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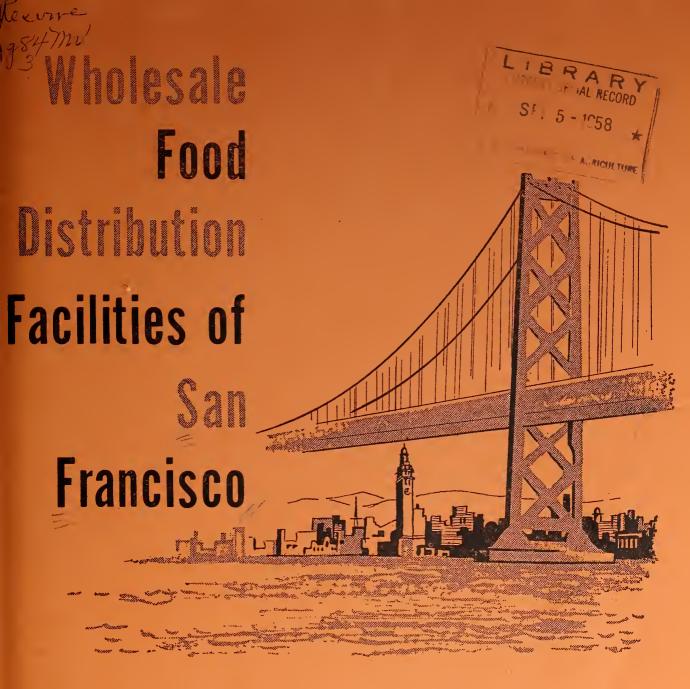




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Marketing Research Report No. 226

Marketing Research Division

Agricultural Marketing Service

U. S. DEPARTMENT OF AGRICULTURE

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Summary

This study of the wholesale market facilities in San Francisco was made with the cooperation of the California Department of Agriculture at the invitation of the Mayor of San Francisco. It was prompted principally by the Agricultural Com-mittee of the San Francisco Chamber of Commerce. The study covers the wholesale handling of fruits, vegetables, poultry, eggs, dairy products, meat, meat products, dry groceries, and frozen food in San Francisco—products with a total annual volume of about 47,500 carlot equivalents and a value of approximately \$500 million.

San Francisco is a major center for the wholesale distribution of many food items in the northern half of California, furnishing a large part of the supply of food to the 3.5 million persons who live

in the San Francisco Bay area.

The congestion and inefficiencies of the present wholesale food distribution facilities have been known for many years and have prompted many efforts to relocate them. The need for modernization was emphasized during this study when about two-thirds of the 173 wholesale food dealers stated that San Francisco wholesale food distribution facilities were entirely unsatisfactory and they would be interested in moving to new ones.

Conditions on and adjacent to the present facilities, including inadequate and narrow approaches, streets, and driveways; old, inefficient, and outmoded multistoried buildings; lack of rail connections; and generally unsatisfactory facilities lead to high cost of operation and result in a situation where it is extremely difficult for many operators

to continue in business.

A modern wholesale food center is needed and desirable in San Francisco. To accommodate present requirements of 138 food wholesalers whose facilities are inefficient and outmoded, 9 buildings (including a frozen food and public refrigerated storage building) containing wholesale multiple store units of various sizes, and 7 detached wholesale store buildings would be needed. These would be used as follows: 70 store units in 4 buildings for fresh fruit and vegetable wholesalers and 2 units for 2 restaurants; 3 buildings for poultry, eggs, and dairy products; 2 buildings for meat wholesalers and processors; 3 packer branch houses; 3 dry grocery warehouses; and one building for frozen food distributors and processors and public refrigerated warehouse. In addition, a restaurant, a truckers' shed containing 30 stalls, a garage and service station, and a motel are also suggested. Direct rail connections to wholesale stores and additional team tracks would provide trackage for unloading about 300 railroad cars at one time. Parking space adjacent to the buildings and in special parking areas would make it possible to park more than 1,500 motor vehicles simultaneously. Major streets would be at least 150 feet wide, thus providing adequate room to

handle traffic without undue congestion.

These facilities, with streets and space for future expansion and allied industry, would require a minimum of 122.8 acres. The lack of available sites has resulted in an extremely high price for land in the city. The estimated cost of the South Basin site, the only site in the city of sufficient size, placed in condition to build was estimated to be approximately \$9.5 million. The construction cost of facilities would amount to approximately \$16.2 million. This would total \$25.7 million. It is estimated that the food center would make possible a total annual savings of approximately \$2.1 million. The greater part of these savings would accrue from reduced cartage and handling costs, reduced losses from deterioration, spoilage and breakage, and reduced traffic congestion in the food center area. Very little measurable savings were shown for dry grocery and frozen food dealers. However, other savings which cannot be measured readily would accrue to these dealers and to farmers, dealers on the market, and to consumers. The city of San Francisco would also benefit in several ways.

WHOLESALE FOOD DISTRIBUTION FACILITIES OF SAN FRANCISCO

By Harry G. Clowes, agricultural economist Transportation and Facilities Branch Marketing Research Division Agricultural Marketing Service

Background of Study

This study was initiated during the summer of 1955, at the request of the Mayor of San Francisco, to provide assistance in planning a new wholesale fresh fruit and vegetable market for that city. The request was prompted principally by the San Francisco Chamber of Commerce and its

Agricultural Committee.

The congestion and inefficiency of the present produce market facilities have led to many efforts to relocate them. As early as October 1926, editorials appeared in State farm publications deploring the market's inadequacy. The objective of a new, modern wholesale produce terminal gained impetus in 1939 when a survey conducted under the auspices of the Chamber of Commerce among farmers in California and southern Oregon revealed that the lack of adequate marketing facilities was one of their primary complaints against shipping produce to San Francisco.

The Agricultural Committee of the Chamber of Commerce was formed in 1941. One of its major objectives was to establish a modern wholesale produce market terminal within the city. As a result of its studies at that time, the Chamber urged the city administration to request a comprehensive survey of the marketing situation by the United States Department of Agriculture and the University of California. In this action, it was joined by the Wholesale Fruit and Produce Dealers Association, the Central Council of Civic Clubs, the California Farm Bureau Federation, the California Division of Farmers Educational and Cooperative Union, and the Pacific Rural Press. On January 12, 1942, the Board of Supervisors of the city and county of San Francisco adopted a resolution requesting such a survey. That study was made during the summer and fall of 1942.1

Because of the unsettled situation during World War II, little was accomplished to secure a new market. However, local interest continued high. For example, in 1953 the Department of City Planning prepared a comprehensive report to the city supervisors on the possibility of relocating the present produce district.² Several series of articles, which were widely read, appeared in local newspapers pointing out the disadvantages of the old market area.³

The volume of business in the market area has been declining gradually for a number of years as many buyers and sellers have become increasingly dissatisfied with the present facilities. The city also has become concerned at the deterioration of the facilities, the presence of undesirable food handling situations, fire hazards, and the serious traffic congestion in and near the market area. This situation prompted the Board of Supervisors in 1954 to declare an area (Lower Market—Embarcadero Area E-1), including the major produce section, to be a "blighted area" under the provisions of the State Redevelopment Act. Plans are now being considered to move the present occupants and to redevelop the area into more efficient uses.

It was apparent early in the study that many wholesale marketing facilities for food commodities other than fruits and vegetables also were in need of replacement, and that if the area were redeveloped, some wholesalers of other foods would have to relocate. Accordingly, plans were expanded to include poultry, eggs, dairy products, meats and meat products, dry groceries, and frozen foods.

Objectives of the study were:

 To analyze the wholesale marketing situation for food products and to determine their adequacy.

2. To determine the kinds and amount of marketing facilities needed to provide for efficient distribution of food products.

- 3. To estimate total costs of construction, operating expenses, and sources of income of the proposed new marketing facilities.
- 4. To outline the potential benefits to be secured from construction of a new and modern food distribution center.

September 1954, is a good example.

¹ Calhoun, W. T.; Erdman, H. E.; Mehren, G. L. Improving the San Francisco Wholesale Fruit and Vegetable Market. Bur. Agr. Econ., U. S. Dept. Agr. in cooperation with Univ. Calif., College Agr., Berkeley, Feb. 1943.

² Relocating San Francisco's Wholesale Produce Market. Dept. City Planning, San Francisco, Calif., Aug. 1953.
³ A series of articles, "Parsley and Progress," by Richard Reinhardt, San Francisco Chronicle, August and

It should be emphasized strongly that this is not a study of the San Francisco Bay Area wholesale food facilities, but is restricted to the requested study of those facilities located in the city of San Francisco. No attempt was made to study marketing facilities that supplied the large population across the bay. If this had been done, the conclusions in this report might have been different.

The data were secured primarily through interviews with wholesalers of fruits, vegetables, poultry, eggs, dairy products, meats, frozen foods, dry groceries; meat slaughterers; and meat packer

branch houses. Information was obtained also from buyers who patronize the various markets in the area; truckers hauling to and from them; railroad officials; representatives of city, State, and Federal governments; various trade organizations; Chamber of Commerce officials; and the several State and private colleges and universities which were interested in the project.

A preliminary report was made on November 10, 1955, to a group of San Francisco business, industrial, and civic leaders.⁴ A number of revisions made since that publication are included in this

report.

San Francisco as a Food Distribution Center

Over 800,000 persons resided within the boundaries of San Francisco in 1954, according to the Chamber of Commerce. An additional 200,000 individuals commuted to the city for business or visited the city as tourists, using part of the city's food supplies. An additional 2.5 million persons lived in the bay area. Figure 1 shows the areas in the San Francisco Bay region served by market facilities of the city. Sizable quantities of food and allied items also were shipped regularly to all parts of the world.

According to the 1954 United States Census of Business, sales by all food wholesalers in the city amounted to approximately \$617 million. Of this amount, sales of grocery, confectionery, and meat wholesalers accounted for \$504 million; sales of edible farm products by wholesalers, \$75 million; and sales of assemblers of farm products, \$38

million.5

The United States census estimated that 1,329 retail food establishments (with payrolls) supplied almost all the food needs of the city's approximately 1 million consumers in 1954. The sales of these retail stores and markets were estimated at approximately \$220 million. In addition, there were approximately 1,120 restaurants, cafeterias, and caterers in the city with annual sales of \$115 million. The retail food establishments included 664 grocery stores, 225 meat markets, 34 seafood markets, 80 fruit and vegetable retail stores and markets, 59 confectionery stores, 134 bakery product retailers, 61 delicatessens, and 72 food stores not elsewhere classified. (These establishments were only those having payrolls.)

Three major trunkline railroads—the Southern Pacific Railroad, the Atchison, Topeka, and Santa Fe Railroad, and the Western Pacific Railroad—serve San Francisco. Only the Southern Pacific Railroad, however, has direct land con-

nections in the city, the Santa Fe and the Western Pacific transporting their shipments to San Francisco across the bay from Oakland and other terminal points. In addition, most of the piers and industries along the Embarcadero are served by a belt line railroad owned and operated by the California State Harbor Commission. It has reciprocal switching arrangements with the three trunkline railroads entering the city, and rates for the shipper or receiver on this line are comparable with those served directly by the trunklines.

A network of major Federal and State highways connects the city's wholesale food markets with producing areas and consuming centers to the north, east, and south. Within the city itself, a large system of elevated freeways is being constructed; this will connect all parts of the city

with high speed, limited-access roads.

Volume and Source of Supplies

An estimated 47,528 carlot equivalents of food and allied items were received in San Francisco in 1954 (table 1). Of these shipments an estimated 80 percent originated from producing areas in the State, and 20 percent arrived from many of the 48 States and several foreign countries.

Table 1.—Estimated direct receipts of specified food products and percent of each by commodity group, San Francisco, Calif., 1954

Commodity group	1954 volume	Percent of total
Fresh fruits and vegetablesPoultry, eggs, and dairy products_Meat and meat products Dry groceriesFrozen foods	Carlot equivalent 1 20, 831 5, 526 2 10, 978 8, 319 1, 874 47, 528	Percent 43. 9 11. 6 23. 1 17. 5 3. 9 100. 0

¹ Excludes receipts at farmers' market, ² Includes 7,200 carlot equivalents (carcass weight) of livestock for slaughter arriving by rail and truck.

⁴ Clowes, H. G. "San Francisco's Proposed Modern Wholesale Food Center (A Preliminary Report)." U. S. Dept. Agr. AMS, Washington, D. C. Nov. 1955. ⁵ Census of Business, 1954. Wholesale Trade—Cali-

⁵ Census of Business, 1954. Wholesale Trade—California, U. S. Dept. Commerce Bul. W-1-15, 25 pp. ⁶ Census of Business, 1954. Retail Trade—California, U. S. Dept. Commerce Bul. R-1-5, 71 pp.

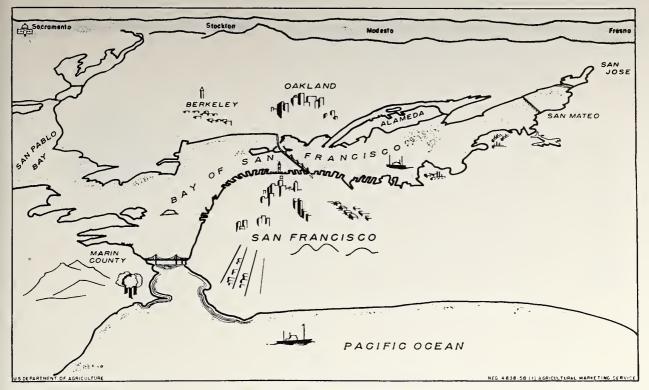


Figure 1.—San Francisco Bay Region.

An estimated 43.9 percent of the receipts were fresh fruits and vegetables. For the most part these shipments originated in the commercial agricultural areas of the San Francisco Bay area, the Sacramento and the San Joaquin Valleys, and other producing areas of the State (fig. 2).

A large part of the remainder of the shipments came from Arizona, Oregon, and Washington.

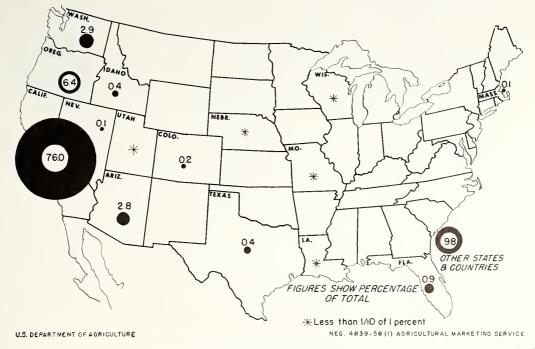


Figure 2.—Origin of the fresh fruit and vegetable receipts, San Francisco, Calif., 1954. (Data from Market News Service, U. S. Dept. Agr.)

Most varieties of commercially grown fruits and vegetables in the United States are produced in nearby areas and are available in most seasons to San Francisco fruit and vegetable wholesalers.

Shown below is the percent of total unloads of fresh fruits and vegetables in San Francisco, by

State of origin.

-	Percent of total unloads		
State of origin	in San Franci	sco	
Arizona		2. 8	
California		6. 0	
Colorado		. 2	
Florida		. 9	
Idaho		. 4	
		$\dot{0}$	
Louisiana		. 1	
Massachusetts			
Missouri		. 0	
Nebraska		. 0	
Nevada.		. 1	
Oregon		6.4	
Texas		. 4	
Utah		. 0	
Washington		2. 9	
Wisconsin		. 0	
Wisconsin		. 0	
Total U. S. A	96	0. 2	
Other countries		9. 8	
Other countries			
Total unloads	100	0. 0	

The above percents exclude receipts at the

Municipal Farmers Market.

About two-thirds (66.0%) of the total poultry, egg, and dairy products received were produced within the State (figs. 3 and 4). Practically all of the poultry shipments were from the Petaluma and Modesto districts, but at certain periods of each year, when local supplies were limited, quantities were shipped in from midwestern areas. Over three-fourths (76.7%) of egg shipments were from California. Several large distributors of dairy products received quantities of butter or cheese from Idaho, Illinois, Wisconsin, Oregon, and other dairy producing States (table 2). There were some imports of dairy products from foreign countries, including Denmark, Australia, and New Zealand.

Approximately 10,978 carlot equivalents of meats and meat products were unloaded in 1954 by San Francisco wholesalers and slaughterers. Over half (57%) of the meat shipments originated in the 9 San Francisco Bay area counties, 26 percent in other California counties, 10 percent in 10 other western States, and the remainder (7%), in other areas of the United States. (Fig. 5.) A significant proportion of the

⁷ Including livestock receipts slaughtered in the city area (carcass basis).

Table 2.—Percent of receipts of poultry, eggs, butter, and cheese, and percent of total by State of origin, San Francisco, Calif., 1954

State of origin	Poul- try	Eggs	But- ter	Cheese	Percent of total
	Per-	Per- cent	Per-	Per- cent	
Arkansas	6. 3	cent	cent	cent	2. 1
California	87. 7	76. 7	52. 3	12. 8	66. 0
Colorado	. 2	1. 4	. 5		. 6
Idaho		. 1	13. 0	30. 2	7. 1
Illinois	. 0		1. 6	11. 4	2. 0 1. 2
Iowa Kansas	. 1	3. 4 10. 1	5. 1		1. 2
Kentucky		10. 1	<i>J</i> . 1		. 0
Maryland	. 1				. 0
Minnesota		2. 9	4. 1	2. 2	2. 1
Mississippi	$\frac{1}{2}$. 1
Missouri	. 3		3. 0	6. 3	1. 6
Montana Nebraska	3. 6	$\begin{array}{c} \cdot 1 \\ \cdot 2 \end{array}$. 1	. 9	1. 4
Nevada	5. 0		. 1	. 5	. 1
New York	. 1			. 9	$\frac{1}{2}$
North Dakota			6. 9		1. 4
Oklahoma	. 1	. 1	. 9	. 1	. 3
Oregon	. 2		7. 0	11. 1	3. 1
South Dakota Tennessee		. 6	. 9	. 1	$\begin{array}{c} \cdot 4 \\ \cdot 0 \end{array}$
Tennessee Texas				6. 9	1. 1
Utah		4. 4	1. 0	. 4	1. 7
Washington			2. 7	. î	. 5
Wisconsin				16. 1	2. 4
Wyoming			. 1		. 0
Total	100. 0	100. 0	100. 0	100. 0	100. 0

shipments of pork received from outside the State was fresh pork. Upon arrival a large part of it was processed for consumption as smoked and cured pork products. San Francisco is the location of a relatively large smoked meat processing industry.

Some of the frozen food processing plants in major production areas within 100 to 200 miles of San Francisco transport considerable quantities of their products to the city for freezing and storage. Approximately 75 percent of the city's receipts of frozen foods arrive from such nearby cities as San Jose, Sunnyvale, Santa Clara, Watsonville, Sacramento, and Fresno. Other quantities are brought from nearby producing States such as Oregon, Washington, and Idaho, but some are received from Chicago and other eastern cities. Total unloads of 1,874 carlot equivalents of frozen food in 1954 were reported during the survey.

Dry grocery wholesalers handled 8,319 carlot equivalents, or 17.5 percent of total food receipts in the city. These were received from most all the 48 States and many foreign countries.

⁸ Williams, W. F., Wholesale Meat Distribution in the San Francisco Bay area. U. S. Dept. Agr., Mktg. Res. Rpt. No. 165, 1957.



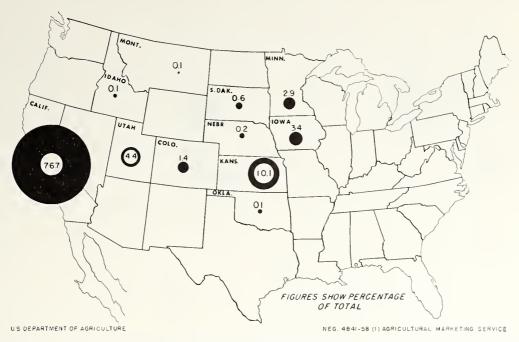
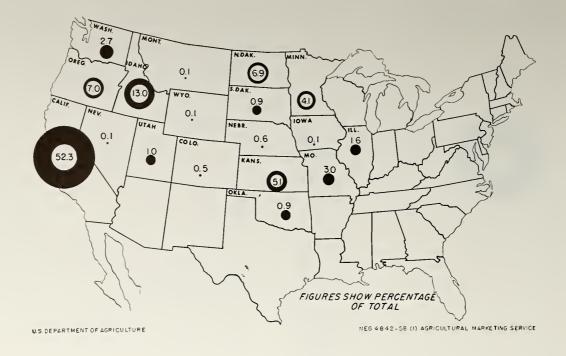


Figure 3.—Origin of receipts of poultry (above) and of eggs, San Francisco, Calif., 1954. (Data from Market News Service, U. S. Dept. Agr.)



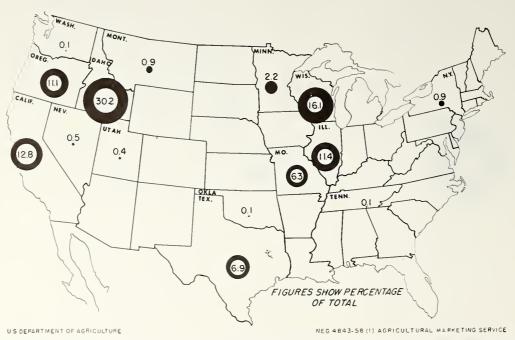


Figure 4.—Origin of receipts of butter (above) and of cheese, San Francisco, Calif., 1954. (Data from Market News Service, U. S. Dept. Agr.)

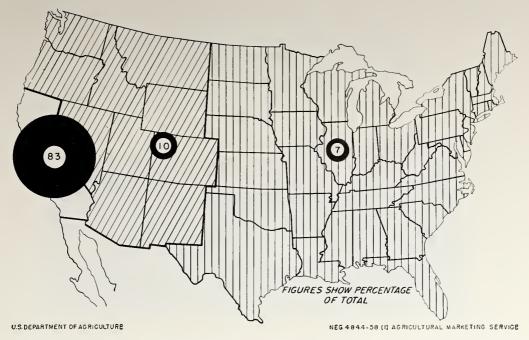


Figure 5.—Origin of meat and meat products receipts, San Francisco, Calif., 1954. (Adapted from-Williams, W. F., Wholesale Meat Distribution in San Francisco Bay Area Mktg. Res. Rept. No. 165, U. S. Dept. Agr. 1957.)

Method of Transportation

Approximately 89.3 percent (42,438 carlot equivalents) of the food supplies arriving in the wholesale markets in the city in 1954 was received by motortruck, and only 10.7 percent (5,090 carlot equivalents) by rail. Table 3 shows the estimated receipts of food in 1954 by rail and motortruck, by commodity handled. The proportion of rail receipts to truck receipts varies somewhat by commodity as shown by the following discussion of individual commodity groups.

Table 3.—Estimated direct receipts of food products by rail and motortruck, by type of commodity, San Francisco, Calif., 1954

	Carlot equivalent unloads			
Type of commodity	Rail	Motor- truck	Total	
Fresh fruits and vegetablesPoultry, eggs, and dairy	Number 2, 267	Number 1 18, 564	Number 20, 831	
products	684	4, 842 3 9, 672	5, 526 10, 978	
Meat and meat products 2 Dry groceries	1, 306 474	7, 845	8, 319	
Frozen foods	359	1, 515	1, 874	
Total	5, 090	42, 438	47, 528	

¹ Includes 1.516 carlot equivalents received by boat or express,

Fresh Fruits and Vegetables

Receipts of fresh fruits and vegetables in San Francisco are the second largest in the West and rank 12th in the United States from standpoint of volume. Of the West Coast cities, only Los Angeles received more of these products in 1954 than San Francisco. The total volume, although gradually declining, has held within narrow range during the last 25 years in which records of receipts by rail, boat, air, and truck have been compiled by the Federal-State Market News Service.9

During 1954 the independent wholesale dealers and chainstore organizations received 20,831 carlot equivalents. Of this amount, 89.2 percent (18,564 carlot equivalents) was received by truck and boat, and the balance (2,267 carlot equivalents) was received by rail (fig. 6). These data do not include the sales at the city-owned farmers' market on Alemany Boulevard, which reportedly had received 669 carlot equivalents in 1954 (all by truck).

Poultry, Eggs, and Dairy Products

San Francisco is the second largest market for butter, cheese, and eggs on the West Coast, and

³ Includes shipments received by slaughterers as livestock.

⁹McDowell, A. M., and Bussman, R. W. Market News Service. Unloads of Fresh Fruits and Vegetables, San Francisco, 1954. U. S. Dept. Agr., San Francisco, Calif., 1954.

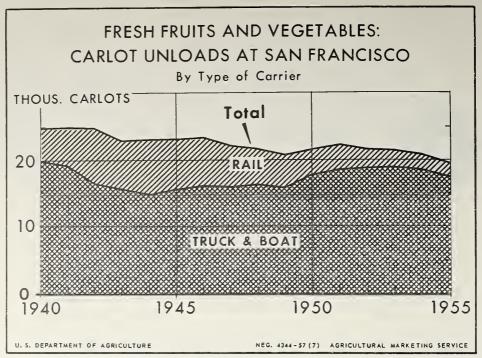


Figure 6.—Carlot unloads of fresh fruits and vegetables by type of carrier, San Francisco, Calif., 1940 to 1955. (Data from Market News Service, U. S. Dept. Agr.)

ranks first in the receipts of dressed poultry. There was a gradual increase in the 10 years 1945–54 in the receipts of cheese, but decreases in receipts were shown by the United States Department of Agriculture Market News Service for butter, dressed poultry, and eggs during the same povied.

During 1954, wholesalers in San Francisco handled 5,526 carlot equivalents of poultry, eggs, and dairy products. Of this amount, 778,360 cases (1,769 carlot equivalents) were shell eggs. Included in the above estimate were direct receipts of 24 million pounds (798 carlot equivalents) of processed poultry; 1,054 carlot equivalents of live poultry; 1,084 carlot equivalents of butter; and 821 carlot equivalents of cheese.

As shown in table 3, nearly 88 percent (4,842) carlot equivalents) was received by motortruck and the balance (12%) or 684 carlot equivalents) by rail (figs. 7, 8, and 9).

Meat and Meat Products

California is the leading State in western U.S. A. in the production and processing of livestock and meat products. Many small slaughterhouses are located within a 200-mile radius of San Francisco. Within the city, there are a relatively large number of independent meat wholesalers and processors of special types of meat, such as Italian sausage.

In 1954, meat wholesalers, slaughterers, and packer branch houses in the city received an estimated 10,978 carlot equivalents of meat and meat products. About 88 percent (9,672 carlot

equivalents carcass weight) was received by motor-truck and the remaining 12 percent (1,306 carlot equivalents) by rail (table 3).

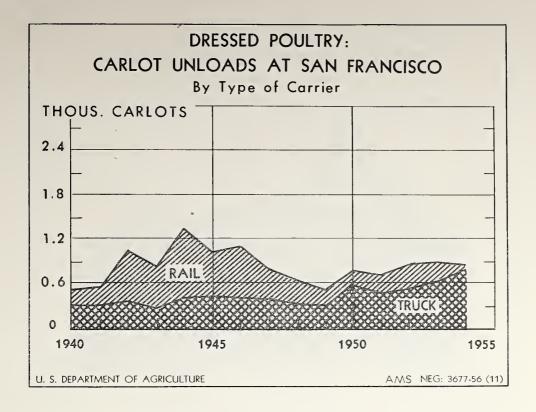
Beef dominated the sales volume of most packers. Dressed beef received from packers in other western States was quite important. More than half of the San Francisco veal supply was dressed by packers in other northern California locations. In general, the principal veal slaughterers in northern California slaughtered few livestock other than veal and were located in or near the principal milk producing areas. Slaughter of lambs is highly concentrated in a few slaughterers in the Sacramento area. A large proportion of the pork consumed in the city was bought from packing houses in the Midwest and cured by the packer branch houses of San Francisco.

