.) has declined in both the public warehousing and meat packing industries over the last 18 years. While the 508 million cubic feet reported on October 1, 1961 were 26 million more than two years earlier, they were still 33 million under the October 1, 1943 level. Much of the cooler space in the Nation, used primarily for the storage of fresh fruits, is located along our East and West Coasts.

^{2/} Does not include 11 warehouses reporting 2.8 million cubic feet in Alaska and Hawaii.

GROSS REFRIGERATED STORAGE SPACE

Distribution by Temperature Range and Type of Warehouse



* BEGINNING WITH 1943, REFRIGERATED WORKING SPACE IN MEAT PACKING PLANTS WAS EXCLUDED.

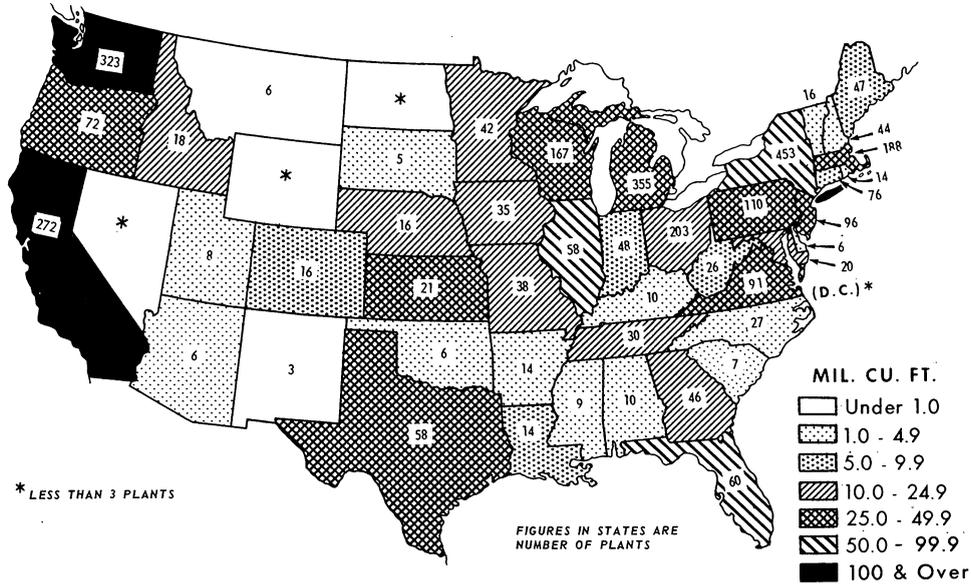
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Figure 1

DISTRIBUTION OF GROSS REFRIGERATED CAPACITY, BY STATES, OCTOBER 1, 1961

Total Cubic Feet and Number of Plants



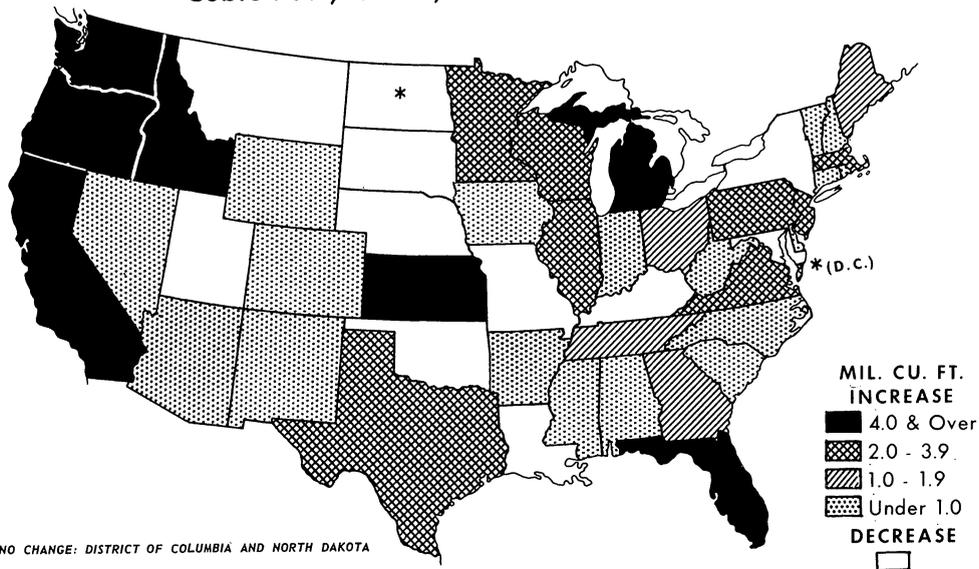
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Figure 2

CHANGES IN GROSS REFRIGERATED SPACE, BY STATES

Cubic Feet, Oct. 1, 1959 to Oct. 1, 1961



U. S. DEPARTMENT OF AGRICULTURE

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Figure 3

The major portion of the national storage capacity was for public general use (fig. 1). About 54 percent, or 554 million cubic feet, existed for storing most agricultural perishable and semi-perishable products. Public general space could be found in all States except Wyoming. It was concentrated heaviest in California, Illinois, New York, Kansas, and New Jersey, in the order named.

Private and semiprivate storage capacity appears to be the fastest growing segment of the warehousing industry. Most of the facilities within this classification were plants operated by food processors and handlers. Their storage capacity on October 1, 1961 totaled 193 million cubic feet, 37 million more than the capacity available on October 1, 1959. This was a 24-percent gain.

These facilities accounted for 19 percent of the total refrigerated capacity in 1961 compared with 17 percent 2 years earlier. Private and semiprivate space rate of increase was equivalent to 9 percent compounded annually, based on a moving average of 5-survey years beginning with 1943. By comparison, the rate of increase in public general capacity averaged 3 percent per year during the same period.

Refrigerated space used by meat packers for storage purposes totaled almost 52 million cubic feet, a gain of about one million since 1959. This industry no longer maintains such extensive storage capacities as in the past because of faster methods for curing meats which reduced their need for cooler space. According to the 1961 survey, cooler capacity was down to approximately 33 million gross cubic feet. On the other hand, their freezer capacity increased 2 million to 19 million cubic feet. (See tables 3, 4 and 5 for number of refrigerated plants, gross, and net capacities, by States and type of warehousing operations.)

FREEZER CAPACITY

Mechanical refrigerated units probably were the first made in the late eighties or early nineties. Prior to that, cold storage warehousemen relied on mixtures of crushed ice and salt to maintain an environment suitable for storing food.

From early records, it is known that Chicago had less than 3 million cubic feet of cold storage space in 1887 and New York less than 6 million cubic feet in 1902.

Today there are individual warehouses in sections of the country that have under a single roof a capacity which equals or exceeds the total refrigerated capacity that existed in Chicago and New York in those early days.

Up until the development of the frozen food industry, the storage pattern for the warehousing industry was described primarily by seasonal changes in both production and stocks of apples, pears, eggs, and pork. However, these products were cooler stored and, as late as 1943, freezer space was limited to the 111 million cubic feet.

The 1961 survey showed a 516-million gross cubic area, about four and two-thirds times the October 1, 1943 level, and 12 percent more than in 1959 (tables 6 and 7). Freezer capacity in the United States has been growing about 10.6 percent per year, based on a moving average trend of 5-survey years beginning with 1943. Much of this growth can be attributed to additions in public warehouse

