A GARMENT CENTER FOR BOSTON, MASSACHUSETTS

by

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ABSTRACT OF THESIS

Title: A GARMENT CENTER FOR BOSTON

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In every city, loft buildings form a good percentage of the downtown structures. These old loft buildings, clustering around the retail and office core in Boston, house the largest industry in the city -- the garment industry. Production of clothing, mostly women's clothing, is a major function of this loft space. The great majority of the Boston loft space is over 30 years old, some over 50 years old, and could well be replaced.

This thesis takes as its problem the design of a garment center with new loft and related spaces for the ladies' garment industry in the city of Boston. The problem is not a new one, for such a center was proposed when the Central Artery threatened to take the major loft structures occupied by the industry several years ago.

A description of the industry in detail and recommendations as to a location for a regional center were made in my earlier thesis, The Ladies' Garment Industry in Boston, A Study of Characteristics Affecting Choice of Location (M.C.P., M.I.T., 1956). This thesis proposes to continue where that thesis left off and to design a garment center for this city.

This thesis selects a specific site, develops a program for such a center, describes in detail the functional relationships that such a center would require, and presents a site and building plan designed to integrate these relationships into an aesthetically pleasing physical unit, a unit that would function well in the city as well as for the industry.

The necessary character of space required, the requirements of transportation for goods and labor, and the function of the center as a focal point for the industry are problems for which solutions are offered.

Thesis Supervisor: Herbert L. Beckwith
Professor of Architecture
May 19, 1958

Pietro Belluschi, Dean
School of Architecture and Planning
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Cambridge, Massachusetts

Dear Dean Belluschi:

I hereby submit my thesis entitled, A Garment Center for Boston, Massachusetts, in partial fulfillment of the requirements for the degree of Master of Architecture.

Yours sincerely,

Albert Tappe
FOREWORD

This thesis is the logical continuation of research begun in the M.I.T. Department of City and Regional Planning. It represents the effort of the author to relate his studies in planning to those in architecture. The two make up one project, beginning with an analysis of the ladies' garment industry and its role in Boston, presented in an earlier thesis, culminating here in the final design of a center for that industry.

I am indebted to the faculty of the Department of Architecture for its helpful criticism. The cooperation of the members of the industry and the ILGWU in Boston is gratefully acknowledged. Finally I wish to thank Sydnor Hodges and Joseph Savitzky for their aid and suggestions.

The author takes full responsibility for all assumptions, interpretations of facts, and conclusions presented here.

Albert Anthony Tappe

Cambridge, Massachusetts
May 19, 1958
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INTRODUCTION

In the city of Boston more than in other cities, the question of the obsolescence of physical plant is of major importance. As each city is a frame for the activities that take place in it, so the antiquated loft buildings in Boston support the activities of the garment industry -- the largest industry in the city. The apparel industry requires a downtown location for its activities. However, it may in the future be forced to turn elsewhere for expansion if improved space is not made available where it is desired.

At present the garment industry is located in the lofts along Kneeland Street and the nearby buildings in that district. The high loft buildings along Kneeland Street and the wide street itself are all that symbolize the Boston ladies' garment industry. Several years ago these lofts were in danger of destruction from the Central Artery clearance. A change of route saved them, but not before some thought, both by the industry and by promoters, had been given to the idea of a physical garment center for the industry in Boston. The site then under consideration was the New York Streets area, and some sketches were made of a proposed center. With the change of route of the Central Artery, however, the ideas were abandoned and have lain dormant for some years.
This thesis and the one that preceded it are an examination of the industry and a proposal for a center for the industry. Such a center would give form to the industry; would provide a center for displays, would enhance its position as a regional focal point for the needle trades, would attract workers to a presently labor-shy industry; and would make possible better productivity.

Boston is in great need of new loft space. Old, low-cost loft space is a necessary element as the birthplace of small new firms, but Boston has only old loft space. A center for the successful firms and the larger wholesaler would have a salutary effect on the industry.

With these purposes in mind, this thesis selects a specific site for the garment center, develops the architectural program for the center, and discusses the functional relationships necessary for such a center. It presents a site and building plan for the center, related to the surrounding city environment.

The design goals of this thesis are, then, as follows:

creation of a functional and architectural focal point for the ladies' garment industry in Boston and New England; and

proper location and relation of the industry to the city and the services it uses: circulation, labor, business services, etc.
A word should be added here about what this thesis is not. It would be quite possible to project the functioning of the apparel industry in Boston some forty years into the future. Looking ahead, for instance, it is entirely likely that truck transport to contractors in New England will be replaced by air freight transport to contractors in Puerto Rico, low-cost stitchers in the Deep South, etc. I feel that, even with such changes in transport and location of contractors, the central location will still be valid for Boston at that time. Boston will probably still be the heart of a rapid air-freight and surface-transport system and, because consumer demand will remain high in urban New England, the city will continue to function as a regional garment marketing and fashion center.

A projection forty years into the future would, of course, make specific site recommendations and architectural designing highly conjectural, although allowing the imagination free reign, in such areas as heliport facilities for air transport of freight, structural innovations (unobstructed loft space), and radical changes in city surface circulation. Such a program was strongly considered and was tempting for the freedom it offered. It was rejected in favor of one of more immediate utility, restricted to a realistic framework, in the hope of sparking the
interest of the industry.

Thus, the present thesis proposes an intermediate solution, recognizing existing problems and offering solutions that could be acted upon by the industry -- something which a conjectural center forty years away might not do.
CHAPTER I

DESCRIPTION OF THE GARMENT INDUSTRY

The manufacturing of clothing in the United States has become concentrated in the hearts of cities. This is especially true in the older cities on the East Coast, with Boston no exception.

The reasons for the selection of the cities as the site for manufacture of clothing is dealt with fully in my earlier thesis.¹ To quote briefly some of the reasons:

"The manufacture of the majority of women's clothing in the United States has become concentrated in the central areas of the larger cities, permitting access to consumers, agents and buyers, other business services, and a large labor pool. The apparel industry generally is composed of an agglomeration of small, single plant manufacturers who have a high value for low bulk of product. Because of the volatile demand for its products (seasonal fluctuations and rapid style change), there is a low limit on the size of plants beyond which size increases do not further reduce the cost of unit production."²

As an urban industry, the garment industry can afford to pay the high rents of a central location, and this contributes to a high degree of specialization of product.³ This specialization in the needle trades is so extreme that it takes the form, not only of production by one

²Ibid., p. 6.
³Ibid., p. 6.
manufacturer of a particular garment, but often of only particular sizes of that garment. Rapid style change makes for cutthroat competition and turnover of firms is high.¹

While the majority of the industry is concentrated in the cities on the East coast, the growth of regional centers in the West is noticeable. New York remains the dominant force in the industry as a whole. In 1954 New York produced 40 percent of the national total value added by the apparel industry. Its domination of the ladies' clothing industry is even more striking; in 1954 it had 66.2 percent of the national women's apparel market collar volume. Boston has made the most rapid gains in recent years in its relative share of the national market in ladies' garments, approaching 3.2 percent.² (See Appendix A, Table 1.)