Dry Groceries

Approximately 8,319 carlot equivalents of dry groceries were received in San Francisco in 1954. Only about 6 percent (474 carlot equivalents) was received by rail and about 94 percent (7,845 carlot equivalents) by motortruck.

Frozen Foods

Estimated receipts during 1954 of frozen food products were approximately 1,874 carlot equivalents. Of this amount only 19 percent (359 carlot equivalents) was received by rail and the balance or 81 percent (1,515 carlot equivalents) was brought to the city by motortruck.



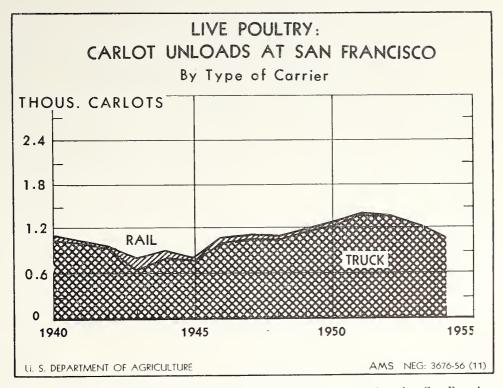
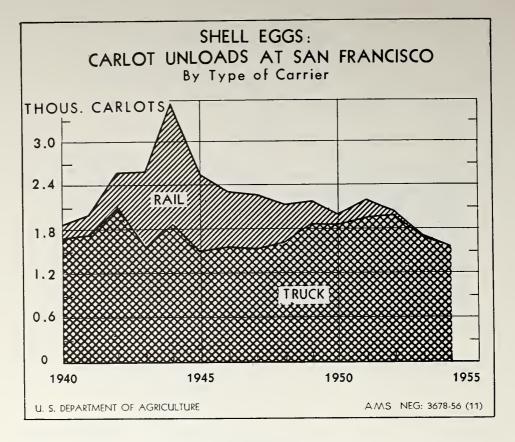


Figure 7.—Carlot unloads of dressed poultry (above) and of live poultry, by type of carrier, San Francisco, Calif., 1940–1954. (Data from Market News Service, U. S. Dept. Agr.)



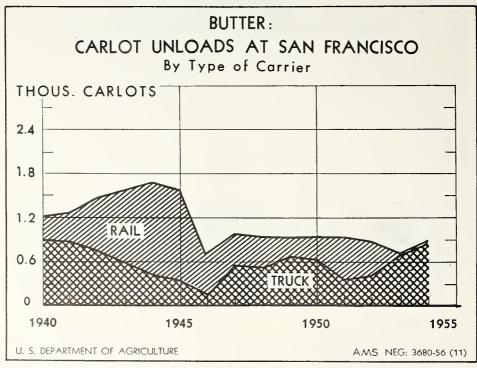


Figure 8.--Carlot unloads of shell eggs (above), and of butter, by type of carrier, San Francisco, Calif., 1940-1954. (Data from Market News Service, U. S. Dept. Agr.)

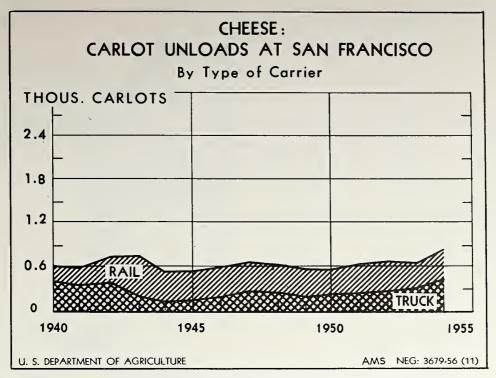


Figure 9.—Carlot unloads of cheese, by type of carrier, San Francisco, Calif., 1940-1954. (Data from Market News Service, U. S. Dept. Agr.)

Number of Dealers, and Volume Handled

The wholesale food business in San Francisco is one of the more important commercial activities in the city. It was carried on in 1954 by 173 wholesalers (3 chainstore organizations, 8 meat packer branch houses, 8 livestock slaughterers, and 154 independent dealers). About half of the independent food wholesalers, including all the wholesale fruit and vegetable dealers, were located in the extreme northeastern part of the city in what is known as the Commission District or the Washington Street Market District.

Figure 10 shows the location of each food whole-saler in San Francisco, by type of food commodity handled. Also shown are the cold storage ware-houses, packer branch houses, slaughterers, the Washington Street Market District, the Farmers Municipal Retail Market, "Butchertown," the rail team track yards, and major highways within the city of San Francisco, as well as a proposed location of a new food center in the Hunters Point-South Basin area.

Table 4 shows the number and percentage of wholesale dealers comprising the 5 commodity groups studied.

Independent wholesalers handling more than one commodity were classified according to the major product handled to avoid duplication. The chainstore organizations handled several types of food. National meat packer branch houses handled meats and meat products primarily, plus poultry, eggs, and dairy products.

Table 4.—Number of independent wholesalers by type of commodity handled, other types of wholesalers, and percentage of total number each group contains, San Francisco, Calif., 1954

Commodity group	Whole- salers	Proportion of total
Independent wholesalers: Fresh fruits and vegetables - Poultry, eggs, and dairy	Number 73	Percent 42. 2
products	14	8. 1
Meat and meat products	48	27. 8
Dry groceries	9	5. 2
Frozen foods	10	5. 8
	154	89. 1
Other wholesalers:	3	1. 7
Chainstore organizations Packer branch houses	8	4. 6
Livestock slaughterers	8	4. 6
·	19	10. 9
Total	173	100. 0

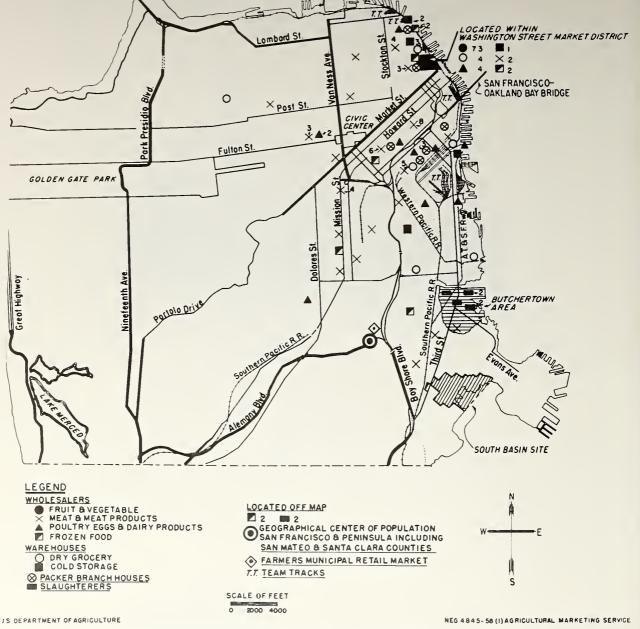


Figure 10.—Map of San Francisco, showing the location of each food wholesaler, by type of food commodity handled; dry grocery and cold storage warehouses; packer branch houses; slaughterers; geographical center of population, San Francisco and peninsula, including San Mateo and Santa Clara Counties; the Washington Street Market District; Farmers Municipal Retail Market; the Butchertown area; the South Basin site; the rail team track yards; and major highways within the city, 1955.

Quantities of food items were stored in 6 public refrigerated warehouses located throughout the city, the amount varying to a large extent by the seasonality of the product. Several wholesalers conducted all their business directly from a public refrigerated warehouse.

GOLDEN GATE BRIDGE

Specialty wholesalers such as those dealing primarily in coffee, rice, beans, sugar, peanuts, or flour are not included in this report.

Fresh Fruits and Vegetables .

There were 73 wholesalers during 1954 who were classified as independent fresh fruit and vegetable dealers. The major proportion of these wholesalers handled a general line of fruits and vegetables; 5 were classified as banana dealers, 3 handled tropical fruits only, 11 specialized in potatoes, onions, and garlic, 2 dealt in melons, 2

dealt exclusively in mushrooms and endive, and the remainder were general fruit and vegetable

dealers.

'All of the 73 independent wholesalers were located in the Washington Street Market District. The estimated direct receipts of these 73 wholesalers were 19,431 carlot equivalents; the receipts were from the team tracks, or from other rail unloading facilities and from trucks. These receipts do not include 669 carlot equivalents received at Municipal Farmers Market, and 1,800 sold by second handlers.

Approximately 1,400 carlot equivalents of direct receipts were handled by the 3 chainstore warehouses. The San Francisco Bay area was the headquarters for 7 chainstore organizations, but only 3 had more than 5 retail stores in the city of San Francisco. A large part of the fresh fruits and vegetables sold by the chainstore outlets in San Francisco was received in warehouses across the bay and was not included in San Francisco

receipts.

Selling hours of the fruit and vegetable dealers in the Washington Street Market District began at 5 a.m. except on Saturday and Sunday when the market was closed. The heaviest trading period was between 5 and 9 a.m. Market personnel usually reported for work about 4 a.m. to arrange and display the goods the "lumpers" had stacked at the curbs during the night.

Poultry, Eggs, and Dairy Products

Poultry, egg, and dairy product wholesalers are scattered throughout the city of San Francisco. Only four dealers were located in the Washington Street Wholesale Market District (fig. 10).

In addition to the 14 independent poultry, egg, and dairy wholesalers (excluding brokers) who received about 91 percent (5,029 carlot equivalents) of the direct receipts, 3 chainstore organizations and 3 packer branch houses also served the retail outlets and received about 9 percent (497 carlot equivalents) of direct receipts. Supplementary supplies received from across the bay for San Francisco retailers were not included in the city's receipts. Poultry, egg, and dairy product wholesalers in San Francisco usually kept open from 7 a. m. to 5 p. m. The heaviest trading was in the morning hours.

Many of the orders were sold by telephone or by the wholesalers' salesmen visiting the buyers' establishments. In many instances, eggs and poultry were processed and packed into consumer packages in or near the producing areas of Modesto and Petaluma. They were then trucked in large quantities to distribution warehouses in the bay area and distributed from there to retail outlets.

Of the 5,526 carlot equivalents of direct receipts of poultry, eggs, and dairy products in 1954, 3,475 carlot equivalents were handled by poultry processors. These dealers killed and dressed live birds for sale to retail markets, mostly as

eviscerated poultry. The balance of 2,051 carlot equivalents was distributed by wholesale dealers who received dressed and frozen poultry, eggs, butter and cheese from producers and processors.

Meat and Meat Products

The wholesale business in meats and meat products was carried on by 48 dealers, 8 livestock slaughterers, 8 packer branch houses, and 3 chainstore organizations. The 48 dealers handling 1,517 carlot equivalents were composed of 30 processors, 13 general wholesalers, and 5 hotel and restaurant suppliers. They distributed a large share of the beef that was consumed in the city. Packer branch houses were primarily distributors of pork, especially cured and smoked products. Livestock slaughterers sold all types of meat but were primarily distributors of locally grown and slaughtered beef, veal, and lamb. Nearly two-thirds (65.5% or 7,200 carlot equivalents carcass weight) of the veal, lamb, and beef was received by local slaughterers. Pork supplies were brought in from Midwestern States in comparatively large volumes. Chainstores received 12.7 percent of the total or 1,394 carlot equivalents (carcass weight).

Dry Groceries

San Francisco's wholesale dry grocery business is carried on by 12 firms. These were classified as follows: 9 independent wholesalers (including 5 general independent wholesalers and 4 independent specialty wholesalers—mostly dealers in imported specialty foods); and 3 chainstore organizations. The independent wholesalers include one voluntary group of wholesalers which sponsored an affiliated group of retail food stores.

Most of the independent dry grocery wholesalers take orders and deliver dry grocery lines only, but some include frozen foods and fresh fruits and vegetables in their business. Chainstore organizations also handle other lines such as frozen foods, meats, and fresh fruits and vegetables. Most dry grocery wholesale establishments kept open 8 hours daily except Saturday

and Sunday.

Of the estimated 8,319 carlot equivalents of dry groceries received in 1954 about 38 percent or 3,144 carlot equivalents were received by independent grocers and 62 percent or 5,175 carlot equivalents by chainstore organizations. Plans were being made by several chainstore organizations to consolidate most of their dry grocery receipts in new facilities being constructed across the bay.

Frozen Foods

A total of 10 independent wholesale firms and 3 chainstore organizations served the retail frozen

food outlets in San Francisco in 1954. Four of the 10 independent wholesalers processed a large proportion of their supplies and 6 were principally distributors for other frozen food manufacturers.

Approximately 42 percent or 793 carlot equivalents were handled by the 6 distributors and 49 percent (912 carlot equivalents) were handled by dealers processing part or all of their frozen food supplies. Chainstore organizations handled the remaining 9 percent or 169 carlot equivalents. In addition a considerable proportion of chainstore frozen food supplies was trucked from their head-

quarters across the bay.

Selling hours of the frozen food wholesalers in San Francisco were usually 8 hours each day (except Saturdays and Sundays), with the heaviest trading in the morning hours. Several dealers have skeleton crews to make up orders during the night. Most of the orders were taken by telephone or by the wholesalers' salesmen visiting the buyers' establishments. In many instances, frozen food is processed and packed into consumer packages in or near the major producing areas. They are then trucked to a distribution warehouse in the city and distributed from there to retail outlets.

Distribution by Commodity

Approximately 66 percent (31,505 carlot equivalents) of the total receipts of food items included in the study were distributed within the city to retail stores, hotels, public and private institutions, restaurants, and to other wholesale dealers. The remainder (16,023 carlot equivalents) was delivered to points outside of the city, mostly to communities within 100 miles. However some deliveries were made to widely scattered points on the Pacific Coast and in the Rocky Mountain area. All deliveries within the city and practically all those outside were made by motortruck. There was more variation between commodity groups distributed within the city than between those shipped outside (table 5).

Figure 11 shows the areas of distribution by product for 1954 for 3 of the 5 commodities in the study. These areas were selected from information supplied by the wholesalers interviewed. The cities shown in figure 11 are those mentioned most frequently by the dealers as their farthest point

of delivery.

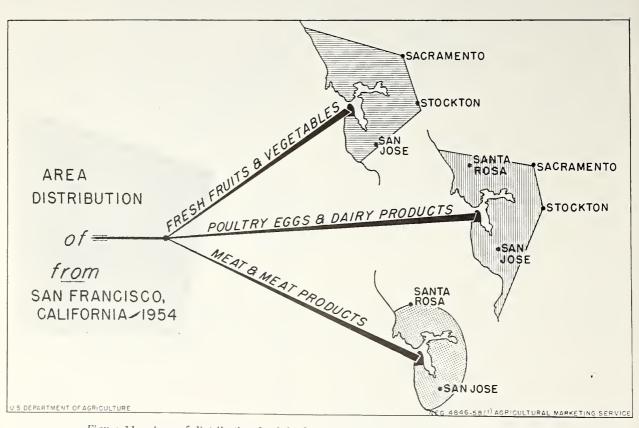


Figure 11.—Area of distribution for 3 food commodities from San Francisco, Calif., 1954.

Fresh Fruits and Vegetables

Approximately 69 percent (14,419 carlot equivalents) of the fresh fruit and vegetable direct receipts in San Francisco during 1954, including chainstore receipts, were distributed within the city (table 6). The remainder were moved by motortruck to nearby cities or exported. An estimated 10,299 carlot equivalents (exclusive of 1,750 carlot equivalents distributed by chainstore grocers) were distributed to retail stores and public eating houses in the city, and the remainder (2,370 carlot equivalents) to various other consumers such as the Armed Forces, public institutions, and ships.

Table 5.—Distribution of food items by wholesalers within and outside the city of San Francisco during 1954 by commodity group

	Distribution	Distribution of supplies		
Commodity group	To outlets within San Francisco	To outlets outside San Francisco	Total	
Fresh fruits and vege- tables	Carlot equiva- lents 14, 419	Carlot equiva- lents ² 6, 412	Carlot equiva- lents 20, 831	
Poultry, eggs, and dairy products Meats and meat pro-	1, 647 8, 101	3, 879 2, 877	5, 526 10, 978	
ducts Dry groceries Frozen foods	6, 280	2, 039 816	8, 319 1, 874	
Total	31, 505	16, 023	47, 528	

 $^{^{\}rm I}$ Includes shipments distributed by chain store organizations, $^{\rm 2}$ Includes 583 carlot equivalents exported,

Of the 6,412 carlot equivalents distributed outside the city limits, 2,254 carlots were delivered to points in Marin County and other points north of the city; 1,826 carlot equivalents were delivered south of the city to points mostly in San Mateo County and 1,749 carlot equivalents were delivered to points east of the city; 583 carlot equivalents were exported. The existence of a sizable fresh fruit and vegetable wholesale market at Oakland and smaller markets in the nearby cities of Sacramento, Fresno, and San Jose, apparently has restricted the area presently served by San Francisco dealers.

Some supplies were shipped to widely scattered destinations thoughout the Pacific Coast region. During the study, it was reported that some individual shipments of fruits and vegetables had been made to Portland, Oreg., and to Fresno and Los Angeles, Calif., by dealers on the San Francisco wholesale market.

An estimated two-thirds (13,952 carlot equivalents) of the city's receipts of fresh fruits and vegetables was distributed in buyers' trucks and the balance (6,879 carlot equivalents) in vehicles belonging to wholesalers and jobbers (table 7). An estimated 91 percent (18,977 carlot equivalents) of the fresh fruits and vegetables received by independent wholesalers were handled directly through the owner's store facilities and the balance, 1,854 carlot equivalents, were delivered at team track or dockside.

Table 6.—Distribution of fresh fruits and vegetables, San Francisco, Calif., 1954

Distribution	Carlot equiva- lents ²	Percentage of total
To outlets in San Francisco Chainstores Other retail stores Hotels and restaurants Military, public institutions and ships	Number 1, 750 9, 133 1, 166 2, 370 14, 419	Percent 8. 4 43. 8 5. 6 11. 4
To points outside San Francisco		
North_ EastSouth_ Exported	2, 254 1, 749 1, 826 583	10. 8 8. 4 8. 8 2. 8
	6, 412	30. 8
Total	20, 831	100. 0

Excludes 669 carlot equivalents unloaded at Municipal Farmers' Market.
 Excludes approximately 1,800 carlots sold by second handlers.

Table 7.—Method and point of delivery of fresh fruits and vegetables, San Francisco, Calif., 1954

Item	Carlot equiva- lents	Percent of total
Method of Delivery Buyers trucks Trucks owned by jobbers and wholesalers	Number 13, 952 6, 879	Percent 67. 6
Total Point of Delivery	20, 831	100. 0
Dealers stores Team tracks, dockside	18, 977 1, 854	91. 1 8. 9
Total	20, 831	100. 0

¹ Excludes 669 carlot equivalents unloaded at Municipal Farmers' Market.

Poultry, Eggs, and Dairy Products

Table 8 shows that approximately 70 percent or 3,879 carlot equivalents of the total poultry, eggs, and dairy products receipts (amounting to 5,526 carlot equivalents) was distributed to outlets in the city, while the remaining 30 percent, or 1,647 carlot equivalents, went to points outside the city limits. A large part of the 1,647 carlots went to cities and towns south of the city, particularly Palo Alto, San Jose, and points as far south as the Monterey Peninsula. The remainder was distributed to points north and east, particularly Santa Rosa and Sacramento (fig. 11).

Practically all shipments were delivered in the dealers' truck. In several instances eggs and poultry products were packaged in consumer packages at the processing plants of Modesto and Petaluma and distributed from area distribution warehouses to points within 7- to 8-hour

drives of San Francisco.

Table 8.—Distribution of poultry, eggs, and dairy products, San Francisco, Calif., 1954

Distribution	Carlot equiva- lents	Percent of total
To outlets in San Francisco Chainstores and other retail stores. Hotels, restaurants, military and public institutions. To points outside San Francisco	Number 2, 796 1, 083 3, 879	Percent 50, 6 19, 6 70, 2
North Northeast and east South	145 581 921	2. 6 10. 5 16. 7
Total	1, 647 5, 526	29. 8

Meat and Meat Products

About three-fourths (74% or 8,101 carlot equivalents) of the meat and meat products received in the city was distributed to outlets in San Francisco and the remainder (26% or 2,877 carlot equivalents) was delivered to points outside the city. An estimated \$98 carlot equivalents were delivered to centers north of the city, 992 carlot equivalents to points east, and 987 carlot equivalents to centers south of San Francisco (fig. 11).

Table 9 shows the distribution of the meat and meat products in 1954. Practically all of these supplies were delivered to the retail outlets

by the wholesalers.

Table 9.—Distribution of meat and meat products, San Francisco, Calif., 1954

Distribution	Carlot equivalents	Percent of total
To outlets in San Francisco Chainstores Other retail stores Hotels and restaurants Military and public institutions	Number 1, 570 4, 687 1, 097 747	Percent 14. 3 42. 7 10. 0 6. 8
To points outside San Francisco	8, 101	73. 8
North Northeast and east South	898 992 987	8. 2 9. 0 9. 0
	2, 877	26. 2
Total	1 10, 978	100. (

¹ Excludes 4,419 carlot equivalents distributed by second handlers.

Dry Groceries

The study showed that of the 8,319 carlot equivalents of dry groceries received in 1954, about three-fourths (6,280 carlot equivalents) was distributed to outlets in San Francisco while the balance (2,039 carlot equivalents) was distributed to points outside the city, including 11 carlot equivalents which were exported.

An estimated 4,541 carlot equivalents were distributed to retailers and 1,739 carlot equivalents were distributed to hotels, restaurants, military and public institutions within the city (table 10).

It was estimated that only 3 percent (or 238 carlot equivalents) was sold to buyers who visited

Table 10.—Distribution of dry groceries, San Francisco, Calif., 1954

Distribution	Carlot equiva- lents	Percent of total
To outlets in San Francisco Chainstores and other retail stores_ Hotels, restaurants, military, and public institutions	Number 4, 541 1, 739	Percent 54. 4
To points outside San Francisco	6, 280	75. 5
North Northeast and east South Exported	653 768 607 11	7. 8 9. 2 7. 3 . 2
	2, 039	24. 5
Total	8, 319	100. 0

the wholesale grocer for supplies. Practically all of it (97%) was distributed in vehicles owned or rented by the independent dealers.

Frozen Foods

Table 11 shows that of the 1,874 carlot equivalents of frozen foods received in 1954, 56 percent (1,058 carlot equivalents) was distributed within the city; the balance was delivered outside the city mostly to consumers located within 100 miles of San Francisco.

Of the 1,058 carlots distributed within the city, 605 were delivered to retail stores, 244 to the Military, public institutions and ships; and 209

to restaurants and hotels.

Table 11.—Distribution of frozen foods by processors and distributors, San Francisco, Calif., 1954

Distribution	Proc- essors	Dis- tribu- tors	Total		
To outlets in San Francisco	Carlot equiv-	Carlot equiv-	Carlot equiv-	Per-	
Retail stores (including	alent	alent	alent	cent	
chains)	413	192	605	32. 3	
Hotels and restaurants Military, public institu-	110	99	209	11. 2	
tions, ships	72	172	244	13. 0	
	595	463	1, 058	56. 5	
To points outside San Francisco					
North	36	83	119	6. 3	
East	106	215	321	17. 1	
South	175	201	376	20. 1	
	317	499	811	43. 5	
Total	912	962	1, 874	100. 0	

Description of Present Marketing Areas and Wholesale Facilities

All facilities known to be used by wholesalers of various food items were visited during the survey and the volume and kinds of business done in each were determined. A description of the facilities and the general locations within the city are given to aid in the development of a plan for proposed new facilities.

The Washington Street Market District

San Francisco's major wholesale fruit and vegetable market is located within the Washington Street Market District. It has stood approximately at its present location since its beginning during the early gold mining days of California.

At that time the shoreline of San Francisco Bay stretched along Battery Street and the first wholesale produce firms were located there, some of them housed in old ships that had been abandoned by the gold seekers.

As time passed, a part of the bay adjoining Battery Street was filled in so that by 1890 the produce market began to expand into the reclaimed

land along Washington Street.

The market district was destroyed by earth-quake and fire in 1906. Immediately afterward fruit and vegetable dealers shipped their goods to Oakland and sold them there. Within a few weeks, however, one enterprising merchant set up business again in San Francisco, this time at the Vallejo Street dock within a few blocks of the rubble of the original market. In only a few days all local produce men abandoned their places in Oakland and established temporary quarters at the Vallejo Street dock.

Operations at this dock started about May 10, 1906. Meanwhile, the fruit and vegetable merchants were rebuilding at the original site. By October of that same year after hectic cleanup operations, they invited the city officials to an outdoor luncheon on Front Street, the present marketsite. This event marked the rebirth of San Francisco's wholesale market district after the fire.

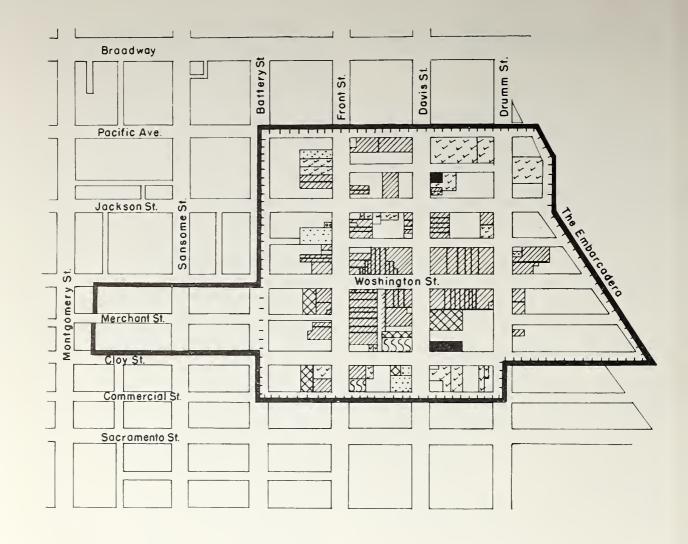
In early days, nearly all of the produce handled at the San Francisco market came down the San Joaquin and Sacramento Rivers by steamboat and barge, thus accounting for the location of the

market along the waterfront.

For more than 20 years several of the piers along the Embarcadero were used for certain marketing operations. Pier 3 was once devoted to the handling of fruit, while Pier 9 became a center of onion and potato marketing. In 1914, the onion and potato operation was moved to Pier 27 which was set aside by the State of California for use by the State's potato industry. But as potatoes from Oregon and Idaho came into the market in increasing quantities by truck and rail, and as shipment of potatoes by steamboat gradually decreased, the produce business on the pier was abandoned.

The Washington Street Market District today is roughly a 12-block area bounded by Pacific Avenue on the north, the Embarcadero on the east, Battery Street on the west and Commercial Street on the south. It lies within the Lower Market Embarcadero Redevelopment Area E-1, (fig. 12). It is adjacent on the north to the major financial district of the city with its canyons of skyscrapers. The eastern edge of the market district along the Embarcadero adjoins the important shipping facilities of the Port of San Francisco. To the west is the world famous tourist attraction, San Francisco's Chinatown.

