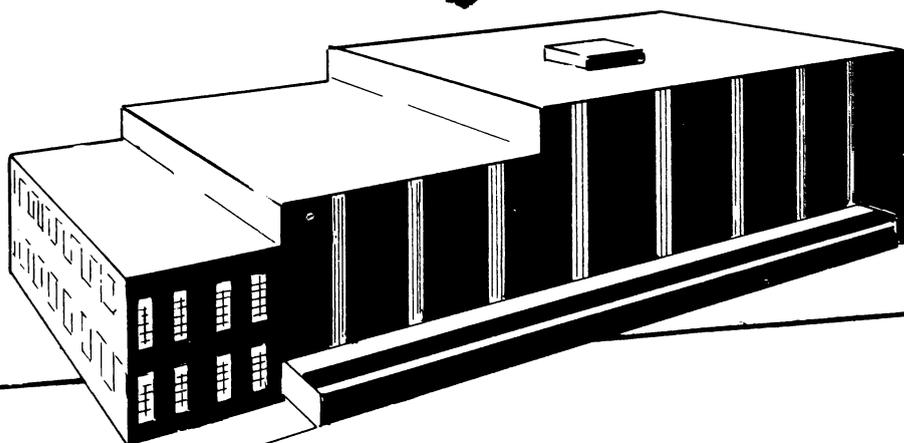


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CAPACITY OF REFRIGERATED WAREHOUSES

in the United States
October 1, 1957



OCTOBER 1958

CRCP REPORTING BOARD
AGRICULTURAL MARKETING SERVICE

A preliminary mimeographed report (CoSt - 2 Prelim 58) was released July 23, 1958, immediately following completion of this survey.

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CAPACITY OF REFRIGERATED WAREHOUSES
IN THE UNITED STATES

October 1, 1957

INTRODUCTION

Scope and Objectives of the Survey

The Department of Agriculture made its first survey of the capacity of refrigerated storage facilities in the United States on October 1, 1921. It reported 544 million cubic feet of gross refrigerated space. ^{1/} Successive surveys have been made in each alternate year since that time. This is a report on the results of the 19th biennial space survey which showed 901 million cubic feet of gross refrigerated space in the United States as of October 1, 1957.

As in previous surveys, every effort was made to include all known public, private, and semiprivate refrigerated storage facilities. Among those included are fish houses, fruit houses, meat-packing plants, frozen food processing facilities and cheese houses having artificially cooled space for the storage of their products. Other types of establishments also were surveyed and included in the findings, for by definition, the survey covered all classes of facilities having space artificially cooled to temperatures of 50° F. or below in which foodstuffs are held for 30 days or more.

Space in wholesaler, jobber, retailer or other classes of business generally is not used for holding products 30 days or more and, therefore, was not included in this report nor was it included in any of the previous surveys. Space in locker plants, too, was excluded as well as refrigerated space maintained by retail food businesses, hotels, and the Armed Services.

The coverage of the refrigerated warehousing industry for this survey was checked against membership listings published by trade associations, by review of trade journals, and other trade media before and during the survey. It is believed that the mailing list compiled from known sources provided practically complete coverage of the industry.

Replies to all questionnaires on warehouse capacity were carefully reviewed and checked against previous reports submitted by the warehouseman. Wherever a doubtful entry was found, confirmation or correction was secured.

^{1/} Included in the 1921 capacity is refrigerated working space in meat-packing plants which, starting with the 1943 survey, was excluded from all successive surveys. Beginning with 1953, meat packers were asked to exclude all smoking and curing rooms, also. Classification of refrigerated space in the 1953 survey was (a) 19° F. and below and (b) above 19° F. to 50° F.

Prepared by Kenneth D. Ackers, Assistant Head, and Melvin R. Banks, Head, Cold Storage Reports Section, under the general supervision of Emerson M. Brooks, Chief, Special Statistics Branch, Agricultural Estimates Division, Agricultural Marketing Service.

The primary objectives of these space surveys are:

1. To ascertain the size of the national refrigerated capacity in order to obtain knowledge of trends, area changes, distribution of space, and other factors important to industry and Government alike.
2. To provide a benchmark by which to check the adequacy of storage occupancy data furnished by the warehousing industry each month as a part of the Cold Storage Report.
3. To provide the warehousing industry with statistical data which may be used for (a) planning an efficient and orderly expansion program in areas that can support additional storage space or (b) identifying those areas where space is in sufficient supply.
4. To aid in locating refrigerated space to facilitate the preservation of perishable foods.

Definitions

The terms used in this report are defined as follows:

Public cold storage. -- Any artificially cooled warehouse where the operator is engaged in storing food commodities requiring refrigeration, 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 animals and 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 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. Companies operating 2 or more plants in the same city or state were counted by the number of plants having a separate mailing address or by the number of plants having a company designation that sets one apart from the other. Thus, if a company had one mailing address but had buildings designated as A, B, and C, it was considered to have 3 plants.

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

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.

Table 1.--Warehouses, all types: Refrigerated storage capacity, United States, October 1, 1957

Type of refrigerated warehouse ^{1/}	Plants	Gross space ^{1/}			Usable piling space ^{1/}		
		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.....	767	331,510	171,487	502,997	237,842	127,190	365,032
Private and semi-private general.....	554	77,319	66,469	143,788	56,478	50,108	106,586
Meat-packing plant.....	171	19,291	42,871	62,162	12,716	27,961	40,677
Apple houses:							
Public.....	112	1,723	40,341	42,064	1,465	33,473	34,938
Private and semi-private.....	1,069	2,923	147,463	150,386	2,450	120,054	122,504
Total.....	2,673	432,766	468,631	901,397	310,951	358,786	669,737

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

Table 2.--Warehouses, all types: Refrigerated storage capacity, United States, 1939-1957

Type of refrigerated storage	1939	1941	1943	1945	1947	1949	1951	1953	1955	1957
	<u>1,000 cu. ft.</u>									
Public ^{1/}	351,368	371,771	389,991	403,832	408,232	413,256	425,114	466,470	498,599	545,061
Private ^{1/}	32,072	43,973	49,544	62,291	83,781	85,417	94,929	118,201	153,079	210,705
Semiprivate ^{1/}	50,438	48,407	42,081	45,254	52,035	85,781	92,744	84,290	92,771	83,469
Meat packing plants ^{2/} ..	312,562	302,232	169,650	134,814	130,993	116,324	98,229	79,089	68,568	62,162
Total.....	746,440	766,383	651,266	646,191	675,041	700,778	711,016	748,050	813,017	901,397

^{1/} Includes apple house refrigerated storage space.

^{2/} Prior to 1943 refrigerated working space in meat packing plants was included.

REFRIGERATED WAREHOUSE SPACE IN THE UNITED STATES

Gross Space

Gross refrigerated warehouse space in the Nation totaled 901 million cubic feet on October 1, 1957 (table 1), according to a survey made by the Crop Reporting Board. This was a net gain of 88 million cubic feet over the previous survey in 1955. Nearly two-thirds of this increase could hold temperatures of zero degrees Fahrenheit and below; the remaining one-third could not hold temperatures below zero (fig. 1). Refrigerated space in public warehouses increased 39 million cubic feet, the survey showed. Gains in all classes of apple house space were 33 million cubic feet. Private and semiprivate warehouse space increased 23 million cubic feet. These increases were partially offset by a net loss of 6 million cubic feet in meat packing establishments. During the 1945-55 period (table 2), total gross space increased at an average rate of 33 million cubic feet per survey. However, growth was quite variable for each type of warehousing activity. For example, public warehouse space increased at an average amount of 22 million cubic feet each 2 years from 1945 to 1955. Private and semiprivate space increased biennially by 16 million cubic feet whereas apple warehouses had a gain of 8 million cubic feet. Space in meat packing plants declined nearly 13 million cubic feet per survey because of the closing of plants in many sections of the country and a change in the definitions of storage space. Total gross and usable refrigerated space by States, regions, and type of warehouse facility are shown in tables 4 and 5.

Zero Space

On October 1, 1957, space that could hold zero degrees Fahrenheit and below totaled 433 million cubic feet, 56 million more than in 1955. See tables 6 and 7 for gross and usable zero warehouse space. By comparison, only 145 million cubic feet existed 10 years earlier. Zero space in the past decade has shown a three-fold increase. Most of the freezer gains took place in public facilities where a net gain of 50 million cubic feet over 1955 was reported. This was almost 1.5 times the 1945-55 average gain of 34 million cubic feet. Private and semiprivate warehouses increased their freezer capacity by 5 million cubic feet between 1955 and 1957. Zero space declined 2 million cubic feet in meat packing plants. The distribution of zero space by type of warehouse facility is shown in fig. 2.