GROSS REFRIGERATED SPACE

Distribution by Type of Warehouse, Oct. 1, 1961

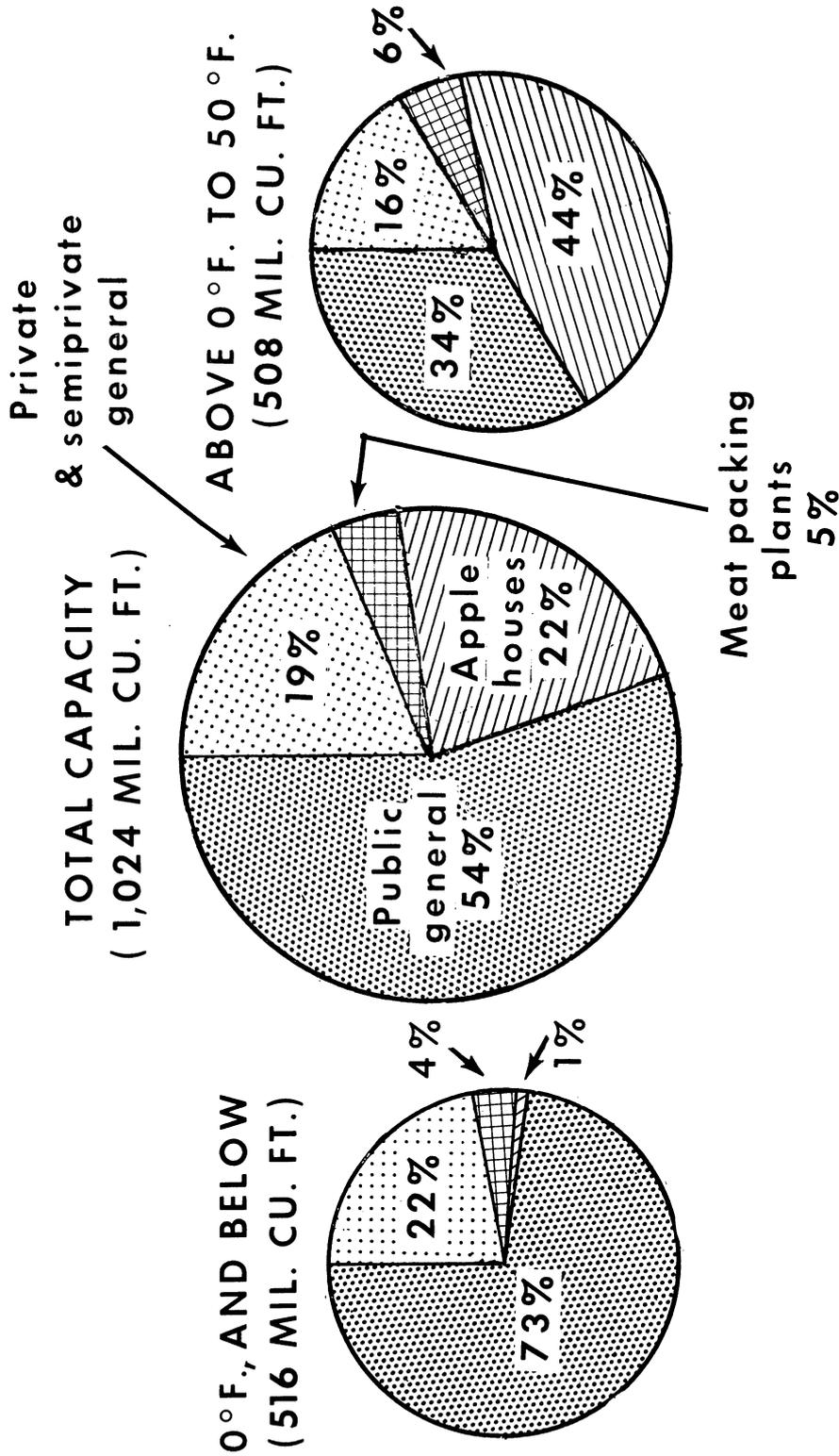


Figure 4

freezer space which went from 169 million cubic feet in 1951 to 381 million in 1961. During this period, too, private and semiprivate freezer capacity nearly quadrupled.

Traditionally, the major share of the national refrigerated capacity has been in the regional divisions east of the Mississippi River. This still holds true. However, each successive survey has shown that as the national capacity increased, more space is being added in regions west of the River than east of it. In 1961, for example, 46.9 percent of the national freezer capacity was in the western half of the country compared with 46.2 percent in 1959. When the 1951 survey was made, freezer facilities west of the Mississippi comprised 42 percent of the national total. Almost half of the freezer space in the western half was in Pacific Coast States and most of this was for public general use.

COOLER CAPACITY

The national cooler capacity of 508 million cubic feet is used largely for storing apples, pears, and grapes. Consequently, a high degree of concentration of this particular type of facility and space is in the New England, Middle Atlantic and Pacific Regions (tables 8 and 9). Cooler capacity for all types of warehouses in these three regions represented 56 percent of the total gross cooler capacity in the Nation.

Forty-four percent of the national cooler capacity was in refrigerated facilities identified as apple houses and another one-third was in public general warehouses. The remaining capacity, 173 million cubic feet, was in meat packer and private and semiprivate facilities. Cooler space in public general warehouses is declining steadily. It dropped from a level of 206 million cubic feet on October 1, 1951 to 173 million on October 1, 1961. In the last two years, the decline was 5 million cubic feet.

In contrast, cooler capacity gains were reported by both public and non-public apple house operators. About 18 million cubic feet of cooler space were added to private and semiprivate apple facilities since 1959. This is the continuation of a trend to locate warehouse space close to the growing areas, thus accounting for a high level of private and semiprivate plant clustering in the New England, Middle Atlantic, East North Central, South Atlantic and Pacific Regions. Public apple house space was located primarily in the Middle Atlantic, South Atlantic and Pacific areas.

PUBLIC GENERAL REFRIGERATED CAPACITY

Gross refrigerated storage capacity in public general warehouses increased nearly 26 million cubic feet since the 1959 survey, to 554 million cubic feet on October 1, 1961. This capacity represented 54 percent of the total refrigerated storage space in the Nation (fig. 4). About 381 million cubic feet, or 69 percent of the gross capacity in public general warehouses, were classed as freezer space. This space was 74 percent of the country's total freezer capacity. Public general freezer space increased nearly 31 million cubic feet since the last survey but cooler space declined 5 million.

To keep pace with the needs of customer industries, public storage warehouses added over 212 million cubic feet of gross freezer space since 1951, but this was partially offset by a 33-million decrease in cooler space. So great was the

expansion in public freezer space, its capacity on October 1, 1961 was over $4\frac{1}{2}$ times that in 1941, and $2\frac{1}{4}$ times the 1951 total.

For the second time on record, the East North Central States led all other regions in the amount of public warehouse space (fig. 5). Since 1959, this area increased 6 million gross cubic feet to 115 million, which was nearly 21 percent of the total refrigerated space maintained for public use. However, this area's net increase was due largely to the conversion of some non-public warehouse space to public-type warehousing, particularly in Illinois.

The Middle Atlantic States, which previous to the 1959 survey had more public general warehouse capacity than any other region, remained in second position but showed a decline of 6 million gross cubic feet from the previous survey. Much of this decline was due to the razing of old facilities in the area, primarily cooler space. Following closely in third place was the Pacific Region with a capacity of 102 million cubic feet, up 7 million since 1959. These three regions controlled 58 percent of the public warehouse capacity in the country.

Public warehouse space is located in every State except Wyoming. For the third consecutive survey, California led all other States in the amount of public warehouse space. The 89 plants in the State had 62.5 million cubic feet compared with 60.9 cubic feet in 1959. Over 77 percent of California's public space reported in 1961 could hold temperatures of 0° F. or below.

Illinois, with 55.5 million cubic feet, ranked second with 52 percent of its space in the freezer range. The increase in Illinois was due primarily to shifts within warehouse classification. New York State, for many years the recognized leader in the amount of public warehouse space, dropped from second to third place, with a capacity of 52.1 million cubic feet. New York's decline in public capacity was due largely to a decrease in the number of public plants following reclassification of warehousing operations and closing of old facilities within the State. Warehouses in the first 3 ranked States controlled about 31 percent of the Nation's public warehouse space. In contrast to the heavy concentration of public space in these 3 States, the District of Columbia and 7 States each had less than three plants doing public business and Wyoming had none.

In the 11 States with over 20 million cubic feet of public capacity in 1961, the amount of change in the past decade varied from virtually no change in Pennsylvania to an increase of 23 million in Kansas. Illinois and California each added 20 million cubic feet during this period. Florida's capacity increased 13 million; Washington, 11 million; Michigan, 9 million; Texas, 6 million; Massachusetts, 4 million; New Jersey, 3 million, and New York, 1 million.

Public storage space in the 38 cities that have 2 million or more cubic feet of usable piling space and 3 or more public general warehouses (table 11) accounted for nearly one-third of the total gross refrigerated capacity in the United States. In addition, space availability in these cities represented over 60 percent of the total available space in public general warehouses in the Nation. Cities in this report are standard metropolitan areas which are major urban centers and include all the closely linked surrounding areas.