Within this district 85 independent food wholesalers handled 53 percent of the volume of the commodities studied. Interspersed with these food wholesalers were 2 seafood dealers, 1 public refrigerated warehouse, 2 food processors, 19



LEGEND

FRUITS & VEGETABLES

MEAT & MEAT PRODUCTS

POULTRY EGGS & DAIRY PRODUCTS

DRY GROCERIES

ALLIED INDUSTRY

COLD STORAGE

555 FROZENFOOD

U.S. DEPARTMENT OF AGRICULTURE

LOWER MARKETEMBARCADERO REDEVELOPMENT AREA E-I

WASHINGTON ST. PRODUCE MARKET DISTRICT

NEG.4847-58 (I) AGRICULTURAL MARKETING SERVICE

Figure 12.—Lower Embarcadero Redevelopment Area E-1 showing wholesale food stores by type and allied industries in the Washington Street Produce Market District, San Francisco, Calif., 1955.

specialty food wholesalers, 4 barber shops, 17 restaurants, 10 trucking and garage establishments, 4 liquor stores, 3 hotels, and 3 seed and feed establishments. Ten box paper and printing establishments also were located here, apparently due to the proximity to the city's major financial and commercial district. There were 11 vacant store properties in the area at the time of study. Several of the food wholesalers operated from more than

one building because they were unable to find suitable quarters in a single building.

Many of the streets within the district were narrow, ranging from 30 to 55 feet between curb lines. Washington Street, running east and west, was the center of the major group of fruit and vegetable wholesalers, and was just 30 feet wide. Front, Davis, and Drumm Streets, the other major streets of the market area which cut across it from

north to south, varied in width from 45 to 51 feet. Colombo Vegetable Market, an area near Pacific Avenue between Davis and Front Streets which was used previously by nearby farmers to sell their products, contained 20 stalls but during the survey only 8 were occupied by 4 growers. None of the stores in the Washington Street Market District had rail connections and all rail receipts were hauled from railroad terminals or nearby team tracks

Most of the buildings in the district have had very little repair or renovation since 1906. They were mostly of antiquated design. Some were several stories in height. The buildings had little aisle space and lacked automatic sprinkling systems. As a result the fire hazard was great and insurance rates were high. The basements in many stores could not be used because they were below the level of high tide and subject to excessive seepage. Floors above the second were not generally used except by the several poultry processing plants located within the district. In many instances the store units were less than 25 feet wide. They usually were about 60 feet deep.

Practically all the stores lacked front and rear platforms and rear entrances. Toilet facilities were inadequate in most instances. Except for a public parking lot for 20 to 30 automobiles provided by the city adjacent to the Embarcadero, there were no public parking facilities in the

district.

Sidewalks in front of most stores were covered by a corrugated iron canopy which through the years has been badly damaged by trucks as they attempted to park alougside the curb to load or unload. A large proportion of the food wholesalers located within this district rented their facilities.

Table 12 shows the average number of floors of building occupied and space used, by type of

commodity dealer.

Figure 13 vividly illustrates the extreme variation between assessments for land and buildings

Table 12.—Number of wholesalers, average number of floors occupied, and average space used, by type of commodity, in the Washington Street Market District, San Francisco, Calif., 1954

Type of commodity	Whole- salers	Average number of floors occupied in building	Average space used
Fruits and vegetables Poultry, eggs, and dairy products Meat and meat products Dry groceries Frozen foods	Number 73 4 2 4 2	Number 2 4 2 3 2	Square feet 4, 821 36, 300 11, 400 4, 670 2, 600

in the Washington Street Market District and nearby commercial locations. Despite their proximity, property values dropped sharply at the edge of the commercial district. The low valuation in the Washington Street Market District was in contrast to the high value properties located in the Montgomery Street area, adjacent import-export area along lower California Street, the dock area and the warehouse district along the Embarcadero below Telegraph Hill, and the area around the Custom House, Appraisers Building, and the Hall of Justice. In one instance the assessed valuation of land and improvements just a few blocks away from the center of the Washington Street market district was 42.7 times as high as property being used by wholesale produce dealers.

Food Facilities Outside Washington Street Wholesale Market District

Eighty-eight of the 173 wholesalers handling the 5 groups of food commodities studied were located outside the Washington Street Wholesale Market District. (Five of the 6 cold storage warehouses were located outside the district). Those outside handled 47 percent of the total tonnage of these items in 1954. Some of these wholesalers were located within a mile of the market district. Others, however, were scattered widely throughout the city.

Most of the supplies of meat and meat products, dry groceries, and frozen foods were handled by dealers located outside the Washington Street market area. In several instances, these wholesalers were located within certain well defined areas in other parts of the city. One important

district was the "Butchertown" area.

"Butchertown" Area 10

The first commercial slaughtering of livestock and wholesaling of meat in San Francisco was conducted on what is now known as Pacific Street. As the city grew, objections to insanitary conditions of the slaughtering establishments forced the firms to move to what was known as Old Butchertown.

Sometime before 1906 efforts were made to move the meat packing and slaughtering industry away from residential areas. Subsequently, the State Legislature granted the meat packing industry the right to use a tract of land, now known as Butchertown. It was located south of Islais Creek, east of Kentucky or Third Street as it is now called, and south of Arthur Avenue (fig. 10).

After inspection of slaughtering operations was placed under the jurisdiction of the California Department of Agriculture and the Federal Government, a number of packers moved to South San Francisco or to other locations where

¹⁰ Historical information was supplied by William Schneider, AMS, U. S. Dept. of Agr., San Francisco, Calif., 1955

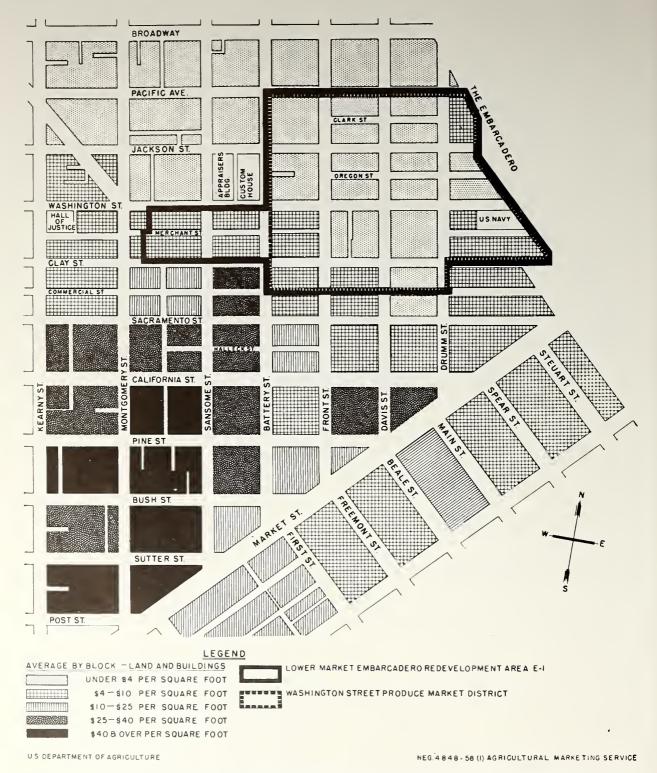


Figure 13.—Average tax assessment for land and improvements, Lower Market Embarcadero Redevelopment Area E-1, and nearby areas, San Francisco, Calif., 1955.

they could build more efficient and sanitary facilities. In the summer of 1955, only 8 meat packing and processing concerns remained in operation in Butchertown, and it was reported that several of them had made plans to transfer all slaughtering operations closer to the areas of

livestock production.

Buildings in Butchertown were obsolete, multistoried brick and wood constructions surrounded by old, unsanitary livestock pens (fig. 14). The facilities were mounted on pilings generally. Some of the adjacent land was being filled by the State Harbor Commission. The basements in some buildings could not be used for they were below the level of high tide and subjected to excessive seepage. Some of the livestock receiving pens or corrals still in operation were unsightly and odoriferous. The streets were narrow, and in several instances those adjacent to the packing houses were not paved.

Toilet facilities were inadequate in most instances and parking space was limited. Some repairing of obsolete buildings had been accomplished, but in general they were too badly ar-

ranged for efficient operation.

Battery Street Area

Several manufacturers of Italian-type cured sausages and other processed meat have located at the end of Battery Street, immediately west and northwest of the present Washington Street district. The manufacturers claimed the humidity and temperature conditions here were ideal for curing high quality Italian sausage products.

Two of the public cold-storage warehouses which were used by the wholesalers of fruits and vegetables, and in which several meat and poultry wholesalers operate and rent space, were located at the northern end of Battery Street, about a mile from the Washington Street district. Only three of the wholesalers located in this area had

rail facilities direct to their buildings.

Other Market Areas

Six of the large national meat packer branch houses operated in the vicinity of Townsend Street near the Third Street passenger station of the Southern Pacific Railway. Several of these buildings were built in recent years, and were modern and efficient in design and operation. Others, however, were old and obsolete. Some buildings were concrete and steel, but others were wood and brick, a type of construction not now permitted by the city. The newer buildings had adequate refrigeration, were mostly fireproof, and one or two had adequate space for expansion.

Most of the packer branch houses had facilities for preparing cured and smoked pork products.

Some of the food wholesalers operated in two or more buildings. Other handlers have renovated or rebuilt their facilities within the past few years, and were successful in making changes which have improved their operating efficiency. In many instances, however, the original design of the building was such that the objective could not be fully accomplished. A few wholesalers have built modern buildings that permit a relatively high degree of operating efficiency. However, in only a few instances is parking space provided for customers and the firm's own trucks.

In many instances wholesalers who were located outside the Washington Street district were in areas where traffic congestion was not as acute as in the produce district. However, some were located in the business and industrial sections of the city where streets were narrow and somewhat steep. It was necessary in some instances to build directly against a hillside or a steep cliff. This made traffic conditions very difficult.

Traffic Congestion

Traffic congestion in and around the various wholesale market areas has been acute for many years. Several hundred motor-trucks of all types haul supplies to and from the stores and at peak periods frequent tie-ups of long duration occurred.

Traffic counts were made in the Washington Street district during the busy morning hours of Friday, July 15, and Monday, July 18, 1955, to estimate the total traffic load, periods of greatest congestion, and types of vehicles used. No traffic counts were made for other market districts.

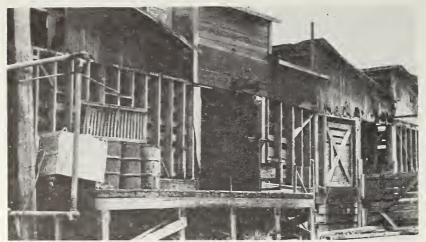
All vehicles within the area bounded by Battery, Jackson, and Clay Streets, and the Embarcadero were counted at half hour intervals (table 13). Vehicles were classified in 5 groups as follows: (1) Incoming trucks bringing supplies to the market; (2) vehicles owned or operated by market dealers or local drayage firms located within this area; (3) buyers' vehicles, including passenger automobiles used to haul food items; (4) other passenger automobiles; and (5) nonmarket vehicles such as mail trucks, and trucks hauling milk, bakery goods, ice, garbage, etc.

Figure 15 shows the dispersion of vehicles on July 15, 1955. Nearly 550 vehicles were standing in the market at 7 a. m., the time of greatest congestion. There were other vehicles parked on nearby streets but no count was made of them. Practically all such vehicles were the property of firms located nearby and would not affect the market traffic in a new site. Many incoming vehicles may have come and gone by 7 a. m. By 8:30 a. m. many buyers had left. The major share of a day's business is over by 9 or 9:30 a. m.

each day.

To further complicate the traffic problem, many incoming trucks must unload during the early morning hours and stack their contents on the sidewalks or 5 to 10 feet into the street. Trucks arriving later usually find the sidewalks full of produce from earlier arrivals. During market hours, the sidewalks, which average 10 feet wide,





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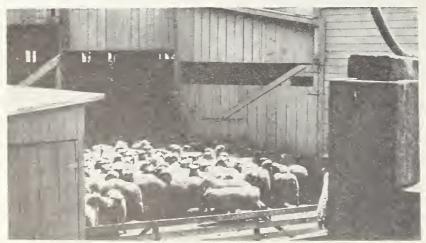


Figure 14.—Views of some of the present facilities in the "Butchertown" area, San Francisco, Calif., 1957. Top, Slaughter house for beef. Center, Unloading docks for livestock pens. Bottom, View of sheep pens.

Table 13.—Number and type of vehicles in the Washington Street Wholesale Market District, by half-hour intervals from 3 a. m. to 8:30 a. m., July 15 and 18, 1955, San Francisco, Calif.

	Types of vehicles							Total				
Time (a. m.)		ming ads	Mai vehi	ket cles	Buy vehi		Passe		Ot. veh	her icles	July	July
	July 15	July 18	July 15	July 18	July 15	July 18	July 15	July 18	July 15	July 18	15	18
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Numbe
3:00	. 68	47	102	33	8	13	76	99	25	13	203	20
3:30	. 46	56	199	55	36	15	136	119	28	14	309	25
1:00	. 52	59	188	60	39	30	128	127	39	17	318	29
: 30	35	45	198	82	88	64	130	158	36	15	357	36
:00	$\begin{array}{c} 45 \\ 29 \end{array}$	$\frac{40}{35}$	197	91	126	123	123	150	30	18	398	4:
::00	16	23	$\frac{215}{243}$	$\frac{76}{63}$	180	146	149	173	26	13	450	4-
5:30	. 14	13	$\frac{243}{234}$	66	$\frac{212}{224}$	189	175	162	26	26	497	40
:00	13	8	$\begin{array}{c} 254 \\ 256 \end{array}$	65	$\frac{224}{250}$	$\begin{array}{c c} 205 \\ 205 \end{array}$	174	190	29	22	501	49
:30	$\frac{13}{12}$	6	$\frac{230}{239}$	61	$\frac{250}{253}$	$\frac{205}{218}$	194 184	$\frac{201}{203}$	25	35	544	5
:00	11	4	$\begin{array}{c} 235 \\ 226 \end{array}$	$\frac{51}{52}$	$\frac{233}{210}$	180	184	$\frac{203}{202}$	$\frac{35}{29}$	38 47	539	5
:30	7	5	192	$\frac{32}{62}$	143	107	142	$\frac{202}{179}$	56	90	$\frac{476}{398}$	4:

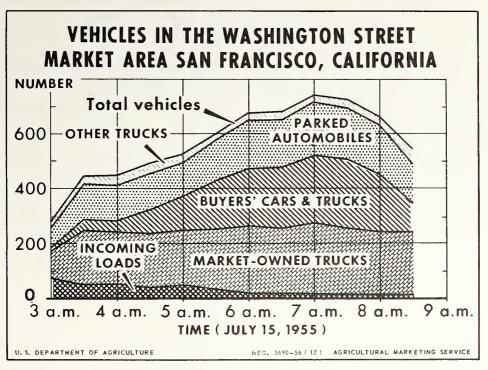


Figure 15.—Vehicles in the Washington Street Market Area, San Francisco, Calif., July 15, 1955.



Figure 16.—View of congested sidewalks and streets, during market hours, Washington Street Market District, San Francisco, Calif., July 1955.

are used by the dealers for sales and storage. Rows of crates, boxes, and packages were stacked so close at times that only a very narrow path was left, hardly wide enough for a 2-wheel clamp hand truck to pass through (fig. 16).

It is obvious that the streets were not adequate for the business being carried on in the district.

Even with the most careful regulation the traffic situation would be difficult in this district. Length of time vehicles may park was not regulated. Some vehicles were being loaded, a few carried produce waiting to be unloaded, but many stood in front of the stores 2 hours or longer; some were double parked for hours before a package was loaded. Many trucks were parked in front of wholesale food establishments each morning by 4:30 or 5 a. m., but stand empty and idle while their owners are making purchases, until 7 a. m. or later. Loading operations are then started.

Many examples of these delays and inconveniences were given during the study—by truckers, dealers, and buyers. One organization with several retail outlets in a nearby county has a semitrailer truck which was used only in transporting its fruit and vegetable supplies from the Washington Street district. It was parked from early afternoon to about 11 a. m. the next morning to hold space for loading the day's supplies.

It is not only buyers' trucks which waste valuable loading space and thus intensify an

inherently bad traffic problem. Several motor-trucks belonging to dealers were left standing in front of the stores throughout the entire selling period—sometimes only partly unloaded, sometimes just standing idle. On one morning during the study an empty truck was parked continuously from 4 a. m. to 9 a. m. in front of a store without ever being moved or having a package placed on it. Inquiry was made as to why such valuable space was so wasted and the reply was merely that the truck might be needed to make a delivery to some large buyer. During the entire morning no buyers had been able to use that street space, and the particular firm had not delivered a single package from this loading space. Its deliveries had all been made by handtruck to buyers' vehicles standing in other parts of the market.

There is one obvious reason for this practice. If a buyer who comes early does not park his truck near the produce stores, he would probably not be able to get there later. Then when he has finished his buying and is ready to load, he would have more difficulty in getting his purchases delivered by the porters to the truck. If he does not take the best parking place, someone else would take it and might keep it for hours. As a natural consequence, almost everyone takes the best place available at the time he comes, and holds it.

Many passenger automobiles were parked within this highly congested area during the

busiest hours. Some stopped in the busy sections of the market; a number parked regularly on Oregon Street. A number rented space in otherwise empty buildings, or parked back of the produce stores; others parked nearer the edge of the area. To add still further to the gravity of the traffic problem, many nonmarket vehicles pass through the cross streets and side streets during the trading hours.

Facility Ownership

Approximately 62 percent (107) of the independent wholesalers and chainstore organizations included in the study reported that they rented the facilities they occupied and approximately 38 percent (66) owned their facilities (table 14). Those renting received less than half (21,183 carlot equivalents) of the total unloads of the 5 food items included in the study and those owning their facilities received 55 percent (26,345 carlot equivalents). As shown by table 14, the proportion of those owning their facilities and those that rented varied considerably by commodity group. The 3 chainstore organizations owned their facilities.

Fresh Fruits and Vegetables

Only 10 percent (7) of the independent fruit and vegetable wholesale dealers included in the study owned the buildings they occupied, and 90 percent (66) of the dealers rented their buildings. Those owning their buildings handled about 21 percent of the total volume (4,058 carlot equivalents) handled by independent fruit and vegetable dealers, and about 79 percent (15,373 carlot equivalents) were handled by wholesalers who rent.

Poultry, Eggs, and Dairy Products

Half (7) of the independent poultry, egg, and dairy product wholesalers owned their facilities. The independent dealers owning their buildings handled an estimated 3,243 carlot equivalents or about 65 percent of the total volume handled by all independent wholesale poultry, egg, and dairy wholesalers.

Meat and Meat Products

About 62 percent (40) of the independent meat and meat product wholesalers included in this study owned the buildings they occupied and 38 percent (24) rented. Those owning their buildings handled about 89 percent of the total meat handled by dealers (including slaughterers).

Dry Groceries

Five of the 9 independent dry grocery wholesalers reported that they owned the property in which they conducted their business. These 5 dealers handled 43 percent of the total volume handled by all dry grocery wholesalers located in the city.

Frozen Foods

Four of the 10 independent frozen food wholesalers owned their buildings. Those owning their buildings handled an estimated 492 carlot equivalents or about 29 percent of the total volume handled by all independent frozen food wholesalers. Six wholesalers rented their buildings and handled 1,213 carlot equivalents or 71 percent of the total volume.

Table 14.—Number of wholesalers who own or rent their facilities, by type of business and commodity group, and volume and percent of total carlot equivalents handled, San Francisco, Calif., 1954

Volume ha Carlot aber equivalent F	sa	hole-ders Volu	ime handled
	nt Percent Nu		lot
66 15, 373 7 1, 786 24 1, 014 4 1, 797 6 1, 213 107 21, 183	79. 1 35. 5 10. 6 57. 2 71. 1	73 19, 4 14 5, 6 64 9, 5 9 3, 1 10 1, 7 170 38, 8	131 100. 0 1029 100. 0 1384 100. 0 144 100. 0 100. 0
0 0	. 0	3 8, 6	535 100. 0

¹ Volumes handled by chainstore organizations are not shown by commodity groups.

Space Occupied

A little over 52 acres (2,269,608 sq. ft.) of floor space was being used by independent food wholesalers included in the study. Table 15 shows the estimated amount of floor space used by each type of wholesaler. The space used by meat wholesalers accounts for 56 percent of the total space in buildings occupied by independent dealers. This large proportion is accounted for by the space demands by several of the larger processing and slaughtering firms.

Over 60 percent (1,375,592 sq. ft.) is first floor space (table 16). An estimated 63 percent of the first floor space (858,413 sq. ft.) was used by the meat and meat products processors, dealers, and slaughterers. Fresh fruit and vegetable dealers account for 211,724 square feet of the first floor

space.

Table 15.—Estimated amount of floor space used in buildings occupied by independent wholesalers, by types of commodity handled, San Francisco, Calif., 1954

Type of commodity handled	Estimated floor space used			
Fresh fruits and vegetables Poultry, eggs and dairy products Meat and meat products 2 Dry groceries Frozen foods	Square feet 351, 954 273, 335 1, 274, 794 257, 275 112, 250	Percent 15, 5 12, 1 56, 2 11, 3 4, 9		
Total	2, 269, 608	100. 0		

Chainstore warehouses excluded.

Fresh Fruits and Vegetables

The buildings used by the 73 independent fruit and vegetable wholesalers differ widely in size, a few consisting of more than 10,000 square feet of first floor space, while some had less than 1,000 square feet in use. They use an estimated 351,954 square feet or approximately 8 acres; the space used by chainstore warehouses and public refrigerated warehouses not being included in this estimate. Of this space 47,815 square feet was refrigerated space. Roughly 60 percent of the total space used by fruit and vegetable wholesalers was first floor space. The balance was mostly basement or 2nd floor space. In addition to the 351,954 square feet of space used, there was 49,105 square feet of sidewalk space in front of the stores, most of which was used intensively for selling, handling, and displaying produce.

Poultry, Eggs, and Dairy Products

The buildings occupied by the 14 independent poultry, egg, and dairy product wholesalers vary in size. Several of the larger wholesalers have 40,000 square feet or more, while the smaller dealers have buildings 20 to 30 feet wide and 30 to 70 feet long.

The independent wholesalers use 118,860 square feet of first floor space. There was a total of 273,335 square feet of space or over 6 acres. Poultry processors often used buildings with from 3 to 7 floors. About 21 percent (58,128 sq. ft.) of the total space was refrigerated.

Meat and Meat Products

The estimated floor space used by independent meat wholesalers was 1,274,794 square feet or ap-

Table 16.—Estimated amount of floor space used by 170 independent wholesalers, by commodity group, San Francisco, Calif., 1954

			Floor sp	ace used		То	otal
Commodity group	Whole-salers	- 11 11 11001		Ot	her	All whole-	
		All whole- salers	Average	All whole- salers	Average	salers	Average
Fresh fruits and vegetables_Poultry, eggs, and dairy products Meat and meat products 1_Dry groceries 2_Frozen foods	Number 73 14 64 9 10	Square feet 211, 724 118, 860 858, 413 105, 675 80, 920	Square feet 2, 901 8, 490 13, 413 11, 741 8, 092	Square feet 140, 230 154, 475 416, 381 151, 600 31, 330	Square feet 1, 921 11, 033 6, 506 16, 844 3, 133	Square feet 351, 954 273, 335 1, 274, 794 257, 275 112, 250	Square feet .4, 821 19, 523 19, 919 28, 586 11, 225
Total	2 170	1, 375, 592	x x x	894, 016	x x x	2, 269, 608	X X X

Includes 8 packer branch houses and 8 slaughterers.
 Excludes chainstore organizations.

² Including slaughterers and meat packer branch houses,

proximately 29 acres. An estimated 67 percent of the total space was on the first or ground floor. The amount of floor space in buildings occupied by wholesalers varies by types of wholesalers and is shown in table 17. No information was obtained on space used by the 3 chainstore organizations for their meat handling operations.

About 8 percent (100,620 sq. ft.) of total space in meat and meat product wholesalers' establishments was refrigerated-either cooler or freezer A dealer's cooler space was generally greater than his freezer space, but he could usually interchange one for the other with little difficulty. Although some dealers needed more cooler or freezer space, most had some refrigerated space in their buildings. In addition to refrigerated space in their own buildings, many wholesalers rented space in public cold storage warehouses. In several instances the entire operations of a wholesaler were carried on in a public cold storage warehouse. It was reported that for 1954, 14 meat and meat product wholesalers rented refrigerated space in addition to their own facilities, but no estimate was obtained of space rented.

Table 17.—Estimated amount of floor space used by independent meat and meat product wholesalers (including slaughterers and packer branch houses. but excluding chainstore organizations), San Francisco, Calif., 1954

Type of wholesaler	Deal-	Floor space				
	ers	First floor	Other	Total		
	Num- ber		Square feet	Square feet		
Processors	30					
General wholesaler Hotel and restau-	13	49, 678	29, 516	79, 194		
rant suppliers	5	25, 700	5, 400	31, 100		
Slaughterers Packer branch	8	459, 300	145, 990	1 605, 290		
houses	8	155, 505	90, 190	245, 695		
Total	64	858, 413	416, 381	1, 274, 794		

¹ Does not include space for stock sheds, pens, and corrals.

The amount of refrigerated space used in 1954 by meat and meat product wholesalers in buildings they occupied was as follows:

	Square
	feet of
	refriger- ated
	space
Type of wholesaler	used
Processors	53, 540
General wholesalers	17,799
Hotel and restaurant suppliers	11,561
Packer branch houses	17, 720
Total	100, 620

No estimate was available for local slaughterers and chainstore organizations.

Dry Groceries

The 9 independent dry grocery wholesalers used a total of 257,275 square feet of space or about 6 acres (table 18). These wholesalers used 105,675 square feet of first floor space and 151,600 square feet of other floor space. In several instances, the buildings had 4 floors, most of the top floors being used for storage and assembling of orders. Several wholesalers used basement space for storage of trucks.

The 3 chainstore organizations used 71,500 square feet of first floor space, and 224,500 square feet of other space or a total of 296,000 square feet of space. This is approximately 7 acres of space.

No estimate was made of cooler or freezer space for dry grocery, independent or chainstore organizations.

Table 18.—Estimated amount of floor space in buildings used by wholesale dry grocers' establishments, San Francisco, Calif., 1954

	Whole- salers	Floor space			
Type of wholesaler	estab- lish- ments	First floor	Other	Total	
General dry gro- cersSpecialty dry gro-	Number 5	feet	Square feet 93, 400	feet	
cers	4	30, 600	58, 200	88, 800	
	9	105, 675	151, 600	257, 275	
Chainstore organizations	3	71, 500	224, 500	296, 000	
Total	12	177, 175	376, 100	553, 275	

Frozen Foods

The 10 independent wholesalers used 80,920 square feet of first floor space, 21,165 square feet of second floor space, and 10,165 square feet of basement space. This is a total of 112,250 square feet or approximately 2.6 acres of space used.

The buildings occupied by the independent frozen food wholesalers vary in size and construction. In one instance the owners leased a 4-story building previously used by a newspaper. Several of the larger frozen food wholesalers had 12,500 square feet or more, while other dealers had 6,000 square feet or less.

Principal Inadequacies of Facilities and Operations

The analysis of the wholesale food handling facilities in San Francisco showed that many dealers were operating in facilities that made operating costs excessive and prevented efficient handling of food. The inadequacies did not apply to every dealer but they were prevalent among handlers of all types of commodities covered in the study.

A short summary of some of these inadequacies is given in this chapter to point up some of the costs that may be changed with the construction of new facilities.

Inadequate Buildings and Auxiliary Facilities

Generally, and especially in the Washington Street district, store buildings were poorly adapted to the functions that must be performed. Buildings were not designed for rapid handling of heavy, bulky, and perishable foods. In most buildings floors were at sidewalk level without platforms on which to unload incoming supplies, or to assemble and load the outgoing produce. The greater proportion of the stores had only front entrances through which all food items must be moved in and out. Because of the inconvenience of getting to the back part of the stores, much of the floor space was little used even though rents were extremely high. Many buildings had no toilet

facilities and public sanitation facilities were lacking. Streets were sometimes littered with refuse; crates and broken boxes usually were stacked on sidewalks and streets.