The Garment Industry in Boston

In Boston, the apparel industry developed with the port activities, aided by the invention of the power loom, the sewing machine, and the rise of New England as a textile center in the late 19th century. The garment manufacturers have traditionally tended to locate near the source of their sales and labor. This in Boston has been

¹Ibid., p. 7.
²Ibid., p. 24.
in the area near the downtown department stores.

Since the turn of the 20th century, the growth of the Boston ladies' garment industry has been rapid and today is the largest part of the industry in the city, with a total of 411 manufacturing establishments and 13,469 employees. Of these, some 218 establishments and 8,944 workers are engaged in the production of women's garments. (See Appendix A, Table 2.) The Boston industry, while of local importance, still looks to New York for its major sales. Nevertheless, Boston is a regional center of increasing importance. Two hundred and forty-three of the 532 Massachusetts ladies' garment firms reported for 1956 by the Massachusetts Department of Commerce were located in Boston. As for the contractors, of all the 11,000 stitchers in New England, only those in Fall River, New Bedford, and Rhode Island, and to a lesser extent Worcester, do more than 10 or 20 percent of their business for jobbers outside Boston. Boston remains the display center for buyers for all of New England, with shows held in Boston hotels in the spring and fall.

The wage scale of the average garment worker is low: while 20 percent of the city's total employment is in the

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1 Commonwealth of Massachusetts, Department of Commerce, Directory of Manufacturers, 1956.
garment industry and while 16 percent of the total city's value of product is derived from this industry, only 12 percent of the total wages paid to industrial workers is received by garment workers.

The size of the average plant in Boston is small, employing 32 people. (See Appendix A, Tables 3 and 4.)

The range of space per worker in Boston's ladies' garment shops is between 100 and 180 square feet per worker. The present average per worker in the Kneeland Street area is approximately 150 square feet per worker. The low space requirements per worker suit it well to operation in urban areas. In planning for future construction, it is well to note the trend to larger space and the standard of 200 square feet per worker recommended by the ILGWU engineering department.

The industry today ships its products predominantly via pickup truck to and from local destinations, and by parcel post, railway express, air freight, and truck for distant destinations. Jobbers in Boston are serviced by contractors all over New England and the growing expressway system is important to the growth of the industry, facilitating rapid truck service between contracting shop, jobber, and market. In Boston, the Central Artery will strengthen the downtown location of the industry in the Kneeland Street area.

1Ibid., p. 25.
The rents that the industry pays are approximately 1.45 percent of total operating costs. It has been

1Mr. Alfred Parrott, in his preliminary report to the Regional Plan Association in 1953 (New York City, Regional Plan Working Committee, The Future of the New York Apparel Industry, 1952-1970) said the following about the New York City industry’s ability to pay higher rents (p. 68):

"There is no doubt that the apparel industry can well afford to pay the rentals charged in new buildings. Where rent is only about 2 percent of gross revenue, the difference between an annual rental of about $1.50 per square foot in the old loft buildings south of 14th Street and the approximately $2.25 per square foot charged in new loft buildings would be only 1 percent of gross. This difference could probably be made up many times in the savings made possible by better lighting, better layout, off-street loading and unloading and quarters more efficient in every way.

"In fact many apparel firms now located in old sub-standard loft buildings would welcome the opportunity to move into more efficient quarters but the space simply is not available and the manufacturers in this industry are so small that they cannot finance new buildings."

This question of ability to pay higher rents is important since future plans for the industry may depend upon this factor.

The later (1957) New York City Mayor’s Committee for World Fashion Center report corroborates Mr. Parrott’s observations in a section devoted to the amount the industry can pay for rent (A Stitch in Time, p. 38):

"The 1947 U.S. Census of Manufacture lists the available annual production per garment worker as $20,400. worth of finished goods.

"An average successful firm in the industry may employ 30 workers. Assuming a current $2.00 per square foot rent for average space
estimated that the industry could pay higher rents for better space. In Boston, the range of rents is between 60 cents and $1.50 per square foot, or just about half the current New York rents. A new center at current construction, land, and financing costs in downtown Boston could rent space for approximately $2.25 per square foot, which is within the range of the rents that the manufacturers could pay if productivity were increased, and comparable to rentals for new loft space being paid in New York City.²

1 (continued from previous page)

in the garment district and using this as a basis of analysis, the following rental picture is derived.

30 workers @ $20,400 per annum $612,000
gross value per annum production
30 workers @ 170 sq. ft./worker 5,100 sq.ft.
required floor space
5,100 sq. ft. @ $2.00/sq. ft. $10,200 rent
ratio of rental to gross value of goods produced: 10,200
612,000 1.66 percent

"If the rental is doubled to $4.00 per square foot, the increase in rental would be 1.66 percent. A very small increase in production efficiency would very quickly absorb this difference.

"Production engineers have indicated that modern plants with adequate access facilities for loading and unloading might readily raise production efficiency by 15% to 20%. It would take only a fraction of such gains to pay for the difference in rent."

²Interviews with realtors of the A. W. Perry real estate firm and George Fuller construction firm, Boston, March 1958.
Location of the Industry in Boston

The present location of the garment industry in Boston is in response (1) to tradition -- it has always been in its present location, and (2) to the desire to be as near as possible to its source of material and labor supply, sales, and services.¹ In Boston, more than half of the garment manufacturers in the three U.S. Census categories selected for this study (see Appendix B) are located in the Kneeland Street area, with notable subclusters in the vicinity of North Station, in the North End, and a straggling collection of producers along Washington Street going toward Roxbury.

Kneeland Street represents a choice of location with excellent access by transit to all parts of Boston for labor and by artery to services for the manufacturers.

A further description of the site is given in Chapter III below.