The largest amount of public warehouse space, 50 million gross cubic feet, was in the Chicago area. New York City ranked second with 40 million cubic feet and Kansas City, with 27 million cubic feet, ranked third. Los Angeles, Boston,

DISTRIBUTION OF GROSS REFRIGERATED SPACE, FREEZER AND COOLER, BY REGIONS, AND TYPE OF WAREHOUSE, OCTOBER 1, 1961

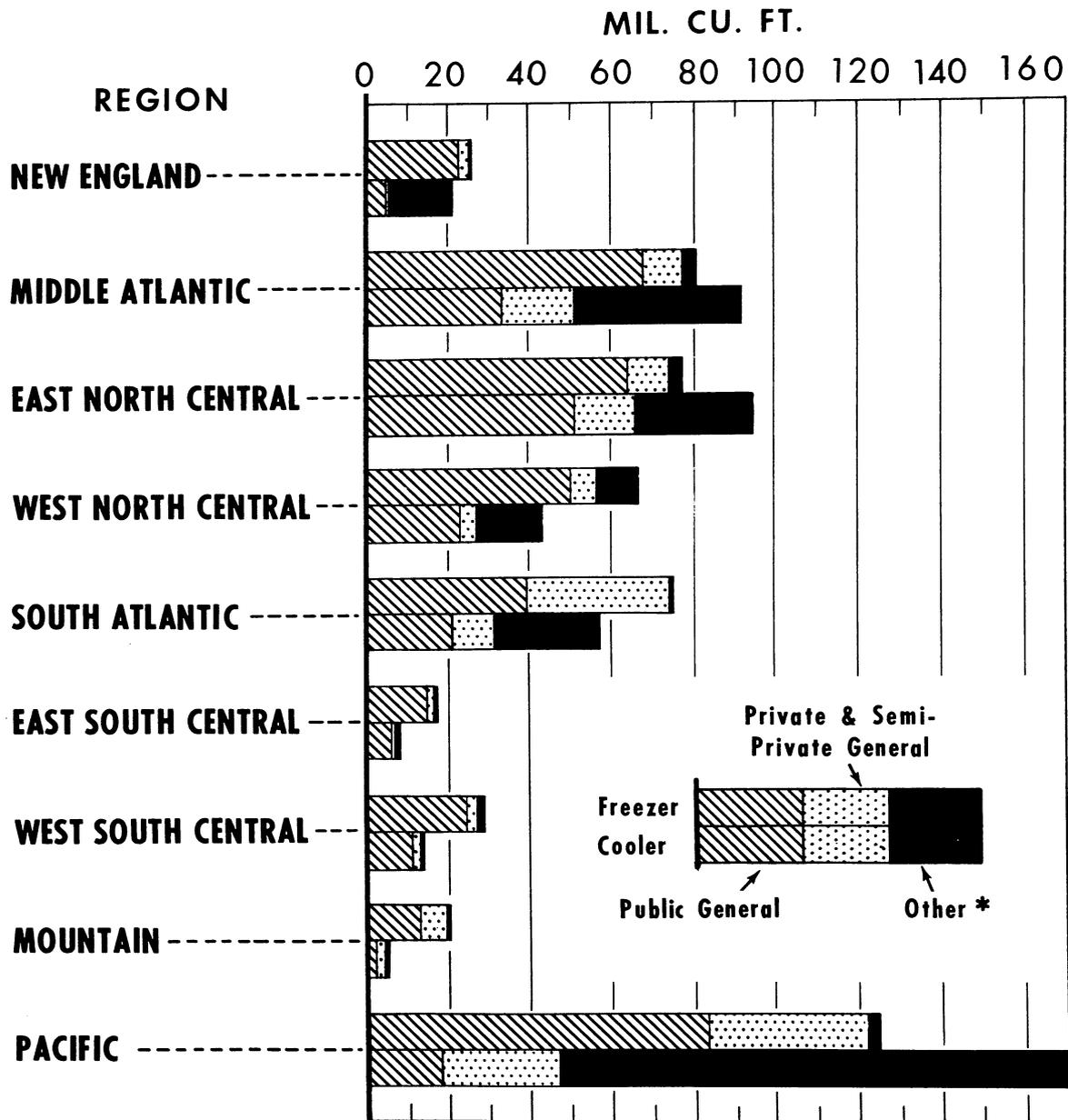
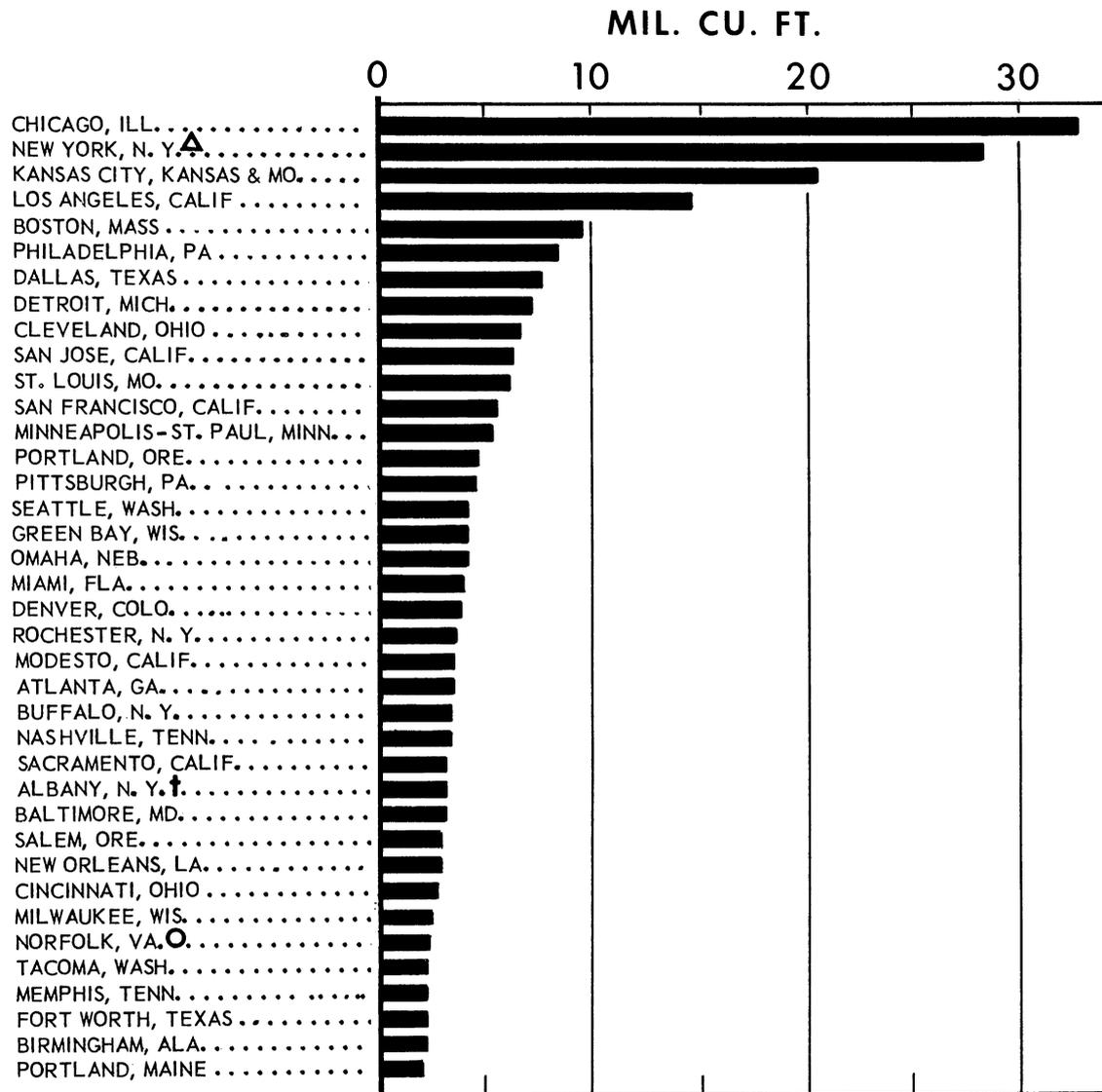


Figure 5

CITIES* WITH 2 MILLION OR MORE CUBIC FEET USABLE PILING SPACE, OCTOBER 1, 1961

Each Having 3 or More Public General Refrigerated Warehouses



* METROPOLITAN AREAS [△] INCLUDES NORTHEASTERN NEW JERSEY
[†] INCLUDES SCHENECTADY AND TROY [○] INCLUDES PORTSMOUTH, NEWPORT NEWS AND HAMPTON

Figure 6

Philadelphia, and Dallas, in the order named, were the only other areas with 10 million or more gross cubic feet of public refrigerated warehouse space. Figure 6 shows graphically the capacities in each of the 38 metropolitan areas. Tables 10 and 11 list the gross and net refrigerated capacities of these cities.

PRIVATE AND SEMIPRIVATE CAPACITY

Almost 19 percent of the total refrigerated space in the United States was in private or semiprivate general warehouses, according to the 1961 survey. This class of warehousing had 193 million gross cubic feet, 37 million more than reported in the previous survey.