Lack of Direct Rail Connections

Many dealers occupied facilities which lacked rail connections. Food items shipped by rail had to be carted from team tracks to the stores for distances varying from 2 or 3 blocks to several miles. This cartage was costly. It added to deterioration, shrinkage, and loss by theft. It represented a marketing cost that could be reduced greatly if all wholesalers' stores had rail spurs direct to their buildings.

Traffic Congestion

In those areas where large quantities of foods are handled, the lack of street space in which to accommodate the vehicles used in moving products to and from the stores has long been recognized as one of the most serious handicaps confronting all dealers and buyers operating in these areas.

Hundreds of motortrucks haul supplies to and from the stores and at peak periods the congestion was great enough to result in tie-ups of long duration (fig. 17). Large trucks were delayed in



Figure 17.—Washington Street Market District during morning hours, San Francisco, Calif., 1955.

reaching wholesale stores and buyers could not find parking space. During the survey it was reported that many previous buyers had stopped coming to the various market districts of the city because of impossible traffic situations. These conditions greatly increased the cost of handling food and resulted in much deterioration and pilferage.

Split Markets

Figure 10 shows that as many as 4 or 5 stops in different parts of the city would be necessary for most retail grocers if they wished to secure all of their food needs on one visit to the city. Even though a dealer could secure most of his needs of fresh fruits and vegetables in the Washington Street district, it was not unusual for a buyer to spend a large part of a day driving to the various wholesalers, securing his food supplies, and returning to his store.

Split markets are costly to buyers and sellers alike, for some sellers have to operate in 2 or more locations. There are extra costs for the additional sales force and other expenses in maintain-

ing a second or third location.

Accurate price, supply, and other information is difficult to obtain in a split market situation. An example of an attempt to overcome the lack

of coordinated price information is the daily reports by the State-Federal Market News Service giving the fresh fruit and vegetable unloads as of 5 a.m. This report was available, based on the night's unloads, shortly after 6 a.m. each morning. It was supplemented by a more detailed report later in the day. By these reports buyers and sellers become acquainted with the "market condition" and usually are able to set a price for the items on the market.

Unregulated Operating Hours

Operating hours were not well regulated in any of the wholesale market areas of the city. Most wholesalers fixed their schedules to suit their demands but tried to adhere to an 8-hour schedule. Even the fresh fruit and vegetable dealers of Washington Street district followed an 8-hour schedule for most employees. They had arrangements with most producers arriving with supplies in the afternoon or early evening to stack the load on the sidewalk or street adjacent to the store, thus eliminating a large force to receive the goods.

However, the lack of coordination in establishing scheduled hours of selling made it impossible for buyers to arrive on the market at a time when a full selection of the best produce was available.

Some Costs Incurred by Wholesalers

The kind and type of facilities through which food items are handled directly affect the costs of marketing these items. Deficiencies of the present wholesale marketing facilities in San Francisco made many distribution costs high. This section of this report deals with some of the costs which can be measured with reasonable accuracy. They are: (1) Cartage, (2) handling, (3) spoilage, deterioration, and breakage, and (4) rentals. Obviously, these are not the total costs of marketing, but are only some of the costs that will be affected by the development of a new food center. The costs shown in this chapter are based on costs of independent dealers only.

Cartage

Cartage, for purposes of this report, consists in unloading a rail car at the team track onto a motortruck, transporting the load to the wholesale facilities, and unloading it to sidewalk or platform of the facilities. Cartage costs were primarily based upon public carrier charges in San Francisco as listed in the Public Service Commission Tariff.¹¹ The cartage cost incurred

in San Francisco during 1954 for moving food products from rail yards to wholesaler facilities was estimated to be \$196,826 or about \$45 per carlot equivalent. Table 19 shows the number of rail carlots on which cartage costs were incurred, the average cost per carlot, and the total cost by type of commodity handled.

Table 19.—Cartage costs as estimated for independent wholesalers, by commodity group, San Francisco, Calif., 1954

Commodity	Carlots incurring cartage costs	Cartage cost per car	Total cost
Fresh fruits and vegetables Poultry, eggs, and dairy products Meat and meat products 1 Dry groceries Frozen foods	622	Dollars 40. 08 37. 90 49. 60 62. 00 66. 70	Dollars 84, 729 23, 574 56, 544 10, 168 21, 811 196, 826

¹ Excluding meat received as livestock.

¹¹ Supplement No. 9 to City Carrier Tariff No. 1-A, Public Utilities Commission of the State of California, San Francisco, Calif., 1954.

Handling 12

For purposes of this study the term "handling" includes the receiving of the commodity at the wholesaler's store, moving it into the facility, rehandling within the facility, and loading on an outgoing truck. In some instances this would include handling from a truck to the wholesaler's store door and handling from the store to the buyer's truck parked some distance away.

As stated previously, many of the facilities used by food wholesalers in San Francisco were of obsolete design, having inadequate space for efficient movement of food items. Many of these facilities were of such design that efficient handling methods could not be used. Handling costs which were affected by these conditions were estimated in 1954 to be \$2,516,735 or an average of approximately \$65 per car. Table 20 shows the number of carlot equivalents on which handling costs were incurred, average handling cost per carlot equivalent, and total handling cost by type of commodity.

Table 20.—Handling costs as estimated for independent wholesalers, by commodity group, San Francisco, Calif., 1954¹

Commodity group	Carlots incurring handling costs		Total cost
Fresh fruits and vegetables Poultry, eggs and dairy products Meat and meat products Dry groceries Frozen foods Total	Carlot equiva- lent 19, 431 5, 029 9, 584 3, 144 1, 705 38, 893	Dollars 70. 62 67. 42 49. 27 70. 75 65. 00	Dollars 1, 372, 217 339, 055 472, 200 222, 438 110, 825 2, 516, 735

¹ Excludes costs of chainstore organizations.

Spoilage, Deterioration, Breakage, and Shrinkage

Spoilage, deterioration, breakage, and shrinkage costs were estimated by independent wholesalers for all commodities. Losses from shrinkage, deterioration, and breakage to fresh fruits and vege-

¹³ See footnote 12.

tables in San Francisco were estimated to be \$660,654 or \$34 per carlot equivalent. Part of the shrinkage included in this estimate is said to be attributable to continuous 10 to 25 m. p. h. wind currents which occur in most seasons. Highly perishable products such as berries and green goods suffer considerable loss from shrinkage if left in exposed locations for any length of time. In San Francisco this loss may result from the practice of storing many items on sidewalks and streets for extended periods. Annual losses from breakage and deterioration in the poultry and egg business were estimated at \$311,-798 or \$62 per carlot equivalent, the highest loss per carlot for the 5 groups of commodities. Estimated spoilage, deterioration, breakage, and shrinkage costs for all independent wholesalers were estimated at \$1,547,073 in 1954 (table 21), or an average cost of \$39.78 per carlot equivalent.

Table 21.—Spoilage, deterioration, breakage, and shrinkage costs as estimated for the independent wholesale dealers, San Francisco, Calif., 1954¹

Commodity group	Carlots incurring spoilage, deteri- oration, breakage, and shrinkage	Cost per carlot equiva- lent	Total cost
Fresh fruits and vegetables Poultry, eggs and dairy products Meat and meat products Dry groceries Frozen foods Total or average	Carlot equivalent 19, 431 5, 029 9, 584 3, 144 1, 705 38, 893	Dollars 34. 00 62. 00 51. 60 13. 00 23. 00	Dollars 660, 654 311, 798 494, 534 40, 872 39, 215 1, 547, 073

¹ Excludes costs of chainstore organizations.

Rentals

Information was secured on rental values for facilities owned and those rented by means of direct interviews with the occupants of the present facilities. Where the occupant of the facility was also the owner, an effort was made to estimate the cost of renting a similar facility. Information was not available with regard to the rental values for chainstore facilities, national meat packers, or local slaughterers. Rental charges for the wholesale dealers covered were estimated at \$1,436,784 in 1954 (table 22).

Summary of Selected Marketing Costs Affected by Facilities Used

Table 23 shows selected marketing costs of wholesalers by type of commodity studied. The

¹² Estimates of handling costs for fresh fruits and vegetables as herein defined were based upon information compiled by Stanford Research Institute, under contract with the U.S. Department of Agriculture, in San Francisco in 1952, adjusted to the 1954 basis. See Transportation and Handling Costs of Selected Fresh Fruits and Vegetables in San Francisco Bay Terminal Area, Marketing Research Report No. 2, U.S. Dept. Agr., May 1952. Estimates of handling costs for other commodities are based in part on data furnished by dealers who were interviewed.

Table 22.—Rental value of facilities as estimated for 154 independent wholesale dealers, by commodity group, San Francisco, Calif., 1954 ¹

Commodity group	Area used in buildings	Total cost
Fresh fruits and vegetablesPoultry, eggs, and dairy pro-	Square feet 351, 954	Dollars 309, 719
ducts Meat and meat products 2	273, 335 423, 809	177, 668 483, 142
Dry groceries Frozen foods	257, 275	198, 095 268, 160
Total	1, 418, 623	1, 436, 784

¹ Does not include chainstores.

estimated cost in 1954 of cartage, handling, spoilage, deterioration, breakage, shrinkage, and rental was \$5,697,418.

Other Marketing Costs

There are many other marketing costs that cannot be measured as readily, which would be affected by the development of a new food center. One of the largest costs is the cost of time lost incurred by local and out-of-town buyers and sellers traveling through heavy traffic to and from market places. Another costly item is the cost of doing business in scattered facilities. Long selling hours in an unregulated market are time-consuming for buyers, sellers, and market employees. Other costs are borne by the city and the public, and include costs of street maintenance in heavily congested streets, policing in and around markets, and enforcing sanitation and fire regulations.

Table 23.—Summary of selected cost items incurred by independent wholesalers, by type of commodity, San Francisco, Calif., 1954

Commodity group	Cartage	Handling costs	Spoilage, deteriora- tion, break- age, and shrinkage	Rentals	Total
Fresh fruits and vegetables Poultry, eggs, and dairy products Meat and meat products Dry groceries Frozen foods	Dollars 84, 729 23, 574 56, 544 10, 168 21, 811	Dollars 1, 372, 217 339, 055 472, 200 222, 438 110, 825	Dollars 660, 654 311, 798 494, 534 40, 872 39, 215	Dollars 309, 719 177, 668 483, 142 198, 095 268, 160	Dollars 2, 427, 319 852, 095 1, 506, 420 471, 573 440, 011
Total	196, 826	2, 516, 735	1, 547, 073	1, 436, 784	5, 697, 418

The Need for a Modern Wholesale Food Center in San Francisco

Trading in the present wholesale food market areas in San Francisco has been carried on for many years. In many instances, these businesses have been located in these areas since early days, with only an interruption and rebuilding caused by the San Francisco earthquake and fire of 1906.

During the years, distribution of practically all food commodities has changed radically from direct sale to consumers by producers to sales through processors, wholesalers, and retailers. According to the United States census, the population of the city of San Francisco has increased over 2½ times during the past 50 years. Food habits have changed considerably, and transportation has been much improved. These changes have not been accompanied by comparable expansion of volume or improvement in the facilities for marketing food.

Present costs in marketing food items at wholesale have been outlined previously. These costs for selected items amount to more than \$5.6 million each year. Ultimately the costs which may be excessive are paid by consumers or by a decrease in the prices received by producers. Some food distributors have tried to solve their problems by building new facilities outside the market areas. Many of these firms are service wholesalers, who take orders and deliver directly to buyers. Moving to new facilities in areas where they can operate efficiently is not possible for most of the fresh fruit and vegetable wholesalers and for other food distributors who sell to buyers at the wholesalers' stores, unless almost all similar dealers move to a new site as a group.

Furthermore, the city of San Francisco, as previously pointed out, has become concerned at the deteriorating condition of the facilities, the presence of undesirable food handling situations, fire hazards, and the severe traffic congestion in and near the major market area on Washington Street. The city declared the Washington Street market and the adjacent area to be a blighted area

² Does not include packer branch houses or slaughterers.

in 1954 and plans are now well advanced for the redevelopment of this district into an up-to-date modern office and apartment house area. A new wholesale food market location is necessary under these conditions since the present market facilities will be torn down and the dealers must move to another location within a very few years.

In a new location, provision should be made for independent wholesalers of all types of foods, and should include chainstore warehouses, processors, manufacturers' branch houses, brokers offices, and all other parts of the food industry that care to operate in it. Facilities should be built so that foods could be unloaded from railroad cars and

trucked directly into wholesale stores.

Buildings should be designed to permit the use of proper handling equipment for moving products into, within, and out of them. They should be large enough for a dealer to consolidate all his operations in one building, with space for both refrigerated and common storage, and for any necessary processing. Buildings should have front and rear entrances, so that trucks and rail cars being unloaded in the rear will not interfere with outgoing shipments and deliveries to buyers in the front of the store. Streets between buildings should be wide enough that trucks can back up to the platform and still leave sufficient room in the center for traffic to move freely. There should be adequate parking space for trucks and automobiles. Buyers should be able to obtain a complete line of food items without going to other parts of the city. The food center should be located at a point where access to and egress from the market are easy and efficient.

Obviously, a wholesale food center can be provided only by concerted action. It can be developed only by making a new start, in a new location, where sufficient land is available to accommodate firms desiring to move now and those who may desire to locate there in the future.

San Francisco, and perhaps the entire bay area, needs a new wholesale food center that is open to

all types of buyers, sellers, and agencies engaged in transportation. The plan proposed herein takes into account existing defects and relates them to the basic essentials of a good market. It does not take into consideration the needs of the entire bay area, but shows only what would be required to accommodate the business in San Francisco proper. Further study would be necessary to develop a plan for a food distribution center large enough to meet the needs of the whole area.

An important consideration in deciding on the nature and practicability of a new wholesale food center for the city of San Francisco is the extent of interest among the various groups concerned and their willingness to use the new market when

it is built.

All the 73 dealers of fresh fruits and vegetables were questioned about moving to a new market facility. On the day they were interviewed, 56 replied that they were interested and would rent facilities in a new market, 8 were undecided at that time, and 9 replied that they did not believe

such a move would be a good one.

Nine out of 14 of the poultry and egg and dairy product dealers expressed a definite interest in moving to new facilities, and 6 of the 9 dry grocery wholesalers were likewise interested. Of the 48 independent meat and meat product wholesalers and 8 meatpacker branch houses interviewed, 31 expressed an interest in moving to new facilities. Several dealers have built new facilities or renovated the present ones, for which reason they were not interested in a new food distribution center.

Railroads and trucking organizations have shown considerable interest by assisting in preparation of street and track plans to fit the new proposed plans. The city and State governments through their many agencies have shown an interest by assigning personnel to assist in collecting and analyzing data, preparing plans and arranging for conferences of various interested persons and

organizations.

Kind and Amount of Facilities Needed

It is essential that any plan for a new wholesale food distribution center provide facilities which will eliminate or remedy the defects which have been pointed out. In order to accomplish this, it is necessary to consider the needs of all the various segments of the wholesale trade who would operate in such a center. Provision must be made for the establishment of whatever facilities are required for present and anticipated future needs. The individual needs of each wholesaler have been determined from personal interviews and from observing their operations.

From these interviews and observations it was determined that a new San Francisco food distribution center should include in the initial

construction the following facilities:

1. Stores for all types of food wholesalers and processors.

2. Office space for brokers and other persons requiring such space, including the food center management.

3. Space for restaurants, communications center, etc.

4. Truckers' shed.

5. Public refrigerated warehouse.

Provision also should be made for:

- Rail connections to dealers' stores.
 Team tracks.
- 3. Paved streets of adequate width.

4. Toilet facilities.

5. Sufficient parking areas.

6. Auxiliary facilities such as a motel and a combination service station and garage.

The actual amount of each kind of facility built should be based upon the space needed to handle present volume by responsible tenants who will actually sign firm leases for it. This precaution is necessary to prevent overbuilding at the outset and to insure the occupancy of all facilities.

The kind and amount of facilities planned for initial construction are based upon the estimated volume of business handled by the 138 independent wholesalers who are operating under such conditions that they should move to new facilities. These wholesalers handled about 32,384 carlot equivalents during 1954. The size and number of new facilities as suggested, are based on total volume handled.

Two types of buildings are suggested: (1) Multiple-store buildings for smaller wholesalers in which several stores are contained in one building, and (2) detached buildings for each firm large enough to justify such a building. Generally, wholesalers with fairly large volumes of business and those requiring special features in their facilities are placed in detached buildings. Table 24 shows the number of wholesalers who would occupy each of the two types of facilities and their estimated volumes of business, by type of commodity handled.

Fresh Fruits and Vegetables 14

Seventy multiple store units are suggested for fresh fruit and vegetable wholesalers. They are designed to handle 19,431 carlot equivalents or approximately 277.5 carlot equivalents per year each. This volume represents the present volume of the independent wholesalers in the Washington Street district. It is expected that normal attrition and consolidation of businesses will permit

a smaller number of store units than the present number of dealers. An additional two units would be occupied by two restaurants for food center patrons. Public restrooms should be built in the basements of these units.

Fresh fruit and vegetable facilities could be placed in 4 buildings containing multiple store units. These units are 22 feet 6 inches by 60 feet with an 18-foot ceiling. The rear platform is 14 feet wide, 55 inches above the top of the rail; and a front platform 24 feet wide, 45 inches above the pavement, thus making an overall depth (including the walls) of 100 feet for each building. The roof over the front platform should have a 6 foot overhang to protect the produce during unloading. A continuous step, 22 inches above the pavement should run along the front platform to accommodate small trucks and to permit pedestrians easy access to the stores (fig. 18).

A wooden bumper 6 by 8 inches should be bolted to the edge of the front platform to protect it from damage from trucks. The produce is delivered by rail car or motortruck to the rear platform and unloaded directly on the dealer's floor. Part of the width of the front platform is designed for use by the wholesaler for display and sales purposes; the remainder is for common use of buyers and for delivery of produce direct to the buyers' trucks and for a passageway between stores.

Store units should be constructed side by side with continuous front and rear platforms. Individual wholesalers or dealers might take one or more than one unit, as required for their operations. Hence, temporary partitions between units should be so placed as to provide each dealer with the space that he needs and should be built of material so the partition can be moved if necessary

Table 24.—Number of wholesalers suggested to occupy multiple store units and detached buildings in a new food distribution center and their estimated volume of business, by type of commodity, San Francisco, Calif.

	Multiple-store units			Detached buildings			Total	
Type of commodity	Dealers	Units	Volume of business handled	Dealers	De- tached build- ings	Volume of business handled	Number of whole- salers	Total volume of business handled
Fresh fruits and vegetablesPoultry, eggs, and dairy products Meat and meat products ¹ Dry groceries Frozen foods Total	Number 73 12 31 5 10 131	Number 70 8 30 9 11	Carlot equiv- alent 19, 431 3, 789 1, 683 724 1, 705	Number 0 2 3 2 0 7	Number 0 2 3 2 0 7	Carlot equivalent 0 0 1, 240 1, 812 2, 000 0 5, 052	Number 73 14 34 7 10	Carlot equivalent 19, 431 5, 029 3, 495 2, 724 1, 705 32, 384

¹ Includes 945 carlot equivalents intramarket movement.

 $^{^{14}\,\}mathrm{Thc}$ overall dimensions of each multiple-store building include the thickness of the two 12-inch outside walls.

¹⁵ See footnote 14.

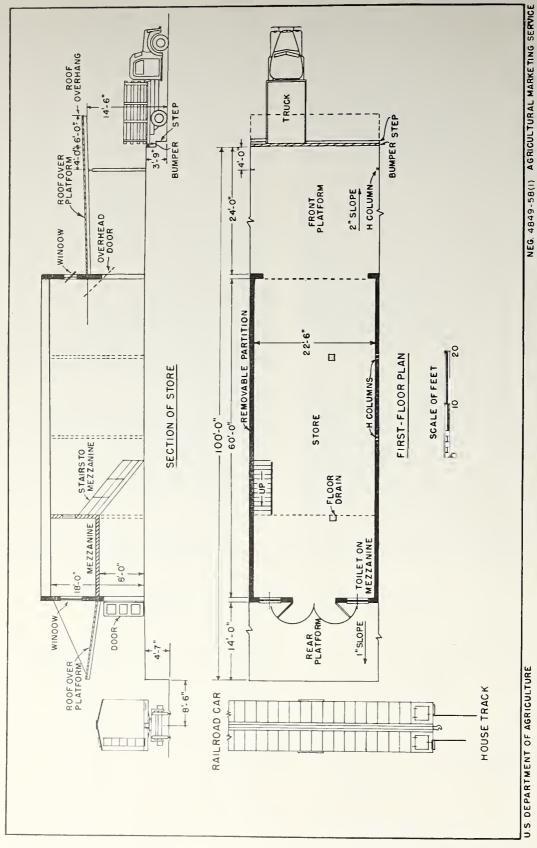


Figure 18.—Suggested plan for fresh fruit and vegetable facilities.

for expansion. The total length of the building is determined by the number of units required, the space available in the market area, and the arrangement of all facilities on the market. In the proposed plan, because of interference from the street and sewer easements on the site used in developing the layout, 44 units are grouped in 2 buildings of 22 units each, and 26 units are included in 2 buildings of 13 units each. On another site the grouping would be different.

It is recommended that offices for wholesalers be constructed on the mezzanine floor, each office being 15 feet deep and the width of the store. When constructed at the rear of the store with windows in the front part of the office mezzanine, a view of the sales floor and delivery space is afforded without occupying valuable space on the main floor. To allow for construction of the mezzanine office and provide adequate space underneath for walk-in coolers or ripening rooms, the height of the ceiling should be no less than 18 feet above the main floor level. Toilet facilities for each store should be provided on the mezzanine.

Adequate air screens and vents should be provided to facilitate the circulation of air within the store. Interiors of the stores should be well

lighted.

In most instances the front doors should be built of heavy screening material on metal or wood frame. The front door should be about 16 feet wide with a 4-foot access door in it. The rear door should be about 8 feet wide. All outside

doors should be at least 8 feet high.

There should be two floor drains at least 8 feet off the center of the store unit with the floor pitched to the drain in each store. The floor slabs should have a nonskid surface or they may create a danger of slipping and bad falls by employees and market customers. Floors in the stores should be designed for a live load of at least 350 pounds per square foot, and mezzanine floors for a live load of 75 pounds per square foot.

Where subsoil requires it, all building foundations and floors should be supported on treated wooden piles capped with concrete to support walls

and floors.

It is suggested that a single railroad siding be laid behind all of the fruit and vegetable stores parallel to the rear platform. This will permit the unloading of rail cars onto the rear platform and into the store or directly into trucks.

The street at the rear of the store should be paved level with the top of the rails so as to permit the loading or unloading of trucks whenever the

platform is not occupied by railroad cars.

It is recommended that ripening rooms, coolers, other refrigeration equipment or special installation in the store units be provided by the tenants. Individual dealer requirements for these items vary considerably. Furthermore, there may be some wholesalers who have equipment which could be transferred to a new store when completed.

Each unit contains 1,350 square feet of first

floor enclosed space, and 855 square feet of platform space (fig. 18). There is an additional 337% square feet in each mezzanine office. Thus, these 70 units would comprise 94,500 square feet of first floor enclosed space, 59,850 square feet of platform space, and 23,625 square feet of mezzanine office space, or a total of 177,975 square feet of space in the 70 units. These 70 units should handle efficiently the 19,431 carlot equivalents of fresh fruits and vegetables which were handled by the independent Washington Street market district in 1954. The space used in the district for fruits and vegetables amounted to 351,954 square feet but much of this space was inefficiently used because of the design and characteristics of the present facilities.

Although store units of the same type are suggested for all types of fruit and vegetable wholesalers, a layout is suggested for specialty businesses, such as banana handlers, illustrating how the facilities could be arranged to obtain maximum utilization of floor space and the proper flow of the

product through the store.

Figure 19 shows a plan for the handling of bananas in standard store units. This plan covering three units is planned for a volume of 300 carlot equivalents annually. It is based on a 6-day ripening period, and contains six paneled ripening rooms 10 feet 11 inches wide, by 27 feet 11 inches long, and 8 feet high. The capacity of each room is about 365 stems or 1 carlot equivalent. Ripening rooms cover about one-half of the total enclosed first-floor area, while the balance is planned for cutting, packaging and shipping operations. As a rule, this ratio makes possible the best flow of the product through the units. The suggested layout permits the unloading of the bananas from the railcar directly into the cutting, packing, and shipping room, with comparatively short distances between specific operations. Space above the ripening rooms can be used for offices and storage of cartons and other such items.16

When the space requirements of the tenants are known, the banana wholesalers, tomato prepackagers, and other dealers who do various kinds of processing may be grouped into one of the suggested fruit and vegetable buildings.

Truckers' Shed

One truckers' shed will be needed to facilitate direct transfer of long-haul perishable shipments to local trucks when produce for more than one consignee is included in the load; and for reloading trucks for return trips. It should contain 30 stalls, 10 feet by 25 feet (fig. 20). The shed would contain approximately 7,500 square feet. The roof of a shed of this type is A-shaped and covers

¹⁶ For more information on banana handling see Andrews, B. G., Burt, S. W. Methods, Equipment, and Facilities for Receiving, Ripening, and Packing Bananas. Mktg. Res. Rpt. No. 92, U. S. Dept. Agr., 1955.

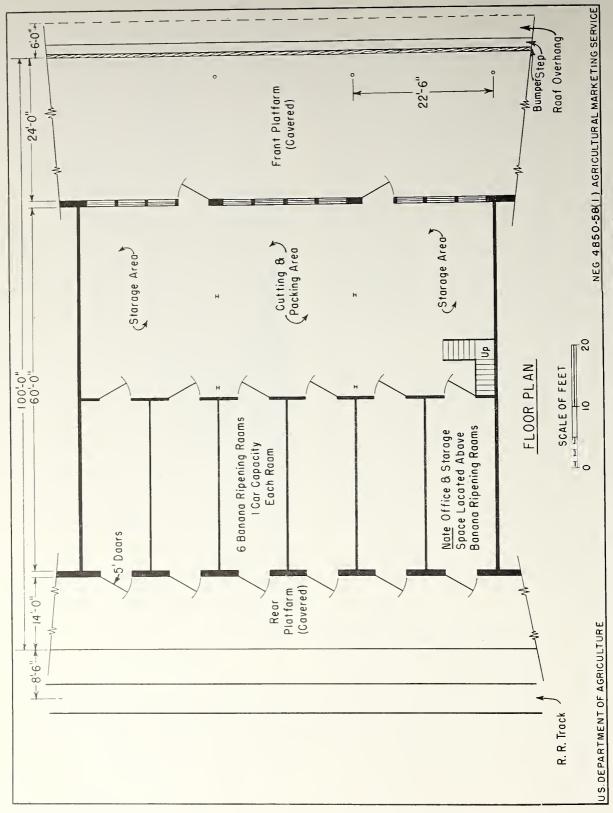


Figure 19.—Possible plan, covering 3 standard store units, for the handling of bananas.