¹New York City Regional Plan, 1927; and Mabel A. Magee, Trends in Location of the Women's Clothing Industry (1930), p. 114, as follows:

"Nearness to the market is an all-embracing factor in determining plant location in this industry. In New York migration uptown with the shopping district, the failure of movements outward, and the success of the central location are closely paralleled by the location in the Chicago Loop, the movement back to town after experimenting in the Milwaukee Avenue district, and the ever increasing concentration of the industry into five or six city blocks. Apparently, it is only in the production of the cheaper goods, and then only when the selling function has been intrusted to centrally located agents, that any attempt to utilize outlying areas is successful."
Labor Force

The garment industry is by tradition an industry employing immigrants for a large part of its labor force. The majority of workers in all branches in major garment centers are drawn from immigrant groups with the Russian and Polish Jews in considerable predominance, followed by the Italians. For the unstable and highly competitive manufacturer, the immigrants represent a cheap source of labor with a tradition of employment in the needle trades. For the immigrant, the industry represents ready employment and no language barrier. In addition, the tendency of the immigrants to settle in cities aided their original employment by the urban garment manufacturers.

Sons and daughters of immigrants are less ready to follow their parents into the shops. Labor supply is becoming an increasingly serious problem in cities, with non-immigrants reluctant to be identified with the low-paid immigrant groups in an industry with a still-clinging sweat-shop stigma. In New York, Puerto Ricans are following the traditional pattern and the shops resound to Spanish chatter; it is estimated that at least 15 percent of the total New York employment is now Puerto Rican.

As discussed above (p. 3), wages in the industry are low. The fact that 78 percent of the employees in
America's garment industry are women tends to perpetuate the situation. This should be qualified, however, by adding that the operators are paid on a piece-work basis, so that the hourly minimum is the least that a girl can earn, and that, for the industrious, wages are good.¹

From my earlier thesis, the following factors about the Boston women's garment industry were determined. Eighty-one percent of the workers sampled were women. The majority of these lived in Boston (61 percent), with more than one-third living in Roxbury and Dorchester. Eighty-five percent of the workers traveled to work via rapid transit. In addition, the majority of all the workers' residences were serviced by rapid transit.

Producers and Processes of Fabrication

In the garment industry, there are three types of producers for the market:

(1) Manufacturers. The manufacturers perform the entire clothing manufacturing operation; that is, they purchase the material, cut and stitch it, and then market it to wholesalers, occasionally to retailers.

(2) Jobbers. Apparel jobbers are manufacturers who do not stitch, but who purchase cloth,

¹Tappe, op.cit., p. 41.
cut and send it out to a contract shop for the stitching operations, and then market the finished product. The advantage of this method of operation is that it bypasses most of the labor problems in the industry.

(3) Contractors. These firms perform the specialized operations for the apparel jobbers, such as certain kinds of stitching, special tasks such as pleating, etc. Generally they are small shops of ten to thirty operators, located in the out-of-the-way lofts and basements away from high-cost rental areas. Traditionally, they harbor the labor abuses in the industry. The advantage of the exclusive contracting function is that the operator of a contract shop is relieved of all the worries of marketing the finished goods. This split in manufacturing process spreads the risk and is the increasingly popular method of operating.

(See Appendix A, Table 5, for number and size of New England firms.)

The labor problems in the manufacturers' and contractors' operations derive from the extreme fluctuations in shop size due to seasonality of orders. The radical fluctuations in availability of workers' jobs means that they
often accept low wages and intolerable working conditions, with a resultant depressant effect on the labor conditions of the whole industry and serious problems for union organizers attempting to improve standards.

Briefly, the process of manufacture is as follows: the manufacturer begins with the selection of a specific style of dress, several trial dresses are quickly made and distributed for public and buyer response. If orders result, patterns are cut and the material for the dresses is purchased. The above processes can all take place in a few days. The material is cut to pattern and given in small bundles to the girls on the sewing machines to stitch, with a tendency toward specialization of stitching operations by different operators as modernization of manufacture takes place. Buttons and button holes, belts, and other special items are added after stitching. The finished dresses are lined if necessary, pressed, and then packed for shipment. The manufacturing process is simple, but the competition and seasonal fluctuations complicate the process by introducing the pressures of time.
CHAPTER II

A NEW GARMENT CENTER FOR BOSTON

Construction of new facilities for Boston's garment industry is justifiable on at least three grounds. It would improve the organization of the industry, facilitating marketing of products and flexibility of contractual manufacturing arrangements in Boston. It would make possible further improvements in Boston's role as a regional center and better it economically. It would help cope with the shortage of skilled labor in the apparel industry as older immigrant workers retire from the labor force.

Although Boston is already the acknowledged and increasingly successful regional center of garment manufacturing in New England, most sales by large Boston firms are made in their New York showrooms, while smaller manufacturers sell to travelling regional buyers via plant showrooms or through their own salesmen on the road in New England. Buyers for small New England stores review the production of Boston manufacturers, attend the semi-annual show at Boston's Parker House hotel, and visit the wholesalers (of whom all but two in this state are in Boston) in order to make their purchases. A garment center would serve to organize the industry physically by giving it a definite center in which the leading firms could maintain manufacturing facilities, small out-of-town firms
producing for the regional market could have permanent display booths, and the whole would function as a display and buyers' center.

Boston clothing at present is reputed for its craftsmanship, not its style. New York is the acknowledged national style leader. At the same time, a regional style and fashion center in Boston could assist New England apparel manufacturers much as centers in Dallas and Los Angeles do for those in the Southwest and Far West. Such a style center would focus on the small manufacturer serving a regional market. It would serve as an educational force for the public in New England, creating public interest in the Boston market.

A Boston regional style center could become an educational center for training in the needle trades similar to the Fashion Institute of Technology in New York. Coupled with the labor union's efforts to improve working conditions, it could help to remove the old stigma of the sweat shop manned by immigrant labor and relieve the existing shortage of skilled workers in the industry. A fashion center in Boston would help focus attention on the garment industry and contribute to its prestige in labor's eyes, while offering vocational training at a high school level.
Size and Function of Necessary Facilities

To perform its functions of improving the organization of the industry, acting as a style center, and providing a training center, the proposed garment center would require the following kinds of space for wholesale, manufacturing, office space, display and education, materials and supplies for the manufacturer, retail space oriented for employee and pedestrian use, freight, parking, public service areas, outdoor space, and future expansion. It is assumed that manufacturers and jobbers will occupy the manufacturing space, but that, except for specialty lines, the contractors will remain in lower cost space than the proposed garment center can offer.

Wholesale. To be a success, the center for the garment industry must house the industry's wholesalers, who in any event tend to cluster together for the convenience of buyers and to facilitate inspection of each other's wares. Since they "follow the leader" in seeking a location, a new center, if it attracted the leading wholesalers, would of necessity have to provide room for the great majority,¹ according to spokesmen for the industry. Most of the wholesalers in the women's dress industry are presently in the Hudson Building at 75 Kneeland Street,

¹Source: Interview with Mr. J. Fialco, President of Garment Manufacturers' Association of Boston (1957).
Boston (See Appendix A, Table 6). In fact, in three buildings in that area, some 146,000 square feet is devoted to wholesale activities at present. The proposed garment center should have accommodations for 20 wholesalers ranging from 5,000 to 8,000 square feet per wholesaler. In other words, a total of 150,000 square feet should be reserved for their use.