The Pacific Coast Region was far ahead of all other regions, with 35 percent of the total private and semiprivate warehouse space. Warehousemen in the South Atlantic States operated an additional 23 percent. The Middle Atlantic States ranked third, followed by the East North Central States, with each accounting for about 13 percent of the total. By contrast, 10 years earlier, the East North Central States ranked first and the Pacific Coast States second.

Capacity in private and semiprivate plants increased in all regions except the West North Central. Missouri, Nebraska, and Kansas reported less space than in 1959. A 13-million cubic foot addition to private and semiprivate capacity in the Pacific Region raised the area's total to 68 million cubic feet and a 10-million gain in the South Atlantic Region brought capacity up to 45 million cubic feet. In these two regions, the increases were primarily in facilities in California and Florida, which also were the States reporting the largest private and semiprivate capacity in the United States. About 23 percent was in California and 16 percent in Florida. More than 90 percent of the private and semiprivate space in Florida could hold temperatures of 0° F. or below in contrast to only 45 percent in California

Private and semiprivate capacity increased in more than two-thirds of the States from 1959 to 1961. Other important capacity increases besides California and Florida were: Idaho, 4.3 million; Oregon, 2.6 million; Michigan and Wisconsin each 2.3 million; and Virginia, 2.2 million cubic feet.

During the past decade, capacity of the private and semiprivate group more than doubled. In 1951, gross space totaled less than 95 million cubic feet. Only about 31 percent of this space could hold temperatures of 0° F. and below compared with about 59 percent reported in 1961.

Pacific Coast States increased their private and semiprivate capacity by nearly 41 million cubic feet in the last 10 years. The next largest gain was the 37 million cubic feet in the South Atlantic States. These increments accounted for about four-fifths of the national increase in private and semiprivate capacity since 1951.

During this period, the buildup of private and semiprivate capacity was greatest in California and Florida. California's increase was 25.9 million cubic feet and Florida's, 23.9 million. In other States, the gains were as follows: Oregon, 10.0 million; Virginia, 9.0 million; Michigan, 6.6 million; Idaho, 6.2 million; Wisconsin, 5.5 million; Pennsylvania, 5.3 million; Washington, 4.5 million; and New York, 1.6 million.

MEAT PACKING WAREHOUSE CAPACITY

Refrigerated storage space maintained by meat packers and meat processors totaled 52 million cubic feet on October 1, 1961, an increase of 1 million cubic feet since the 1959 survey (table 4). In past years, meat packers have steadily reduced their storage areas because of a declining need for cooler space. However, in 1961, more States reported capacity increases than reported declines. This may be explained by the leveling out of the downward trend in cooler capacity while, at the same time, freezer capacity is increasing. Cooler space, at 33 million cubic feet, (table 8) was down 1 million from the previous survey, but this decline was more than offset by the 2-million cubic foot gain in freezer space, which totaled 19 million cubic feet on October 1, 1961.

Total gross storage capacity in meat packing plants has declined 46 million cubic feet in the past decade. A small part of this change was due to a reclassification of space formerly considered storage space, but in the main, it represented the closing of old and obsolete facilities.

Over two-thirds of the total meat packing storage space in the Nation was in two regions, the West North Central States (49 percent) and the East North Central States (19 percent). Iowa, with 14 percent of the total gross meat packer storage capacity, outranked all other States. Kansas, with 8 percent, was second. Wisconsin reported almost as much capacity as Kansas and ranked third, followed by Minnesota, Nebraska, and Texas, in that order.

The freezer capacity in meat packer and processing facilities was concentrated largely in Iowa and Minnesota (table 6). Combined, these two States accounted for almost 6 million cubic feet out of the 10 million in the West North Central Region.

APPLE HOUSE CAPACITY

Gross storage capacity in apple houses increased nearly 18 million cubic feet between October 1, 1959, and October 1, 1961. Over 225 million cubic feet of space were in the 1,566 plants reported on October 1, 1961. Thus, nearly half of the total number of refrigerated plants in the country was maintained for fresh fruit storage. However, these plants represented only 22 percent of the total refrigerated storage space in the Nation. Within this industry classification, 82 percent of the space was in private and semiprivate facilities and the remainder was for public use.

Pacific Coast States, with 55 percent of the total gross capacity, topped all others in the amount of apple house space. The next 4 leading areas' shares of the total were as follows: Middle Atlantic, 18 percent; South Atlantic, 11 percent; East North Central, 10 percent; and New England, 7 percent.

More than 6 million gross cubic feet of space was added between 1959 and 1961 in both the Pacific Coast States and the Middle Atlantic States. Increases between one and two million cubic feet were registered in New England, South Atlantic, and East North Central Regions.

Twenty-six States reported apple house space and all except 3, New Jersey, Illinois and Kansas, showed an increase or no change since the 1959 survey. The most significant gains were in New York, Washington, Pennsylvania, California, and Oregon, in that order.

An indication of the concentration of apple space is that 82 percent was in 6 States. Washington, with 42 percent, was far ahead of the others. It was followed by New York with 12 percent; Virginia, 8 percent; Michigan, 7 percent; California, 7 percent; and Oregon, 6 percent. Michigan had the most apple houses, 294, but Washington, with 247, was not far behind. These States were followed by New York, with 235 plants; Ohio, with 171; and Massachusetts with 142.

Of the 1,566 apple houses operating, 107 plants were conducted as public facilities. They had 40 million cubic feet of storage space, a gain of nearly one million since 1959. A substantial gain in New York's capacity, 3 million cubic feet, and lesser gains in Massachusetts and Michigan, were partially offset by reductions reported in the capacity on the West Coast, East North Central, and South Atlantic--the other major apple storage centers.

Between 1951 and 1961, the national apple house capacity increased 82 million cubic feet. About half, 42 million cubic feet, was added to West Coast facilities; in the Central and Middle Atlantic Regions, each added 15 million. Other gains were: 8 million in the New England States and 2 million in the South Atlantic. Washington and Michigan showed the largest increases in apple storage capacity since 1951. During this decade, 30 million cubic feet were added in Washington and 13 million in Michigan. California's capacity increased 9 million; New York, 7; Pennsylvania, 5; Massachusetts and Oregon, 4 million each; West Virginia, 2 million; and Virginia remained unchanged.

Table 1. --Warehouses, all types: Refrigerated storage capacity, United States, October 1, 1961

Type of refrigerated warehouse <u>1/</u>	Plants	Gross space <u>1/</u>			Usable piling space <u>1/</u>		
		Zero° F. or below	Above Zero° F. to 50° F.	Total	Zero° F. or below	Above Zero° F. to 50° F.	Total
	<u>Number</u>	<u>1,000 cu. ft.</u>	<u>1,000 cu. ft.</u>	<u>1,000 cu. ft.</u>	<u>1,000 cu. ft.</u>	<u>1,000 cu. ft.</u>	<u>1,000 cu. ft.</u>
Public general.....	820	380,919	173,079	553,998	277,666	127,970	405,636
Private and semi-private general.....	676	112,958	79,924	192,882	83,638	58,308	141,946
Meat-packing plants....	143	19,061	32,924	51,985	12,400	22,071	34,471
Apple houses:							
Public.....	107	1,679	38,186	39,865	1,369	30,952	32,321
Private and semi-private.....	1,459	1,709	183,605	185,314	1,473	148,764	150,237
Total.....	3,205	516,326	507,718	1,024,044	376,546	388,065	764,611

1/ For definitions of terms used, see page 2.

Table 2. --Warehouses, all types: Gross refrigerated storage capacity, United States, 1945-1961

Type of refrigerated storage	1945	1947	1949	1951	1953	1955	1957	1959	1961
	<u>1,000 cu. ft.</u>								
Public <u>1/</u>	403,832	408,232	413,256	425,114	466,470	498,599	545,061	567,251	593,863
Private <u>1/</u>	62,291	83,781	85,417	94,929	118,201	153,079	210,705	239,832	298,486
Semiprivate <u>1/</u>	45,254	52,035	85,781	92,744	84,290	92,771	83,469	84,312	79,710
Meat packing plants....	134,814	130,993	116,324	98,229	79,089	68,568	62,162	50,872	51,985
Total.....	646,191	675,041	700,778	711,016	748,050	813,017	901,397	942,267	1,024,044

1/ Includes apple house refrigerated storage space.

