AN APPROACH TOWARDS THE REDEVELOPMENT OF THE DOWNTOWN SHOPPING DISTRICT OF BOSTON

by

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Signature of Author.....
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Thesis Supervisor

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Head, Department of City and Regional Planning

June 9, 1958

Dr. Pietro Belluschi
Dean, School of Architecture and Planning
Massachusetts Institute of Technology
Cambridge, Massachusetts

Dear Dean Belluschi,

I submit, herewith, a thesis report entitled, "An Approach Towards The Redevelopment of The Downtown Shopping District of Boston", as my final study for the degree of Master in City Planning. It is my sincere hope that others may find this study useful in connection with the general field of downtown area planning.

Very truly yours,

Joseph Savitzky

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ABSTRACT

"AN APPROACH TOWARDS THE REDEVELOPMENT OF THE DOWNTOWN SHOPPING DISTRICT OF BOSTON"

JOSEPH SAVITZKY

Submitted to the Department of City and Regional Planning on January 31, 1958 in partial fulfillment of the requirements for the degree of Master in City Planning.

The method adopted in the thesis is divided into four stages: the survey and analysis of problems; the formulation of criteria for planning the future of the area; the specific physical recommendations for land use, circulation and appearance; and the general method of implementing the plan.

Principal findings of the survey indicate the general trend of more limited space and land for retail functions in the downtown area of Boston. Obsolescence of physical plant and inefficiencies of access are the most serious physical problems in the area.

The formulation of objectives is based on the general goals of conservation of principal resources (as substantial buildings and transportation facilities), alleviation of serious functional problems, recommendation of increased flexibility and amenity in new construction, and improved settings for historic and institutional structures in the area.

The physical plan itself indicates a more compact (and concentrated) retail district which is defined by the recommendations for street and pedestrian access systems. Recommendations for floor area ratio are a further means of defining the subunits of the general area studied in detail. The areas immediately surrounding the retail "core" are recommended for increased consumer-oriented activities (included in this category are uses as hotels, entertainment and personal services). Special attention is given to the problems of pedestrian access in the consumer areas. Provisions are made for pedestrianways and grade separations where pedestrianways intersect heavy automobile trafficways.

Visual connections, for the purposes of easy orientation and pleasant environment, are considered as an integral part of the detailed arrangements of land available for buildings and open spaces of all types.

A preliminary development program suggests formation of private redevelopment corporations that would finance new construction under an overall plan. The role of public agencies is underlined as the coordination of public improvements is considered a major element in the plan. The development plan indicates subareas for development- each is described in terms of potential re-use. Quantification of the plans is presented for each development area in floor space and frontage recommendations.

Thesis Supervisor: Kevin A. Lynch
Associate Professor of City Planning

ACKNOWLEDGEMENTS

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INTRODUCTION

The problems facing the downtown business districts of major U.S. cities are receiving attention from planners as increased mobility of people has encouraged wider distribution of urban activities. Some of these activities have been traditionally based in the downtown areas, but with changing patterns of residence, working places and distribution systems, they have been undergoing a reorganization of their basic structure. The case of residence and retail distribution is one of the most dramatic examples. Suburban housing development has been followed by new shopping expansion in the form of neighborhood convenience stores and regional stores found in suburban shopping centers.

The downtown shopping district, in the meantime, has had a difficult time in maintaining its position in the community retail structure. The traditional center has seen limited growth or decline in plant and sales; while the outlying areas have experienced significant growth. Faced with the threat of losing an important community facility, municipalities have become involved in various programs to forestall further loss of business at the center. Merchants, meanwhile, have opened branch stores, and in some cases, abandoned their downtown stores.

This case study has been undertaken as a vehicle for organizing a plan statement applicable to a highly complex urban area--the downtown shopping district of a large city. The principal orientation used has been that of reducing the

scope of the subject to a manageable size useful for goal formulation--and its application in form of physical recommendations.

Selectivity of method of analysis and method of goal statement have been the determining influences throughout the study. The first chapter reviews the current character of the downtown shopping district (of Boston); its problems and potentialities. The second chapter is a generalized statement of major objectives to be developed in formulating the plan for the area. In the third chapter the plan is developed, first as a general statement, and second as a detailed consideration of the shopping district proper. The final chapter uncovers some of the possibilities for effectuation of a plan, but is only a preliminary statement requiring extensive study (beyond the scope of this study). Finally, a concluding statement reviews the plan recommendations in terms of the stated objectives.