The space will be primarily for the display and storage of dresses on racks. A small office and service area would complete the major requirements for the wholesalers. The dresses will arrive on trucks, be sent to the wholesale area by freight elevator for storage and display to the buyers. When they are purchased, they will need to be wrapped for shipment from the freight area via specified carrier.

Since the wholesale areas must, above all, be convenient to buyers, quick access to parking facilities is important, as most buyers in Boston will arrive by car. The wholesale area should also be within easy reach of the garment center's service facilities for the buyers -- restaurant, toilets, display area, and fashion center. Neither the wholesalers nor the buyers require direct access to the offices in the general office space described below, since there is no functional relationship between them. Access to the manufacturing area for the transport of
finished dresses should be provided the wholesale area, as well as access to the freight area.

Manufacturing. The other major purpose of the center is to bring together and upgrade the manufacturing space in Boston, providing better working conditions and better services for the small manufacturer.

The Boston garment manufacturers are presently spread about the Kneeland Street area in small shabby loft buildings, all over 30 years old. In three major buildings alone, including the large Hudson Building, Kneeland Street manufacturers now fill 355,000 square feet. The proposed garment center would provide about 175,000 square feet of manufacturing space, to be used by manufacturers and jobbers. The majority of the manufacturers in the area at present may more properly be called jobbers, purchasing their material locally, cutting it, and having it stitched by contractors outside the area who send it back for display, sale, packing, and shipment. The proposed center would probably attract more of these jobbers than the complete manufacturer because of relatively high rental costs. The center would allow approximately 16 concerns, with each manufacturer or jobber averaging 5,000 to 12,000 square feet.\(^1\) This is considered conservative. Should

\(^1\)The average firm employs 32 workers @ 200 square feet per worker. The mythical average firm would require 6,400 square feet.
the center be a success, the demand for manufacturing space would increase considerably. Future expansion is discussed below.

The manufacturing space will be used for the production of garments. The manufacturer will purchase the material and cut the patterns, and make several trial dresses for display to the buyers. If these are salable, he cuts the cloth for the orders and either stitches the garments or contracts the stitching out. When assembled, the garments will be packaged by the manufacturer or jobber and shipped. The spaces required are therefore office, toilets, display (a booth), cutting and stitching areas, storage, wrapping, and access to a shipping area. The production area must be relatively unobstructed, high-ceiling, loft space. Twelve foot clearance is considered minimum. Adequate ventilation and light are primary requirements.

The manufacturing area should be convenient to buyers, but this is less important than in the case of the wholesalers. Manufacturing space must have direct access to the freight and shipping services for the rack-fulls of garments delivered several times each day. Because manufacturers and jobbers will employ many more people than the wholesalers, access to transit and some parking should be provided for them and for the convenience of buyers.
The manufacturing area should be near employee services such as cafeterias and employee-oriented retail space. Manufacturers must also have access to wholesale provisions used in the trade: cloth, machines and tools, and "notions" such as buttons, zippers, needles, etc. Manufacturers will not need direct access to the general office area. Access to the display area and public areas is desirable as manufacturers often sell their own products to buyers from a salesroom in the plant. Sometimes they sell via salesmen on the road or a salesroom in New York City. Since one purpose of the center is to group all salesrooms into a functioning group, manufacturers should be adjacent to wholesaling space for buyer convenience.

Office Space. A garment center for Boston must include office space for the numerous organizations operating within the industry. The International Ladies' Garment Workers' Union (ILGWU) is a prime example; it is a major factor in the successful operation of the apparel trades -- recruiting labor, making plant and machine layouts for manufacturers, etc. The union's present quarters would be demolished in the plan for the garment center.

Other organizations using space in the center for purely routine office purposes would include the manufacturers' organization, industry publications, and the
garment register. The office space would be only for organizations and individuals related to the center and not for the use of individual wholesalers, manufacturers, and jobbers whose office space is included in the plant area requirements.

The functional requirements for the office space include access to all public areas and functions, restaurants, bar, retail area, open space, transit, and parking. The office space need not have direct access to the wholesaling and manufacturing areas or freight facilities and manufacturing-oriented wholesale, since merely the inclusion on the site will give adequate proximity. Within the office area, employee services, restrooms, etc., are required.

Space required is estimated at 100,000 square feet.

Fashion Display and Education Center. The garment center has as one of its purposes the creation of a style center in Boston to be a focus for the region. Such a center would replace on a continuing basis the semiannual shows held in the various hotels in Boston. Besides the buyers from small New England retail stores, the center would stimulate the interest of the public in style and fashion, which many observers feel Bostonians need! Greater public style consciousness should speed up obsolescence of clothing and promote both manufacturing and sales.
The fashion center would also have an educational function. Classes in design and sewing could be given. There should be exhibitions of the latest fashions, promoted from the viewpoint of the student as well as the buyer and the public. The display areas would include apparel from firms within and outside the center which could be compared critically by students. Also needed would be toilets and service areas.

Three classrooms and two offices are proposed for the education classes.

Approximately 10,000 square feet are provided.

The display and education area should be oriented to the public, be accessible to transit and parking, and have convenient access to the restaurant, bar, delicatessen, and park. Its inclusion provides enough proximity to the office, wholesale and manufacturing areas.

**Materials and Supplies Sales Area for the Garment Industry.**

The garment center should include provisions for material supply, both as a service and as inducement to manufacturers and jobbers to locate there. Since the majority of the firms will be small firms doing purchasing in less-than-carload lots, proximity to cloth goods wholesalers, button wholesalers, and zippers, belts, pins, needles, snaps and hooks, and other accessories is important. In addition, such space in a center may be used for display
by mill representatives. Although designed primarily for the industry itself, such wholesalers of materials in the Kneeland Street area at present usually sell materials to the public at below usual retail cost. Suppliers of equipment would also use the materials and supplies area. Sewing machine rentals would be one of the major businesses.

The space would be used primarily as sales and storage areas. Ten thousand square feet is an estimated requirement for this function, assuming the supplier would only stock on the premises samples of goods available by truck from warehouses.

The materials and supplies area should be located with primary access to the manufacturers and jobbers and to the freight handling terminal, with secondary access to the public areas.