Table 3. --Number of refrigerated warehouses, United States, October 1, 1961

State and region	Total	Public	Private and semiprivate	Meat packers	Apple-houses	
					Public	Private and semiprivate
	Number	Number	Number	Number	Number	Number
Maine.....	47	5	1/	-	1/	34
New Hampshire.....	44	1/	1/	-	-	42
Vermont.....	16	1/	1/	-	-	12
Massachusetts.....	188	27	18	1/	1/	138
Rhode Island.....	14	1/	1/	-	-	10
Connecticut.....	76	5	1/	-	1/	69
New England.....	385	42	31	1/	1/	305
New York.....	453	85	110	23	30	205
New Jersey.....	96	27	7	-	5	57
Pennsylvania.....	110	39	19	8	4	40
Middle Atlantic.....	659	151	136	31	39	302
Ohio.....	203	17	13	1/	1/	168
Indiana.....	48	6	6	9	1/	1/
Illinois.....	58	34	7	6	1/	1/
Michigan.....	355	29	30	1/	1/	285
Wisconsin.....	167	55	102	1/	-	1/
E. North Central.....	831	141	158	26	19	487
Minnesota.....	42	16	21	5	-	-
Iowa.....	35	18	6	11	-	-
Missouri.....	38	24	1/	7	1/	1/
North Dakota.....	1/	1/	-	-	-	-
South Dakota.....	1/	1/	1/	1/	-	-
Nebraska.....	16	9	1/	1/	-	-
Kansas.....	21	15	-	5	-	1/
W. North Central.....	158	85	35	35	1/	1/
Delaware.....	6	1/	1/	1/	-	-
Maryland & D. C....	21	11	3	1/	-	1/
Virginia.....	91	23	6	3	8	51
West Virginia.....	26	4	1/	1/	1/	18
North Carolina.....	27	14	8	-	1/	1/
South Carolina.....	7	1/	1/	1/	-	-
Georgia.....	46	28	14	4	-	-
Florida.....	60	28	32	-	-	-
South Atlantic.....	284	114	68	12	11	79
Kentucky.....	10	6	1/	1/	-	1/
Tennessee.....	30	19	5	1/	-	1/
Alabama.....	10	7	1/	-	-	-
Mississippi.....	9	6	3	-	-	-
E. South Central.....	59	38	13	6	-	1/
Arkansas.....	14	11	1/	-	1/	-
Louisiana.....	14	10	4	-	-	-
Oklahoma.....	16	7	1/	1/	-	-
Texas.....	58	35	1/	1/	-	-
W. South Central.....	102	63	26	12	1/	-
Montana.....	6	4	1/	1/	-	-
Idaho & Wyoming...	19	8	1/	1/	-	-
Colorado.....	16	10	1/	1/	-	-
New Mexico.....	3	1/	1/	-	-	-
Arizona.....	6	1/	-	1/	-	-
Utah & Nevada.....	10	7	1/	1/	-	-
Mountain.....	60	36	15	1/	-	-
Washington.....	323	38	33	5	19	228
Oregon.....	72	23	30	1/	1/	16
California.....	272	89	131	1/	1/	38
Pacific.....	667	150	194	11	30	282
United States...	3,205	820	676	143	107	1,459

1/ Not shown to avoid disclosure of individual plant reports.

Table 4. --Total gross refrigerated space, by type of warehouse, United States, October 1, 1961

State and region	Total	Public	Private and semiprivate	Meat packers	Apple-houses	
					Public	Private and semiprivate
	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.
Maine.....	6,481	3,027	1/	-	1/	2,025
New Hampshire.....	2,123	1/	1/	-	-	2,030
Vermont.....	1,455	1/	1/	-	-	1,038
Massachusetts.....	30,118	20,863	1,853	1/	1/	6,060
Rhode Island.....	1,988	1/	1/	-	1/	241
Connecticut.....	5,001	1,924	1/	-	1/	3,012
New England.....	47,166	27,814	3,502	1/	1/	14,406
New York.....	94,064	52,090	12,438	3,354	10,225	15,957
New Jersey.....	37,639	27,191	6,736	-	823	2,839
Pennsylvania.....	40,951	23,167	6,345	1,273	1,936	8,230
Middle Atlantic..	172,654	102,448	25,569	4,627	12,984	27,026
Ohio.....	23,898	18,340	468	1/	1/	4,199
Indiana.....	8,032	3,684	1,294	2,108	1/	1/
Illinois.....	61,114	55,530	1,668	2,730	1/	1/
Michigan.....	48,182	21,178	11,139	1/	1/	14,684
Wisconsin.....	31,396	16,452	10,806	1/	-	1/
E. North Central	172,622	115,184	25,375	9,917	1,921	20,225
Minnesota.....	21,841	11,642	6,411	3,788	-	-
Iowa.....	17,080	8,089	1,559	7,432	-	-
Missouri.....	24,028	18,075	1/	2,937	1/	1/
North Dakota.....	1/	1/	-	-	-	-
South Dakota.....	1/	1/	1/	1/	-	-
Nebraska.....	10,943	7,153	1/	1/	-	-
Kansas.....	32,218	27,949	-	4,120	1/	1/
W. North Central	110,384	73,459	10,562	25,699	1/	1/
Delaware.....	1,929	1/	1/	1/	-	-
Maryland & D. C...	11,199	8,914	410	1/	-	1/
Virginia.....	39,853	12,894	9,646	345	9,128	7,840
West Virginia.....	7,658	2,154	1/	1/	1/	4,488
North Carolina....	3,678	2,325	775	-	1/	1/
South Carolina....	1,092	1/	1/	1/	-	-
Georgia.....	15,644	11,955	2,659	1,030	-	-
Florida.....	50,962	20,805	30,157	-	-	-
South Atlantic..	132,015	60,805	44,576	2,751	10,033	13,850
Kentucky.....	3,242	3,029	1/	1/	-	1/
Tennessee.....	14,814	12,111	1,192	1/	-	1/
Alabama.....	4,810	4,379	1/	1/	-	-
Mississippi.....	1,696	1,038	658	-	-	-
E. South Central	24,562	20,557	2,384	1/	-	1/
Arkansas.....	4,592	4,319	1/	-	1/	-
Louisiana.....	6,248	5,618	630	-	-	-
Oklahoma.....	3,776	2,798	1/	1/	-	-
Texas.....	29,078	23,109	1/	1/	-	-
W. South Central	43,694	35,844	4,239	1/	1/	-
Montana.....	491	301	1/	1/	-	-
Idaho & Wyoming...	13,199	5,378	1/	1/	-	-
Colorado.....	6,166	5,216	1/	1/	-	-
New Mexico.....	448	1/	1/	-	-	-
Arizona.....	1,435	1/	-	1/	-	-
Utah & Nevada.....	3,673	3,278	1/	1/	-	-
Mountain.....	25,412	15,645	8,339	1/	-	-
Washington.....	129,468	23,852	10,262	1,009	10,105	84,240
Oregon.....	43,624	15,926	14,013	1/	1/	12,747
California.....	122,443	62,464	44,061	1/	1/	12,145
Pacific.....	295,535	102,242	68,336	2,381	13,444	109,132
United States...	1,024,044	553,998	192,882	51,985	39,865	185,314

1/ Not shown to avoid disclosure of individual plant reports.

Table 5. --Total usable refrigerated space, by type of warehouse, United States, October 1, 1961