I. SURVEY AND ANALYSIS

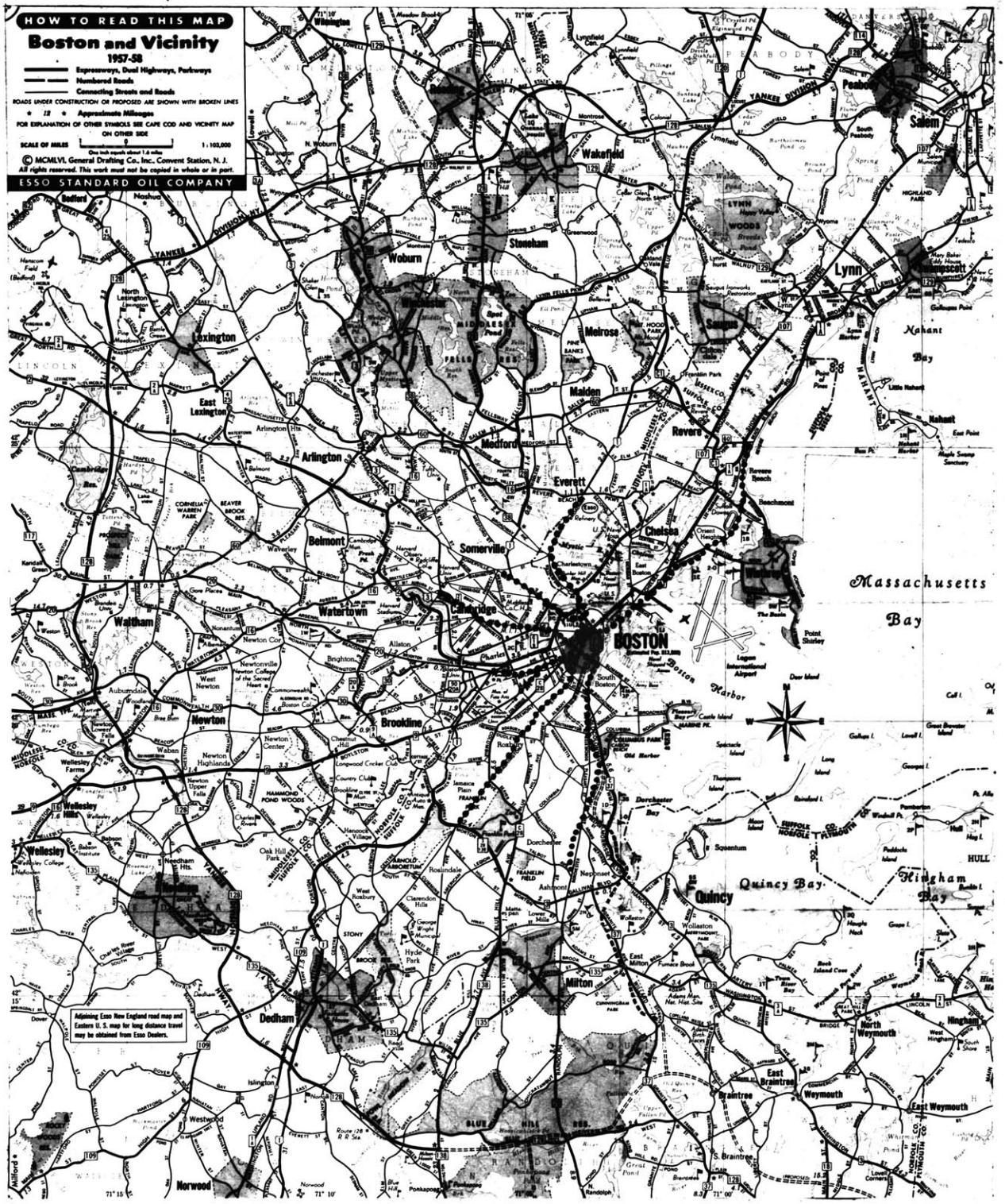
Historical Synopsis of the Downtown Shopping District of Boston[1]

The commercial center of Boston has been located on the peninsula known as Boston Proper since its founding in the seventeenth century. From a small settlement on the edge of the North End, the center has moved less than three-quarters of a mile in a period of almost three hundred years. (Map 1)

The shopping district, as a component part of the downtown, moved from its location along the waterfront, to the area alongside the Boston Common in the 1880's. By then, Washington, Tremont and the cross streets had become lined with shops, replacing the fine homes that had made up "collonade row".