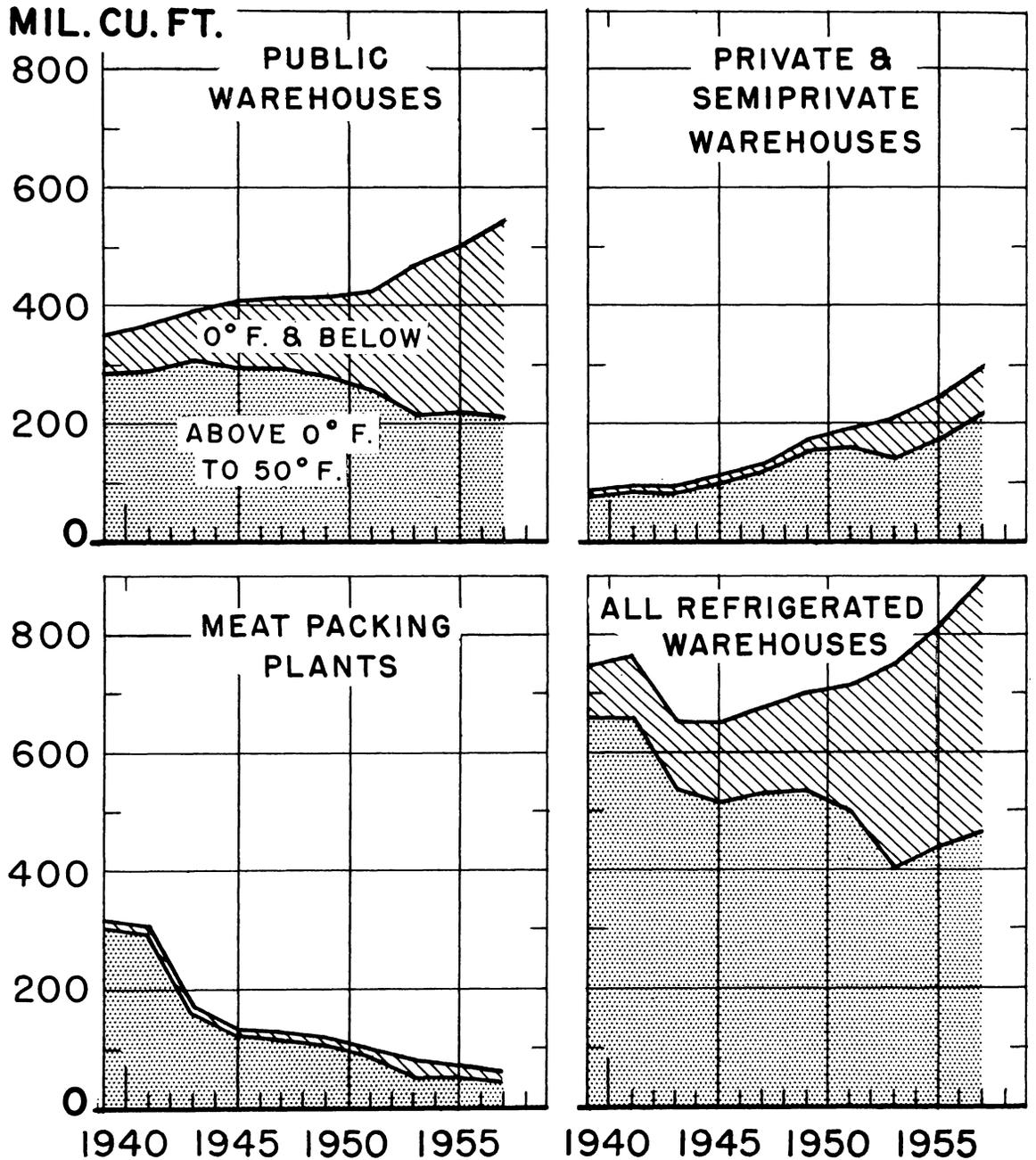
About 83 percent of the freezer space was located in five regions, namely Pacific, Middle Atlantic, East North Central, West North Central, and South Atlantic. Public warehouses, in these regions, accounted for 62 percent of the Nation's freezer space. Nearly 11 percent of the total freezer space was in California's public refrigerated warehouses. This was about one-third more than in public houses operating in New York and twice the space operated for public use in Illinois.

Cooler Space

Space that could hold only temperatures above zero to 50 degrees Fahrenheit increased 32 million cubic feet to 468 million cubic feet by October 1, 1957. See tables 8 and 9 for gross and usable cooler space. Only 10 years earlier, cooler space totaled 530 million cubic feet. Over the years the relative amount of total cooler space has declined. As of the 1957 survey, 52 percent of the

GROSS REFRIGERATED SPACE

Distribution by Temperature Range and Type of Warehouse



U.S. DEPARTMENT OF AGRICULTURE

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Figure 1

total refrigerated space was cooler space. By contrast, 10 years earlier cooler space amounted to 78 percent of the total. The relative distribution of cooler space has also changed. The 1957 survey revealed that 40 percent of the cooler space was in apple houses, 37 percent in public warehouses, 14 percent in private and semiprivate facilities, and 9 percent in meat-packing establishments (fig. 2). Ten years earlier, the distribution was as follows: apple houses, 25 percent; public warehouses, 46 percent; private and semiprivate warehouses, 7 percent; and meat packing plants, 22 percent. The demand for cooler space in warehousing has declined. About 70 percent of the cooler space was located in the Pacific, Middle Atlantic, and East North Central States. This is due to the heavy concentration of public and apple warehouses in these States. Nearly 20 percent of the cooler space in the country is located in the State of Washington. The cooler space in this State consists primarily of apple houses.

GROSS REFRIGERATED SPACE

Distribution by Type of Warehouse, Oct. 1, 1957

TOTAL CAPACITY
(901.4 MIL. CU.FT.)

ABOVE 0°F. TO 50°F.
(468.6 MIL. CU.FT.)

0°F. AND BELOW
(432.8 MIL. CU.FT.)

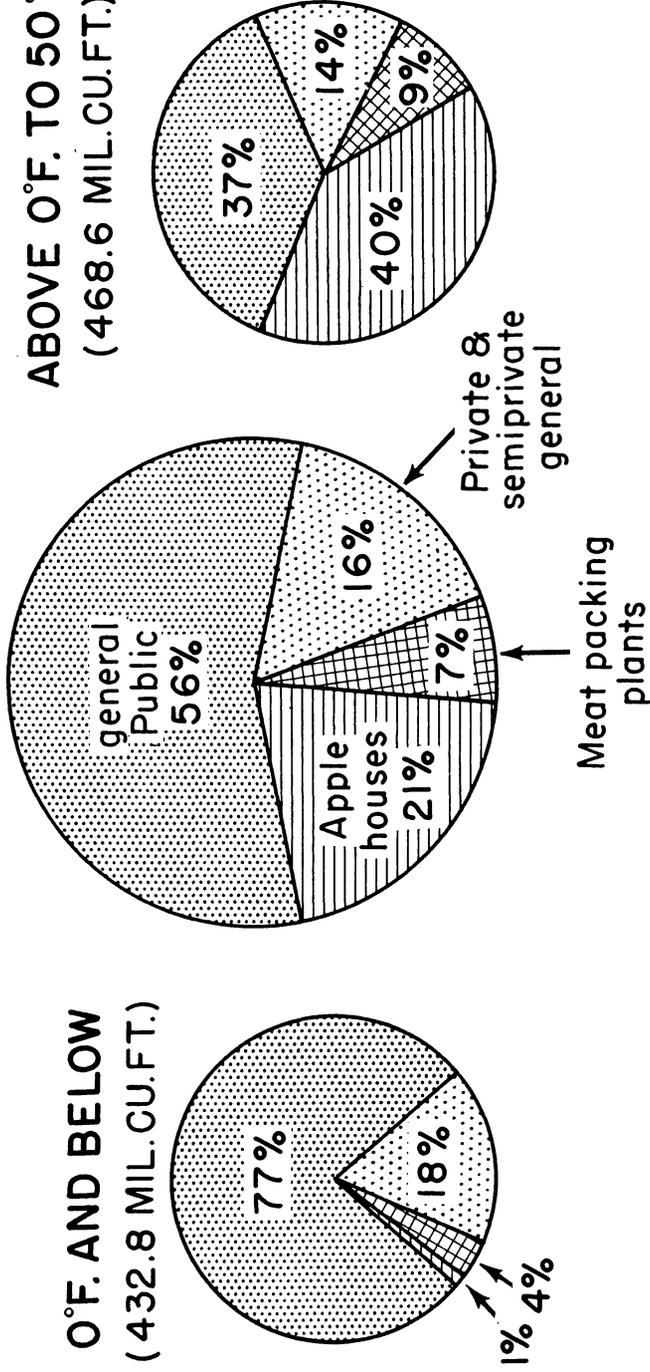


Figure 2

Table 3.--Number of refrigerated warehouses, United States, October 1, 1957

State and region	Total Number	Public Number	Private and semiprivate Number	Meat packers Number	Apple-houses	
					Public Number	Private and semiprivate Number
Maine.....	36	5	5			26
New Hampshire.....	38	{3	{3			{48
Vermont.....	16					91
Massachusetts.....	135	{26	{18		{4	9
Rhode Island.....	13					73
Connecticut.....	78	5				247
New England.....	316	39	26		4	
New York.....	392	89	87	22	30	164
New Jersey.....	81	19	7		6	49
Pennsylvania.....	101	34	15	12	4	36
Middle Atlantic...	574	142	109	34	40	249
Ohio.....	53	13	12	9	4	15
Indiana.....	24	7	{11	11	{9	
Illinois.....	58	30		10		4
Michigan.....	320	22	23	{8	8	{266
Wisconsin.....	127	38	82			285
East North Central	582	110	128	38	21	
Minnesota.....	27	14	8	5		
Iowa.....	33	15	8	10		
Missouri.....	40	{27	4	{10	1/	1/
North Dakota.....	3					
South Dakota.....	4	{11		{7		
Nebraska.....	17		{5	{6		1/
Kansas.....	25	16		6		1/
West North Central	149	83	25	38	1/	1/
Delaware.....	7	3	{7	1/		
Maryland & D. C.....	20	11		1/		4
Virginia.....	67	18	5	{4	1/	28
North Virginia.....	25	5	3			{17
North Carolina.....	18	{14	{6		1/	
South Carolina.....	{48			{7		
Georgia.....		28	9			
Florida.....	55	29	26			
South Atlantic...	240	108	56	13	14	49
Kentucky.....	{43	6	3	{7		
Tennessee.....		18	8			1/
Alabama.....	12	{13	{5	1/		
Mississippi.....	7					
East South Central	62	37	16	1/		1/
Arkansas.....	14	10	1/		1/	
Louisiana.....	15	12	3			
Oklahoma.....	16	7	4	5		
Texas.....	56	32	17	7		
West South Central	101	61	1/	12	1/	
Montana.....	7	4	1/	1/		
Idaho & Wyoming.....	15	6	6			1/
Colorado.....	16	10	1/	{6		
New Mexico.....	3	{5	1/			
Arizona.....	4			1/		
Utah & Nevada.....	11	7	1/	1/		
Mountain.....	56	32	1/	1/		1/
Washington.....	297	35	31	10	25	196
Oregon.....	63	20	26	{9	{6	14
California.....	233	100	96			25
Pacific.....	593	155	153	19	31	235
United States.....	2,673	767	554	171	112	1,069

1/ Not shown separately to avoid disclosure.