Retail Space for Employees and Pedestrians. The proposed garment center is located at the lower edge of the primary shopping district for both Boston and the entire New England region. In this location, it is accessible to a large number of pedestrians and occupies what might be valuable retail frontage. Some recognition of this fact is included in the planning of the center. Retail space would not only serve the pedestrians but also the center's employees. It would in addition help finance the project.
Such retail space should be pedestrian oriented and have access to off-street service via trucks. It should also be convenient to the center employees and to visitors (buyers) to the center who will use its services.

The proposed apparel industry center allowed 15,000 square feet gross for pedestrian- and employee-oriented retail space.

**Freight Terminal.** Provision by a garment center of a modern freight handling terminal which permits manufacturers and jobbers to get terminal rates for shipments is perhaps the most important function of the center. For the city, the center with its freight terminal provides off-street parking for loading and unloading of the trucks that now clog the district. Almost all of the garment industry deliveries are made via pickup and van truck, and all firms require trucks to relay goods to post office, and to rail and air express offices for shipment. Jobbers using contractors in other parts of New England for stitching make deliveries and pickups via truck. Often loads are small and the process of loading and unloading is short, measured in minutes, even though many still use the rack method of delivering dresses and garments instead of the newer specially constructed trucks.

The freight terminal is to act as a terminal and should therefore have offices and shipping facilities for parcel
post, railway express, air freight, and various van lines. Little storage space is required. Freight handling and offices predominate the area usage. There should be loading docks for 20 vans, freight elevators as required by the plans, and office area for the various van lines and express services. Fifteen thousand square feet excluding truck circulation space is required for the freight center services.

The freight terminal should have access to the materials and supplies group as well as the wholesalers, manufacturers, and retailers in order to minimize congestion on the surrounding streets.

Parking. Parking is required in the garment center. Although the great majority of the center's employees will travel by transit, the purpose of the center as a focal point for the industry and a buying center necessitates adequate parking for employers and buyers.

Parking space for a minimum of 500 cars with easy access to the wholesale and public areas of the center and to the streets is very important. The site of the center is accessible to the central artery through Boston and access to the center's parking from the artery should be direct.

One hundred and fifty thousand square feet would allow 300 square feet per car for 500 cars.
Public Service Areas. The garment center must provide for its employees such services as a health center, cafeteria, delicatessen, bar where employers may entertain clients as well as spacious areas for lounging at lunch hour. The food service facilities can serve both employees and passers-by. Such facilities must therefore be accessible to both the general public and the employees of the center.

The following facilities are considered necessary and desirable for a center of this type, together with their required service and toilet areas, etc.

Health Center - facilities for examination and treatment of accidents, for rest, and office space for a nurse. 1,000 square feet.

Cafeteria - provision of food service for 300 patrons, accessible both to public and employees. 4,000 square feet.

Delicatessen - an essential service in a center of this type, particularly in view of its traditional ethnic character, and desirable because of variety for lunching workers. To seat 70 persons 1,500 square feet required.

Lounge - small bar or cocktail lounge primarily for employers to entertain clients. Negotiation and bargaining is a characteristic of the industry, and a dry martini is often a great help. 500 square feet.

Total space required for the public service areas listed here would be 6,400 square feet gross.
Outdoor Public Space. The garment center should provide landscaped open areas for the public strollers along Washington Street. The site selected is the former site of the "Liberty Tree" of Revolutionary era fame, and offers a landscape theme for the public space of the center. The center should provide outdoor relaxation space for employees.

The center as a whole should recognize the opportunity to create a terminus for the lower Washington Street shopping district.

At least one-third of the site should be open area of some nature. Since the site has approximately 185,000 square feet, there would be a minimum of 60,000 square feet of open space for the entire site.

Future Expansion. It is hoped that the center will be a commercial as well as an artistic success and that many more of the garment firms in the Kneeland Street area will want to move near the center. Future expansion, expressed in the plot plan in terms of future use of adjacent land, is to be considered in the solution.

Provision for future manufacturing and wholesaling space as well as services such as freight and employee services are important and should be indicated in the site plan, either within the existing site or in expansion on property adjacent to the site.
### Summary of Space Requirements for the Garment Center for Boston

<table>
<thead>
<tr>
<th>Service Areas</th>
<th>Total: Service Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials and Supplies for Industry</td>
<td>10,000</td>
</tr>
<tr>
<td>Retail Space for Employees and Pedestrians</td>
<td>15,000</td>
</tr>
<tr>
<td>Freight Terminal</td>
<td>15,000</td>
</tr>
<tr>
<td>Parking</td>
<td>150,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Public Service Areas</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Center</td>
<td>1,000</td>
</tr>
<tr>
<td>Cafeteria</td>
<td>4,000</td>
</tr>
<tr>
<td>Delicatessen</td>
<td>1,500</td>
</tr>
<tr>
<td>Lounge</td>
<td>400</td>
</tr>
<tr>
<td></td>
<td>7,000</td>
</tr>
</tbody>
</table>

| Total: Service Uses                                 | 197,000              |

| Total square feet                                    | 632,000              |
| Total land area in site including streets (approx.)  | 185,000              |

F.A.R.: 3.4
CHAPTER III

THE SITE SELECTED FOR THE CENTER

At first glance there seems to be a wide variety of choice for the site for a ladies' garment center in Boston. The range of choice for the whole region was discussed in detail in my previous thesis and narrowed down to a location in the Kneeland Street area of Boston.

The reasons for the selection of the Kneeland Street area are briefly that for the jobber and manufacturer it offers the best combination of essentials for the operation of their businesses. These essentials are proximity to:

- adequate and skilled labor supply,
- transport services offered by the city,
- other manufacturers for buyer convenience,
- retail outlets for comparison shopping and market check, and
- sources of supply.

It is not surprising that the majority of the present industry's firms in Boston are already located in an area tending to maximize access to these services. It is important to note that these services are still most obtainable in the traditional location. With no reason to assume that these service accessibilities will radically change in the future, it is desirable from a planning point
of view to preserve and strengthen the industry in its present location. Thus the consideration of a site was narrowed to the Kneeland Street area.

One possible location which presented itself as logical in view of accessibility to operational requirements would have been on Kneeland Street next to the recommended location. However, this other area, bounded by Kneeland Street, Beach Street, Harrison Avenue, and the Central Artery, is the heart of the Chinese community in Boston, the displacement of which would have such major social and political repercussions as to preclude even the consideration of the change. The Chinese community location would have placed the proposed garment center in the middle of the garment area and given it direct access to the Central Artery. This theoretical advantage would have been slight, however, and does not outweigh the disadvantage of uprooting an entire ethnic community in the city.