State and region	Total	Public	Private and semiprivate	Meat packers	Apple-houses	
					Public	Private and semiprivate
	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.
Maine.....	4,960	2,202	1/	-	1/	1,660
New Hampshire....	1,743	1/	1/	-	-	1,676
Vermont.....	1,239	1/	1/	-	-	899
Massachusetts....	21,299	14,057	1,394	1/	1/	4,727
Rhode Island.....	1,414	1/	1/	-	-	199
Connecticut.....	3,859	1,396	1/	-	1/	2,411
New England.....	34,514	19,074	2,665	1/	1/	11,572
New York.....	71,954	39,265	8,733	2,289	8,199	13,468
New Jersey.....	25,092	18,146	3,962	-	716	2,268
Pennsylvania.....	29,885	16,399	4,557	776	1,611	6,542
Middle Atlantic..	126,931	73,810	17,252	3,065	10,526	22,278
Ohio.....	18,405	13,863	335	1/	1/	3,431
Indiana.....	5,755	2,678	1,089	1,150	1/	1/
Illinois.....	40,012	36,394	1,142	1,479	1/	1/
Michigan.....	37,185	15,802	8,492	1/	1/	11,931
Wisconsin.....	23,863	12,602	8,228	1/	-	1/
E. North Central	125,220	81,339	19,286	6,460	1,618	16,517
Minnesota.....	14,806	7,795	4,773	2,238	-	-
Iowa.....	12,054	5,862	1,089	5,103	-	-
Missouri.....	16,252	12,592	1/	1,827	1/	1/
North Dakota.....	1/	1/	-	-	-	-
South Dakota.....	1/	1/	1/	1/	-	-
Nebraska.....	7,804	5,046	1/	1/	-	-
Kansas.....	23,966	21,285	-	2,555	1/	1/
W. North Central	77,581	52,970	7,339	16,732	1/	1/
Delaware.....	1,312	1/	1/	1/	-	-
Maryland & D. C...	8,426	6,505	317	1/	-	1/
Virginia.....	31,824	10,355	7,838	213	7,266	6,152
West Virginia....	5,947	1,520	1/	1/	1/	3,649
North Carolina...	2,841	1,780	602	-	1/	1/
South Carolina....	832	1/	1/	1/	-	-
Georgia.....	11,656	8,692	2,175	789	-	-
Florida.....	40,056	17,293	22,763	-	-	-
South Atlantic..	102,894	47,448	34,294	2,173	7,953	11,026
Kentucky.....	2,773	2,598	1/	1/	-	1/
Tennessee.....	11,158	9,003	1,043	1/	-	1/
Alabama.....	3,441	3,142	1/	1/	-	-
Mississippi.....	1,320	845	475	-	-	-
E. South Central	18,692	15,588	1,908	1/	-	1/
Arkansas.....	3,309	3,076	1/	-	1/	-
Louisiana.....	4,568	4,010	558	-	-	-
Oklahoma.....	2,574	1,890	1/	1/	1/	-
Texas.....	21,044	16,879	1/	1/	-	-
W. South Central	31,495	25,855	3,105	1/	1/	-
Montana.....	390	230	1/	1/	-	-
Idaho & Wyoming...	10,007	3,934	1/	1/	-	-
Colorado.....	4,935	4,280	1/	1/	-	-
New Mexico.....	375	1/	1/	-	-	-
Arizona.....	987	1/	-	1/	-	-
Utah & Nevada....	2,622	2,362	1/	1/	-	-
Mountain.....	19,320	11,849	6,524	1/	-	-
Washington.....	101,873	18,038	7,272	680	8,248	67,635
Oregon.....	34,189	12,865	10,227	1/	1/	10,528
California.....	91,902	46,800	32,074	1/	1/	10,072
Pacific.....	227,964	77,703	49,573	1,431	11,022	88,235
United States...	764,611	405,636	141,946	34,471	32,321	150,237

1/ Not shown to avoid disclosure of individual plant reports.

Table 6. --Gross refrigerated space, by type of warehouse, United States, October 1, 1961

ZERO° F. AND BELOW

State and region	Total	Public	Private and semiprivate	Meat packers	Apple-houses	
					Public	Private and semiprivate
	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.
Maine.....	4,106	2,677	1/	-	1/	-
New Hampshire.....	80	1/	1/	-	-	-
Vermont.....	331	1/	1/	-	-	-
Massachusetts.....	18,376	16,852	1,305	1/	1/	1
Rhode Island.....	1,288	1/	1/	-	-	2
Connecticut.....	1,394	1,375	1/	-	1/	8
New England.....	25,575	22,450	2,846	1/	1/	11
New York.....	37,994	32,080	3,685	1,066	669	494
New Jersey.....	21,723	18,832	2,771	-	2	118
Pennsylvania.....	20,338	17,197	2,533	110	120	378
Middle Atlantic..	80,055	68,109	8,989	1,176	791	990
Ohio.....	12,557	12,295	158	1/	1/	1/
Indiana.....	4,262	2,755	928	579	1/	1/
Illinois.....	30,782	29,103	966	700	1/	1/
Michigan.....	22,469	15,789	6,436	1/	1/	17
Wisconsin.....	7,154	4,432	1,170	1/	-	1/
E. North Central	77,224	64,374	9,658	3,157	15	20
Minnesota.....	16,712	9,929	4,499	2,284	-	-
Iowa.....	11,491	6,934	1,234	3,323	-	-
Missouri.....	14,118	12,247	1/	1,298	1/	1/
North Dakota.....	1/	1/	-	-	-	-
South Dakota.....	1/	1/	1/	1/	-	-
Nebraska.....	7,358	5,713	1/	1/	-	-
Kansas.....	16,420	14,939	-	1,481	1/	1/
W. North Central	67,024	50,237	6,348	10,435	1/	1/
Delaware.....	1,573	1/	1/	1/	-	-
Maryland & D. C...	7,987	7,627	328	1/	-	1/
Virginia.....	7,369	4,044	3,066	20	1/	1/
West Virginia.....	1,198	1,176	1/	1/	1/	1/
North Carolina.....	1,842	1,309	521	-	1/	1/
South Carolina....	785	1/	1/	1/	-	-
Georgia.....	8,230	5,534	2,306	390	-	-
Florida.....	45,874	18,740	27,134	-	-	-
South Atlantic..	74,858	39,946	34,089	572	1/	1/
Kentucky.....	1,965	1,950	1/	1/	-	1/
Tennessee.....	10,631	9,161	1,133	1/	-	1/
Alabama.....	2,999	2,839	1/	1/	-	-
Mississippi.....	978	625	353	-	-	-
E. South Central	16,573	14,575	1,653	1/	-	1/
Arkansas.....	4,148	4,138	1/	-	1/	-
Louisiana.....	4,391	3,825	566	-	-	-
Oklahoma.....	2,342	1,694	1/	1/	-	-
Texas.....	18,297	14,869	1/	1/	-	-
W. South Central	29,178	24,526	2,850	1/	1/	-
Montana.....	248	197	1/	1/	-	-
Idaho & Wyoming...	11,409	5,039	1/	1/	-	-
Colorado.....	4,485	3,961	1/	1/	-	-
New Mexico.....	236	1/	1/	-	-	-
Arizona.....	1,057	1/	-	1/	-	-
Utah & Nevada.....	2,940	2,842	1/	1/	-	-
Mountain.....	20,375	13,182	6,710	1/	-	-
Washington.....	30,253	21,810	7,466	441	402	134
Oregon.....	26,193	13,410	12,611	1/	1/	-
California.....	69,018	48,300	19,738	1/	1/	538
Pacific.....	125,464	83,520	39,815	891	566	672
United States...	516,326	380,919	112,958	19,061	1,679	1,709

1/ Not shown to avoid disclosure of individual plant reports.

Table 7. --Usable refrigerated space, by type of warehouse, United States, October 1, 1961

ZERO° F. AND BELOW

State and region	Total	Public	Private and semiprivate	Meat packers	Apple-houses	
					Public	Private and semiprivate
	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.
Maine.....	3,063	1,965	1/	-	1/	-
New Hampshire.....	57	1/	1/	-	-	-
Vermont.....	263	1/	1/	-	-	-
Massachusetts.....	12,222	11,053	980	1/	1/	1
Rhode Island.....	886	1/	1/	-	-	2
Connecticut.....	1,004	990	1/	-	1/	6
New England.....	17,495	15,103	2,155	1/	1/	9
New York.....	28,294	23,634	2,979	730	537	414
New Jersey.....	14,238	12,775	1,375	-	1	87
Pennsylvania.....	14,536	12,173	1,875	61	98	329
Middle Atlantic.....	57,068	48,582	6,229	791	636	830
Ohio.....	9,703	9,489	119	1/	1/	1/
Indiana.....	3,200	2,001	809	390	1/	-
Illinois.....	18,848	17,825	610	402	1/	1/
Michigan.....	17,101	11,937	4,991	1/	1/	13
Wisconsin.....	5,348	3,345	822	1/	-	1/
E. North Central.....	54,200	44,597	7,351	2,223	13	16
Minnesota.....	11,687	6,725	3,598	1,364	-	-
Iowa.....	8,406	5,142	862	2,402	-	-
Missouri.....	9,534	8,439	1/	761	1/	1/
North Dakota.....	1/	1/	-	-	-	-
South Dakota.....	1/	1/	1/	1/	-	-
Nebraska.....	5,193	4,092	1/	1/	-	-
Kansas.....	11,798	11,070	-	728	1/	1/
W. North Central.....	47,225	35,794	4,822	6,606	1/	1/
Delaware.....	1,050	1/	1/	1/	-	-
Maryland & D. C....	5,932	5,649	253	1/	-	1/
Virginia.....	5,201	3,066	1,926	20	1/	1/
West Virginia.....	834	816	1/	1/	1/	1/
North Carolina....	1,397	987	400	-	1/	1/
South Carolina....	601	1/	1/	1/	1/	1/
Georgia.....	6,131	4,003	1,884	244	-	-
Florida.....	36,265	15,960	20,305	-	-	-
South Atlantic..	57,411	31,590	25,226	396	1/	1/
Kentucky.....	1,673	1,661	1/	1/	-	1/
Tennessee.....	8,090	6,882	995	1/	-	1/
Alabama.....	2,209	2,092	1/	1/	-	1/
Mississippi.....	776	510	266	-	-	-
E. South Central.....	12,748	11,145	1,384	1/	-	1/
Arkansas.....	2,946	2,941	1/	-	1/	-
Louisiana.....	3,275	2,774	501	-	-	-
Oklahoma.....	1,575	1,131	1/	1/	-	-
Texas.....	13,224	10,803	1/	1/	-	-
W. South Central.....	21,020	17,649	2,198	1/	1/	-
Montana.....	197	154	1/	1/	-	-
Idaho & Wyoming...	8,662	3,682	1/	1/	-	-
Colorado.....	3,623	3,274	1/	1/	-	-
New Mexico.....	198	1/	1/	-	-	-
Arizona.....	712	1/	-	1/	-	-
Utah & Nevada.....	2,154	2,082	1/	1/	-	-
Mountain.....	15,546	9,989	5,258	1/	-	-
Washington.....	22,620	16,517	5,360	287	334	122
Oregon.....	19,852	10,568	9,197	1/	1/	-
California.....	51,361	36,132	14,458	1/	1/	483
Pacific.....	93,833	63,217	29,015	518	478	605
United States...	376,546	277,666	83,638	12,400	1,369	1,473