Table 4.--Total gross refrigerated space, by type of warehouse, United States, October 1, 1957

State and region	Total 1,000 cu. ft.	Public 1,000 cu. ft.	Private and semiprivate 1,000 cu. ft.	Meat packers 1,000 cu. ft.	Apple-houses	
					Public 1,000 cu. ft.	Private and semiprivate 1,000 cu. ft.
Maine.....	4,619	2,726	745			1,148
New Hampshire.....	1,597	{332	{150			{2,333
Vermont.....	1,218					
Massachusetts.....	26,435	{21,250	{1,679		{643	4,547
Rhode Island.....	1,915					231
Connecticut.....	4,757	1,561				3,196
New England.....	40,541	25,869	2,574		643	11,455
New York.....	95,489	58,714	12,307	3,509	8,631	12,328
New Jersey.....	31,735	23,775	4,517		804	2,639
Pennsylvania.....	38,053	21,475	5,917	2,065	1,724	6,872
Middle Atlantic...	165,277	103,964	22,741	5,574	11,159	21,839
Ohio.....	20,473	16,617	561	2,139	356	800
Indiana.....	6,304	4,274	{10,720	1,286	{1,995	
Illinois.....	61,727	43,783		5,545		428
Michigan.....	37,900	18,237	8,358		469	{10,622
Wisconsin.....	25,557	13,524	9,114	{3,133		
East North Central	151,961	96,435	28,753	12,103	2,820	11,850
Minnesota.....	17,694	10,113	3,405	4,176		
Iowa.....	14,394	6,654	1,605	6,135		
Missouri.....	29,817	{21,481	2,017	{6,129	1/	1/
North Dakota.....	585					
South Dakota.....	3,758	{7,138		{8,663		
Nebraska.....	12,485		{782			
Kansas.....	26,508	22,408		3,625		1/
West North Central	105,241	67,794	7,809	28,728	1/	1/
Delaware.....	1,890	844	{1,896	1/		
Maryland & D. C.....	10,233	8,091		1/		916
Virginia.....	35,677	10,587	6,472	{389	1/	4,357
West Virginia.....	6,740	1,727	1,313			{4,034
North Carolina.....	2,883	{2,767	{416		1/	
South Carolina.....	800			{1,453		
Georgia.....	12,043	10,208	517			
Florida.....	36,766	18,810	17,956			
South Atlantic...	107,032	53,034	28,570	2,218	1/	9,307
Kentucky.....	3,531	3,031	413	{1,097		1/
Tennessee.....	12,056	9,803	868			
Alabama.....	5,342	{5,726	{562	1/		
Mississippi.....	958					
East South Central	21,887	18,560	1,843	1/		1/
Arkansas.....	3,922	3,246	1/		1/	
Louisiana.....	6,225	5,980	245			
Oklahoma.....	7,046	2,741	221	4,084		
Texas.....	26,727	21,738	1,960	3,029		
West South Central	43,920	33,705	1/	7,113	1/	
Montana.....	423	327	1/	1/		
Idaho & Wyoming.....	4,029	2,083	1,379	{828		1/
Colorado.....	5,467	4,656	1/			
New Mexico.....	375	{970	1/			
Arizona.....	914			1/		
Utah & Nevada.....	3,337	2,890	1/	1/		
Mountain.....	14,545	10,926	1/	1/		1/
Washington.....	118,297	18,798	9,921	1,468	11,714	76,396
Oregon.....	31,050	12,133	7,946	{2,339	{1,126	10,408
California.....	101,646	61,779	28,881			8,084
Pacific.....	250,993	92,710	46,748	3,807	12,840	94,888
United States.....	901,397	502,997	143,788	62,162	42,064	150,386

1/ Not shown separately to avoid disclosure.

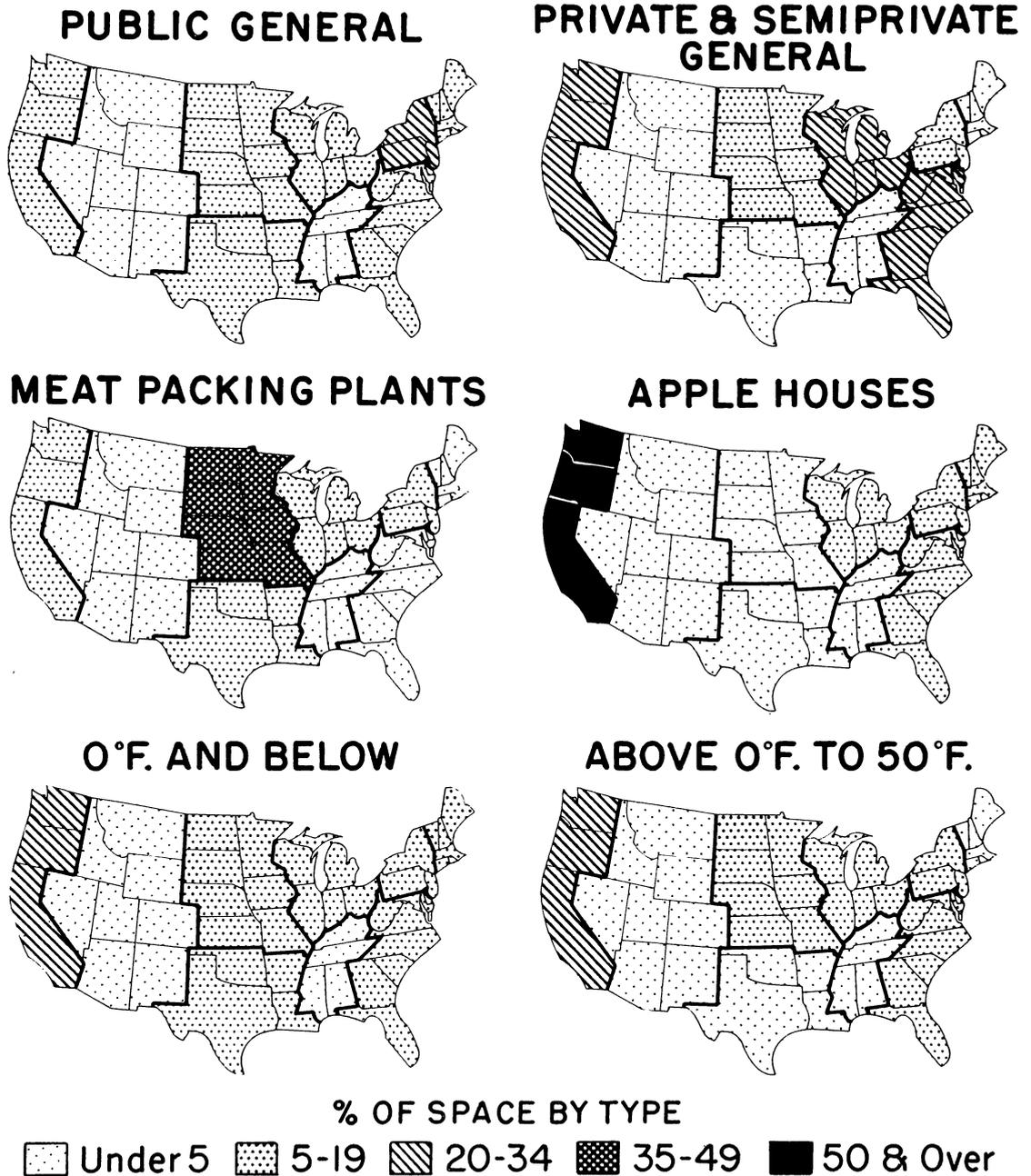
Table 5.--Total usable refrigerated space, by type of warehouse, United States, October 1, 1957