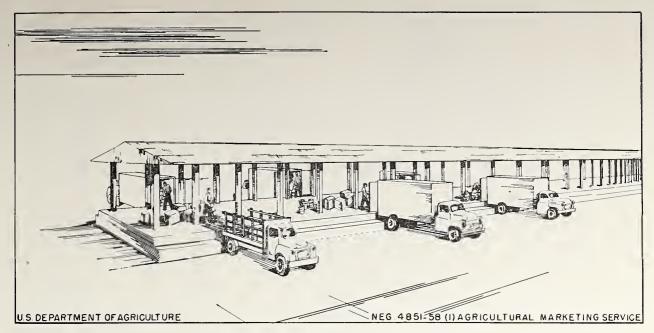


Figure 20.—Suggested plan for a truckers' shed.

a concrete platform which is built 36 to 40 inches above street level and extends beyond the edge of platform. A continuous step about 12 inches in width and about one-half the height of the platform should be constructed on each side of the platform to facilitate loading on small trucks and to permit ready access so pedestrians may reach the platform from the street. The column supports for the roof arc placed at regular intervals set back from the edge of the platform about 48 inches to provide a maximum of unobstructed space.

The shed should be marked off in stalls 10 feet wide for the entire platform. This width is necessary to permit easy parking and to allow for movement of personnel between the trucks. length of the shed, of course, depends to some extent upon the physical features of the site selected, but for a San Francisco Food Distribution Center, a shed 300 feet long is suggested. A shed of this length should not hamper traffic movement

in the food center site.

Poultry, Eggs, and Dairy Products 17

The volume of poultry, eggs, and dairy business which the food center would handle was estimated at 5,029 carlot equivalents of direct receipts so facilities are planned to handle this volume.

The one proposed multiple-store structure would contain 8 store units (fig. 21). Each unit is $22\frac{1}{2}$ feet wide by 70 feet deep with a 14-foot covered platform in front (45 inches high) and a 14-foot covered platform in the rear (55 inches high), giving an overall depth (including walls) of 100

The roof over the front platform extends 6 feet beyond the edge of the platform for protection from bad weather in the loading of produce. An 18-foot ceiling height is recommended. Removable partitions should be provided between units for the dealers who may need two or more units. A mezzanine 15 feet deep by the width of the store is suggested for the rear of the building. A continuous step 22 inches high should run along the front platform to accommodate small trucks and pedestrians. A wooden bumper 6 by 8 inches should be bolted to the edge of front platform to protect it from truck damage.

Because of the wide variation in requirements of individual wholesalers for cooler and freezer space, it is recommended that such units be provided by the wholesalers themselves rather than by the food center. However, for purposes of illustration only, a cooler 14 feet by 25 feet is shown at the rear of the store. The building would contain 12,600 square feet of enclosed first floor space, 2,700 square feet of mezzanine office space, and 5,040 square feet of platform space, or a total of 20,340 square feet of usable space.

Two detached buildings, 180 feet by 230 feet each, are suggested for 2 independent poultry, eggs, and dairy product wholesalers. There would be 82,800 square feet of space in the two buildings. The design and layouts of these buildings would be the responsibility of the individual firm, but they should be built to meet all construction requirements of the United States Public Health Service, the Federal Inspection Service, State and city sanitation departments, and city building codes, and to conform to the master plan for the market.

Although the same type of store unit is suggested

¹⁷ See footnote 14.

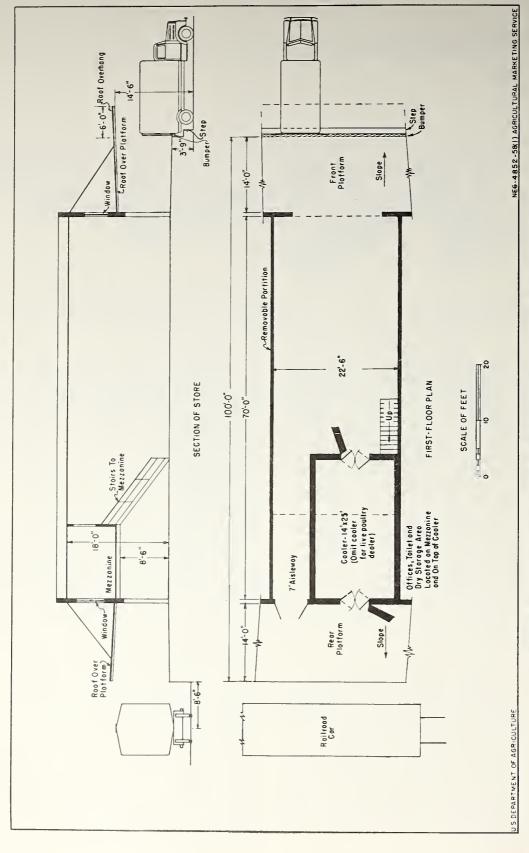


Figure 21.—Suggested plan for facilities for poultry, eggs, and dairy product wholesalers.

for all poultry, egg, and dairy product dealers, several of the dealers handle butter and cheese principally, and a layout is suggested which may suit the demands of this type of dealer to a greater extent.

Figure 22 shows a possible arrangement for a dairy product store unit. A concern handling a large proportion of its receipts in butter and cheese, must have most of the space used refrigerated, therefore, 50 feet of the 70 feet enclosed is suggested as a cooler room and 20 feet for dry storage and shipping room. These units are for smaller wholesalers, who in many instances also cure, process cheese or package cheese and butter and require a relatively large amount of space.

The suggested layout for a wholesale butter and cheese store has the following features: (1) A cooler room 22 feet 6 inches by 50 feet by 18 feet high, with a capacity of about 5 carlots, (2) a dry storage and shipping room 22 feet 6 inches by 20 feet and 10 feet high, and (3) a mezzanine office 20 feet by the width of the building above the shipping room. There is a 14 foot front platform, 45 inches high and a 14 foot rear platform, 55 inches high. Thus the overall depth (including walls) is 100 feet. This layout provides for straight flow of dairy products through the store with a minimum of handling and backtracking.

Meat and Meat Products

Thirty multiple store units in 2 buildings are suggested for 31 meat processors and wholesalers which handled 1,683 carlot equivalents of meat and meat products in 1954. Three detached buildings are suggested for 3 packer branch houses handling 1,812 carlot equivalents. Included in these volumes are 945 carlot equivalents of intramarket movement. No new facilities are suggested for slaughterers because many of those currently operating in Butchertown are planning to move their operations out of the city to locations nearer to the source of livestock production, and other facilities will be expanded accordingly. The suggested facilities provide 264,500 square feet of efficient and usable space; over 50 percent of the space presently used by the 31 meat wholesalers and 3 packer branch houses.

In the proposed plan, 30 multiple-store units for meat processors, wholesalers and hotel suppliers are in two buildings, each with 15 units. These buildings are one and one-half story buildings (fig. 23). The main floor of each unit is 25 feet wide, and 58 feet deep (exclusive of walls) and 11 feet high from the floor to the ceiling, with 14-foot covered platforms at the front with a 6-foot overhang for protection of the meat from inclement weather and a 14-foot covered rear platform. The overall depth of each building (including walls) is 88 feet. The half-story second

floor level is 25 feet wide, 40 feet deep (exclusive of walls) and 8 feet high, all of which is enclosed space.

Two meat rails should be built above both the front and rear platforms. These rails should run the full length of the platforms and have crossovers in front of each store so that meat can be unloaded at any point on the platforms and rolled into the stores. These rails also provide a method for transporting meats between wholesalers.

The rear platforms should be at refrigerated car floor level, or about 55 inches in height, while the front platforms should be about 45 inches in height. A continuous step 22 inches high should run along the outside of the front platform so that pedestrians can step onto the platform from the street at any point. A wooden bumper 6 x 8 inches should be bolted to the top edge of the front platform to protect it from damage from trucks backing up to it.

The first floor of the store units in the original plan is for the meat handling operations. All floors and platforms on this level should be built of material with a nonskid surface. The second floor is used primarily for dry storage, offices, locker rooms, toilets, and refrigeration machinery for the first floor stores, offices for meat inspection officers, etc. Partitions should be of removable type so that several units can be combined for larger operators or for future expansion of individual operators. Freight elevators, 10 feet by 10 feet, are provided at each end of the building for carrying supplies to the upper level.

Each unit of the above dimensions contains 1,450 square feet of enclosed first floor space, 1,000 square feet of enclosed second floor space, and 700 square feet of platform space, or a total of 3,150 square feet. Thus the 30 units proposed for the meat processors and wholesalers contain 43,500 square feet of enclosed first floor space, 30,000 square feet of enclosed second floor space, and 21,000 square feet of platform space, or a total of 94,500 square feet.

Possible layouts for wholesale meat stores, boning establishments, and hotel supply houses occupying standard units are shown in figure 24. All three layouts permit a direct flow of meat and meat products through the store with a minimum of handling. These sketches are merely intended to show how different types of meat dealers can make use of the proposed standard unit by varying the internal arrangement to suit their own particular needs.

The layout for a general wholesaler (No. 1 on fig. 24) has a cooler 44 feet long by 24 feet wide by 11 feet high; it includes a freezer 8 feet by 9 feet. The maximum capacity of the cooler is about 260 quarters of beef. However, the working capacity is only 205 quarters.

¹⁸ See footnote 14.

¹⁹ See footnote 14.

²⁰ The capacity of meat rails is calculated as 1 foot of rail per quarter of beef, each quarter assumed to weigh 150 pounds.

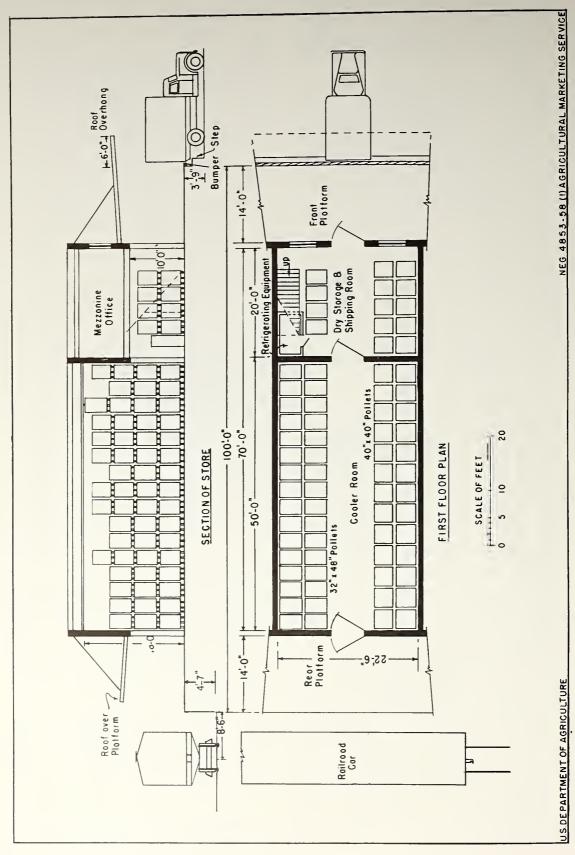


Figure 22.—Suggested floor plan for dairy product store unit.

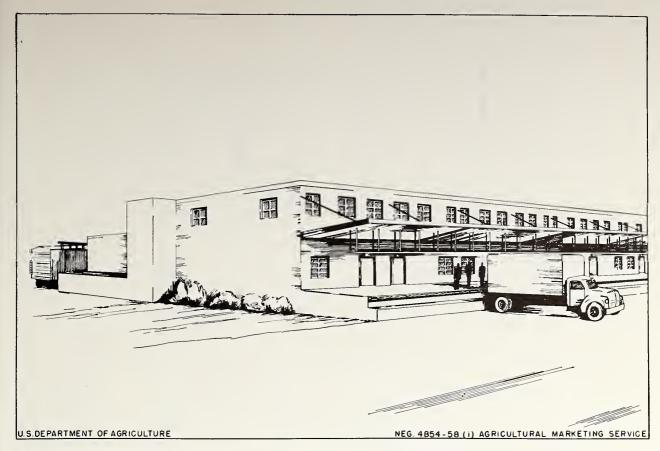


Figure 23.—A design for the proposed meat building.

The shipping room is 13 feet long by 17 feet wide, and the first floor shipping office, included in this section, is 13 feet long by 6 feet wide. There is a 1-foot wall separating the cooler from

the shipping area.

The layout of the boning establishment (No. 2 on fig. 24) shows a cooler 30 feet 6 inches by 24 feet by 11 feet high. This includes a freezer 8 feet by 13 feet. The cooler has a capacity of about 132 quarters of beef. There is also a workroom, 13 feet long by 24 feet wide between the cooler and the shipping area. The shipping area includes a shipping room 13 feet long by 17 feet and a shipping office 13 feet by 6 feet. There are two 1-foot walls separating the shipping area, the workroom and the cooler.

The layout of a hotel supply house (No. 3 on fig. 24) has a cooler 15 feet long by 24 feet wide by 11 feet high. Adjacent to the cooler is a workroom and freezer. The workroom is 22 feet 6 inches by 8 feet, and the freezer is 22 feet 6 inches by 15 feet wide. Immediately adjacent to the workroom and freezer area is the shipping area which includes a shipping room 14 feet 6 inches long by 19 feet and a shipping office 6 feet 6 inches long by 13 feet wide. There are two 1-foot walls separating the cooler, work area, and shipping areas.

The typical second floor plan shown might vary in locker space requirements for different types of operators; however, it is suggested that the general arrangement shown in figure 24 be used. The second floor office, which is the main office of the firm while the first floor office space is used only as a control point in the shipping operations, is 13 feet by 19 feet; the corridor, 4 feet 6 inches wide; the locker room 8 feet by 10 feet, containing 14 lockers, 2 toilets, 6 feet by 4 feet; a store room, 11 feet by 17 feet 6 inches; a compressor room, 11 feet by 6 feet and a freight corridor 7 feet wide.

Major requirements of meat wholesalers other than meat rails are refrigeration facilities, hot and cold water and steam. Because of variations of individual dealers, they should provide their own refrigeration rooms and equipment. Individual steam and hot water generating facilities should also be provided by each dealer. Each building should be built to meet the requirements of the Public Health Service, the Federal Meat Inspection Service, State and city sanitation departments and city building codes.

Three detached structures are suggested for use by three packer branch houses handling about 1,812 carlot equivalents. They are, 250 feet deep by 160 feet, 200 feet by 350 feet, and 200 feet by

300 feet respectively.

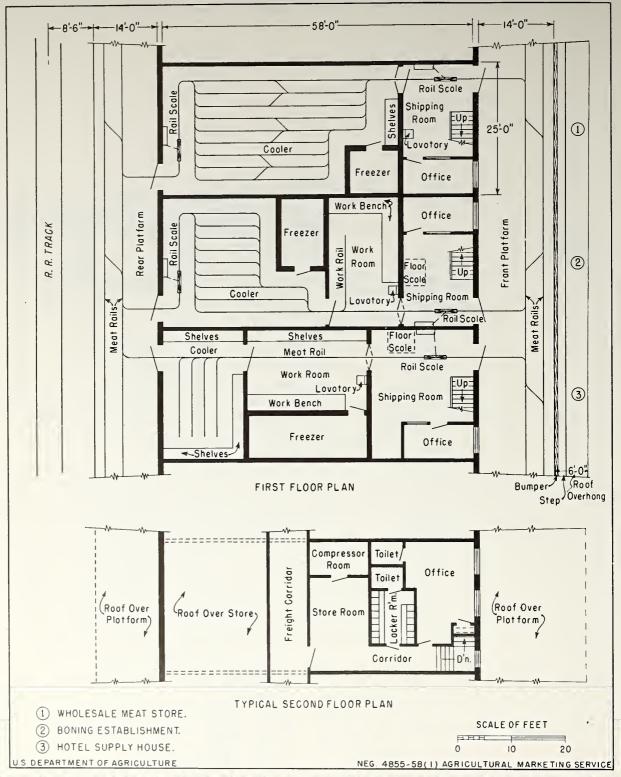


Figure 24.—Suggested floor plans for (1) wholesale meat store, (2) boning establishment, and (3) hotel supply house.

Some consideration should be given before final plans are completed to building a full second floor level on the meat stores instead of only a half story. This would add about 5 percent to the costs of constructing these stores. As the past years have clearly shown, trends in the form and style that meat is handled and marketed are constantly changing. For example, several years ago meat was usually handled in quarters and sides. Now, much is received boned and cut into specialty cuts, such as roasts or steaks. A further development that may have much promise is the sale of frozen retail cuts of beef and other meats; prepared and packaged, ready for the household consumer. The buildings suggested herein should be constructed so they will be adaptable to the trends in the food business. In the event that a full second floor is built, the building should be constructed in such a way that the ceiling and floor between the two levels can be knocked out, making a one story building with a ceiling height about 18 feet. For this type of convertibility, it would be desirable to support the meat rails from the walls of a removable structure with columns and overhead beams rather than to hang them from the ceiling, thus eliminating the heavy construction of ceilings and other supports able to carry the heavy weights of meat in addition to normal floor loads. Thus the meat store could be adapted easily to a palletized operation should there develop a large increase in the volume of meat marketed in the frozen packaged form ready for household consumption.

Dry Groceries

Facilities are suggested for seven dry grocery firms which handled an estimated 2,724 carlot equivalents in 1954. In the proposed plan nine units in one building and two detached buildings containing 40,000 square feet and 90,000 square feet respectively are provided. Each of the nine units in the multiple store building is 50 feet wide, 100 feet deep and 18 feet high from the main floor to the ceiling, with a 14-foot covered platform at the front and rear. The dimension of the multiple store building (including walls), therefore is 130 feet by 450 feet. The five dry grocery firms occupying the nine multiple-store units handled an estimated 724 carlot equivalents in 1954.

To make it possible for individual wholesalers to lease two or more units as required for their operations, removable partitions should be used between units. All units in the plan contain mezzanine offices 15 feet deep by 50 feet wide, located at the front of the store near the order filling operations, thus freeing the rear of the unit for storage. To allow for their construction and provide adequate space for storage, it is suggested the height of the ceiling be 18 feet. All floors and platforms on the first floor level should be concrete with a nonskid surface.

The design of the buildings provides continuous platforms and floors on the same level. The front platforms are at truck-bed level, or 45 inches high, and the rear platforms at boxcar-floor level are also 45 inches high. The roof over the front platform should extend at least 6 feet to protect the merchandise from damage during bad weather. A step 22 inches high is provided at the front platform for pedestrians and small trucks. Both front and rear door openings are 10 feet wide. A wooden bumper 6 by 8 inches should be bolted to the top edge of the front platform to protect it from damage by trucks. Figure 25 shows a floor plan for a wholesale dry grocery store.

Each store unit of the above dimensions contains 5,000 square feet of first-floor enclosed space, 750 square feet of mezzanine space, and 1,400 square feet of platform space, or a total of 7,150 square feet. The nine units suggested for the five wholesalers provide 45,000 square feet of first-floor enclosed space, 6,750 square feet of mezzanine space, and 12,600 square feet of platform space, or a total of 64,350 square feet. Since the five dealers now occupy 168,475 square feet, the amount of space proposed for them represents 38 percent of that presently occupied; however, much of their space is used inefficiently due to poor building design.

Two wholesalers, neither of which could conveniently operate from multistore units, should develop the design and plan of the structures they would occupy. These structures should be built to meet all construction requirements of city building codes and to conform to the master plan for the food center. The wholesalers handled an estimated 2,000 carlot equivalents in 1954, and would occupy 130,000 square feet in new facilities as contrasted to 58,700 square feet now used in their facilities. In each case, these firms had requested much more space to meet increasing business demands.

A possible layout for a general dry grocery establishment showing a schematic diagram of pallet stocking and traffic flow is shown in figure This sketch is prepared merely to show how a dry grocery firm can make use of the space in a building. It permits the most efficient use of space and allows a direct flow of merchandise through the building with a minimum of handling. The sketch shows a layout for a one-floor building 284 feet by 350 feet by 18 feet high, including the rear platform. A continuous covered platform, 14 feet wide is provided in the rear of the building. A loading dock 155 feet long and 25 feet deep is also provided in the front of the building, providing space for 14 trucks to load at one time. First floor and mezzanine office space is provided in one corner of the building for conference rooms, tabulation rooms, accounting office, reception office and space for individual offices for various members of the firm. In the opposite side of the building there is a workroom and a cooler room. Each of these rooms is approximately 120 by 40

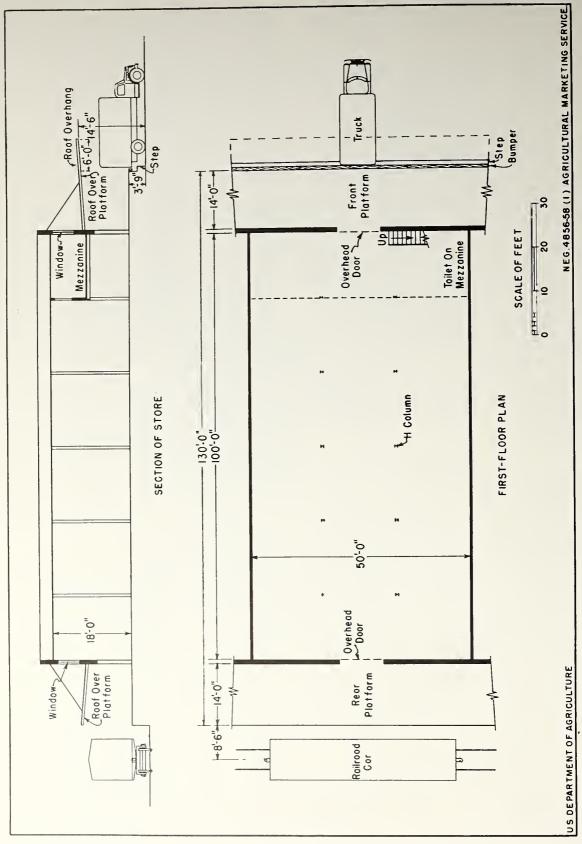


Figure 25.—Possible floor plan for multiple unit dry grocery store.

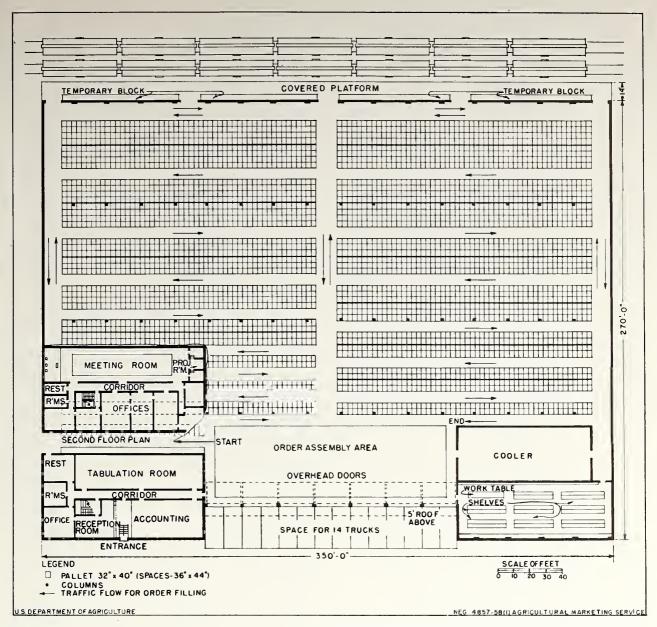


Figure 26.—Suggested plans for a dry grocery warehouse showing a schematic diagram of pallet stacking and traffic flow.

feet by 18 feet high. An order assembly area is provided directly behind the front loading platform.

Frozen Food and Public Refrigerated Warehouse

One building is suggested to contain facilities needed by 10 frozen food wholesalers who handled 1,705 carlot equivalents in 1954 and by public cold storage and freezer patrons. Facilities for a large specialized frozen food and egg dealer, a frozen fruit and berry processor and distributor, and a frozen meat processor and distributor are also pro-

vided, as well as general refrigerated storage space for users in the food distribution center. In the proposed plan the dimensions of the building are 800 feet by 300 feet and 18 feet high from the main floor to the ceiling. In addition, front and rear covered platforms along the length of the building are 20 feet deep. The roof over the front platform should extend at least 6 feet beyond the edge of the platform to protect the merchandise from damage when unloaded during bad weather. The front platform is at truck-bed level, or 45 inches high, and the rear platform is at refrigerator carfloor level, or 55 inches high. There should be at least three sets of steps for pedestrians along the front platform. All floors and platforms on the

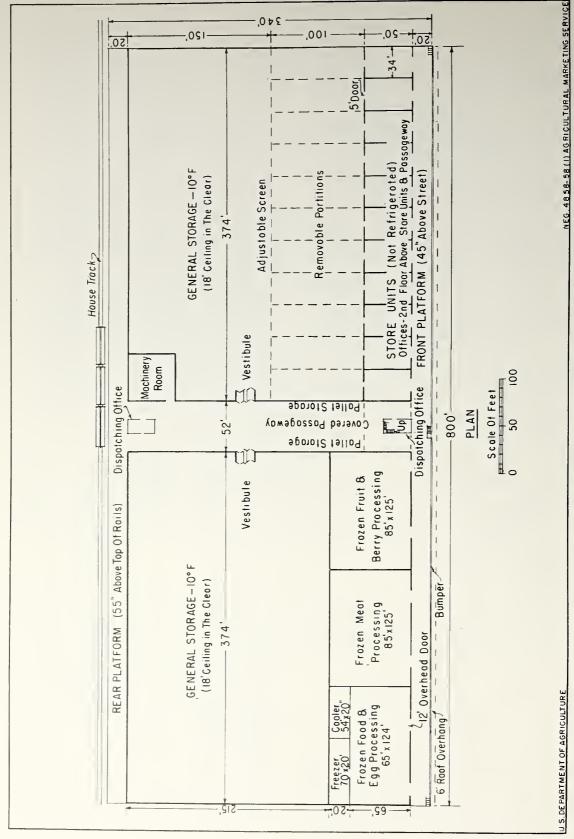


Figure 27.—Suggested plan for frozen food and public refrigerated warehouse. (All dimensions are for outside of building.)

first-floor level should be made of conerete with a nonskid surface. A wooden bumper 6 by 8 inches should be bolted to the top edge of the front platform to protect it from damage by trucks.

A covered unrefrigerated passageway, 52 feet wide, connects the front and rear platforms at the eenter of the building, thus dividing the building into two parts (fig. 27). This passageway is to be used for some of the receiving and loading-out operations of the general storage areas. Dispatching offices at both the front and rear entrances of the passageway are for the purpose of cheeking the receipts and shipments of frozen foods from general storage. Empty pallets may be stacked along the walls of the passageway.

A vestibule on each side of the passageway gives access to a general storage freezer in each of the two sections of the building. The part to the rear of the building is designated for the general storage of frozen food products, and the refrigeration machinery is placed in the corner at the rear of one of these general storage areas. One general storage area is 374 feet long and 215 feet wide, and the other is 374 feet by 150 feet. The total for the two areas is 136,510 square feet or 2,457,180 cubic feet, including the machinery room. The storage rooms are 18 feet high.

The front right section of the building is completcly occupied by 11 multiple-store units. Front door openings to the 11 multiple-store units are 12 feet wide, and rear door openings 5 feet wide. Each unit is 34 feet wide and 150 feet deep. The front 50 feet of each unit is unrefrigerated space, and the remaining 100 feet is freezer space. Each unit eontains 5,100 square feet of first-floor space—1,700 square feet unrefrigerated and 3,400 square feet refrigerated. A second-floor office is located above the unrefrigerated space, providing space 34 feet wide by 50 feet deep, or 1,700 square feet. In addition, platform space for each unit totals 680 square feet. Thus, the total floor space per unit is 7,480 square feet. The 11 store units provide 56,100 square feet of first-floor enclosed space (18,700 sq. ft. unrefrigerated and 37,400 sq. ft. refrigerated), 18,700 square feet of secondfloor office space, and 7,480 square feet of platform space—a total of 82.280 square fect.

In addition to the second-floor space shown above for the 10 wholesalers, 2,600 square feet is included over the covered passageway for use by the building management and employees, for office space, rest rooms, and storage.