Thus, the location recommended and developed by this thesis as the best choice for the proposed location of the garment center is the area bounded by Kneeland Street, Washington Street, Essex Street, and Harrison Avenue in downtown Boston. This site has the advantage of direct access to the transit stop of the Metropolitan Transit Authority subway on the corner of Washington and Essex Streets, as well as adequate access to the Central Artery, via Kneeland and Essex Streets.
From the standpoint of the relation of the site to the rest of the city, the selected area is strategically located. It is the termination of the downtown shopping district, and is midway between the central business district, the South Cove redevelopment area, and the secondary retail area in the Back Bay. It is adjacent to several hotels and the major theatre district in the city -- of importance inasmuch as it facilitates the entertainment of buyers, etc.

A garment center in this location is in a position to exert important influences on the future growth of the city, not only economically but also aesthetically. By putting the center into relationship with Phillips Square, a small square that is even now almost a pleasant urban space, there is an opportunity to relate the central space in the garment center to the surrounding city.

The site is surrounded by a mixture of old loft buildings, ranging in height from three stories to twelve or more on Kneeland Street and Phillips Square. On Washington Street, land uses oriented to the pedestrian consist of run-down movie houses, bars, cheap restaurants, and stores selling cheap merchandise. Entertainment facilities, in the form of bars, run along Essex Street almost to Harrison Avenue. The frontage along Kneeland Street consists of a liquor shop, yard goods store, shoe store,
small restaurant, and the remainder is vacant. Harrison Avenue is lined with Chinese restaurants, an office building, and a few shops. The night life of the bars focuses on the corner of Washington and Essex Streets; indeed this is a minor center of low-cost night life in Boston requiring constant patrol by civil and military police. The buildings on the site and the buildings that surround it are in a rundown condition. The mixed land uses and the low valuation of the property are evident in its appearance.

Replacement of Existing Facilities on the Site

There are several major structures presently occupying the site which must be replaced by equivalent uses in the new center.

First is the present parking structure on Beach Street which, along with the Knapp Street, would be closed and incorporated in the proposed center. The parking center is quite old and if the cars from Detroit gain another six inches in length, its ramps will be obsolete anyway. At present it has capacity for 400 cars. The new center should replace this parking space with an additional space allotment for 100 cars.

Another structure that contains uses which must be provided by the new center is the International Ladies' Garment Workers' Union office building on Harrison Avenue. This building contains both offices and manufacturing space.
Office space for the ILGWU and for similar organizations should of course be in the project.

In the site there were at the time of the Massachusetts Department of Commerce's survey of manufacturers in 1955 24 firms occupying an average of 125,000 square feet. Since a majority of these firms are small marginal operations, they may be expected to move off the project area. Replacement of their manufacturing space with additional space for the first influx of manufacturers, jobbers and wholesalers moving in from their present quarters on Keene-land Street will be needed. This upgrading of some of the loft space in the garment area is one object of this project.

The other uses -- marginal retailing, honkytonks, and restaurants -- should probably be allowed to move elsewhere.

Thus, the center provides for the continuation of the essential activities and the removal of the objectionable ones.
<table>
<thead>
<tr>
<th>EXISTING OCCUPANCY*</th>
<th>PROPOSED CENTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>sq.ft.</td>
<td>sq.ft.</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>240,000</td>
</tr>
<tr>
<td>Wholesale</td>
<td>140,000</td>
</tr>
<tr>
<td>Office</td>
<td>20,000</td>
</tr>
<tr>
<td>Consumer Services</td>
<td>150,000</td>
</tr>
<tr>
<td>(Bars, Restaurants, Theatres)</td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td>80,000</td>
</tr>
<tr>
<td>Vacant</td>
<td>40,000</td>
</tr>
<tr>
<td>Total</td>
<td>570,000</td>
</tr>
<tr>
<td>Total Land Area</td>
<td>632,000</td>
</tr>
<tr>
<td>Present F.A.R.</td>
<td>3.6</td>
</tr>
<tr>
<td>Proposed F.A.R.</td>
<td>3.4</td>
</tr>
</tbody>
</table>

*Source: Boston City Planning Board
Acquisition of the Site

There are three courses open to the developer of a garment center assembling the land.

He can of course buy it privately. It must be admitted that this is a long and difficult process, with the eventual prospect of acquiring the necessary land in this location very doubtful.

A second course of action is for the city to become interested in such a project and to use its powers of eminent domain, as it is entitled to do and intends to do in the case of the proposed government center for Boston. The city is authorized to take land for commercial re-use via sale to the highest bidder under the provisions of Chapter 121 of the Massachusetts General Laws as last amended by Chapter 613 of the Acts of 1957. The city (through its creature, the Housing Board of a Redevelopment Authority) can condemn land, clear it, and resell it for commercial use. One problem here is the failure to date of the courts to define "commercial obsolescence," the test by which property may be condemned. If land-takings were challenged by a property-owner on this definition, a long court fight could result.

A third method of acquiring the land is through the Urban Renewal provision of the U.S. Housing Law of 1954 as amended. It provides that ten percent of the total
Federal funds appropriated to the State may be used for acquiring and clearing commercial land for commercial re-use. Again, eminent domain is used to acquire the land. The principal problem would be whether a new garment center would qualify for the Urban Renewal funds in view of the city's other over-all needs.

In other words, by far the best way to acquire the site for the garment center would be through a successful court verdict for the city in a test case under Chapter 613, making it easy for the city to claim "obsolescence."

Project Costs

Some estimate of the project cost for such a garment center in Boston should be made to indicate the scope of the work involved. Should such a center be built, its success would hinge upon its ability to rent loft space for a figure within the reach of the manufacturers and wholesalers.

It has already been shown (above, pp. 5-6) that the industry can pay a higher rent than has been customary in Boston. It is estimated that with the inclusion within the project of a significant amount of office and retail space, the lower rents for the loft areas would be within the realm of practicality. A range of rents from $2.00 to $2.25 should be possible according to realtors. The high property taxes in Boston should not be ignored, since
they present perhaps the biggest stumbling block to low rentals.

**Comparative Site Costs**

Prepared industrial land (cleared and with utilities available) is obtainable in the industrial estates along Route 128 outside of Boston for roughly $1.50 per square foot. Closer to the heart of the city, the land in the New York Streets redevelopment project is available for roughly $3.00 per square foot. It has been estimated that the land in the project area, cleared of existing structures, could be had for roughly $5.00 per square foot; (this estimate by the A.W. Perry, Co., representing current market value of the property, is very much less than the assessed valuations of the area.)