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.....	3,585	2,013	654			918
New Hampshire.....	1,333	(275	(131			(1,945
Vermont.....	1,018					3,641
Massachusetts.....	18,598	(14,429	(1,128		(553	187
Rhode Island.....	1,340					2,703
Connecticut.....	3,908	1,205				9,394
New England.....	29,782	17,922	1,913		553	
New York.....	72,769	43,780	8,714	2,913	7,018	10,344
New Jersey.....	21,369	15,655	2,865		708	2,141
Pennsylvania.....	27,355	15,016	4,260	1,109	1,535	5,435
Middle Atlantic...	121,493	74,451	15,839	4,022	9,261	17,920
Ohio.....	15,205	12,187	414	1,667	294	643
Indiana.....	4,491	3,123	(6,426	695	(1,517	344
Illinois.....	40,136	29,174		3,348		
Michigan.....	29,497	13,565	6,495	(2,377	386	(8,905
Wisconsin.....	19,968	10,706	7,031			9,892
East North Central	109,297	68,755	20,366	8,087	2,197	
Minnesota.....	11,977	6,796	2,643	2,538		
Iowa.....	10,107	4,889	1,129	4,089		
Missouri.....	19,395	(14,800	1,401	(2,977	1/	1/
North Dakota.....	425					
South Dakota.....	2,365	(4,769	(513	(5,801		
Nebraska.....	8,533			2,518		1/
Kansas.....	20,166	17,358		17,923	1/	1/
West North Central	72,968	48,612	5,686			
Delaware.....	1,307	649	(1,455	1/		
Maryland & D. C.....	7,717	5,833		1/		810
Virginia.....	28,762	8,017	5,478	(227	1/	3,704
West Virginia.....	5,230	1,357	916			(3,221
North Carolina.....	2,350	(2,302	(327		1/	
South Carolina.....	688			(1,062		
Georgia.....	8,607	7,224	437			
Florida.....	29,690	15,708	13,982			
South Atlantic...	84,351	41,090	22,595	1,566	11,365	7,735
Kentucky.....	2,915	2,555	284	(720		
Tennessee.....	8,906	7,197	758			1/
Alabama.....	4,174	(4,513	(453	1/		
Mississippi.....	801					
East South Central	16,796	14,265	1,495	1/		1/
Arkansas.....	2,773	2,360	1/		1/	
Louisiana.....	4,596	4,395	201			
Oklahoma.....	4,650	1,899	181	2,570		
Texas.....	19,527	15,781	1,665	2,081		
West South Central	31,546	24,435	1/	4,651	1/	
Montana.....	357	281	1/	1/		
Idaho & Wyoming.....	2,937	1,535	891	(588		1/
Colorado.....	4,394	3,816	1/			
New Mexico.....	305	(673	1/			
Arizona.....	602			1/		
Utah & Nevada.....	2,422	2,111	1/	1/		
Mountain.....	11,017	8,416	1/	1/		1/
Washington.....	93,980	13,642	6,780	1,011	9,953	62,594
Oregon.....	23,360	9,377	6,040	(1,634	(1,032	7,535
California.....	75,147	44,067	22,292			6,530
Pacific.....	192,487	67,086	35,112	2,645	10,985	76,659
United States.....	669,737	365,032	106,586	40,677	34,938	122,504

1/ Not shown separately to avoid disclosure.

GROSS REFRIGERATED SPACE

*% Distribution of Type of Warehouse Space, by Regions,
Oct. 1, 1957*



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Figure 3

COLD STORAGE CAPACITY, BY GEOGRAPHIC REGIONS

For the fifth consecutive survey, the Pacific States led all other regions in the amount of available refrigerated space. On October 1, 1957, some 251 million cubic feet (table 4) was reported in the three West Coast States--Washington, Oregon, and California. Their combined capacity represented 28 percent of all the gross space in the country. The Middle Atlantic States, with 18 percent of the national capacity, ranked second and the East North Central region, with 17 percent of the total gross space, was in third place.

Between October 1, 1955 and October 1, 1957, refrigerated capacity expanded in all geographic regions. The largest gain, 18 percent, was in West Coast plants. It should be noted, however, that some of this increase was due to the inclusion of some apple houses omitted in previous surveys.

Freezer Space

The Pacific Coast region had more sub-zero space, 98 million cubic feet (table 6), than any other region. The Middle Atlantic States were second with 76 million and East North Central States ranked third with 70 million cubic feet. The West North Central and South Atlantic States, each with 59 million cubic feet, tied for fourth place. Thus, five of the nine regions accounted for 83 percent of the freezer space and 87 percent of the total refrigerated space in the United States.

Cooler Space

Nearly one-third of the national cooler space, 153 million cubic feet (table 8), was located in the Pacific Coast States. This was only 19 million cubic feet less than the combined cooler capacity of the second and third ranked regions, the Middle Atlantic and East North Central. See fig. 3 for the distribution of cooler space by geographic regions.

Public Warehouses

Public space was greatest in the Middle Atlantic States, the 1957 survey showed. Of the 503 million cubic feet of public refrigerated space in the country, 104 million were operating in New York, New Jersey, and Pennsylvania. Next in the order of importance were: East North Central, Pacific Coast, and the West North Central States. All areas reported increased capacity of public facilities since the 1955 survey. About 14 million cubic feet was added on the West Coast. This was unmatched by any other region. By comparison, the next largest increase in public refrigerated capacity occurred in the West South Central area where about 6 million cubic feet were added between 1955 and 1957. See fig. 3 for the distribution of warehouse space, by regions.

Private and Semiprivate Warehouses

Private and semiprivate warehouse space was heavily concentrated in the three West Coast States. Nearly one-third of the 144 million cubic feet of national refrigerated space classified as private and semiprivate was located in Washington, Oregon, and California. The East North Central and South Atlantic regions, each with about 29 million cubic feet, accounted for nearly two-fifths of private and semiprivate warehouse space. The Middle Atlantic States were next

Table 6.--Cross refrigerated space, by type of warehouse, United States, October 1, 1957

ZERO°F. AND BELOW

State and region	Total 1,000 cu. ft.	Public 1,000 cu. ft.	Private and semiprivate 1,000 cu. ft.	Meat packers 1,000 cu. ft.	Apple-houses	
					Public 1,000 cu. ft.	Private and semiprivate 1,000 cu. ft.
Maine.....	2,971	2,226	745			
New Hampshire.....	88					
Vermont.....	312	{309	{78			{13
Massachusetts.....	15,751	{15,702	{1,297		{6	9
Rhode Island.....	1,286					23
Connecticut.....	1,381	1,378				3
New England.....	21,789	19,615	2,120		6	48
New York.....	35,502	30,922	3,167	850	247	316
New Jersey.....	20,553	16,743	3,770		24	16
Pennsylvania.....	19,859	14,659	4,131	382	89	598
Middle Atlantic...	75,914	62,324	11,068	1,232	360	930
Ohio.....	11,072	10,610	280	166	16	
Indiana.....	4,417	3,407	{5,839	664	{14	
Illinois.....	30,370	23,509		1,318		36
Michigan.....	14,747	10,867	3,784	{1,600	26	{50
Wisconsin.....	9,129	7,016	533			
East North Central	69,735	55,402	10,436	3,748	56	86
Minnesota.....	13,855	8,069	3,321	2,465		
Iowa.....	9,348	5,594	1,229	2,525		
Missouri.....	15,140	{14,029	164	{1,362	1/	1/
North Dakota.....	119					
South Dakota.....	616	{6,003		{2,012		
Nebraska.....	7,723		{459			
Kansas.....	11,572	10,238		1,199		1/
West North Central	58,673	43,933	5,173	9,563	1/	1/
Delaware.....	1,397	537		1/		
Maryland & D. C.....	7,938	6,848	{1,886	1/		
Virginia.....	5,511	3,432	1,161	{88	1/	
West Virginia.....	1,712	662	870			
North Carolina.....	1,605	{1,880	{155		1/	{180
South Carolina.....	540			{648		
Georgia.....	5,391	4,627	226			
Florida.....	34,507	16,932	17,575			
South Atlantic...	58,601	34,918	21,873	800	830	180
Kentucky.....	1,969	1,772	162			
Tennessee.....	8,269	7,097	813	{394		1/
Alabama.....	3,043	{3,144	{30	1/		
Mississippi.....	143					
East South Central	13,424	12,013	1,005	1/		1/
Arkansas.....	2,795	2,785	1/		1/	
Louisiana.....	4,739	4,552	187			
Oklahoma.....	2,506	1,768	74	664		
Texas.....	16,828	15,172	460	1,196		
West South Central	26,868	24,277	1/	1,860	1/	
Montana.....	189	166	1/	1/		
Idaho & Wyoming.....	2,974	1,745	1,204			1/
Colorado.....	2,939	2,439	1/	{337		
New Mexico.....	241		1/			
Arizona.....	687	{789		1/		
Utah & Nevada.....	2,570	2,435	1/	1/		
Mountain.....	9,600	7,574	1/	1/		1/
Washington.....	25,736	15,716	7,296	702	458	1,564
Oregon.....	16,844	9,828	6,852			
California.....	55,582	45,903	9,243	{476	{13	111
Pacific.....	98,162	71,447	23,391	1,178	471	1,675
United States.....	432,766	331,510	77,319	19,291	1,723	2,923

1/ Not shown separately to avoid disclosure.