The left front of the building contains space for three specialized frozen food dealers who also process much of their volume of products. (No office space is provided in this section.) Unit No. 1 of this section is planned for use by a large egg processing and frozen food dealer. It eontains one room (124 by 65 ft. by 18 ft. high) for egg cracking and frozen food processing. A freezer room (70 by 20 ft. by 18 ft. high) and a cooler room (54 by 20 ft. by 18 ft. high) for storing shell eggs. The adjacent general storage room

may be utilized as necessary for storage at temperatures down to 10 degrees below zero. The second unit is suggested for occupancy by a frozen meat packaging and distributing firm. It is 85 feet wide, 125 feet long, and 18 feet high. The frozen meat plant capacity is estimated at approximately 25,000 pounds per day of packaged frozen meat specialty items; steaks, eutlets, meat patties, and hamburgers. The third unit is 125 feet by 85 feet by 18 feet high. It is suggested for the use of a frozen fruit and berry processing This firm takes fresh fruits and some vegetables, peels and prepares and freezes these items for use mostly by local restaurants and other eating establishments. The fruit and berry processing unit is designed to handle about 180 crates of berries per hour, or approximately 1,800 erates per day. Fruit processing is estimated at 2,500 boxes of apples peeled and frozen each working day and somewhat less for other fruits. Most of the freezing is carried on in the public refrigerated warehouse, after processing and peeling the fruit in the unit.

The agency operating this building would be expected to furnish refrigeration to the entire facility, but the individual firms operating would be expected to provide all other equipment.

The total area provided in the frozen food facility (exterior dimensions) is 293,300 square feet, divided between general storage and individual storage areas as follows:

Type of space	General	Area for individ-	Total
	area	ual firms	area
RefrigeratedUnrefrigerated	Square	Square	Square
	feet	feet	feet
	136, 510	61, 130	197, 640
	35, 240	60, 420	95, 660
Total	171, 750	121, 550	293, 300

Proposed Total Amount of Floor Space as Compared With Present Space Used

The 9 multiple-store buildings in the proposed plan contain 131 store units for 138 wholesalers, and provide 478,715 square feet of floor space. In addition 7 detached major buildings containing 382,800 square feet are provided. In table 25 a comparison of the amount of space provided is given with the amount of space in buildings now used by the wholesalers who would be located in these store units.

A total of 861,515 square feet is provided in the proposed food distribution center plan compared with 1,387,059 square feet in the present buildings for the 138 dealers who are included. Thus the proposed multiple store and detached buildings contain approximately 38 percent less space than

Table 25.—Floor space presently used by independent wholesalers compared with space suggested for them in proposed food center plan, by commodity groups, San Francisco, Calif.

			Amount of floor space						
	Whole-salers included		In proposed buildings ¹					Increase or decrease in proposed space	
Commodity groups	in pro- posed plan	In present buildings			Detache	d buildings			
		Number of units	Total space ²	Number of units	Total space	Amount	Percent-age		
Fresh fruits and vegetablesPoultry, eggs, and dairy products_ Meat and meat products (including packer branch houses)	Number 73 14	Square feet 351, 954 206, 885 493, 275	Number 70 8	Square feet 177, 975 20, 340 94, 500	Number 0 2	Square feet 0 82, 800 170, 000	Square feet -173, 979 -103, 745 -228, 775	Percent -49. 4 -50. 1 -44. 4	
Dry groceries Frozen foods	7 10	227, 175 107, 770	9	64, 350 3 121, 550	$\frac{3}{2}$	130, 000	-32,825 $+13,780$	-14.4 -14.4 $+12.8$	
Total	138	1, 387, 059	131	478, 715	7	382, 800	-525, 544	-37. 9	

now occupied by these dealers. Space provided for general storage in the public cold storage warehouses, truckers' shed, garage and service station, motel and restaurants, and second floor offices is not included in these figures.

Direct Rail Connections to Stores

The number of tracks, which provide direct rail accommodations to the wholesalers' stores vary. A single house track at the rear platform and a team track is provided for the fresh fruit and vegetable wholesalers; a single house track to the poultry, egg, dairy, and meat wholesalers, and to the public refrigerated storage warehouse; and two tracks are provided for dry grocery wholesalers. The team track for fresh fruit and vegetable dealers can be used as a passing or switching track. The layout of the food center should be planned so that rail connections may be expanded for all facilities if they should be needed at some future time and sufficient space should be provided to permit the laying of a second track where only single tracks are laid at the beginning.

House and team tracks are provided for unloading approximately 300 cars at one time. Wherever possible, the streets should be paved at the rear of the stores between the rails so that rear platforms can be used in loading and unloading motortrucks when the tracks are not occupied by rail cars, and to make it easier to keep these areas clean.

Streets and Parking Areas

Where rows of store buildings face the same street and center parking is planned, the streets should be at least 180 to 190 feet wide to permit parking of motortrucks at right angles on each

side of the street, center parking, and sufficient space for a free flow of traffic. Other streets may be from 60 to 100 feet wide, depending upon their use and the traffic load. The major streets should be constructed to carry heavy traffic and facilitate proper drainage away from the buildings. All parking should be at right angles to the loading platforms in order to accommodate as many trucks as possible along the platforms and facilitate the movement between buildings and trucks.

Convenient parking spaces should be provided near the buildings for customers' and employees' passenger cars and motortrucks that are not actually being loaded or unloaded. The parking areas should be as near the stores as possible but should not block the streets, store platforms, and other loading areas. They should be marked properly to permit orderly parking and to conserve space. Although no definite figures were computed to serve as a basis for determining the number of parking spaces, about 1,500 parking spaces would seem to be adequate for the needs of the food center.

Other Facilities and Services

It is likely that many firms now occupying space in the vicinity of the present wholesale dealers will desire to have offices in a new food distribution center. These firms would include brokers, carlot receivers, and other firms related to the food center; the food center management, including the management of the commodity corporations; communication firms; inspection and market news offices; and transportation lines. Space should be provided also for a branch bank, barber shop, restaurants, and public restrooms. Office space is provided for 20 offices on the second floor

Does not include 2d floor offices, garage and service station, motel, restaurants, and truckers shed.
 Includes space provided in mezzanine floors.
 Does not include space provided for general storage and public refrigerated warehouse, which amounts to 171,750 sq. ft.

of one fruit and vegetable wholesale building and 10 offices over the 52-foot vestibule in the frozen

food building.

In the proposed layout, two restaurants or cafes are provided in the multiple-store buildings for fresh fruit and vegetable dealers by adding a standard unit to each of two buildings. Another restaurant is provided in its own building adjacent to a motel. This restaurant would probably serve the general public, since it is adjacent to the motel and near a major street. The motel is mentioned as an auxiliary facility, because there may be need for it, depending on where the food distribution center may be built.

Public restrooms should be provided at various points throughout the food center area. In the proposed layout they are provided in basements under the restaurants in the fruit and vegetable section and in the restaurant near the motel.

Provision should be made for a garage or truck service center, and dormitory facilities for truckers and others doing business in the center.

Future Needs

In developing plans for a food distribution center both immediate needs and possible future needs should be taken into consideration. In the future more stores of the type originally constructed may be needed as well as other types of facilities. In this latter category would be facilities for food shippers, transportation and general warehousing companies, food processing plants, food importers, supplies and containers dealers, equipment wholesalers; and allied industrics such as wholesalers dealing in coffee and tea, sugar, peanuts, spices, candy, beverages, etc.

In cities which have built new wholesale food markets many other types of wholesalers and food handlers have gravitated to the market area over a period of time. Therefore, this possibility should be kept in mind so that a unified food center can be built, which will be adequate for future needs, and sufficient land area will be

available for needed expansion.

Arrangement of Proposed Facilities in a Food Distribution Center

A possible layout of the facilities suggested in the report as needed for a Food Distribution

Center in San Francisco is shown in figure 28. This layout shown for a 122.8-acre site, was drawn to fit the South Basin site which was being widely discussed when this study was made. The principles set forth can be followed on any site. Some features of this layout, particularly the arrangement of the railroad tracks, might be improved on a different site.

Individual areas of the food center are set aside for each major food group. These food sections are arranged so that the buyer can obtain his supplies of fresh fruits and vegetables in one general area, nearest the principal traffic artery, then his supplies of poultry, eggs and dairy products, dry groceries and finally the meats and frozen foods in their respective areas, and leave for his store over a proposed expressway without retracing his steps and causing market traffic congestion.

Another feature of the layout is that insofar as possible those types of wholesalers making a large proportion of their sales direct to buyers visiting the food center have been placed adjacent to each other, while those whose businesses consist of taking orders and delivering have been placed at

the opposite end of the site.

In preparing the layout it was planned in such a way that the facilities initially built will form a compact unit, and expansion can be made without destroying the compactness of the facilities at any stage of development. Streets have been designed to minimize traffic problems. Each section has its own parking area. The operations of buyers and sellers are facilitated by these arrangements.

The Food Center is planned to handle most of the products sold in a retail grocery store, so a buyer should not find it necessary to visit other areas to secure a complete line. All the services necessary for the conduct of the wholesale food business have been included, such as restaurants, wholesale stores, offices, trucker's shed, garage, etc., so that a complete, well rounded food distribution center is provided. Space is also provided for construction of additional facilities that may be needed at some future time to handle the commodities for which the area is designated. Obviously, it is important in planning the food center that a master plan for the complete facility be prepared and adopted at the outset, so that the first buildings to be constructed will not interfere with the further development of the area.

Selecting a Site for the Proposed Food Center

Factors To Be Considered

A number of factors should be considered in selecting a site if the requirements of the major groups directly concerned with the location of the proposed food center are to be met. These groups, include: (1) Buyers who will go to it for supplies, (2) sellers who bring or send food items to it, and

(3) dealers who will operate there.

Among the factors that should be considered in determining the location which will best meet the requirements of all groups are: (1) Its relation to the geographical center of population and retail grocery distribution—the direction of the city's growth, (2) accessibility to all forms of transportation, (3) adequate land area available at a reasonable cost, and (4) accessibility to public ntilities.

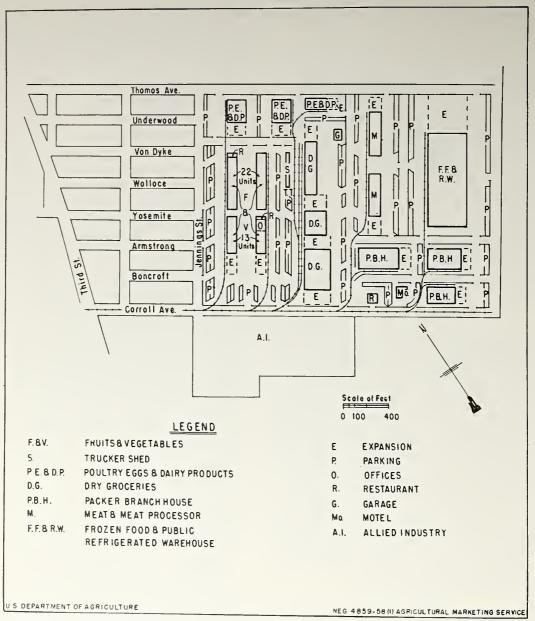


Figure 28.—Suggested arrangement of facilities for wholesale food center on the South Basin Site, San Francisco, Calif.

Over the years many attempts have been made by various groups to find an adequate site for a new wholesale terminal to replace the Washington Street wholesale market area. These groups have investigated many suggested sites in various parts of the city. In December 1954, after an exhaustive study into defects and benefits of various sites within the city, a report of a committee on site selection for relocation of the wholesale fruit and vegetable market was made to the chairman of the Agriculture and Industrial committees of the San Francisco Chamber of Commerce.

Sites Evaluated

Each of the sites studied by this committee as well as other sites was evaluated by the Department survey group. An analysis of several of the sites follows:

(a) Sixth and Channel Site: This site was located east of Sixth Street, south of channel and west of the Southern Pacific Mission Bay yards. It contained 29.1 acres and was assessed at \$154,000. It was rejected mainly because of its limited area and location in a congested traffic area.

(b) Third and Army Street Site: This site was located between Pennsylvania and 25th Street, Third and Army Streets, plus two blocks bounded by Iowa, 23d Street, Minnesota and 25th Street. It contained approximately 31.4 acres, and the land was assessed at \$395,000 in 1955 without development or acquisition costs. The site was not given further consideration because of the location, inadequate size, and relative high cost of the land. The approaches to the proposed south crossing bridge from Oakland would use over half of this site and cause a congested traffic situation with nonmarket traffic.

(c) Islais Creek Site: It was located south of Islais Creek and extended to Evans Avenue and from Third Street to Rankin Street and the Southern Pacific Railroad tracks. It contained 22.7 acres, including streets and had an assessed value of \$400,210. This site was not given further consideration because of inadequate size and the

relative high cost of the land.

(d) Arthur Avenue Site: Bounded by Arthur Avenue, Jennings Street, Davidson Avenue, Lane Street, Custer Avenue and Mendell Street, it contained 29.3 acres including street area, and was assessed at \$65,910. The site was not given further consideration because (1) there were objectionable odors from adjacent stockyards and Butchertown facilities, (2) the area was being filled with low-grade fill, and (3) it was too small.

(e) South Basin Site: This site was bounded by Thomas Avenue, Jennings Street, Carroll Avenue and on the east by the partially filled land bordering on Hawes Street. At one time it was designated as the South Basin Redevelopment Area B-1, by the Redevelopment Agency. At the time of the study 15.1 acres of the South Basin site were owned by the United States Public Housing Administration; 19.5 acres by the city of San Francisco and the United States Navy Department as streets and railroad right of way; and 27.4 acres by individuals, making a total of 62.0 acres. Directly south of Carroll Avenuc between Jennings Street and Fitzgerald Street is another plot of 15 acres. Also, directly east of the site, 45.8 acres of filled land would be available. If these areas are included in the South Basin site, there would be a total of 122.8 acres available in this site.

At the suggestion of the city officials, the South Basin site was given major consideration. This

site is evaluated below in more detail.

(f) Other Sites: If interest develops in providing a food distribution center for the entire bay area, obviously other sites across the bay or perhaps south or north of the city should be considered. During the study a number of such sites were suggested, but because of the decision to restrict this study to the city of San Francisco, no evaluation was made of them.

An Evaluation of the South Basin Site

The South Basin site was evaluated in some detail in light of the four principal factors outlined earlier in this chapter. The following pages will illustrate the type of analysis that should be made by market sponsors before any site is selected for a wholesale food center. In the discussion which follows only the requirements of the city of San Francisco are considered. The conclusions would be different if the analysis were being made for the entire metropolitan or bay area.

Convenience to Retail Outlets

A food center should be located convenient to retail outlets but at the same time it should be located out of the highly congested downtown district. If possible, the site should be located so that it requires a minimum of travel time between the retail outlets and the food center.

Distance to the center of distribution and center of population: Figure 29 shows the location of the retail grocery stores within the city in 1955, the 1955 center of retail distribution and the 1950 center of population.²¹ The South Basin site is approximately 3.5 miles from the 1955 center of the retail distribution, which is located at Noe and 15th Street. It is also about 3.5 miles from the 1950 center of population which is on Duboce Street, in the general vicinity of the United States Mint.

Direction of major population growth: The South Basin site lies in the general direction of the major growth of the population. Data supplied by the City Planning Department show that during the past 30 years those areas near the southern and eastern boundaries had the greatest increases in population. It is expected that the center of retail distribution in the city will move in that direction.

Accessibility to Transportation Facilities

In considering the accessibility of any site to transportation facilities at least three items should be studied: (1) Convenience for rail receipts, (2) convenience for receipts and shipments by motortrucks and (3) elimination of nonmarket traffic.

Convenience for rail receipts: In 1954 the volume of food items received by rail by the independent dealers was 5,090 carlots, It is essential that a site be selected on or near a railroad to permit spur tracks to be brought to dealers' stores. All the railroads serving San Francisco deliver food shipments or have reciprocal switching arrangements with other rail lines. The South Basin site is served by the Southern Pacific Railroad-Hunters

²¹ This information was provided by the San Francisco Wholesale Grocers Association,

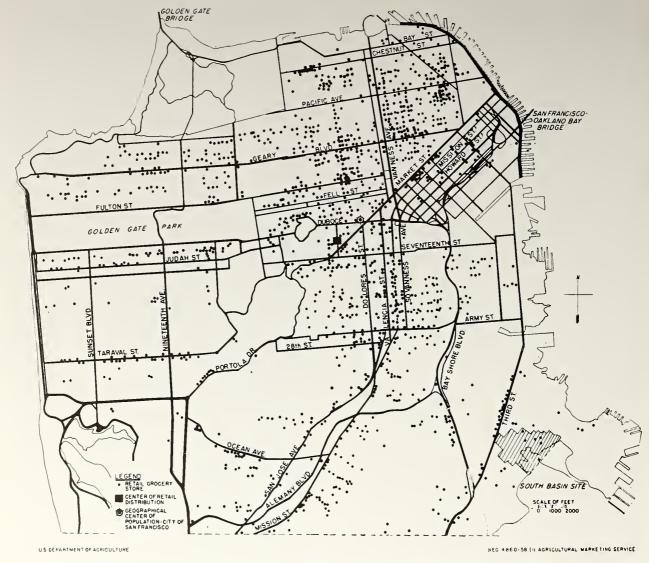


Figure 29.—Location of retail grocery stores within the city in 1955; the 1955 center of retail distribution; the 1950 geographical center of population, city of San Francisco; and the South Basin Site, San Francisco, Calif.

Point drill track, making deliveries by rail convenient.

Convenience for receipts and shipments by motor-truck: The 1954 motortruck receipts by independent dealers of the food items in this study amounted to 42,438 carlot equivalents. These receipts were from distant producing sections and nearby farms. Most food items coming to the market by truck have already been transported a considerable distance. Traveling a few extra miles on routes free of traffic congestion will consume less time than entering a highly congested area.

Figure 30 shows the location of the proposed new highways and streets in relation to the South Basin site. The South Basin tract is located two blocks from Third Street and approximately 0.6 miles from the Bayshore Freeway, both of which are major truck routes from the south over which a major portion of incoming loads of fruits and vegetables and other food items is brought to the city.

The proposed Hunters Point expressway to be built adjacent to the site on the east will be an additional low level route into the city from the south.

The South Basin site, being located adjacent to the major thoroughfares of the city will reduce the time needed by buyers trucks to reach the food center and return to their stores over the present time needed to reach the market.

Elimination of nonmarket traffic: The handling of food necessarily involves a large amount of trucking for heavy and bulky merchandise. The handling of the normal and necessary movement of trucks and automobiles even in a well planned

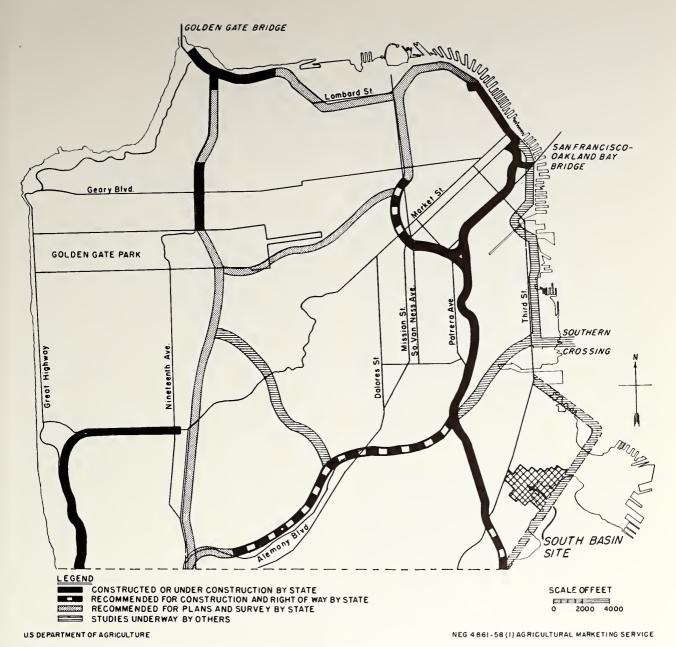


Figure 30.—Present and proposed and regional traffic arteries in relation to location of the South Basin Site, San Francisco,

wholesale food center can be a serious problem. When other vehicles not related to the market business also move through the market area, necessary market traffic may be seriously impeded. Therefore, it is important that a new food center be located in an area which is reasonably free from nonmarket traffic, and where the nonmarket traffic may be excluded.

Since the South Basin site lies between the major truck artery of Third Street on the west and the proposed Hunters Point expressway on the east, nonmarket traffic can be eliminated and

through traffic routed around the market area. Thus the South Basin site is conveniently located for efficient inbound and outbound traffic of food items to the proposed wholesale food center.

Availability of Sufficient Land at Reasonable Cost

The cost of land on which a food center is developed (including the cost of placing the land in condition for construction and the cost of buying and removing buildings that may be on the site) affects the cost of the project and the amount of rental income necessary to amortize the invest-

ment. It has already been shown that a comparatively large acreage would be required for a wholesale food market.

Due to the extreme limitation of available land in San Francisco for industrial and commercial developments, much consideration was given to

this point.

The South Basin site presently comprises 62 acres, including area in streets and railroad right of way. Directly south of Carroll Avenue is 15 acres which could be included in this site. Also to the east of this site, the State Reclamation Agency was actively planning at the time of the study to reclaim approximately 300 acres from San Francisco Bay. Approximately 45.8 acres of this reclamation area was included in order to make it possible to develop plans for a wholesale food center on this site. This area would be east of Hawes Street, south of Thomas Avenue and the proposed Hunters Point expressway. Additional land area may be available west of Jerome Street along Third Street if needed by other allied industries.

This site, containing 122.8 acres was the largest area of relatively unimproved land within the city at the time of the survey. It should be adequate for the suggested facilities as well as for expansion

and allied industries.

Appraisals by city officials of land value for the so-called South Basin Redevelopment Area of 62 acres gave an assumed cost in 1955 of \$0.90 per square foot or \$39,204 per acre for the land. There was in addition, an estimated cost of \$0.45 per square foot for development and \$0.25 per square foot acquisition costs or a total of \$1.60 per square foot, or \$69,696 per acre. The expansion area of 15 acres south of Carroll Avenue was appraised at \$1.25 per square foot, plus \$0.70 per square foot for development and acquisition costs, or \$1.95 per square foot, or \$84,942 per acre. The reclamation land area of 45.8 acres to the east was estimated to be \$1.25 per square foot. plus \$0.70 development and acquisition cost, a total of \$1.95 per square foot or \$84,942 per acre.

This extremely high cost of land puts an almost impossible handicap on using this site, if the food center is to be economically feasible without a city

or State subsidy.

Accessibility to Public Utilities and Zoning

Water, gas and electricity are available along Thomas Avenue, Jerome Avenue, and Carroll Avenue, and could be brought to various parts of the South Basin site without much difficulty. Present zoning in several parts of the site may need to be revised before a large commercial project of this type could be built here, but for the most part present zoning would be adequate.

Conclusion on Sites

The South Basin site appeared to be the most satisfactory site of suitable size for a wholesale food distribution center in San Francisco. Its

chief disadvantage was its extremely high cost. If interest in providing a food distribution center for the entire bay area should develop, of course, more facilities and a larger tract of land would be required, but consideration would be given to other locations in the bay area. The principles and procedures followed in this report would simply be applied to the larger area in selecting a site and developing a layout on it.

Estimated Investment Costs of Land and Facilities

Nearly \$26 million would be required to acquire the South Basin site of 122.8 acres, put it into condition to build, and construct the kind and amount of facilities described in this report. The furnishings and equipment costs of the offices, motel, garage and filling station, and other facilities such as refrigeration in the fresh fruit and vegetable stores are not included, nor does this estimate include the cost to the city for construction of streets, sewage, water, and other public utilities. For the purpose of this report, the cost estimates are only those involved in placing the 122.8-acre site in condition to build and constructing on it those wholesale food handling

facilities which have been suggested.

The Food Center plan, for convenience of treatment, is divided into four areas. The wholesale facilities for fruit and vegetable dealers are placed on a section of the South Basin Redevelopment Project. For purposes of the study it is called area A. A second section of the food center provides facilities for dealers in poultry, eggs, and dairy products, and dry grocers' warehouses, which have been laid out on the balance of the South Basin Redevelopment Project, and is designated as area B. The third section contains facilities for dealers in meats, meat products, packer branch houses, meat processors, and the public refrigerated warehouse and frozen food establishments. Part of this section is placed on land to be reclaimed from the bay by the San Francisco Bay Reclamation project. It is designated as area C. The remainder of the site is reserved for allied industry and is referred to as area D.

The costs of land and facilities are based on 1955 figures. No allowance or subsidies from public sources are recognized. If subsidies with respect to taxes, land values, or amortization should be forthcoming, they would merely result in a shifting of the payment of costs and not

affect the total cost.

Land Costs

According to a 1955 appraisal, arranged by the city, and other estimates, the cost of 122.8 acres of land for the South Basin site would be \$9,488,675. This was computed as follows:

	Acreage needed	Land cost per acre 1	Total land cost
Area "A" Area "B" Area "C" Area "D"	Acres 31. 1 30. 7 46. 0 15. 0	Dollars 69, 696 69, 696 84, 942 84, 942	Dollars 2, 167, 546 2, 139, 667 3, 907, 332 1, 274, 130 9, 488, 675

¹ Includes primary cost of land, plus acquisition and development costs.

The total cost consists of an estimated \$5,744,257 for the purchase price of the land; \$2,407,126 for the development and fill; and \$1,337,292 for such other costs such as tie-in sewers and for engineering, legal and administrative costs in acquiring the land. Charges for installation of major sewer lines and water mains, and for grading and lighting of city streets will be paid by the city. Since most of these charges are normally assumed by the city government, they are not included in the following investment estimates.

Table 26 shows the estimated land use by areas and commodity sections in the proposed food distribution center.

distribution center.

Table 26.—Estimated land use for the multiple store area and for detached stores in the proposed food distribution center, San Francisco, Calif.

	Acreage needed					
. Land use	Multiple store area	Detached store area	Total			
Area "A"						
Fresh fruits and vegetables total	A cres 31. 1	Acres 0	A cres 31. 1			
Area "B"						
Poultry, eggs and dairy prod- ucts Dry groceries Garage and service station	2. 5 8. 9 . 0	8. 8 10. 3 . 2	11. 3 19. 2 . 2			
Total	11. 4	19. 3	30. 7			
Area "C"						
Meat and meat products Frozen foods and public cold	11. 3	12. 3	23. 6			
storage warehouses ¹ Restaurant and motel	8. 2 . 0	11. 5 2. 7	19. 7 2. 7			
Total	19. 5	26. 5	46. 0			
Area "D"						
Allied industry	. 0	15. 0	15. 0			
Total	62. 0	60. 8	122. 8			

¹ One building containing individual stores and general storage area.

Operators of detached buildings will obviously wish to plan and construct their facilities of the size and design best suited to their needs, under the general designs and plans as established by the food center administration. The amount of floor area that will be needed in the initial construction will depend not only on present needs but also on future plans. The floor space shown for these concerns in the following estimates is based on the amount of space needed by these firms for their current volume of business as determined by the survey. Actual space constructed may differ considerably when final plans for construction are completed. Piling costs are not included in the building construction costs, but are shown separately in each commodity section.

Facility Costs

The estimated costs of structures and other facilities, other than land and its development, are based on a number of factors: (1) Cost of construction indexes for San Francisco in July 1955, (2) estimates submitted by local architects and contractors, and (3) costs of constructing similar facilities in other comparable areas. It is assumed that individual firms will supply their own refrigeration, and other special equipment such as the steam generators used by meat handlers and processors. An exception to this is the cost of frozen food and public cold storage warehouse. (The estimates given include cost of installation of insulation and refrigeration).