1/ Not shown to avoid disclosure of individual plant reports.

Table 8. --Gross refrigerated space, by type of warehouse, United States, October 1, 1961

ABOVE ZERO° F. TO 50° F.

State and region	Total	Public	Private and semiprivate	Meat packers	Apple-houses	
					Public	Private and semiprivate
	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.
Maine.....	2,375	350	1/	-	1/	2,025
New Hampshire.....	2,043	1/	1/	-	-	2,030
Vermont.....	1,124	1/	1/	-	-	1,038
Massachusetts.....	11,742	4,011	548	1/	1/	6,059
Rhode Island.....	700	1/	1/	-	-	239
Connecticut.....	3,607	549	1/	-	1/	3,004
New England.....	21,591	5,364	656	1/	1/	14,395
New York.....	56,070	20,010	8,753	2,288	9,556	15,463
New Jersey.....	15,916	8,359	4,015	-	821	2,721
Pennsylvania.....	20,613	5,970	3,812	1,163	1,816	7,852
Middle Atlantic.....	92,599	34,339	16,580	3,451	12,193	26,036
Ohio.....	11,341	6,045	310	1/	1/	1/
Indiana.....	3,770	929	366	1,529	1/	1/
Illinois.....	30,332	26,427	702	2,030	1/	1/
Michigan.....	25,713	5,389	4,703	1/	1/	14,667
Wisconsin.....	24,242	12,020	9,636	1/	-	1/
E. North Central.....	95,398	50,810	15,717	6,760	1,906	20,205
Minnesota.....	5,129	1,713	1,912	1,504	-	-
Iowa.....	5,589	1,155	325	4,109	-	-
Missouri.....	9,910	5,828	1/	1,639	1/	1/
North Dakota.....	1/	1/	-	-	-	-
South Dakota.....	1/	1/	1/	1/	-	-
Nebraska.....	3,585	1,440	1/	1/	-	-
Kansas.....	15,798	13,010	-	2,639	1/	1/
W. North Central.....	43,360	23,222	4,214	15,264	1/	1/
Delaware.....	356	1/	1/	1/	-	-
Maryland & D. C....	3,212	1,287	82	1/	-	1/
Virginia.....	32,484	8,850	6,580	325	1/	1/
West Virginia.....	6,460	978	1/	1/	1/	1/
North Carolina.....	1,836	1,016	254	-	1/	1/
South Carolina.....	307	1/	1/	1/	-	-
Georgia.....	7,414	6,421	353	640	-	-
Florida.....	5,088	2,065	3,023	-	-	-
South Atlantic.....	57,157	20,859	10,487	2,179	1/	1/
Kentucky.....	1,277	1,079	1/	1/	-	1/
Tennessee.....	4,183	2,950	59	1/	-	1/
Alabama.....	1,811	1,540	1/	1/	-	-
Mississippi.....	718	413	305	-	-	-
E. South Central.....	7,989	5,982	731	1/	-	1/
Arkansas.....	444	181	1/	-	1/	-
Louisiana.....	1,857	1,793	64	-	-	-
Oklahoma.....	1,434	1,104	1/	1/	-	-
Texas.....	10,781	8,240	1/	1/	-	-
W. South Central.....	14,516	11,318	1,389	1/	1/	-
Montana.....	243	104	1/	1/	-	-
Idaho & Wyoming...	1,790	339	1/	1/	-	-
Colorado.....	1,681	1,255	1/	1/	-	-
New Mexico.....	212	1/	1/	-	-	-
Arizona.....	378	1/	-	1/	-	-
Utah & Nevada.....	733	436	1/	1/	-	-
Mountain.....	5,037	2,463	1,629	1/	-	-
Washington.....	99,215	2,042	2,796	568	9,703	84,106
Oregon.....	17,431	2,516	1,402	1/	1/	12,747
California.....	53,425	14,164	24,323	1/	1/	11,607
Pacific.....	170,071	18,722	28,521	1,490	12,878	108,460
United States...	507,718	173,079	79,924	32,924	38,186	183,605

1/ Not shown to avoid disclosure of individual plant reports.

Table 9. --Usable refrigerated space, by type of warehouse, United States, October 1, 1961

ABOVE ZERO° F. TO 50° F.

State and region	Total	Public	Private and semiprivate	Meat packers	Apple-houses	
					Public	Private and semiprivate
	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.
Maine.....	1,897	237	1/	-	1/	1,660
New Hampshire....	1,686	1/	1/	-	-	1,676
Vermont.....	976	1/	1/	-	-	899
Massachusetts.....	9,077	3,004	414	1/	1/	4,726
Rhode Island.....	528	1/	1/	-	-	197
Connecticut.....	2,855	406	1/	-	1/	2,405
New England.....	17,019	3,971	510	1/	1/	11,563
New York.....	43,660	15,631	5,754	1,559	7,662	13,054
New Jersey.....	10,854	5,371	2,587	-	715	2,181
Pennsylvania.....	15,349	4,226	2,682	715	1,513	6,213
Middle Atlantic..	69,863	25,228	11,023	2,274	9,890	21,448
Ohio.....	8,702	4,374	216	1/	1/	1/
Indiana.....	2,555	677	280	760	1/	1/
Illinois.....	21,164	18,569	532	1,077	1/	1/
Michigan.....	20,084	3,865	3,501	1/	1/	11,918
Wisconsin.....	18,515	9,257	7,406	1/	-	1/
E. North Central	71,020	36,742	11,935	4,237	1,605	16,501
Minnesota.....	3,119	1,070	1,175	874	-	-
Iowa.....	3,648	720	227	2,701	-	-
Missouri.....	6,718	4,153	1/	1,066	1/	1/
North Dakota.....	1/	1/	-	-	-	-
South Dakota.....	1/	1/	1/	1/	-	-
Nebraska.....	2,611	954	1/	1/	-	-
Kansas.....	12,168	10,215	-	1,827	1/	1/
W. North Central	30,356	17,176	2,517	10,126	1/	1/
Delaware.....	262	1/	1/	1/	-	-
Maryland & D. C...	2,494	856	64	1/	-	1/
Virginia.....	26,623	7,289	5,912	193	1/	1/
West Virginia....	5,113	704	1/	1/	1/	1/
North Carolina....	1,444	793	202	-	1/	1/
South Carolina....	231	1/	1/	1/	-	-
Georgia.....	5,525	4,689	291	545	-	-
Florida.....	3,791	1,333	2,458	-	-	-
South Atlantic..	45,483	15,858	9,068	1,777	1/	1/
Kentucky.....	1,100	937	1/	1/	-	1/
Tennessee.....	3,068	2,121	48	1/	-	1/
Alabama.....	1,232	1,050	1/	1/	-	-
Mississippi.....	544	335	209	-	-	-
E. South Central	5,944	4,443	524	1/	-	1/
Arkansas.....	363	135	1/	-	1/	-
Louisiana.....	1,293	1,236	57	-	-	-
Oklahoma.....	999	759	1/	1/	-	-
Texas.....	7,820	6,076	1/	1/	-	-
W. South Central	10,475	8,206	907	1/	1/	-
Montana.....	193	76	1/	1/	-	-
Idaho & Wyoming...	1,345	252	1/	1/	-	-
Colorado.....	1,312	1,006	1/	1/	-	-
New Mexico.....	177	1/	1/	-	-	-
Arizona.....	275	1/	-	1/	-	-
Utah & Nevada.....	472	280	1/	1/	-	-
Mountain.....	3,774	1,860	1,266	1/	-	-
Washington.....	79,253	1,521	1,912	393	7,914	67,513
Oregon.....	14,337	2,297	1,030	1/	1/	10,528
California.....	40,541	10,668	17,616	1/	1/	9,589
Pacific.....	134,131	14,486	20,558	913	10,544	87,630
United States...	388,065	127,970	58,308	22,071	30,952	148,764

1/ Not shown to avoid disclosure of individual plant reports.