Table 7.--Usable refrigerated space, by type of warehouse, United States, October 1, 1957

ZERO°F. AND BELOW

State and region	Total 1,000 cu. ft.	Public 1,000 cu. ft.	Private and semiprivate 1,000 cu. ft.	Meat packers 1,000 cu. ft.	Apple-houses	
					Public 1,000 cu. ft.	Private and semiprivate 1,000 cu. ft.
Maine.....	2,310	1,656	654			
New Hampshire.....	69	{253	{62			{5
Vermont.....	251					9
Massachusetts.....	10,313	{10,320	{843		{4	1
Rhode Island.....	864					2
Connecticut.....	1,067	1,065				17
New England.....	14,874	13,294	1,559		4	
New York.....	26,093	22,455	2,458	722	186	272
New Jersey.....	13,402	11,078	2,296		17	11
Pennsylvania.....	13,779	10,062	2,859	259	84	515
Middle Atlantic...	53,274	43,595	7,613	981	287	798
Ohio.....	8,293	7,967	217	95	14	
Indiana.....	3,213	2,495	{3,254	400	{11	20
Illinois.....	18,157	14,406		784		
Michigan.....	11,309	8,126	3,106	{1,173	22	{42
Wisconsin.....	7,223	5,680	383			62
East North Central	48,195	38,674	6,960	2,452	47	
Minnesota.....	9,516	5,479	2,575	1,462		
Iowa.....	6,728	4,197	734	1,797		
Missouri.....	10,329	{9,695	123	{778	1/	1/
North Dakota.....	270					
South Dakota.....	411	{4,000		{1,277		
Nebraska.....	5,101		{310	665		1/
Kansas.....	8,501	7,761				1/
West North Central	40,856	31,132	3,742	5,979	1/	1/
Delaware.....	915	405	{1,449	1/		
Maryland & D. C.....	5,995	5,012		1/		
Virginia.....	4,136	2,549	816	{43	1/	
West Virginia.....	1,293	552	578			{163
North Carolina.....	1,350	{1,591	{133	{439	1/	
South Carolina.....	473					
Georgia.....	3,768	3,236	192			
Florida.....	28,067	14,366	13,701			
South Atlantic...	45,997	27,711	16,869	526	728	163
Kentucky.....	1,643	1,499	115	{253		
Tennessee.....	6,027	5,088	715			1/
Alabama.....	2,443	{2,524	{24	1/		
Mississippi.....	114					
East South Central	10,227	9,111	854	1/		1/
Arkansas.....	2,054	2,045	1/		1/	
Louisiana.....	3,448	3,299	149			
Oklahoma.....	1,722	1,210	63	449		
Texas.....	12,162	10,777	388	997		
West South Central	19,386	17,331	1/	1,446	1/	
Montana.....	167	147	1/	1/		
Idaho & Wyoming.....	2,067	1,282	765	{208		1/
Colorado.....	2,433	2,094	1/			
New Mexico.....	198	{538	1/			
Arizona.....	444			1/		
Utah & Nevada.....	1,872	1,764	1/	1/		
Mountain.....	7,181	5,825	1/	1/		1/
Washington.....	18,464	11,224	5,058	484	389	1,309
Oregon.....	12,877	7,639	5,159	{260	{10	98
California.....	39,620	32,306	7,025			
Pacific.....	70,961	51,169	17,242	744	399	1,407
United States.....	310,951	237,842	56,478	12,716	1,465	2,450

1/ Not shown separately to avoid disclosure.

with 23 million cubic feet. The rapid rate of growth of private and semiprivate space is shown by the fact that nearly one-sixth of the space was acquired since October 1, 1955 and one-third since October 1, 1953. Only in the West North Central and Mountain regions did private and semiprivate capacity fall below that reported in 1955.

Meat-Packing Plants

Meat packers' storage space was confined largely to the West North Central States. Over 46 percent of their space was in this area. In the East North Central States, there was an additional 20 percent which left about one-third in the remaining regions. The 6 million cubic feet reduction in gross capacity in meat-packing plants during the 1955-57 period was the result of plants closing in East North Central and Middle Atlantic States. This more than offset capacity gains in the West South Central States.

Apple Houses

Over one-half of the apple warehouse space used exclusively for apples and/or pears was located in the Pacific Coast States. The next largest concentration of this type of warehousing activity was found in the Middle Atlantic States. The State of Washington alone had 46 percent of the total apple space. Gains were reported in all regions except in the Mountain States. Gains, however, were greatest in the Pacific States, notably in Washington.

Summary

In general, the gradual shift of warehouse space from east to west has not abated in the last 10 years. In 1947, more than 57 percent of the gross refrigerated warehouse space was located east of the Mississippi River. In 1957 the amount of space east of the river had dropped to 54 percent. Gains in refrigerated capacity in States west of the Mississippi in the decade since 1947 were 125 million cubic feet whereas gains in States east of the Mississippi totaled 101 million.

COLD STORAGE CAPACITY, BY STATES

Some type of warehouse space was reported in every State, the 1957 survey revealed. Within the 48 States and the District of Columbia there were 2,673 plants (table 3) with 901 million cubic feet of gross storage space (table 4). New York, with 392 warehouses, had the greatest number of plants but not the greatest capacity. Its 95 million cubic feet of gross space was exceeded by Washington with 118 million cubic feet and by California with 102 million. Wyoming reported the least amount of space. The relative rankings of each of these States has changed since 1955. In 1955, New York had 90 million cubic feet of gross space compared with Washington's 96 million and California's 89 million. In 1947, New York had more plants (257) and more warehouse space (85 million cubic feet) than any other State.

Four States--Washington, California, New York, and Illinois, each with more than 50 million cubic feet of space on October 1, 1957, comprised nearly 42 percent of the total space in the country (fig. 4). Another 38 percent of the total space was in 11 States where capacities ranged from 25 million to 50 million cubic feet. Thus, 15 States, collectively, accounted for more than 80 percent of the total refrigerated space in the United States.

Warehouse space has increased in all but 9 States and the District of Columbia since October 1955. Reductions in these 9 States arose primarily from space losses of 5 million cubic feet in private and semiprivate warehouses and 4 million in meat-packing establishments.

In California, Michigan, New York, Pennsylvania, Virginia, and Washington gross space increased by more than 4 million cubic feet each (fig. 5). Cumulatively, these gains amounted to 61 million cubic feet or 70 percent of the overall net increase in the country. Capacity gains in apple storages amounted to 28 million cubic feet in the above mentioned States or about 84 percent of the total increase in national apple space. Private and semiprivate warehouse space increased 19 million cubic feet, equivalent to 84 percent of the national capacity gain in this type of warehouse activity. Likewise, 48 percent of the net increase in public warehouse capacity could be accounted for in the public facilities located in these 6 States.

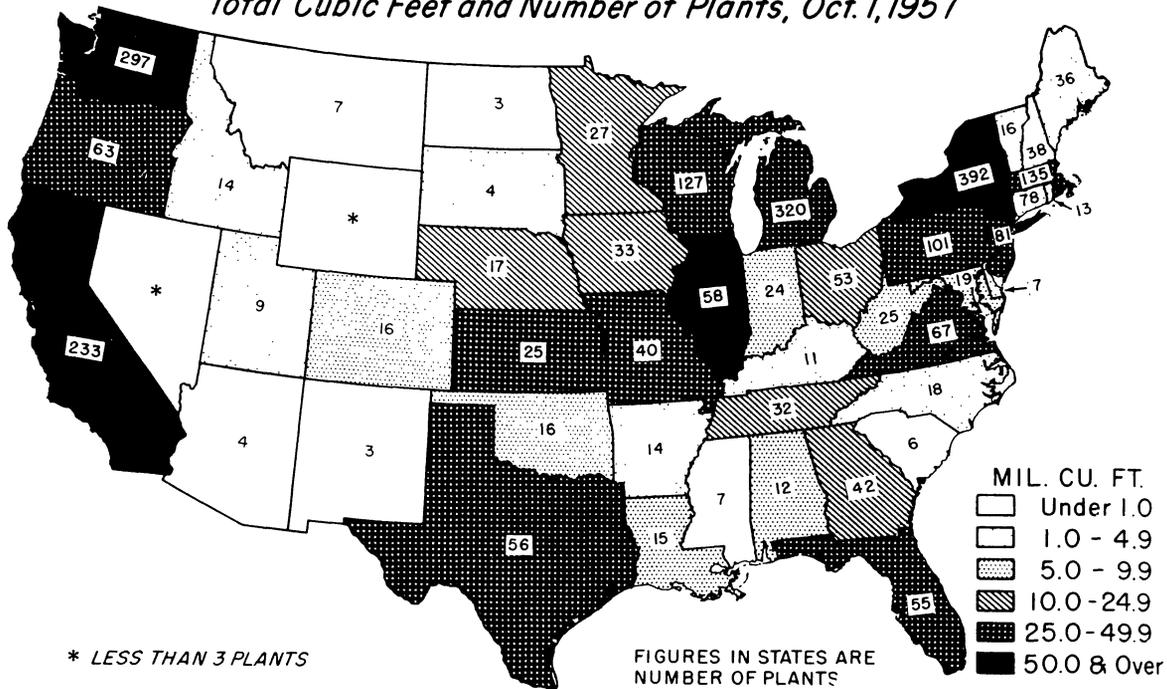
Capacity increases in excess of 4 million cubic feet per State were not the rule. In most cases, space gains were less than 1 million cubic feet. In 5 States, increases ranged from more than 1 million to less than 2 million cubic feet. In 6 of the States, the capacities increased by more than 2 but less than 4 million cubic feet (fig. 5).

Five States--California, New York, Florida, Illinois, and Washington--had 42 percent of the space that could hold temperatures of zero degrees or below. California led all other States with 56 million cubic feet of freezer space. In second place was New York with 36 million; in third place was Florida with 35 million. Ranked fourth with 30 million cubic feet was Illinois. Fifth was Washington reporting 26 million.

Nearly 50 percent of the refrigerated capacity in the temperature range of zero to 50 degrees was located in 4 States. Leading all others was Washington with 92 million cubic feet. This exceeded second-ranked New York by one-third and third-ranked California by one-half. Virginia had only one-third the cooler space of Washington.