Thus, assuming the following construction costs of $14.00 per square foot for loft space, and $18.00 per square foot for office space and other, we have:

- **land costs** 156,000 sq. ft. @ $5.00/sq. ft. $780,000
- **parking facilities and terminal construction** 200,000 sq. ft. @ $10.00/sq.ft. 2,000,000
- **manufacture and wholesale area construction** 325,000 sq. ft. @ $14.00/sq.ft. 4,550,000
- **office and retail, etc. construction** 142,000 sq. ft. @ $18.00/sq.ft. 2,560,000

$9,890,000

From this very rough estimate of cost -- let us say $10 million -- it can be seen that land costs are a small
part (9 percent) of the total, and would have a proportionately small effect upon rent.¹

The final rents would of course be determined by the cost of money for the project, other financial factors such as the amount of equity money required, the tax arrangement with the city, and overhead and operating costs.

These very rough figures demonstrate that the project is within the realm of feasibility, and that the site, if it could be acquired, is a reasonable one financially.

Planning Considerations

The relationship of the project to future plans for the rest of the city is important.

One outstanding characteristic of the proposed re-use of the site for manufacturing and wholesale purposes is the decision to use Washington Street frontage for wholesale and pedestrian uses while providing for some retail uses within the site, rather than devote fully equivalent space for retail functions. This major shift in the use of land springs from the planning assumption that the retail core of Boston will continue to contract somewhat, and that the lower section of the Washington

¹Land at $1.50/square foot gives a total project cost of $9,370,000, or a reduction of roughly 6.5 percent. Land at $3.00/square foot still results in a reduction of nearly 4 percent over the $5 price cited above.
Street retail area can profitably be redeveloped for other land uses.

Another assumption is that the marginal uses on the site devoted to entertainment (theatres, restaurant, bars) and second-hand shops will continue their present drift up Kneeland Street onto Stuart Street (its continuation) and Tremont Street. The replacement of these uses by others will be in the city's interest, protecting the retail district from the fly-by-night retailer and transient revelers.

Finally, it is hoped that the center would, if successful, spark the re-use of adjacent properties for manufacturing and wholesale in the garment industry. Thus, the major planning goal of the thesis is the development of a revitalized garment district around this proposed garment center.
EXISTING LAND USE
(GENERALIZED)

- RETAIL BLOCKS
- MFG / WHOLESALE
- OFFICE BLOCKS
- MIXED BLOCKS
- RETAIL / OFFICES
- INSTITUTIONS
- PROPOSED SITE IN GARMENT DISTRICT

EXISTING LAND USE
(GENERALIZED)

A GARMENT CENTER FOR BOSTON, MASS.
ALBERT TAPPE
MAY, 1958

LOCATION OF PROPOSED CENTER AND
THE EXISTING GENERAL LAND USE IN
DOWNTOWN BOSTON, MASS.
A GARMENT CENTER FOR BOSTON, MASS.

ALBERT TAPPE
MAY, 1958

PROPOSED SITE LOCATION IN THE GARMENT DISTRICT

- MANUFACTURE
- MAJOR PARKING FACILITY
- SUBWAY STOP
- AREA INCLUDED IN PROPOSED SITE

SCALE IN FEET
CHAPTER IV

A DESIGN FOR A GARMENT CENTER FOR BOSTON

The three previous chapters have presented the background of the industry, the program for the center, and the description of the site selected for the garment center.

Chapter IV is the architectural solution to the problem, presented in the following drawings and sketched in three-dimensional form by the accompanying model.
APPENDIX A

TABLE 1. Relative Size of the Major Women's Wearing Apparel Markets in Percent of National Dollar Volume of Gross Production Costs

<table>
<thead>
<tr>
<th>City</th>
<th>1948</th>
<th>1954</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>68.4%</td>
<td>66.2%</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>5.1</td>
<td>5.6</td>
</tr>
<tr>
<td>Chicago</td>
<td>4.7</td>
<td>4.4</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>3.0</td>
<td>3.2</td>
</tr>
<tr>
<td>BOSTON</td>
<td>2.3</td>
<td>3.1</td>
</tr>
<tr>
<td>St. Louis</td>
<td>1.6</td>
<td>1.5</td>
</tr>
<tr>
<td>Kansas City</td>
<td>0.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Dallas-Ft. Worth</td>
<td>0.8</td>
<td>1.0</td>
</tr>
<tr>
<td>Baltimore</td>
<td>0.7</td>
<td>0.9</td>
</tr>
<tr>
<td>Cleveland</td>
<td>1.3</td>
<td>0.8</td>
</tr>
<tr>
<td>San Francisco</td>
<td>1.0</td>
<td>0.8</td>
</tr>
<tr>
<td>Miami</td>
<td>0.2</td>
<td>0.5</td>
</tr>
<tr>
<td>Cincinnati</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Milwaukee</td>
<td>0.4</td>
<td>0.3</td>
</tr>
<tr>
<td>All Other Areas</td>
<td>9.2</td>
<td>10.2</td>
</tr>
</tbody>
</table>

Source: International Ladies' Garment Workers' Union, "Trends and Prospects; Women's Garment Industry, 1953-1956," May 1956, p. 19, "based on data collected by the National Credit Office".
## APPENDIX A

### TABLE 2. Principal Data Relative to the Leading Manufactures in the City of Boston, Mass., 1955, by Industries

<table>
<thead>
<tr>
<th>Industries (in order of value of products)</th>
<th>No. of Estabs. (in scope of census)</th>
<th>Av. No. of Production &amp; Related Workers</th>
<th>Total Amt. of Wages Paid During Yr. (Gross before and deductions)</th>
<th>Value of Products (FOB plant)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men's &amp; Women's Clothing, Other Than Men's Work Clothing</td>
<td>411</td>
<td>13,469</td>
<td>$38,409,465</td>
<td>$207,735,335</td>
</tr>
<tr>
<td>Printing &amp; Publishing &amp; Related Industries</td>
<td>230</td>
<td>8,605</td>
<td>$40,680,162</td>
<td>$138,927,532</td>
</tr>
<tr>
<td>Fabricated Metal Products (Ferrous) &amp; Related Industries n.e.c.</td>
<td>129</td>
<td>4,757</td>
<td>$18,154,601</td>
<td>$105,213,573</td>
</tr>
<tr>
<td>Electrical Machinery, Apparatus &amp; Supplies</td>
<td>52</td>
<td>4,429</td>
<td>$15,166,087</td>
<td>$67,244,470</td>
</tr>
<tr>
<td>Subtotal: These Industries</td>
<td>822</td>
<td>31,460</td>
<td>$112,140,315</td>
<td>$519,120,910</td>
</tr>
<tr>
<td>Total - All industries</td>
<td>2,090</td>
<td>67,764</td>
<td>$230,110,062</td>
<td>$1,286,402,185</td>
</tr>
</tbody>
</table>