Table 10. --Warehouses, all types: Refrigerated storage capacity, in cities having 3 or more plants and at least 3 million cubic feet of usable piling space, October 1, 1961

City and State ^{1/}	Plants	Gross space			Usable piling space		
		Zero° F. or below	Above 0° F. to 50° F.	Total	Zero° F. or below	Above 0° F. to 50° F.	Total
	Number	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.
Boston, Mass.....	32	11,989	3,621	15,610	7,966	2,720	10,686
New York, N. Y. & Northeastern, N. J....	96	27,999	20,336	48,335	20,202	13,984	34,186
Albany, Schenectady & Troy, N. Y.....	8	2,726	1,805	4,531	2,134	1,329	3,463
Buffalo, N. Y.....	43	3,475	5,322	8,797	2,431	4,093	6,524
Rochester, N. Y.....	12	3,541	3,894	7,435	2,487	2,839	5,326
Philadelphia, Pa.....	41	11,548	4,976	16,524	7,523	3,808	11,331
Pittsburgh, Pa.....	12	5,513	2,526	8,039	4,089	1,655	5,744
Cincinnati, Ohio.....	6	2,816	1,467	4,283	2,402	1,289	3,691
Cleveland, Ohio.....	14	6,176	3,448	9,624	4,517	2,380	6,897
Chicago, Ill.....	31	28,824	25,161	53,985	17,546	17,452	34,998
Detroit, Mich.....	48	7,209	4,692	11,901	5,561	3,331	8,892
Grand Rapids, Mich.....	79	337	4,398	4,735	230	3,660	3,890
Green Bay, Wis.....	25	1,965	5,336	7,301	1,250	4,002	5,252
Milwaukee, Wis.....	7	2,677	2,425	5,102	2,109	1,698	3,807
Minn.-St. Paul, Minn...	10	8,199	2,368	10,567	5,504	1,457	6,961
Kansas City, Kans.& Mo.	10	15,956	13,583	29,539	11,135	10,375	21,510
St. Louis, Mo.....	13	6,260	5,715	11,975	4,268	3,778	8,046
Omaha, Nebr.....	8	6,099	3,321	9,420	4,305	2,428	6,733
Wichita, Kans.....	3	2,439	2,203	4,642	1,773	1,653	3,426
Baltimore, Md.....	7	4,021	1,323	5,344	2,875	1,065	3,940
Atlanta, Ga.....	9	3,143	2,583	5,726	2,114	1,619	3,733
Orlando, Florida.....	5	8,329	-	8,329	6,365	-	6,365
Miami, Florida.....	6	4,309	612	4,921	3,639	219	3,858
Nashville, Tenn.....	6	3,682	1,341	5,023	2,660	1,023	3,683
Dallas, Texas.....	6	6,900	4,785	11,685	5,145	3,468	8,613
Denver, Colo.....	12	3,859	1,272	5,131	3,147	948	4,095
Seattle, Wash.....	20	7,762	1,699	9,461	5,243	1,167	6,410
Portland, Ore.....	19	8,299	1,469	9,768	6,448	907	7,355
Salem, Ore.....	5	5,081	401	5,482	3,563	338	3,901
Fresno, Calif.....	26	2,164	2,711	4,875	1,420	2,139	3,559
Los Angeles, Calif.....	45	21,163	7,100	28,263	15,164	5,022	20,186
Sacramento, Calif.....	8	4,628	1,758	6,386	3,575	1,361	4,936
San Francisco-Oakland Calif.....	17	5,756	2,337	8,093	4,272	1,742	6,014
San Jose, Calif.....	17	9,755	3,287	13,042	7,604	2,511	10,115
Modesto, Calif.....	6	5,065	1,077	6,142	4,179	1,012	5,191
Stockton, Calif.....	16	1,183	3,113	4,296	768	2,325	3,093
Total.....	728	260,847	153,465	414,312	185,613	110,797	296,410

^{1/} Standard metropolitan areas.

Table 11. --Public general warehouses: Refrigerated storage capacity in cities having 3 or more plants and at least 2 million cubic feet of usable piling space, October 1, 1961

City and State 1/	Plants	Gross space			Usable piling space		
		Zero° F. or below	Above 0° F. to 50° F.	Total	Zero° F. or below	Above 0° F. to 50° F.	Total
		1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.	1,000 cu. ft.
Portland, Maine.....	3	2,474	310	2,784	1,817	200	2,017
Boston, Mass.....	15	11,627	2,742	14,369	7,663	1,980	9,643
New York, N. Y. & Northeastern N. J... Albany, Schenectady & Troy, N. Y.....	29	27,116	12,499	39,615	19,538	8,727	28,265
Buffalo, N. Y.....	3	2,367	1,673	4,040	1,855	1,236	3,091
Rochester, N. Y.....	8	3,006	1,608	4,614	2,115	1,209	3,324
Philadelphia, Pa.....	6	3,144	1,610	4,754	2,251	1,264	3,515
Pittsburgh, Pa.....	15	10,856	2,057	12,913	6,990	1,396	8,386
Cincinnati, Ohio.....	6	4,257	1,900	6,157	3,197	1,285	4,482
Cleveland, Ohio.....	3	2,447	601	3,048	2,097	529	2,626
Chicago, Ill.....	4	6,165	3,265	9,430	4,509	2,229	6,738
Detroit, Mich.....	24	27,980	22,487	50,467	17,065	15,861	32,926
Green Bay, Wis.....	7	6,650	3,079	9,729	5,053	2,133	7,186
Milwaukee, Wis.....	10	1,436	4,234	5,670	914	3,166	4,080
Minn.-St. Paul, Minn..	4	2,083	880	2,963	1,704	654	2,358
St. Louis, Mo.....	8	6,886	1,173	8,059	4,693	736	5,429
Kansas City, Kans.&Mo.	6	5,217	3,987	9,204	3,539	2,640	6,179
Omaha, Nebraska.....	6	14,443	12,955	27,398	10,420	10,036	20,456
Baltimore, Md.....	3	4,563	1,224	5,787	3,274	798	4,072
Norfolk, Va.....	5	3,955	430	4,385	2,819	265	3,084
Atlanta, Ga.....	5	1,745	1,418	3,163	1,244	1,060	2,304
Miami, Florida.....	7	2,821	2,519	5,340	1,859	1,570	3,429
Memphis, Tenn.....	6	4,309	612	4,921	3,639	219	3,858
Nashville, Tenn.....	6	2,491	782	3,273	1,736	450	2,186
Birmingham, Ala.....	4	3,417	1,116	4,533	2,497	820	3,317
New Orleans, La.....	3	1,940	1,177	3,117	1,428	745	2,173
Dallas, Texas.....	5	2,670	1,566	4,236	1,807	1,050	2,857
Fort Worth, Texas.....	3	6,663	3,546	10,209	5,020	2,675	7,695
Denver, Colo.....	3	2,199	1,128	3,327	1,393	789	2,182
Seattle, Wash.....	7	3,565	921	4,486	2,974	712	3,686
Tacoma, Wash.....	7	5,115	922	6,037	3,525	622	4,147
Portland, Ore.....	6	3,037	119	3,156	2,157	83	2,240
Salem, Ore.....	8	5,389	389	5,778	4,337	296	4,633
Los Angeles, Calif....	4	3,354	401	3,755	2,532	338	2,870
Modesto, Calif.....	28	16,712	3,360	20,072	12,130	2,534	14,664
Sacramento, Calif....	3	3,924	99	4,023	3,359	74	3,433
San Francisco, Calif..	4	3,646	232	3,878	2,939	159	3,098
San Jose, Calif.....	11	5,405	1,851	7,256	4,059	1,445	5,504
Total.....	8	6,114	2,127	8,241	4,524	1,732	6,256
Total.....	293	231,188	102,999	334,187	164,672	73,717	238,389

1/ Standard metropolitan areas.