DISTRIBUTION BY STATES OF GROSS REFRIGERATED SPACE

Total Cubic Feet and Number of Plants, Oct. 1, 1957



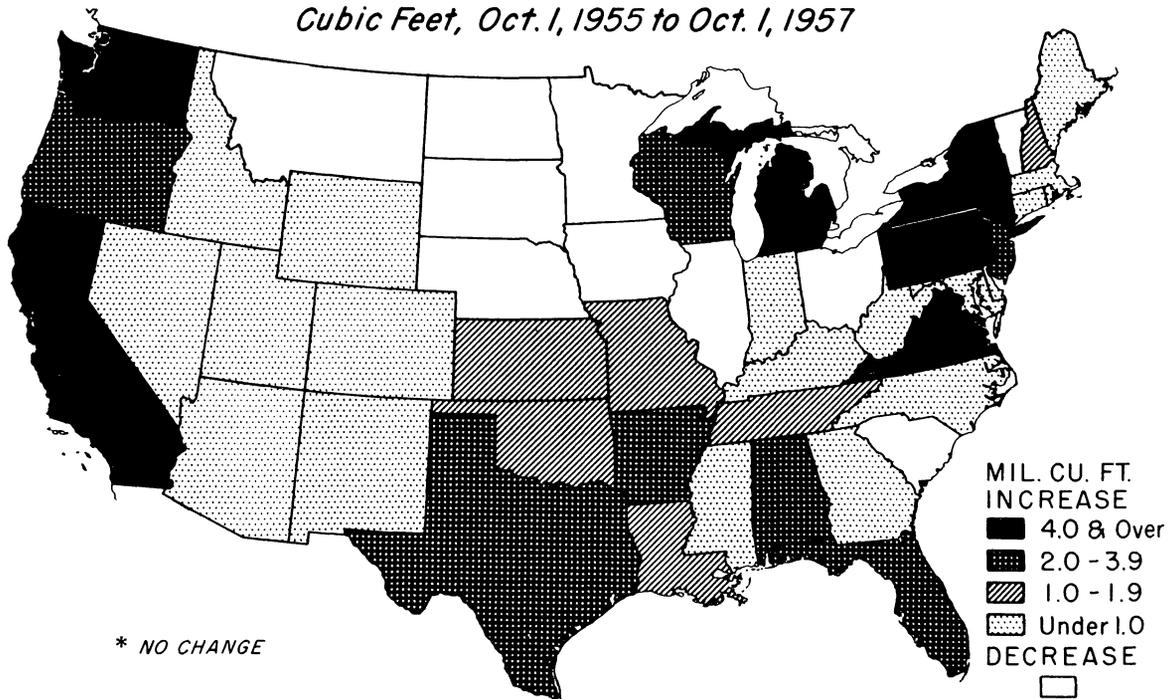
U.S. DEPARTMENT OF AGRICULTURE

NEG. 6381-58 (7) AGRICULTURAL MARKETING SERVICE

Figure 4

CHANGES IN GROSS REFRIGERATED SPACE, BY STATES

Cubic Feet, Oct. 1, 1955 to Oct. 1, 1957



U.S. DEPARTMENT OF AGRICULTURE

NEG. 6380-58 (7) AGRICULTURAL MARKETING SERVICE

Figure 5

Public Warehouses

For the first time on record, California led New York in the amount of available public warehouse space. California reported 62 million cubic feet of space being operated for public use while New York reported 59 million. Illinois ranked third with 44 million cubic feet. Combined public warehouse space in these three States amounted to one-third of the total. Public space was available in every State but Wyoming. Five States--California, Michigan, Alabama, Kansas, and Florida--reported net gains from 1955 in public warehouse space in excess of 2 million cubic feet. Accumulated net gains in these States amounted to 23 million cubic feet compared with an over-all net gain of 39 million cubic feet of public space from October 1, 1955 to October 1, 1957. California reported the largest net change, a gain of 12 million cubic feet. On the other hand, Illinois reported the largest net loss in public space, nearly 2 million cubic feet.

Private and Semiprivate Warehouses

California reported 29 million cubic feet of private and semiprivate warehouse space. This was the largest figure for any State. California has maintained its lead since 1951. Alone, it had one-fifth of all the private and semiprivate space. More than 55 percent of the country's private and semiprivate capacity could be found in California, Florida, New York, Illinois, and Washington. Florida, second-ranked, with 18 million cubic feet, has maintained this position since 1955. New York, in third place, reported 12 million cubic feet. Illinois, usually among the top three, dropped to fourth with only 10 million. In fifth place, was Washington with almost 10 million cubic feet. Net gains in Michigan, New York, Washington, and Virginia amounted to 70 percent of the country's gain in private and semiprivate warehouse space. Michigan reported a 5 million net gain. Washington and Virginia each reported gains of about 3 million cubic feet. Reductions under 1 million cubic feet occurred in several States. In Illinois and Nebraska, losses in excess of 2 million cubic feet were reported.

Meat-Packing Plants

Refrigerated storage space maintained by meat-packers and meat processors totaled 62 million cubic feet on October 1, 1957, down 6 million since 1955. The major portion of the storage area was located in 12 midwestern States. Iowa, Missouri, and Illinois were, by far, the leading locations for this type of warehousing activity. In each of these States, approximately 10 percent of the national total was located. Meat-packing capacity has long been declining. Each successive survey has shown the industry is not replacing facilities being closed or razed. The 1957 survey, for example, revealed that more States reported net losses in meat-packing space than reported gains. State reductions were largest in Illinois and New York where the combined loss amounted to 4 million cubic feet. A gain of 2.5 million cubic feet was reported in Oklahoma and Texas.

Apple Houses

Apple warehouse space increased in nearly every State reporting this type of facility. Gains totaled nearly 33 million cubic feet. This brought the country's apple storage space to 192 million cubic feet on October 1, 1957. Nearly 46 percent of this space was in Washington. New York, with 11 percent, ranked second

Table 8.--Gross refrigerated space, by type of warehouse, United States, October 1, 1957

State and region	ABOVE ZERO°F. TO 50°F.					
	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.....	1,648	500				1,148
New Hampshire.....	1,509	{23	{72			{2,320
Vermont.....	906					
Massachusetts.....	10,684	{5,548	{382		{637	4,538
Rhode Island.....	629					208
Connecticut.....	3,376	183				3,193
New England.....	18,752	6,254	454		637	11,407
New York.....	59,987	27,792	9,140	2,659	8,384	12,012
New Jersey.....	11,182	7,032	747		780	2,623
Pennsylvania.....	18,194	6,816	1,786	1,683	1,635	6,274
Middle Atlantic...	89,363	41,640	11,673	4,342	10,799	20,909
Ohio.....	9,401	6,007	281	1,973	340	800
Indiana.....	1,887	867	{4,881	622	{1,981	
Illinois.....	31,357	20,274		4,227		392
Michigan.....	23,153	7,370	4,574	{1,533	443	{10,572
Wisconsin.....	16,428	6,508	8,581			
East North Central	82,226	41,026	18,317	8,355	2,764	11,764
Minnesota.....	3,839	2,044	84	1,711		
Iowa.....	5,046	1,060	376	3,610		
Missouri.....	14,677	{7,452	1,853	{4,767	1/	1/
North Dakota.....	166					
South Dakota.....	3,142	{1,135		{6,651		
Nebraska.....	4,762		{323			
Kansas.....	14,936	12,170		2,426		1/
West North Central	46,568	23,861	2,636	19,165	1/	1/
Delaware.....	493	307	{10	1/		
Maryland & D. C.....	2,295	1,243		1/		916
Virginia.....	30,166	7,155	5,311	{301	1/	4,357
West Virginia.....	5,028	1,065	443			{3,854
North Carolina.....	1,278	{887	{261		1/	
South Carolina.....	260			{805		
Georgia.....	6,652	5,581	291			
Florida.....	2,259	1,878	381			
South Atlantic...	48,431	18,116	6,697	1,418	13,073	9,127
Kentucky.....	1,562	1,259	251	{703		
Tennessee.....	3,787	2,706	55			1/
Alabama.....	2,299	{2,582	{532	1/		
Mississippi.....	815					
East South Central	8,463	6,547	838	1/		1/
Arkansas.....	1,127	461	1/		1/	
Louisiana.....	1,486	1,428	58			
Oklahoma.....	4,540	973	147	3,420		
Texas.....	9,899	6,566	1,500	1,833		
West South Central	17,052	9,428	1/	5,253	1/	
Montana.....	234	161	1/	1/		
Idaho & Wyoming.....	1,055	338	175	{491		1/
Colorado.....	2,528	2,217	1/			
New Mexico.....	134	{181	1/			
Arizona.....	227			1/		
Utah & Nevada.....	767	455	1/	1/		
Mountain.....	4,945	3,352	1/	1/		1/
Washington.....	92,561	3,082	2,625	766	11,256	74,832
Oregon.....	11,206	2,305	1,094	{1,863	{1,113	10,408
California.....	46,064	15,876	19,638			7,973
Pacific.....	152,831	21,263	23,357	2,629	12,369	93,213
United States.....	468,631	171,487	66,469	42,871	40,341	147,463

1/ Not shown separately to avoid disclosure.

Table 9.--Usable refrigerated space, by type of warehouse, United States, October 1, 1957

ABOVE ZERO°F. TO 50°F.