1 Not elsewhere classified

Source: Abstract from Commonwealth of Massachusetts, Department of Labor and Industries, Division of Statistics, Bulletin #3, 1955. Table 1.
APPENDIX A

TABLE 3. Distribution of Shops in the U.S. Producing Women's Garments, by Size, March 1953

<table>
<thead>
<tr>
<th>Size of Shop</th>
<th>Women's Outer Wear</th>
<th>Undergarments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 3 workers</td>
<td>9.8%</td>
<td>10.3%</td>
</tr>
<tr>
<td>4-7 workers</td>
<td>8.5</td>
<td>8.8</td>
</tr>
<tr>
<td>8-19 workers</td>
<td>23.1</td>
<td>20.7</td>
</tr>
<tr>
<td>20-49 workers</td>
<td>37.0</td>
<td>26.2</td>
</tr>
<tr>
<td>50-99 workers</td>
<td>15.1</td>
<td>17.4</td>
</tr>
<tr>
<td>100-249 workers</td>
<td>5.4</td>
<td>12.5</td>
</tr>
<tr>
<td>250-499 workers</td>
<td>0.9</td>
<td>2.9</td>
</tr>
<tr>
<td>500 workers and over</td>
<td>0.2</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: International Ladies' Garment Workers' Union, Research Department
APPENDIX A

TABLE 4. Distribution of Ladies' Garment Workers by Size of Establishment, in Three Selected U.S. Census Categories (233, 234, 236), Boston, Mass., September 1955

<table>
<thead>
<tr>
<th>Establishments</th>
<th>Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>281</td>
</tr>
<tr>
<td>Less than 8</td>
<td>41</td>
</tr>
<tr>
<td>8 - 24</td>
<td>94</td>
</tr>
<tr>
<td>25 - 99</td>
<td>130</td>
</tr>
<tr>
<td>100 - 249</td>
<td>14</td>
</tr>
<tr>
<td>250 - 500</td>
<td>1</td>
</tr>
</tbody>
</table>

### TABLE 5. Distribution of New England Garment Manufacturers, Jobbers, and Contractors, by Numbers of Establishments and Employees

<table>
<thead>
<tr>
<th></th>
<th>Totals of Five Comparable Categories</th>
<th>Percentage of Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estabs.</td>
<td>Employees</td>
</tr>
<tr>
<td>Total</td>
<td>629</td>
<td>34,203</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>181</td>
<td>11,290</td>
</tr>
<tr>
<td>Jobber</td>
<td>72</td>
<td>2,091</td>
</tr>
<tr>
<td>Contractor</td>
<td>376</td>
<td>20,822</td>
</tr>
</tbody>
</table>

Source: 1954 Census of Manufacturers
APPENDIX A


**MASSACHUSETTS:**

<table>
<thead>
<tr>
<th>Type of Operation and Kind of Business</th>
<th>Estabs.</th>
<th>Sales 000</th>
<th>Paid Employees' Work Week Ending Nov. 15, 1954</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Apparel (Incl. Footwear)</td>
<td>54</td>
<td>$44,246</td>
<td>166</td>
</tr>
<tr>
<td>Clothing Furnishings Only (Men and Women)</td>
<td>8</td>
<td>6,526</td>
<td>15</td>
</tr>
<tr>
<td>Women's and Children's Clothing &amp; Accessories</td>
<td>23*</td>
<td>16,693</td>
<td>87</td>
</tr>
</tbody>
</table>

**BOSTON STANDARD METROPOLITAN AREA:**

<table>
<thead>
<tr>
<th>Type of Operation and Kind of Business</th>
<th>Estabs.</th>
<th>Sales 000</th>
<th>Paid Employees' Work Week Ending Nov. 15, 1954</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Apparel (Incl. Footwear)</td>
<td>50</td>
<td>$41,275</td>
<td>156</td>
</tr>
<tr>
<td>Clothing, Furnishings Only (Men and Women)</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women's and Children's Clothing &amp; Accessories</td>
<td>22*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Of these 23 wholesalers listed for Massachusetts, 22 are in Boston, and all of these are located at 75 Kneeland Street.*

Source: 1954 Census of Manufactures, Massachusetts, Table 101
APPENDIX B. Description of Census Categories of the
Women's Apparel Industry

The study of the women's apparel industry in this report is confined to those industries that produce apparel under one or more of the following Census categories, as listed in the 1954 U.S. Census of Manufactures:

23.31--Blouses -- including women's and junior blouses, waists, and shirts. Also, women's, misses', and junior knit outer wear and sport shirts.

23.33--Unit price -- Women's and misses' dresses including ensemble dresses. These garments are usually sold by the piece.

23.34--Dresses, dozen price -- Women's and misses' household apparel, chiefly of washable fabric. These garments are usually sold by the dozen. Also included are individual aprons, smocks and house dresses.

23.39--Women's outerwear -- Bathing suits, beachwear, slacks, riding habits, ski suits, swim wear, sweaters, and outerwear, and sport shirts.

23.41--Women's and children's underwear -- Women's and misses', children's and infants' underwear and nightwear.

23.42--Corsets and allied garments -- Corsets, corset accessories, brassieres, girdles, and foundation garments.

23.61--Children's dresses -- Children's and infants' dresses, children's blouses, blousettes, waists, and skirts.

23.63--Children's coats, children's and infants' coats -- Coats and legging sets, snow suits. Also garments in girls' teenage size.

23.69--Children's outerwear -- Children's and infants' outerwear, such as housecoats, middies, slacks, beachwear -- teenage sizes, too.
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Interviews

In the course of the planning survey, during the Fall of 1957, interviews were held with a number of International Ladies' Garment Workers' Union officials in both New York and Boston, with the President of the Garment Manufacturers' Association of Boston (J. Fialco), and with several small manufacturers in the Boston women's apparel industry.

Interviews in the Spring of 1958 included Boston realtors Arthur Wilcox of the A.W. Perry Company, Bertram Druker staff member of Cabot, Cabot and Forbes, National Planning and Research, Inc., the George W. Fuller Construction Company, and members of the staff of the Boston City Planning Board.
A GARMENT CENTER
FOR BOSTON
plot plan:
first stage

scale: 1" = 80'-0"
plot plan:
second stage
scale: 1" = 80'-0"
PARKING FOR APPROXIMATELY 250 CARS ON EACH OF 2 PARKING LEVELS.

PLAN OF 1st PARKING LEVEL
2nd LEVEL SIMILAR SCALE 1" = 15' 0"

parking plan &
typical section
scale: 1" = 15' 0"