It should be emphasized, that the estimates shown in this chapter should be used only as guides in arriving at a total cost for the project, and are not intended to replace firm estimates made by local architects and contractors at the time construction is undertaken. Local costs estimates at the time of construction may differ

from the figures shown.

· Area A

· Area A	
Fresh Fruits and Vegetables	
Multiple-store structures:	
Multiple store units—70 (in 4 buildings)	
@ \$16,200 (excluding piling)— 177,975	
@ \$10,200 (excluding pling)— 177,373	¢1 121 000
sq. ft. including mezzanines @ \$6.37	φ1, 154, 000
Second floor office space—6,750 sq. ft.	
at \$7	47,250
Restaurants—2 in multiple store units,	
2 units with public restrooms in base-	
ments @ \$18,700	37, 400
Piling—for 72 multiple store units—	0.,
162,000 sq. ft. @ \$1.40	226, 800
To 1,000 sq. 1t. @ \$1.40	24,375
Trucker shed, 7,500 sq. ft. at \$3.25	
	1,469,825
Blacktop combination paving—11.170 sq.	
Discourse Processing 1	999 510
yds. @ \$3	333, 510
Rails—lead-in and house tracks (3,575 ft. @	
\$10) and team tracks (1,600 ft. @ \$10)	51, 750
Piling for trackage area—25,875 sq. ft. @	
\$1.40	36, 22 5
Railroad switches, 4 @ \$2,500	10, 000
Floodlights, 26 @ \$150	3, 900
Public address system	900
I done address system	
	1, 906, 110
-	

Area A-Continued

Fresh Fruits and Vegetables-Continued

Architect and engineer fees @ 6%	\$114, 367
	2, 020, 477
Construction loan @ 5% for 1 year	
	2, 121, 501
Contingency @ 10%	
Cost of facilities	2, 333, 651
Cost of land 31.1 A. @ \$69,696 Total cost, facilities and land for	2, 167, 546
area A	4, 501, 197

It was assumed that the city, in addition to maintaining the paving of city streets bordering the site, would pave and maintain pavement of one 75-foot wide street separating the fruit and vegetable section from the poultry, egg and dairy product section and 100-foot wide street separating the fruit and vegetable section from the allied industry section. The remaining area, except those parts covered by buildings and expansion areas, would be paved at the expense of the project.

The railroad trackage is that required to extend a

The railroad trackage is that required to extend a single track from the existing rail line between areas A and D, on Carroll Avenue, to the rear of the two rows of fresh fruit and vegetable stores and extend a spur from the tracks of the dry grocery stores to serve as a team track for the fruit and vegetable section.

Land cost, as previously pointed out, is \$69,696 per acre.

Area B

Poultry, eggs, and dairy products

Multiple-store structures: Multiple-store units—8 units @ \$16,200 (20,340 sq. ft. including mezzanines @ \$6.38) Piling—18,000 sq. ft. @ \$1.40 Blacktop combination paving, 6,167 sq. yds. @ \$3 Rails, lead-in and house tracks, 400 ft. @ \$10 Piling for trackage area, 2,000 sq. ft. @ \$1.40 Flood lights, 3 @ \$150	\$129, 600 25, 200 18, 501 4, 000 2, 800 450
-	180, 551
Architect and engineer fees @ 6%	10, 833
_	191, 384
Construction loan @ 5% for 1 year	9, 569
Contingency @ 10%	200, 953 20, 095
	221, 048
Detached store structures: Detached stores—2 buildings (eggs and dairy products) 82,800 sq. ft. @ 87.75_ Piling 82,800 sq. ft. @ \$1.40 Blacktop combination paving—17,153 sq. yds. @ \$3 Rails, lead-in and house tracks, 950 ft @ \$10 Piling for trackage area—4,750 sq. ft. @ \$1.40 Floodlights, 8 @ \$150	641, 700 115, 920 51, 459 9, 500 6, 650 1, 200 826, 429

Area B—Continue

Area B—Continued						
Poultry, eggs, and dairy products—Continued						
Detached stone structures—Continued Architect and engineer fees @ 6%	\$49, 586					
Construction loan @ 5% for 1 year	876, 015 43, 801					
	919, 816					
Contingency @ 10%	91, 982					
	1, 011, 798					
Dry groceries						
Multiple-store structures:						
Multiple-store units—9 units @ \$36,160—64,350 sq. ft. (including mezzanine) @ \$5.06	325, 440 80, 640					
Blacktop combination paving—18,894 sq.	56, 682					
vds. @ \$3	10, 000					
@ \$10	7,000					
Railroad switches—4 @ \$2,500 Floodlights—9 @ \$150	10, 000 1, 350					
	491, 112					
Architect and engineer fees @ 6%	29, 467					
	520, 579					
Construction loan @ 5% for 1 year	26, 029					
	546, 608					
Contingency @ 10%	54, 661					
	601, 269					
Detached store structures: Detached stores—2 buildings, 130,000 sq.						
ft. @ 87. Piling—130,000 sq. ft. @ \$1.40. Blacktop combination paving, 15,836 sq.	910, 000 182, 000					
yds. @ \$3.——————————————Rails, lead-in and house tracks, 850 ft. @	47, 508					
S10Piling for trackage area, 4,250 sq. ft. @	8, 500					
\$1.40Floodlights, 7 @ \$150	5, 950 1, 050					
	1, 155, 008					
Architect and engineer fees @ 6%	69, 300					
	1, 224, 308					
Construction loan @ 5% for 1 year	61, 215					
	1, 285, 523					
Contingency 10%	128, 552					
	1, 414, 075					
Service station and garage:	45, 000					
7, 500 sq. ft. @ \$6 Piling, 7,500 sq. ft. @ \$1.40 Blacktop combination paving 278 sq. yds.	10, 500					
@ \$3Floodlights—6 @ \$150	834 900					

 $\frac{900}{57,234}$

Area B-Continued

Dry groceries-Continued

Service station and garage—Continued Architect and engineer fees @ 6%	\$3, 434
Construction loan @ 5% for 1 year	60, 668 3, 033
Contingency @ 10%	63, 701 6, 370
	70, 071
Cost of all area B facilities Cost of land for area B (30.7 acres @	3, 318, 261
\$69,696 per acre)	
Total investment cost for area B	5, 457, 928

It is assumed that the city, in addition to maintaining the paving of streets bordering the site, would pave and maintain pavement of one 75-foot wide street between the fruit and vegetable section and the poultry, egg, and dairy product section (as assumed in notes regarding area A) and a 100-foot wide street separating the fruit and vegetable section and also the dry grocery section from the allied industry section (as previously assumed for area A). It was assumed that, in addition, the city would pave and maintain paving of one 100-foot wide street separating area B from area C. The remaining area, except those parts covered by buildings and expansion areas, would be paved at the expense of the project.

The railroad trackage is that required to extend a single track from the fruit and vegetable section to the 3 buildings of the poultry, egg and dairy products section and to extend tracks from the existing line on Carroll Avenue along the rear of the 3 buildings of the dry grocery section.

Land costs, as previously pointed out, are calculated

at \$69,696 per acre.

Multiple store structures:

Area C Meat and meat products

Multiple store structures:	
Multiple-store units—30 units @ \$22,250	
(including second floors) 94,500 sq. ft.	
	\$667, 500
@ 7.07 Piling—73,500 sq. ft. @ \$1.40	102, 900
Blacktop combination paving—35,417 sq.	102, 000
rds @ \$2	106, 251
yds. @ \$3 Rails, lead-in and house tracks—2,025	100, 201
Rans, lead-in and nouse tracks—2,025	00.050
feet @ \$10 Piling for trackage area—10,125 sq. ft.	20, 250
Piling for trackage area—10,125 sq. ft.	
@ \$1.40	14, 175
Railroad switches—1 @ \$2,500	2, 500
Floodlights—16 @ \$150	2, 400
	915, 976
Architect and engineer fees @ 6\%	54, 959
	970, 935
= = = = = = = = = = = = = = = = = = = =	
Construction loan @ 5% for 1 year	48, 547
	1, 019, 482
Contingency @ 10%	101, 948
	1, 121, 430
	1, 111, 100
Detached store structures:	
Detached buildings—3 packer branch	
houses 170,000 sq. ft. @ \$7.75	1, 317, 500
Piling—170,000 sq. ft. @ \$1.40	238, 000
Blacktop combination paving—22,871 sq.	200, 000
vds. @ \$3	60 619
Deila lead in and have tracks 1,700 feet	68, 613
Rails, lead-in and house tracks—1,500 feet	
@ \$10	15,000
Piling for trackage area—7,500 sq. ft. @	
\$1.40	10, 500
Railroad switches—4 @ \$2,500	10, 000
Floodlights—16 @ \$150	2, 400
	1, 662, 013
	1, 002, 013

Area C-Continued

Meat and meat products—Continued	d
Detached store structures—Continued Architect and engineer fees @ 6%	\$99.721
	1, 761, 734
Construction loan @ 5% for 1 year	
Construction loan @ 5% for 1 year	1, 849, 821
Contingency @ 10%	
- Contingency @ 10 /6	2, 034, 803
Restaurant and Motel:	2, 034, 303
Restaurant—1, with public restrooms in basement (8,000 sq. ft. @ \$7) (\$2,500 for restroom additional)————————————————————————————————————	58, 500 11, 200 44, 550 9, 450 33, 420 750
	157, 870
Architect and engineer fees @ 6%	9, 472
	167, 342
Construction loan @ 5% for 1 year	
	175, 709
Contingency @ 10%	17, 571
	193, 280
Frozen Foods and Refrigerated Wareh	
General Storage Area: Refrigerated space—2,457,180 cu. ft. @	ouse
General Storage Area: Refrigerated space—2,457,180 cu. ft. @ \$1.30	3, 194, 334
General Storage Area: Refrigerated space—2,457,180 cu. ft. @	3, 194, 334 290, 730
General Storage Area: Refrigerated space—2,457,180 cu. ft. @ \$1.30	3, 194, 334 290, 730 3, 485, 064
General Storage Area: Refrigerated space—2,457,180 cu. ft. @ \$1.30	3, 194, 334 290, 730 3, 485, 064 218, 050 81, 399
General Storage Area: Refrigerated space—2,457,180 cu. ft. @ \$1.30 Unrefrigerated space—35,240 sq. ft. @ \$8.25 Piling—155,750 sq. ft. @ \$1.40 Blacktop paying—27,133 sq. yds. @ \$3	3, 194, 334 290, 730 3, 485, 064 218, 050
General Storage Area: Refrigerated space—2,457,180 cu. ft. @ \$1.30	3, 194, 334 290, 730 3, 485, 064 218, 050 81, 399 11, 000 7, 700
General Storage Area: Refrigerated space—2,457,180 cu. ft. @ \$1.30	3, 194, 334 290, 730 3, 485, 064 218, 050 81, 399 11, 000 7, 700 1, 500
General Storage Area: Refrigerated space—2,457,180 cu. ft. @ \$1.30	3, 194, 334 290, 730 3, 485, 064 218, 050 81, 399 11, 000 7, 700 1, 500 3, 804, 713
General Storage Area: Refrigerated space—2,457,180 cu. ft. @ \$1.30	3, 194, 334 290, 730 3, 485, 064 218, 050 81, 399 11, 000 7, 700 1, 500 3, 804, 713 228, 283 4, 032, 996
General Storage Area: Refrigerated space—2,457,180 cu. ft. @ \$1.30	3, 194, 334 290, 730 3, 485, 064 218, 050 81, 399 11, 000 7, 700 1, 500 3, 804, 713 228, 283 4, 032, 996 201, 650 4, 234, 646
General Storage Area: Refrigerated space—2,457,180 cu. ft. @ \$1.30	3, 194, 334 290, 730 3, 485, 064 218, 050 81, 399 11, 000 7, 700 1, 500 3, 804, 713 228, 283 4, 032, 996 201, 650 4, 234, 646
General Storage Area: Refrigerated space—2,457,180 cu. ft. @ \$1.30	3, 194, 334 290, 730 3, 485, 064 218, 050 81, 399 11, 000 7, 700 1, 500 3, 804, 713 228, 283 4, 032, 996 201, 650 4, 234, 646 423, 465 4, 658, 111 1, 430, 443
General Storage Area: Refrigerated space—2,457,180 cu. ft. @ \$1.30	3, 194, 334 290, 730 3, 485, 064 218, 050 81, 399 11, 000 7, 700 1, 500 3, 804, 713 228, 283 4, 032, 996 201, 650 4, 234, 646 423, 465 4, 658, 111

Frozen Foods and Refrigerated Warehouse-Continued

Individual Stores—Continued Piling, 84,250 sq. ft. @ \$1.40 Blacktop paving, 19,200 sq. yds. @ \$3 Floodlights—7 @ \$150	\$117, 950 57, 600 1, 050
Architect fees @ 6%	2, 105, 508 126, 330
Construction loan @ 5%	2, 231, 838 111, 591
	2, 343, 429
Contingency @ 10%	234, 343
Facilities total	2, 577, 772
Cost of all area C facilities	10, 585, 396
Cost of land for area C (46.0 acres @ \$84,942)	3, 907, 332
Total—cost of land and facilities area C	14, 492, 728

It was assumed that the city, in addition to maintaining the paving of streets bordering the site, would pave and maintain pavement of the 100-foot wide street separating the dry grocery and poultry, egg and dairy products section from the meat and meat products section, and also a 100-foot wide street between the meats section and the frozen foods and refrigerated warehouse section. It was assumed that the city would also pave two 75-foot wide streets on each side of proposed packer branch houses.

The railroad trackage is that required to extend rails for a single track from existing tracks on Carroll Avenue to the rear of meat stores and the frozen foods public refrigerated warehouse via packer branch houses with spur tracks thereto.

As previously pointed out the land cost is \$84,942 per acre.

Area set aside for allied industries

Financing the cost of land in area D should be arranged by the overall food center organization. Experience of market organizations in many cities indicates that development of a good wholesale food market usually increases the value of the land and adjoining property over a period of years. Therefore, the investment in 15 acres of land in area D could be financed from capital funds of the parent food center organization and interest and annual taxes paid, until the land is sold to allied industries at a price to recover all charges.

Since it cannot be known until the individual firms are contacted regarding their desire to locate in the food center, what allied food organization will want facilities on the site, it is not possible to show at this time any estimated costs of facilities in area D. It is suggested that as these facilities are developed, estimates of construction costs, paving, etc., be calculated in the same manner as they were computed for areas A, B, and C. Land costs, including acquisition and development costs for area D are estimated as \$1,274,130.

Summary of Investment Costs

Table 27 shows that the total cost of facilities that may be required will be about \$16.3 million, and the cost of land, about \$9.5 million, making a total estimated investment cost of land and buildings of approximately \$25.7 million for sections A, B, C, and D.

Ownership and Management of a Wholesale Food Distribution Center

Regardless of how perfectly a wholesale food center may have been designed, how complete it may be, or how accessible it may be, its success will depend to a large extent on the type of ownership and character of its management. To operate successfully, such a food center must be as well managed as any other business of comparable size. Moreover, it should be operated without discrimination against any type of buyer or seller, against any form of transportation, or against any food item because of its origin.

Many groups and interests are concerned with the type of management placed in control of a wholesale food center. Growers, transportation companies, wholesale dealers, retail grocers, and consumers all have a large stake in the management from the viewpoint of efficient distribution. The investors make up another group vitally concerned with the success of the market. Whether the investors put in private funds or public funds through a State or local appropriation, they have a right to expect the food center to be operated in such a manner that their investments will be protected. In order that the

interests of the public may be protected, it is desirable that the managerial board be composed of members who would represent the interests of those groups most concerned with its successful operation.

Type of Ownership

A wholesale food distribution center can be built and managed by (1) a public benefit corporation sometimes called a market authority; (2) a private corporation for profit, nonprofit, or limited profit; (3) a State or municipal agency; or (4) a combination of these.

Public Benefit Corporation

A public benefit corporation is a legal entity or agency of government and as such is usually granted many of the rights and prerogatives given to local political subdivisions, such as separate school districts or drainage districts. A public corporation created for market ownership and operation is sometimes referred to as a market authority. For such purposes it is usually an

Table 27.—Summary of investment in land and facilities by type of commodity for the proposed food distribution center, San Francisco, Calif.

Type of commodity	I	Multistore areas Detached s			ed st	ore	ar	eas		Total investment															
- V P	Land	F	acili	ties		Tota	al		Lan	d	F	`acilit	ies		Tota	al		Lan	d	Fac	ilit	ties		Tota	al
Area A Fresh fruits and vege-	Dollars		Dolle	120		Dolla	200		Dolla	. w.o.		Dolla	ımo.		Dolle	· ro		Dolla	1110	De	JI.			Dolla	
tables	2, 167, 5																	167,							
Area B										,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-		-,								-==				
Poultry, eggs and dairy products Dry groceries Service Station and	174, 2- 606, 3					395, 207,						011, 414,													
garage						- 			13,	939		70,	071		84,	010)-	13,	939	,	70,	071		84,	010
	780, 5	95	822,	317	1,	602,	912	1,	359,	072	2,	495,	944	3,	855,	016	2,	139,	667	3, 3	18,	261	5,	457,	928
Area C							1																_		
Meat and meat prod- uctsFrozen food and public	959, 8	45 1,	121,	430	2,	081,	275	1,	044,	787	2,	034,	803	3,	079,	590	2,	004,	632	3, 1	56,	233	5,	160,	863
refrigerated ware- house Restaurant and motel	976, 8	33 2,	577,	772	3,	554,	605					658, 193,													
	1, 936, 6							1,	970,	654	6,	886,	194	8,	856,	848	3,	907,	332	10,5	85	,396	14	,492	,728
Area D								1,	274,	130		(1)		1,	274,	130	1,	274,	130		(1)		1,	274,	130
Total	4, 884, 8				-	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	,989	4,	603,	856	9,	382,	138	1:	3,985	,994	$\frac{1}{9}$	488,	675	16,2	237	,308	25	5,725	,983

¹ Cost of facilities not estimated for area D.

instrumentality of State government. The South Carolina Agricultural Marketing Commission is an example of public benefit corporation owning and operating wholesale food distribution facilities

(Columbia, S. C., market).

A public benefit corporation or market authority usually has authority to issue bonds for the purpose of financing the acquisition of land and the construction of market facilities. Although such bonds, as a rule, would be sold on the open market the same as bonds of a county, road district, or school district, at least one State provided for the purchase of the bonds of a market authority by the State treasurer. The bonds of a market authority are amortized from market revenue. In addition to the issuance of bonds, market authorities may receive gifts or donations of land or money for market purposes.

Where appropriate State enabling legislation has been enacted, the governor, commissioner of agriculture, or State marketing commission usually has authority to issue a "certificate of authority" creating a public benefit corporation or market authority on petition from a group of wholesale food dealers or from a city or other political

subdivision of the State.

As an instrument of State government, a public benefit corporation should have on its managerial board at least one member who is a State official and who would represent the public. The government of the city in which the Food Center is located might also be represented on the board. Other members of the board should represent producers, wholesale food dealers, and retail grocers. Consumers might also be represented. Thus, all major interests would have some voice in the market management.

The sole business of a market authority would be that of financing, constructing, and operating the market facility. It would have no authority to engage in the wholesale food business. As a nonprofit corporation it should not fix rental rates above the figures required to raise the revenue needed to amortize the investment, meet operating expenses, and maintain a reserve for contingencies.

The facilities operated may be taxed or exempt from taxes, depending on the views of law-making

bodies.

At the time of the study the State of California had no enabling legislation providing for the creation of market authorities. Therefore, if this type of ownership is to be considered for a food center in San Francisco, it would be necessary for such legislation to be enacted.

Private Corporations

A private corporation is not an agency or instrumentality of government. It is a legal entity,

organized in conformity with existing State statutes, and made up of individuals bound together for a common purpose or objective. A private corporation usually is organized for profit, but may be operated as a nonprofit organization.

Profit corporations. When a private corporation is operated for profit, there are usually no restrictions on the sale of voting stock to any individual because of his occupation or profession. Nor are there restrictions on the number of shares of voting stock that may be held by any one individual. Stockholders have one vote in corporate affairs for each share of voting stock held.

A number of wholesale food markets are owned and operated by private corporations. In some instances the principal stockholders in these corporations are food wholesalers. In other cases, the corporation is a railroad company or some other firm which was organized primarily for other types of business. Most of the large terminal produce markets built in the 1920's were sponsored by railroad companies which believed that such markets would increase the tonnage handled by their lines.

To form a private corporation, the incorporators usually obtain a charter from the State. This charter defines the power of the corporation and of its officers and directors. It also specifies what the stockholders rights shall be and how

they shall exercise their control.

Among the characteristics of a private corporation, the ability of the board of directors to make necessary decisions quickly and without the delay found in some other types of organizations should be noted. Quick decisions on major policy matters, in some cases may be the difference between success and failure of the organization.

On the other hand, there is a tendency for wholesale food markets owned by private corporations to become so-called closed markets. For example, some have prohibited the delivery on the market of food items being brought in by motortruck, especially out-of-State trucks. Often no space is provided for future expansion, either for increased volume or for new food handlers and allied industries.

Furthermore, at certain times, private corporation market sponsors have found it more difficult to obtain necessary funds to take care of preliminary organization and equity fund acquisition than market organizations having a public subsidy arrangement.

Nonprofit private corporation. A nonprofit private corporation is not an agency or instrumentality of government, but must be organized in conformity with existing State statutes. In a private corporation operated for profit, each stockholder usually has as many votes in the affairs of the corporation as he has shares of common or voting stock. In a nonprofit private corporation, participation in corporate rights and activities is usually based either on a system of dues, which limits each member (stockholder) to one vote, or

bylaws which restrict ownership of voting stock

to one share per member.

As a rule, State statutes place no limitations on participation in the corporation because of the business or occupation. However, membership in such corporations can usually be limited or restricted through bylaws. Thus, it is possible for farmers, food wholesalers, retail grocers, and others who are directly interested in the ownership and operation of a wholesale food center to become associated in a nonprofit private corporation for the purpose of constructing and operating a food center.

Whether or not a nonprofit marketing corporation can be chartered in California under present nonprofit corporation or corporation statutes is a question to be decided if the occasion arises.

State Ownership

Another type of ownership that might be considered in connection with the proposed wholesale food center at San Francisco is State ownership and operation. It should be pointed out, however, that State ownership of such a facility goes much further with respect to financing and the consequent risk-bearing than is contemplated in connection with State assistance to a public

benefit corporation.

It would be expected that a State-owned market would be financed in whole or the greater part, through the use of State funds or credit. Provision might be made in the appropriation act for the amortization or repayment of the expendable portion of the investment made with State appropriated funds. However, in another method of financing at least a portion of the cost of a State-owned market would be an authorization to the governing board to borrow funds from either public or private lending agencies for this purpose.

Obviously, before the State of California could embark on a program of this kind, two types of State legislation would be necessary: (1) An authorization either to a board created for the purpose or to an existing State board, commission, or official to construct and operate a wholesale food center in San Francisco; and (2) an appropriation of State funds for the acquisition of land and the construction of facilities or an authorization to borrow funds for these purposes or a combination of the two. These two types of legislation might, of course, be contained in one or more acts, depending upon the rules and desires of the California Legislature.

Municipal Ownership

Municipal ownership of a market is another form of public ownership and is comparable in its basic aspects to State ownership. Certain limitations in many city charters, however, prevent the delegation of authority by the city to a special body, such as a market board, for the operation and control of a municipally owned facility. Where such limitations exist, growers, wholesale food dealers, and retail grocers can be given no voice,

except advisory, in the management of the market.

The foregoing point should be carefully investigated if a municipal ownership of a new food center

in San Francisco is considered.

The Board of Supervisors may not be able to make appropriations from general funds in the city treasury for the construction of market facilities on a basis comparable to that of a State legislative body. Three methods are usually open to municipalities for financing a market program: (1) Issuance of municipal bonds, (2) issuance of revenue warrants, and (3) loans from public corporations. In most cities the issuance of bonds for such purposes must be approved by a majority of the qualified electorate voting in a referendum.

Objections frequently voiced in connection with municipal ownership of a market are that often the management does not have a full appreciation of the problems of all groups using the market facility and that the management is often unduly influenced by political considerations. However, these objections might be overcome by the municipality purchasing the food center site, constructing it, and leasing it to a public benefit corporation or a nonprofit corporation.

Combination of Organizations

A combination of organizations working together may be necessary to secure a site, construct the

facilities, and operate the food center.

In one instance, a city government has used the City Redevelopment Authority to obtain the land upon which the Food Distribution Center corporation plans to build the needed facilities. A contract has been agreed in which the City Redevelopment Authority shall acquire title to the land, demolish substantially all structures on it, grade and fill the site, defray the cost of municipal facilities consisting of paving public streets and installing water and sewer services under the streets, and convey the property to the Food Distribution Center corporation. The contract also states that the food center organization shall develop, operate, and service the food center; that it shall be governed by a board of directors; that it shall have powers to lease land and sell land; that it shall pay annually to the city a certain percentage of the gross rentals received from facilities under lease and licensing agreements, in addition to a lump sum paid annually in consideration of the contract. At the expiration of the contract the corporation may be required to convey to the city, title and interest in all land and buildings.

Management of a Wholesale Food Center

Several methods that may be used in management of a food distribution center are described here. In one approach an overall food center organization may prepare a master plan and lease or sell sites to individual firms which would arrange for the construction of all buildings. This arrangement may have its disadvantages. For instance, many facilities such as railroad tracks,

driveways, parking areas, etc., would be provided for the joint use of a number of tenants. Then too, many of the smaller firms would be located in one or more units of a multiple-store building, and it would be difficult for each group to finance and

construct its own building.

Another approach is for the overall organization to construct, according to approved plans of the dealer, adequate facilities which would then be leased to him for a long period of time. This plan would place operating responsibility on the Food Distribution Center organization. It would collect rentals regularly for each facility, handle all repairs, have total responsibility for general maintenance, and many other activities. It would entail the management of a large clerical, maintenance.

nance, and management staff.

Another way of operating would be for the overall Food Center organization to deal with several commodity subcorporations set up by separate groups of food center users. For instance, the fruit and vegetable dealers operating in area A might form a corporation to deal with the overall food center organization on their facilities and manage their own day-to-day operations. Several other corporations could be formed. For example: there could be separate corporations organized by dealers of poultry, egg and dairy products and dry grocery wholesalers (those suggested for area B), dealers of meat and meat products, and the tenants of the Refrigerated Warehouse and Frozen Food Section (area C). The food center organization would probably deal directly with those leasing the motel, garage and service station, and other such buildings.

The dealer's corporation could deal directly with the overall Food Center organization by leasing the land and arranging for the construction, or it could arrange with the Food Center organization to finance and construct the buildings and lease them in their entirety to the management dealers corporation. The management would work directly with the Food Center organization while the facilities were being built, and would then handle all problems of management in its section of the Food Center; collecting rents from individual tenants, taking care of all services such as street cleaning, street lighting, garbage removal, repairs, traffic management, taxes, etc. It would assess from its dealers a monthly rental in which could be included costs of all management and maintenance services, taxes, the amount of amortization of its obligations for the stores, etc., and a reserve for operating and management.

Obviously, under the latter plan, the overall Food Center organization would be spared many of the details of operation and management, and would be able to confine its activities to developing plans for construction of facilities, dealing with dealer corporations and with managers of individual facilities, etc., and engaging in promotional activities for getting the greatest benefit from the overall development.