State and region	Total 1,000 cu. ft.	Public 1,000 cu. ft.	Private and semiprivate 1,000 cu. ft.	Meat packers 1,000 cu. ft.	Apple-houses	
					Public 1,000 cu. ft.	Private and semiprivate 1,000 cu. ft.
Maine.....	1,275	357				918
New Hampshire.....	1,264	(22	(69			(1,940
Vermont.....	767					3,632
Massachusetts.....	8,285	(4,109	(285		(549	186
Rhode Island.....	476					2,701
Connecticut.....	2,841	140				9,377
New England.....	14,908	4,628	354		549	
New York.....	46,676	21,325	6,256	2,191	6,832	10,072
New Jersey.....	7,967	4,577	569		691	2,130
Pennsylvania.....	13,576	4,954	1,401	850	1,451	4,920
Middle Atlantic...	68,219	30,856	8,226	3,041	8,974	17,122
Ohio.....	6,912	4,220	197	1,572	280	643
Indiana.....	1,278	628	(3,172	295	(1,506	
Illinois.....	21,979	14,768		2,564		324
Michigan.....	18,188	5,439	3,389	(1,204	364	(8,863
Wisconsin.....	12,745	5,026	6,648			9,830
East North Central	61,102	30,081	13,406	5,635	2,150	
Minnesota.....	2,461	1,317	68	1,076		
Iowa.....	3,379	692	395	2,292		
Missouri.....	9,066	(5,105	1,278	(2,199	1/	1/
North Dakota.....	155					
South Dakota.....	1,954	(769		(4,524		
Nebraska.....	3,432		(203			
Kansas.....	11,665	9,597		1,853		1/
West North Central	32,112	17,480	1,944	11,944	1/	1/
Delaware.....	392	244	(6	1/		
Maryland & D. C.....	1,722	821		1/		810
Virginia.....	24,626	5,468	4,662	(184	1/	3,704
West Virginia.....	3,937	805	338			(3,058
North Carolina.....	1,000	(711	(194		1/	
South Carolina.....	215			(623		
Georgia.....	4,839	3,988	245			
Florida.....	1,623	1,342	281			
South Atlantic...	38,354	13,379	5,726	1,040	10,637	7,572
Kentucky.....	1,272	1,056	169	(467		
Tennessee.....	2,879	2,109	43			1/
Alabama.....	1,731	(1,989	(429	1/		
Mississippi.....	687					
East South Central	6,569	5,154	641	1/		1/
Arkansas.....	719	315	1/		1/	
Louisiana.....	1,148	1,096	52			
Oklahoma.....	2,928	689	118	2,121		
Texas.....	7,365	5,004	1,277	1,084		
West South Central	12,160	7,104	1/	3,205	1/	
Montana.....	190	134	1/	1/		
Idaho & Wyoming.....	870	253	126	(380		1/
Colorado.....	1,961	1,722	1/			
New Mexico.....	107	(135	1/			
Arizona.....	158			1/		
Utah & Nevada.....	550	347	1/	1/		
Mountain.....	3,836	2,591	1/	1/		1/
Washington.....	75,516	2,418	1,722	527	9,564	61,285
Oregon.....	10,483	1,738	881	(1,374	(1,022	7,535
California.....	35,527	11,761	15,267			6,432
Pacific.....	121,526	15,917	17,870	1,901	10,586	75,252
United States.....	358,786	127,190	50,108	27,961	33,473	120,054

1/ Not shown separately to avoid disclosure.

while Virginia was in third place with nearly 10 percent. Michigan and Oregon each had more than 5 percent of the total apple space. These five States accounted for more than three-fourths of the total apple capacity. During the 2 years ended October 1, 1957, 18 million cubic feet of apple storage space was added in Washington, 4 million in Virginia, and 2 million in New York.

Summary

In summary, more than two-fifths of the country's warehouse space was operated in Washington, California, New York, and Illinois. Since the 1955 survey, warehouse space increased in all but nine States and the District of Columbia. The largest gains were in California, Michigan, New York, Pennsylvania, Virginia, and Washington. More than 80 percent of the total warehouse gains could be attributed to increases in public and apple warehouse space. The actual increase in apple warehouse space between 1955 and 1957 was less than the survey would indicate because of the inclusion of apple warehouse space in Pacific Coast States not reported in earlier surveys.

REFRIGERATED STORAGE CAPACITY, BY CITIES ^{1/}

Warehouses, All Types

The development of the refrigerated warehousing industry is directly associated with the growth and expansion of cities into large metropolitan areas. As these population centers increased, so did the need for storage facilities for the storage and distribution of food. As a result, the major portion of our country's refrigerated storage capacity is highly concentrated within a small number of metropolitan areas of high population density.

Table 11 lists metropolitan areas having at least 3 million cubic feet (gross) and at least 3 warehouses. The 36 cities shown accounted for 43 percent of all the refrigerated space in the country. Only 25 percent of the plants, however, were located within their areas. More than half (54 percent) of all the zero space in the United States could be accounted for by the facilities in these 36 cities. Foremost among them was Chicago with 52 million cubic feet of refrigerated space. New York City, which for survey purposes includes northeastern New Jersey, ranked second with 48 million cubic feet. The combined capacities of Chicago and New York were larger than the 5 next ranked cities by size of storage, namely, Kansas City, Los Angeles, Philadelphia, St. Louis, and Boston. Rounding out the 10 leading cities were Dallas, Detroit, and San Jose. Each of these cities had at least 11 million cubic feet of gross space.

Public Warehouses

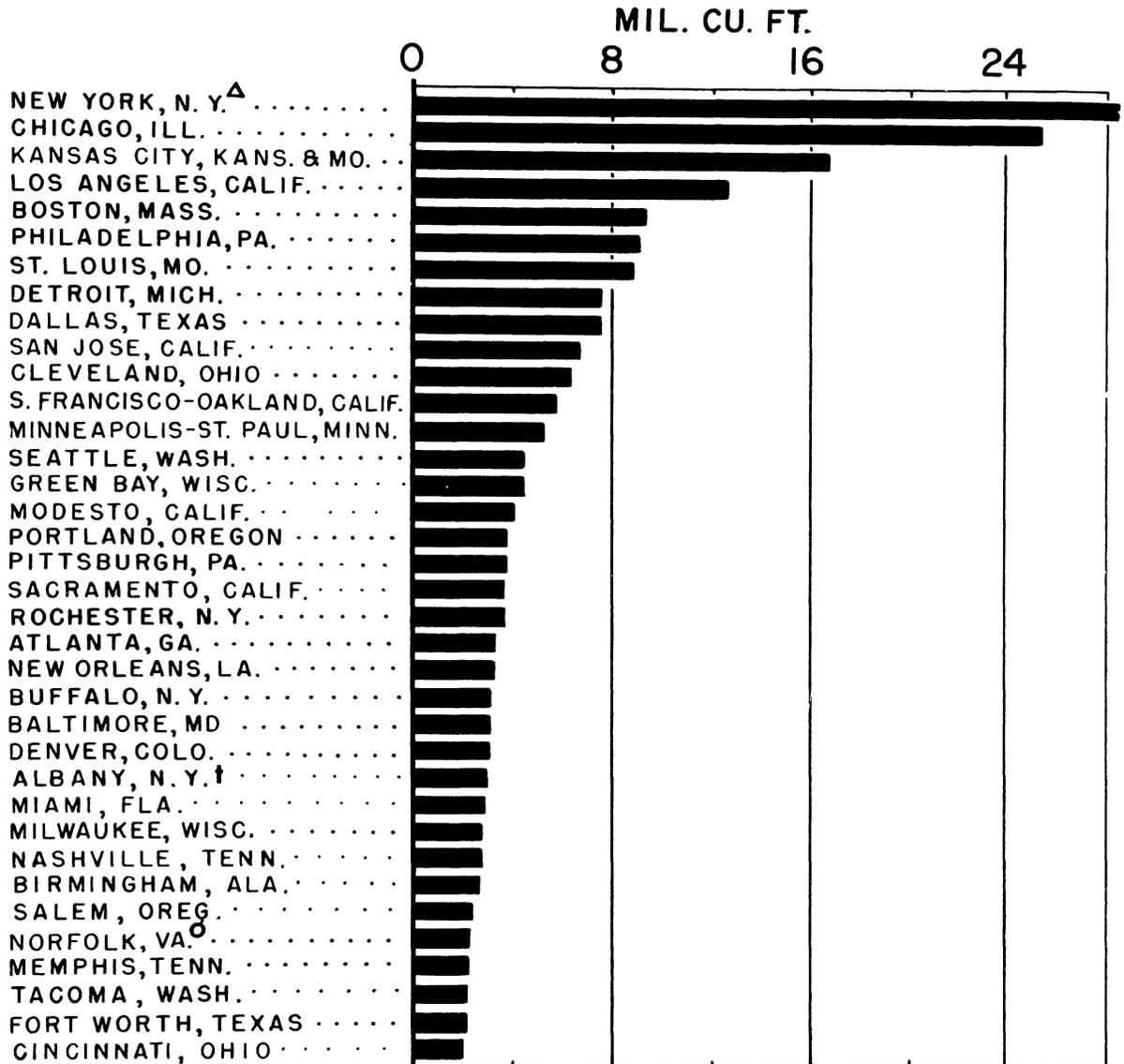
More than three-quarter (76 percent) of the national refrigerated usable piling capacity capable of holding zero degrees Fahrenheit or lower was for public use, the October 1957 survey showed. The major portion of the public warehouse capacity, 60 percent, was located in the 36 cities shown in table 12. Collectively, these cities accounted for 47 percent of the freezer space in all classes of warehouses in the country and 21 percent of all the cooler space.

More public piling space was found in New York City than in any other metropolitan area. With 29 million cubic feet, New York's capacity was almost 4 million greater than Chicago's which ranked second. Kansas City with 17 million; Los Angeles with 13 million; and Boston with 9 million comprised the 5 leading storage areas with public space. Figure 6 shows graphically the capacities in each of the 36 metropolitan areas.

^{1/} Warehouse capacity in each of the cities shown in tables 11 and 12 includes all refrigerated facilities within the city named and in the closely linked surrounding area.

CITIES* WITH 2 MILLION OR MORE CUBIC FEET USABLE PILING SPACE

Each Having 3 or More Public General Refrigerated Warehouses



*STANDARD METROPOLITAN AREAS

†INCLUDES SCHENECTADY AND TROY

ΔINCLUDES NORTHEASTERN NEW JERSEY

○INCLUDES PORTSMOUTH AND NEWPORT NEWS

U.S. DEPARTMENT OF AGRICULTURE

NEG. 1071-58(7) AGRICULTURAL MARKETING SERVICE

Figure 6

Table 10. --Public general warehouses: Percentage of usable piling space occupied at end month, 1946 - 57

Cooler

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	<u>Pct.</u>											
1946.....	60	62	67	75	77	79	76	80	78	80	77	69
1947.....	65	62	61	65	68	74	77	76	73	76	78	74
1948.....	69	65	59	62	65	67	67	65	64	64	59	54
1949.....	52	48	48	49	50	52	53	53	60	68	67	64
1950.....	59	55	54	54	56	60	61	64	63	72	71	67
1951.....	65	60	60	59	62	65	64	65	65	69	66	63
1952.....	59	57	59	59	61	62	63	64	65	69	67	64
1953.....	61	57	56	57	61	61	62	64	65	70	67	63
1954.....	60	58	59	61	64	64	63	65	67	74	72	67
1955.....	63	60	58	60	60	61	62	64	64	68	65	60
1956.....	58	58	55	56	57	59	60	63	64	71	66	61
1957.....	57	55	55	54	55	57	57	59	60	63	59	55

Freezer

1946.....	83	81	80	79	80	80	86	88	87	87	85	86
1947.....	84	82	80	73	74	78	79	80	81	83	84	85
1948.....	84	81	75	70	70	71	72	72	71	72	72	72
1949.....	71	68	64	60	59	61	63	66	67	70	73	76
1950.....	75	74	69	67	64	69	71	74	74	78	79	81
1951.....	80	76	72	70	71	73	76	78	81	83	83	83
1952.....	81	81	78	76	77	78	78	77	77	78	78	79
1953.....	79	76	73	70	69	70	73	76	79	81	80	78
1954.....	77	75	73	72	72	73	75	77	80	82	81	78
1955.....	76	71	68	66	65	66	68	70	71	74	73	72
1956.....	70	66	64	63	64	65	68	70	72	76	77	75
1957.....	72	68	66	64	65	68	70	72	73	75	73	69

Table 11.--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, 1957

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.....	23	10,099	4,723	14,822	6,331	3,546	9,877
New York, N. Y. & Northeastern, N. J... Albany, Schenectady & Troy, N. Y.....	80	30,143	17,519	47,662	20,541	12,174	32,715
Buffalo, N. Y.....	9	2,577	1,743	4,320	2,060	1,295	3,355
Rochester, N. Y.....	38	3,044	6,348	9,392	2,191	5,143	7,334
Philadelphia, Pa.....	10	2,595	4,240	6,835	1,748	3,425	5,173
Pittsburgh, Pa.....	40	12,051	5,558	17,609	7,743	4,192	11,935
	8	3,541	3,244	6,785	2,701	2,087	4,788
Cincinnati, Ohio.....	5	2,464	1,332	3,796	1,848	1,172	3,020
Cleveland, Ohio.....	8	5,149	4,432	9,581	3,647	2,972	6,619
Chicago, Ill.....	31	28,304	24,134	52,438	16,574	16,546	33,120
Detroit, Mich.....	53	5,377	6,374	11,751	3,977	4,832	8,809
Grand Rapids, Mich.....	74	260	3,601	3,861	187	2,991	3,178
Green Bay, Wis.....	19	4,492	2,179	6,671	3,689	1,598	5,287
Milwaukee, Wis.....	8	2,758	1,881	4,639	2,054	1,451	3,505
Minn.-St. Paul, Minn... Kansas City, Kans. & Mo. St. Louis, Mo.....	10	7,591	2,855	10,446	5,158	1,879	7,037
Omaha, Nebr.....	10	10,647	12,275	22,922	7,987	9,644	17,631
Wichita, Kans.....	18	8,237	8,546	16,783	5,743	5,999	11,742
	8	6,379	4,163	10,542	4,166	3,028	7,194
	4	2,442	2,280	4,722	1,780	1,723	3,503
Baltimore, Md.....	8	4,099	545	4,644	2,922	338	3,260
Atlanta, Ga.....	6	2,839	2,378	5,217	1,827	1,451	3,278
Orlando, Fla.....	5	5,698		5,698	4,476		4,476
Nashville, Tenn.....	8	2,899	1,359	4,258	2,095	1,048	3,143
New Orleans, La.....	7	3,176	1,272	4,448	2,266	963	3,229
Oklahoma City, Okla....	6	1,743	3,485	5,228	1,182	2,175	3,357
Dallas, Tex.....	7	8,140	4,221	12,361	5,795	2,946	8,741
Denver, Colo.....	12	2,301	2,176	4,477	1,884	1,644	3,528
Seattle, Wash.....	22	6,837	2,630	9,467	4,868	1,893	6,761
Portland, Ore.....	17	5,899	992	6,891	4,644	792	5,436
Fresno, Calif.....	18	1,204	3,085	4,289	789	2,505	3,294
Los Angeles, Calif.....	42	17,125	5,571	22,696	11,499	4,441	15,940
Modesto, Calif.....	6	4,794	789	5,583	4,153	591	4,744
Sacramento, Calif.....	6	4,036	1,403	5,439	3,233	1,168	4,401
San Francisco-Oakland, Calif.....	18	6,361	2,862	9,223	4,081	1,955	6,036
San Jose, Calif.....	15	8,131	3,558	11,689	5,936	2,715	8,651
Stockton, Calif.....	17	1,222	4,936	6,158	758	3,671	4,429
Total.....	676	234,654	158,689	393,343	162,533	115,993	278,526

1/ Standard metropolitan areas.

Table 12. --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, 1957

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.....	14	10,048	4,134	14,182	6,296	3,039	9,335
New York, N. Y. & Northeastern N. J....	30	28,577	13,931	42,508	19,530	9,632	29,162
Albany, Schenectady & Troy, N. Y.....	3	2,217	1,633	3,850	1,786	1,216	3,002
Buffalo, N. Y.....	8	2,240	1,931	4,171	1,569	1,544	3,113
Rochester, N. Y.....	7	2,291	2,809	5,100	1,492	2,173	3,665
Philadelphia, Pa.....	15	11,704	2,273	13,977	7,490	1,625	9,115
Pittsburgh, Pa.....	4	2,870	2,363	5,233	2,202	1,605	3,807
Cincinnati, Ohio.....	3	2,457	221	2,678	1,842	184	2,026
Cleveland, Ohio.....	4	4,992	4,035	9,027	3,561	2,738	6,299
Chicago, Ill.....	21	22,394	16,709	39,103	13,435	12,019	25,454
Detroit, Mich.....	8	5,376	4,749	10,125	3,977	3,507	7,484
Green Bay, Wisc.....	7	4,122	1,252	5,374	3,437	918	4,355
Milwaukee, Wisc.....	5	2,198	1,308	3,506	1,719	994	2,713
Minn.-St. Paul, Minn...	8	6,094	1,453	7,547	4,237	956	5,193
St. Louis, Mo.....	8	6,906	5,096	12,002	4,815	3,945	8,760
Kansas City, Kans. & Mo.	6	9,491	11,936	21,427	7,357	9,399	16,756
Baltimore, Md.....	5	4,007	410	4,417	2,856	246	3,102
Norfolk, Va.....	4	1,601	1,436	3,037	1,240	1,094	2,334
Atlanta, Ga.....	5	2,744	2,367	5,111	1,753	1,444	3,197
Miami, Fla.....	7	3,558	200	3,758	2,767	175	2,942
Memphis, Tenn.....	6	2,452	639	3,091	1,709	493	2,202
Nashville, Tenn.....	4	2,524	1,125	3,649	1,851	839	2,690
Birmingham, Ala.....	4	2,180	1,235	3,415	1,715	918	2,633
New Orleans, La.....	6	3,109	1,272	4,381	2,213	963	3,176
Dallas, Tex.....	4	7,948	2,328	10,276	5,630	1,851	7,481
Ft. Worth, Tex.....	3	2,200	985	3,185	1,362	711	2,073
Denver, Colo.....	7	1,977	1,866	3,843	1,687	1,404	3,091
Seattle, Wash.....	7	3,999	1,848	5,847	3,029	1,383	4,412
Tacoma, Wash.....	7	3,069	193	3,262	1,964	128	2,092
Portland, Ore.....	8	4,398	486	4,884	3,478	368	3,846
Salem, Ore.....	4	2,902	303	3,205	2,152	271	2,423
Los Angeles, Calif.....	30	15,068	3,211	18,279	10,067	2,521	12,588
Modesto, Calif.....	3	4,502	105	4,607	3,905	80	3,985
Sacramento, Calif.....	5	4,036	600	4,636	3,233	443	3,676
San Francisco, Calif...	14	6,050	2,602	8,652	3,902	1,813	5,715
San Jose, Calif.....	10	6,458	2,864	9,322	4,556	2,052	6,608
Total.....	294	208,759	101,908	310,667	145,814	74,691	220,505

^{1/} Standard metropolitan areas.