Some Operating Costs and the Amortization of Investment

Estimates of operating costs and amortization of the investment are shown in this chapter by the designated areas within the South Basin site. It is assumed, for the purpose of this presentation, that a food center organization will function in an overall capacity dealing with matters of operation of the development, and that special corporations will be created to handle each of the sections previously described. Under this plan the total amount of rent sufficient to cover the amortization payments on the loan, their share of the operating expenses of the overall organization and a contingency to take care of reasonable reserves would be collected by the food distribution center corporation from each trade corporation. Since it is not known at this time what allied industries will occupy space in area D, estimates were not made of their operating costs. Also no estimates were made of operating costs of the motel, garage, and restaurants or other service facilities.

Operating Costs of the Overall Food Distribution Center Organization

For purposes of this study, the operating expenses of the overall or parent food center organization should be recovered by the rentals from the trade corporations and from special services. These expenses will consist mainly of salaries of overall management staff, fees for special services, rent, office supplies and equipment, advertising and promotion, maintenance and repair on equipment, insurance, telephone and telegraph, utilities and an operating contingency fund to allow for variations in these estimates.

Engineering and other developing costs are not included in the operating costs of the overall food center organization. They are considered as part of construction and land costs. Real estate taxes should be paid by the trade corporations and owners of detached buildings, except for area D, which will be additional to the following overall operating costs of the overall organization:

dimacton.		
Personal services: Manager Secretary Clerk Legal, auditing, and other special services	\$20, 000 5, 000 4, 000 15, 000	
Subtotal Office rent Travel and per diem Advertising and promotion Office supplies Insurance, fire and liability Telephone and telegraph Utilities Miscellaneous Operating contingency	1, 800 1, 200 1, 500 2, 000 1, 000 800 800 7, 500	\$44,000
Subtotal		28, 720
Total		72, 720

Amortization of Investment

If the proposed wholesale food center is to be self-liquidating, the investment must be repaid from market revenue. The period over which the investment in land and facilities should be amortized is determined by a number of factors. Observations on several markets indicate that these facilities, if properly designed and operated, should not become fully depreciated or obsolete in less than 20 to 30 years. Most market facilities are used for a much longer period. However, certain standards have been adopted by most financial groups for capital improvements of this type, and the time period selected may depend upon their decision. Usually loan agencies have such loans repaid over a 25- to 30-year period, either in equal installments or with a fairly large sum due at the end of the period. For the purpose of this report, an amortization period of 25 years has been used for the first mortgage loan and 20 years for the second mortgage loan.

It is assumed also that first mortgage loans could be obtained for 65 percent of the total funds needed, and for these loans the annual interest

rate would be 5 percent.

There may be several ways of obtaining the remaining 35 percent of the total funds needed. Some part of these funds would probably be obtained by the corporation selling stock to its tenants. It is reasonable to expect that the corporation could raise about 10 percent of the total funds in this manner. No interest charge would need to be paid on this 10 percent. If the first mortgage loan produces only 65 percent of the funds this would leave another 25 percent to be raised in some other manner. It is assumed therefore that this sum could be raised by sale of preferred stock, debenture bonds, or by a second mortgage on the property.

For the purposes of this study, however, it is assumed that 6 percent interest rate will be paid on the remaining 25 percent of the funds needed and that these funds will be amortized over a

period of 20 years.

Table 28 shows the income that would be required to be raised by the food center organization to amortize 65 percent of the investment by a first mortgage, the amount needed from sale of stock for equity purposes and to amortize the remaining 25 percent.

Taxes To Be Paid by Trade Corporations

It is assumed that taxes would be paid on land, buildings and other facilities. Services provided by the city would include fire protection, street cleaning, and sewage service. In 1955 city property tax rates for the South Basin area averaged \$3 per \$100 assessed value. Assessed value was

Table 28.—Estimated payments needed to amortize costs of land and facilities in the three areas of the proposed Food Distribution Center, San Francisco, Calif.

Investment item	Area								
	A	В	C						
Total investment (land	Dollars	Dollars	Dollars						
and buildings)	4, 501, 197	5, 457, 928	14, 492, 728						
Equity fund (raised	' '	' '	' '						
by stock issue)1	450, 120	545, 793	1, 449, 273						
First mortgage loan: 2	100, 120	010, 100	-, 110, 210						
Amount	2, 925, 778	3, 547, 653	9, 420, 273						
Amortization	2, 020, 110	0, 011, 000	0, 120, 210						
	207, 584	251, 706	668, 368						
payment	201, 364	201, 100	000, 000						
Second mortgage		1							
loan: 3	1 10" 000	1 004 400	à con 100						
Amount	1, 125, 299	1, 364, 482	3, 623, 182						
Amortization									
payment	98, 104	118, 956	315, 869						
Total amortization									
payments	305, 688	370, 662	984, 237						

Assumed to be 10% of total investment of land and facilities. No interest

considered to be 44 percent of market value. Estimated annual taxes on each of the three areas within the food center are shown in table 29. It is assumed that taxes on each area will be paid by individual commodity corporations.

Maintenance and Repairs

Maintenance and repairs on structural facilities should be made to keep facilities in good condition and permit maximum savings in use of the facilities. Table 30 shows for the trade corporations, the estimated maintenance and repair charge, using ½ of 1 percent of facilities cost, excluding land costs.

Insurance

Fire and comprehensive insurance rates for the proposed food distribution center are shown in table 31. They are based on a premium charge of \$1.25 per \$1,000 coverage, on 80 percent value of buildings. Liability insurance is for \$500,000 coverage based on a premium charge of \$1.75 per \$1,000. Total annual premiums for the three areas are estimated to be \$14,706.

Operating Costs of the Trade Corporations

Assuming that a separate trade organization is organized for each of the 3 areas, the major operating costs for each of the corproations would consist of: (1) Salaries for manager and other employees, (2) fees for special services; (3) office

Table 29.—Estimated annual taxes on each of the areas within proposed wholesale food distribution center, San Francisco, Calif.

,		*	
Trade corporation	Investment in land and facil- ities ¹	Assessed valua- tion ²	Amount of tax ³
Area A Fresh fruits and vegetables Area B	Dollars 4, 501, 197	Dollars 1, 980, 527	Dollars 59, 416
Poultry, egg and dairy products Dry groceries Service station and garage	3, 339, 568	36, 964	26, 853 44, 083 1, 109 72, 045
Area C Meat and meat products Frozen food and public cold storage warehouse Motel and restaurant		2, 270, 781 3, 920, 066 185, 954	
Area D Allied Industry		6, 376, 801 560, 617	
Total		11, 319, 433	

Table 30.—Estimated maintenance and repair charges for the facilities of the commodity corporations in the proposed food distribution center, San Francisco, Calif.

Trade Corporation	Estimated cost of structural facilities ¹	Total charge ²
Area A Area B Area C	Dollars 2, 333, 651 3, 318, 261 10, 585, 896	Dollars 11, 668 16, 590 52, 929
Total	16, 237, 308	81, 187

¹ Exclusive of land costs.

expenses, including rent, supplies and equipment, telephone and telegraph, etc.; (4) cost of maintenance and repair, taxes, insurance, and utilities for the commodity facilities; and (5) a pro rata share of the operating expenses of the parent organization. In addition a debt reserve of 20 percent of the annual amortization charges should

is charged on this item.

² Assumed to be able to raise 65% of total investment cost of land and facilities by issue of first mortgage at 5% for 25 years with an amortization payment of \$70.95 per \$1,000.

⁸ Assumed that remaining 25% of total investment cost of land and facilities would be raised at 6% for 20 years with an amortization payment of \$87.18

<sup>Based on assessed valuation of 44% of property value.
Based on 1955 city tax rate of \$3 per \$100 assessed value.</sup>

² Based on ½ of 1 percent of structural costs.

be set up. At the end of 5 years, this amortization reserve will be equal to 1 year's amortization payment, at which time it might be discontinued. Table 32 shows the estimates of these costs for each of the three trade organizations.

Table 31.—Estimated insurance charges for each of three trade corporations in the proposed wholesale food distribution center in San Francisco, Calif.

Trade	Fire and co hensive ins		Liability insur-	Total
corporation	Value of facilities covered	Charge ¹	ance charge ²	pre- mium
Area AArea BArea C	Dollars 1, 469, 825 2, 466, 000 8, 145, 572 12, 081, 397	Dollars 1, 469 2, 466 8, 146 12, 081	Dollars 875 875 875 2, 625	Dollars 2, 344 3, 341 9, 021 14, 706

Based on 80 percent of cost of building and piling calculated at rate of \$1.25 per \$1,000 coverage.

2 Based on a \$500,000 coverage at a rate of \$1.75 per \$1,000.

Office space for trade organizations for areas A and B could be provided on the second floor of one of the fruit and vegetable wholesale buildings, and office space for the area C trade organization could be provided on the second floor of the frozen food and refrigerated warehouse.

Total Revenue Required by the Three **Trade Corporations**

Table 33 shows for each of the three trade corporations the amount of revenue needed to meet amortization payments, taxes, operating costs and contingency. These are estimated to be \$562,149 for Trade Corporation A; \$618,410 for Trade Corporation B; and \$1,612,252 for Trade Corporation The total revenue required is estimated to be \$2,792,811.

The proportion of total charges for each trade corporation to be shared by individual trade groups is based on the proportion of investment costs charged to that corporation,

Obviously, the extremely high cost of land has made these charges much higher than would be the case for similar installations in areas where land costs are more reasonable. However, the food handlers would be operating in modern facilities and would be able to make significant savings in handling costs, transportation costs, etc.

Table 32.—Estimated operating costs of the three trade corporations in the proposed food distribution center, San Francisco, Calif.

Cost item	Trade corporation				
	A	В	С		
Personal services: Manager Assistant manager_ Bookkeeper-clerk _ Switchboard _ operator Watchman and _ laborers 12 Janitor Street cleaning Legal auditing and _ special fees	Dollars 15, 000 6, 000 4, 800 3, 600 (4) 16, 000 2, 500 20, 000 5, 000	Dollars 10, 000 4, 800 (2) 8, 000 10, 000 3, 000 35, 800	Dollars 15, 000 6, 000 4, 800 3, 600 (5) 20, 000 2, 500 10, 000 5, 000		
Office rent	2, 000 1, 000 3, 000 1, 500 800 11, 668 1, 469 875 4, 000 26, 312	1, 500 700 2, 000 500 400 16, 590 2, 466 875 2, 000 27, 031	2, 000 1, 000 2, 000 1, 000 800 52, 928 8, 146 875 4, 000 72, 749		
Pro rata share of operating cost 6 Debt reserve 7 Total	13, 380 61, 138 173, 730	16, 217 74, 132 153, 180	43, 123 196, 847 379, 619		

1 One of the laborers would provide janitor services.

§ Based on \$500,000 coverage at a rate of \$1.75 per \$1,000 coverage.

§ Prorated according to the proportion that the investment by trade organizations A. B, and C is of the total investment in the Food Center. These are computed as follows:

PRORATED SHARE OF EXPENSES OF PARENT ORGANIZATION

ltem	Corpora- tion A	Corpora- tion B	Corpora- tion C	Total
Investment (dollars) Proportion (percent) Amount of parent or-	4, 501, 197 18. 4	5, 457, 928 22, 3	14, 492, 728 59. 3	24, 451, 853 100, 0
ganization expenses (dollars)	13, 380	16, 217	43, 123	72, 720

⁷ Based ou 20% of annual amortization payment (table 34). To be discontinued when the reserve is equal to amortization payment for 1 year.

² Number in parenthesis refers to number of employees in those cases where more than one employee is required.

3 Based on ½ of 1% of capital investment, excluding land.

4 Based on \$80% of the cost of buildings and calculated at the rate of \$1.25

Sources of Revenue for the Three Trade **Corporations**

Table 34 shows the sources of revenue needed for operating each of the three trade corporations. Such amounts must be derived from fees and rentals charged for the use of facilities. The estimates are based on a break-even point rental charge, that is, an amount where the amount collected from rents and fees will just about equal the annual operating charges for each corporation. Obviously the estimated annual rentals shown in table 34 would need to be reviewed and perhaps revised to fit demands for space, and other local conditions. before a rental schedule is adopted.

Table 33.—Estimated total revenue required by the three trade corporations in the proposed food distribution center, San Francisco, Calif.

Cost item	¬Tra	-Trade corporation				
	A	В	C	required		
Amortization Taxes_ Operating costs 10% contingency 1_	305, 688 59, 416 173, 730	Dollars 370, 662 72, 045 153, 180 22, 523	984, 237 191, 304 379, 619	322, 765 706, 529		
Total	562, 149	618, 410	1, 612, 252	2, 792, 811		

¹ Applied to operating costs and taxes only.

Table 34.—Estimated annual rental charges that would have to be charged in the proposed food distribution center, San Francisco, Calif.

		Total space planned	Estimated annual rent		
Trade corporation	Units planned		Operating costs to be absorbed ²	Per unit	Per square foot
Area A ¹ Fresh fruit and vegetable multiple stores Office space, second floor Truckers' shed Restaurant	Number 70 20 20 20	Square feet 177, 975 7, 500	Dollars 537, 842 5, 903 3, 036 15, 368	Dollars 7, 684 295 151 7, 684	Dollars 3. 03
			562, 149		
Area B 1					
Poultry, egg, and dairy products: Multiple stores Detached stores Dry groceries:	8 2	20, 340 82, 800	44, 773 185, 709	5, 597	2. 21 2. 25
Multiple stores Detached stores Garage and service station	9 2 1	64, 350 130, 000	$136,854 \\ 241,551 \\ 9,523$	15, 540 9, 523	2. 13 1. 86
-			618, 410		
Area C 1					
Meat and meat products: Multiple stores Detached stores Frozen food and refrigerated warehouse: 3	30 3	94, 500 170, 000	231, 519 342, 604	7, 717	2. 45 2. 02
Individual firms General storage Office space Restaurant and motel	$14 \\ 1 \\ 1 \\ 1 \\ 1$	$121, 550 \\ 169, 150 \\ 2, 600 \\ 12, 090$	395, 485 593, 470 2, 096 47, 078	2, 100	3. 25 3. 51
			1, 612, 252		
Total			2, 792, 811		

All multiple-store units include mezzanine floor space in addition to first-floor space. Detached stores have first floor space only. ² Based on the proportionate operating cost for each facility included in each trade corporation area of investment costs for that area. Obviously these estimated annual rental charges would need to be reviewed to fit demand for space, etc. before a rental schedule is adopted.

³ This item does not include cost of refrigerant, although the building cost includes the cost of refrigerator equipment for the entire building.

Potential Benefits From a Modern Wholesale Food Distribution Center

Reducing costs of distribution, increasing volume, and improving quality of food reaching the consumer are three major reasons for developing a modern wholesale food distribution center. In this section some of the potential benefits that might be expected to result from building a new food distribution facility are discussed.

Measurable Benefits to Wholesalers

Cartage

Under the definition used in this report, cartage costs were applied to team track receipts only. Since new facilities would provide rail connections for each operation, cartage would be eliminated. Therefore, it was assumed that all of the cartage cost of \$196,826 would be saved (see table 19).

Handling Costs

One of the more important savings to dealers who operate in modern facilities would be from increased labor efficiency. The facilities recommended provide for most of the handling of products on the first floor at truckbed or rail car height and in buildings adapted to the use of modern handling equipment. Products being brought into the store would be received at the rear platform either from rail cars or trailer trucks. Carcass meats could be placed on overhead rails at the edge of the platform and moved into coolers with a minimum amount of labor. Products received in boxes or cartons could be loaded on skids or pallets in the car or truck or on the platform, and moved into the store rapidly and economically. Bulk products, such as watermelons and squash, likewise could be loaded into efficient handling equipment and transported to display platforms with minimum labor requirements.

Table 35 shows that handling costs for dealers to be located in the new facilities would be \$567,566.

A comparison of handling costs as estimated for independent wholesalers by commodity group, adjusted for the number of carlots handled by dealers planning to relocate on the new food center, with handling costs estimated for the new center, is given in table 36. The estimated handling savings to be realized as shown in table 36 is \$1,619,453.

Spoilage, Deterioration, Breakage and Shrinkage

Improved facilities would materially reduce the spoilage, deterioration, breakage, and shrinkage costs. These savings would be possible because perishable commodities would not be stored outside the facility in the sun and winds, thus reducing shrinkage; pilferage would be reduced, and less handling would reduce bruising. The estimated

Table 35.—Handling costs as estimated for the dealers to be located in new facilities, San Francisco, Calif.

Commodity group	Carlots upon which costs were calcu- lated	Handling cost per carlot equiva- lent	Total cost in new facilities
Fresh fruits and vegetables_ Poultry, eggs, and dairy products Meat and meat products Dry groceries Frozen foods Total or average	Number 19, 431 5, 029 3, 495 2, 724 1, 705 32, 384	Dollars 20. 58 14. 20 10. 00 13. 12 15. 00 17. 53	Dollars 399, 890 71, 412 34, 950 35, 739 25, 575 567, 566

Table 36.—Savings in handling costs estimated for the dealers planning to relocate on the proposed wholesale food center, San Francisco, Calif.

Commodity group	Carlots incur- ring han- dling costs	Handling costs on present markets	Handling costs in proposed market	Estimated savings
Fresh fruits and vegetables Poultry, eggs and dairy products Meat and meat products Dry groceries Frozen foods Total	5, 029 3, 495 2, 724 1, 705	172, 199 192, 723 110, 825	399, 890 71, 412 34, 950 35, 739 25, 575	267, 643 137, 249 156, 984

 $^{^{\}rm 1}$ Costs were adjusted to the number of carlots handled by the wholesalers planning to relocate on proposed wholesale food center.

costs on a new food center as shown in table 37 are \$282,666 or an average \$8.73 per car.

A comparison of costs for spoilage, deterioration, breakage, and shrinkage for independent wholesalers by commodity group compared with the same costs as estimated for the new food center is shown in Table 38. This table indicates estimated savings to be realized of \$944,763.

Rentals

A comparison of costs of rents estimated for those 138 dealers planning to relocate on the proposed wholesale food center with rents presently paid as shown in table 39 indicates that

Table 37.—Spoilage, deterioration, breakage, and shrinkage costs as estimated for the dealers to be located on the proposed wholesale food center, San Francisco, Calif.

Commodity group	Carlots upon which costs were calcu- lated	Cost per car	Total cost
Fresh fruits and vegetables_Poultry, eggs, and dairy products Meat and meat products Dry groceries Frozen foods Total or average	Number	Dollars	Dollars
	19, 431	8. 50	165, 164
	5, 029	11. 22	56, 425
	3, 495	10. 36	36, 208
	2, 724	6. 00	16, 344
	1, 705	5. 00	8, 525
	32, 384	8. 73	282, 666

Table 38.—Savings in costs of spoilage, deterioration, breakage, and shrinkage estimated for the dealers planning to relocate on the proposed wholesale food center, San Francisco, Calif.

Commodity group	Carlots incurring depreciation	Costs on present market	Costs on pro- posed center	Esti- mated savings
Fresh fruits and vegetables Poultry, eggs, and	Carlot equiva- lent 19, 431	Dollars 660, 654		Dollars 495, 490
dairy products Meat and meat products	5, 029 3, 495	311, 798 180, 342	56, 425 36, 208	255, 373 144, 134
Dry groceries Frozen foods	2, 724 1, 705	35, 412 39, 215		19, 068 30, 698
Total		1, 227, 421	282, 666	

additional costs for rent in the new food center would be \$600,362 over what is currently paid. However, for handlers operating in up-to-date facilities, there would be savings resulting from the use of modern handling equipment for moving products into, within, and out of the buildings, and a reduction in labor costs, which would offset most of the increased rentals.

Table 39.—Difference in rents estimated for the dealers planning to relocate on the proposed wholesale food center with present rents paid, San Francisco, Calif.

Commodity group	Present rentals	Estimated ³ rent in new facil- ities	Difference
Fruits and vegetables_Poultry, eggs, and	Dollars 309, 719	Dollars 537, 842	Dollars - 228, 123
dairy products Meat and meat prod-	177, 668	230, 482	-52,814
ucts	1 562, 333	574, 123	-11,790
Dry groceries Frozen foods ²	198, 095 268, 160	378, 405 395, 485	-180,310 $-127,325$
Total	1, 515, 975	2, 116, 337	-600,362

1 Includes an estimate for packer branch houses

² Exclusive of space proposed for general use in public refrigerated ware-

houses.

3 Does not include rental for offices, trucker shed, restaurants, motel, and

Summary of Measurable Benefits For **Specific Operating Costs**

The potential estimated benefits, varying widely between commodity groups, are estimated to be \$2,160,680 (table 40). Approximately 62 percent of the total benefits would accrue to fresh fruit and vegetable wholesalers. An estimated 75 percent of the savings would result from savings in present handling costs of all dealers planning to locate in the proposed food center. Also, there would be additional savings to each of these food groups in a new market for which no monetary estimate of savings has been made.

Table 40.—Potential annual benefits to independent wholesale dealers, resulting from construction of proposed wholesale food center, San Francisco, Calif.

Commodity group	Savings				
-	Cartage	Handling	Spoilage	Rents	Total
Fruits and vegetables	Dollars 84, 729 23, 574 56, 544 10, 168 21, 811	Dollars 972, 327 267, 643 137, 249 156, 984 85, 250	Dollars 495, 490 255, 373 144, 134 19, 068 30, 698	Dollars -228, 123 -52, 814 -11, 790 -180, 310 -127, 325	Dollars 1, 324, 423 493, 776 326, 137 5, 910 10, 434
Total	196, 826	1, 619, 453	944, 763	-600, 362	2, 160, 680

Savings in Time of Travel To and From the Market

To get an idea of the time used in reaching the present market for those retailers patronizing it, the Retail Fruit Dealers Association of San Francisco obtained information from about 8 percent of their members. The stores operated by these retailers were mostly medium-sized stores. However, the sample ranged from the small-size corner grocery handling only a few perishables to large specialized produce supermarkets.

The study showed that these operators traveled 5 days each week to and from the present whole-sale fruit and vegetable market for their supplies or an average of 4.75 miles per day. Most of these retail dealers were located west of the present wholesale produce district. About 20 percent reported they visited markets in other nearby cities for their supplies. The average load carried away from the market to their stores was 1.39 tons. It usually took about 2 hours each day to visit the market. Bad traffic conditions caused delays of at least an hour per day.

An additional 30 retail buyers located on the peninsula south of San Francisco were visited. Further information was secured by the San Jose Retail Grocers' Association. These retail buyers reported that they bought most of their fresh fruits and vegetables from service wholesalers operating from the San Jose Wholesale Market, only a few reporting regular visits to the San Francisco wholesale market district. Some traveled as far as 70 miles each day for their supplies. Buyers in this group ranged from small cash grocery stores to large local supermarkets doing a total volume of business reported in excess of \$6 million per year.

Inquiries were made also regarding the time necessary for delivery of food items by other service wholesalers to their customers. In most cases, it was found that appreciably the same conditions were encountered as were found by fresh fruit and vegetable dealers making a visit to the market for their supplies. Service wholesalers delivered on phone calls or on calls by their salesmen, but the truck deliveries took about the same amount of time for the round trip to the retailers store.

If it is assumed that it costs an average of \$5 per hour to operate a truck with the driver and delays caused by traffic congestion averages one hour per day (as reported by truckers during the survey) for a 5-day work week, the cost for the trucks visiting the Washington Street market each day would approximate \$625,000 per year. With the construction of new marketing facilities and the availability of wide streets, plenty of parking spaces and immediate access to and egress from the food center a large part of this amount probably could be saved.

Other Benefits

In addition to the savings described above, wholesalers would find that in a new market it would be possible for them to transact their business with fewer man-hours of labor per day. While products could be unloaded into their stores at any time of the day they desire, with regulated selling hours which could be established in a unified market, the sales period could be much shorter than it is at present. Furthermore, many merchants would no longer find it necessary to operate in two or more places. Operating in this manner would effect considerable savings over and above the savings in porterage. In addition, by operating more efficiently in the improved facilities it is reasonable to expect that the competitive position of some wholesalers would be improved and the volume of their business would likely increase.

Benefits to Buyers

In a consolidated food center of the design proposed in this report, retail grocers in the San Francisco area and out-of-town buyers who look to San Francisco as a source of supply would be able to obtain their supplies more quickly and much more satisfactorily than they can at present. Furthermore, in facilities of this kind it would be possible to have definite hours of selling so that all buyers would know when to get to the market to have the best selection of merchandise from which to choose. Products would be in better condition. It has been reported by a number of San Francisco wholesalers and outof-town buyers that many buyers who formerly came to San Francisco to obtain food products no longer come, or come for only a portion of their supplies, because of the time required for making their purchases. With satisfactory consolidated food facilities these purchases by outof-town buyers might increase.

Benefits to Farmers

Growers of agricultural products would benefit in several ways from the provision of satisfactory food marketing facilities in San Francisco. In the first place, with the products arriving in retail stores in more satisfactory condition and with less handling expense within the market, consumers might purchase larger quantities than they are now purchasing; and thus expand the outlets for farm products. Farmers would also benefit from the improvement in the operation of the price-making forces, not only on the volume which moves through the San Francisco market but also on the considerable quantities that move directly from the farm to other points and are sold on the basis of prices established in the San Fran-

cisco market. Farmers who bring their products to the San Francisco market in their own trucks would benefit through being able to get to the store of the wholesaler promptly and to unload their trucks in less time than is now required. Some farmers probably would benefit in the actual net return that they would get for their produce if cartage and similar services were eliminated.

Benefits to Railroads

The railroads serving San Francisco have long been at a disadvantage in not being able to place carloads of merchandise for unloading directly at the stores of many merchants. When shippers compare the cost, by rail and by truck, of transporting their products to the stores, the cost of cartage from the railroad track to the store must be paid as well as the railroad freight bill, and this often makes the total transportation bill greater than if the shipments were made by motortruck. Furthermore, the extra handling involved when the products move by rail increases the time required for getting them from the shipping point to the store. Hence, if the facilities suggested in this report were constructed, the railroads would benefit.

Benefits to Market Employees

Working conditions for persons employed in food wholesaling operations in San Francisco would be materially improved in a new market. Since the buildings are designed for efficient handling by use of proper equipment, the task of the laborers would be less arduous, their productivity increased, and over a period of time their hourly earnings might increase. Regular hours of work would be expected and large amounts of overtime or irregular employment would not be necessary. With the complete rebuilding of the marketing facilities the general environment would be materially improved and many facilities not now available for them would be provided.

Benefits to the Consumers

The consumers in and around San Francisco would undoubtedly benefit as much from these improvements in market facilities as any other group. They would be able to obtain foods in retail stores in better condition and perhaps at more reasonable prices than they do under present conditions. With a satisfactory variety of perishable foods placed before the housewives at reasonable prices and in good condition, they could be expected to purchase larger quantities of these foods which dietitians say are needed in increased quantities in the average family diet.

Benefits to the City

The city of San Francisco would benefit in several ways from the construction of a new wholesale food center: (1) The removal of the wholesale perishable business from some of the present market areas would facilitate the redevelopment of that part of the city, thus increasing the tax return in the area. (2) Since all citizens in San Francisco are consumers, the city would be rendering a real service to its residents by encouraging the development of satisfactory facilities for the handling of foods. (3) The traffic problem in the present market areas could be more easily solved. (4) The city would benefit from the increased volume of wholesale food business that would be transacted in an adequate market. (5) The transfer of the wholesale food business to modern facilities also would assist the city in the solution of some of its problems pertaining to the enforcement of sanitary and fire regulations and with the prevention of crime. (6) The taxes paid on facilities that might be built in the new food center would probably amount to substantially more than the taxes now paid.

Much gain apparently would result in the removal from the present location of the wholesale produce industry and locating other types of businesses in the area. San Francisco is badly in need of space and it is believed that there would be little difficulty in attracting new tenants to the old market area if new buildings were built on the

present market site.