This was the beginning of a period of rapid growth for the city, one that was to continue until the 1910-1920 decade. (The population had risen from 450,000 in 1890 to about 700,000 in 1920. The population growth since the advent of the automobile, has been almost entirely in the suburban towns surrounding the central city.) It was during this period of rapid growth of the city, that major rapid transit facilities were built. The Tremont St. subway was built at the turn of the century, running under the Boston Common, alongside the shopping district. The Washington Street subway and elevated from Forest Hills to Somerville soon followed. Then came the

1. Firey, Walter, "Land Use in Central Boston", Chapters I, VI and VII.



DOWNTOWN AREA ..... RAPID TRANSIT

MAP I ORIENTATION MAP

"AN APPROACH TOWARDS THE REDEVELOPMENT OF THE DOWNTOWN SHOPPING DISTRICT OF BOSTON"

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East Boston line (along State Street at the edge of the shopping district). By 1928, the system had been extended in all directions except westerly. The system had as its focus, the downtown shopping district. Park Street station and Washington-Winter-Summer Station were the main transfer points for the system. It has been the transit focus at the shopping district that has characterized the area as one that has been "transit-oriented" for accessibility.

With expansion of the business district into the fashionable Back Bay, many high-priced shopping activities moved from the older "core" area to the newer quarters along Boylston and Newbury Streets. The combination of prestige address and auto accessibility has made this area an important sub-center of the shopping district, at a three-quarter mile distance away.

More recently, increases in shopping facilities and sales have occured, principally in the areas outside the CBD. (Table 13). The rise of new suburban centers has been in answer to the demands of an increasing population further removed from the old center. A recent shopper-attitude survey has indicated that the shopper tends to buy a larger percentage of her (or his) goods in local centers as the distance from the downtown Boston shopping center increases.[2] The downtown purchases requiring comparison or high cost become relatively more important in the downtown trips of suburbanites.

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2 "Downtown and Suburban Shopping Habits Study of Greater Boston," 1954, Alevizos, John P., and Beckwith, Allen E. pp. 18-19.

For the closer market, there is still an attraction for the low and middle-priced purchases, provided there is a sufficient variety from which to choose. [3]

With a more selective market, the position of retailing in the downtown is undergoing a change, both in direction of overall plant required and merchandising policies. Recently, there been a series of reactions, on the part of the downtown merchants, to indicate the possible trends that are in the process. The total plant has begun to contract. (During 1956 and 1957, one department store and two large apparel stores have closed. New downtown growth has been principally in the continued expansion of one major department store, large enough to set its own policy in spite of the trends.)

This contraction will mean a probable decrease in the variety and choice offered to the shoppers. It will also mean that land at the center will be open to re-use by other activities that can afford the location. (Such is the case in the recent conversionof one of the large stores into an office building.)

General Description of the Present Downtown Shopping District

The major part of the district is contained within an area of approximately 38 acres (an overall limit of about 1,000 by 1,700 feet). The blocks that make up the concentrated shopping in the district have been designated as the

3 ibid. pp. 48-53.

"present retail core". (Maps 2,3). This area is shown to have contracted since the last inventory by the City Planning Board. (The reduction has been in the blocks containing a vacated department store and the site of a new garage. The remaining 10 blocks are still principally in retail use.)

The shopping district is closely bounded by other major commercial use areas. On the north and east, the major concentration of offices form a concentrated district. To the south, there is a mixture of use with the principal ones being: textile wholesaling and manufacturing, amusements and consumer services. On the west, lies the Boston Common, a center for many public activities throughout the year, as well as a place for relaxation during the business day, or on week-ends.

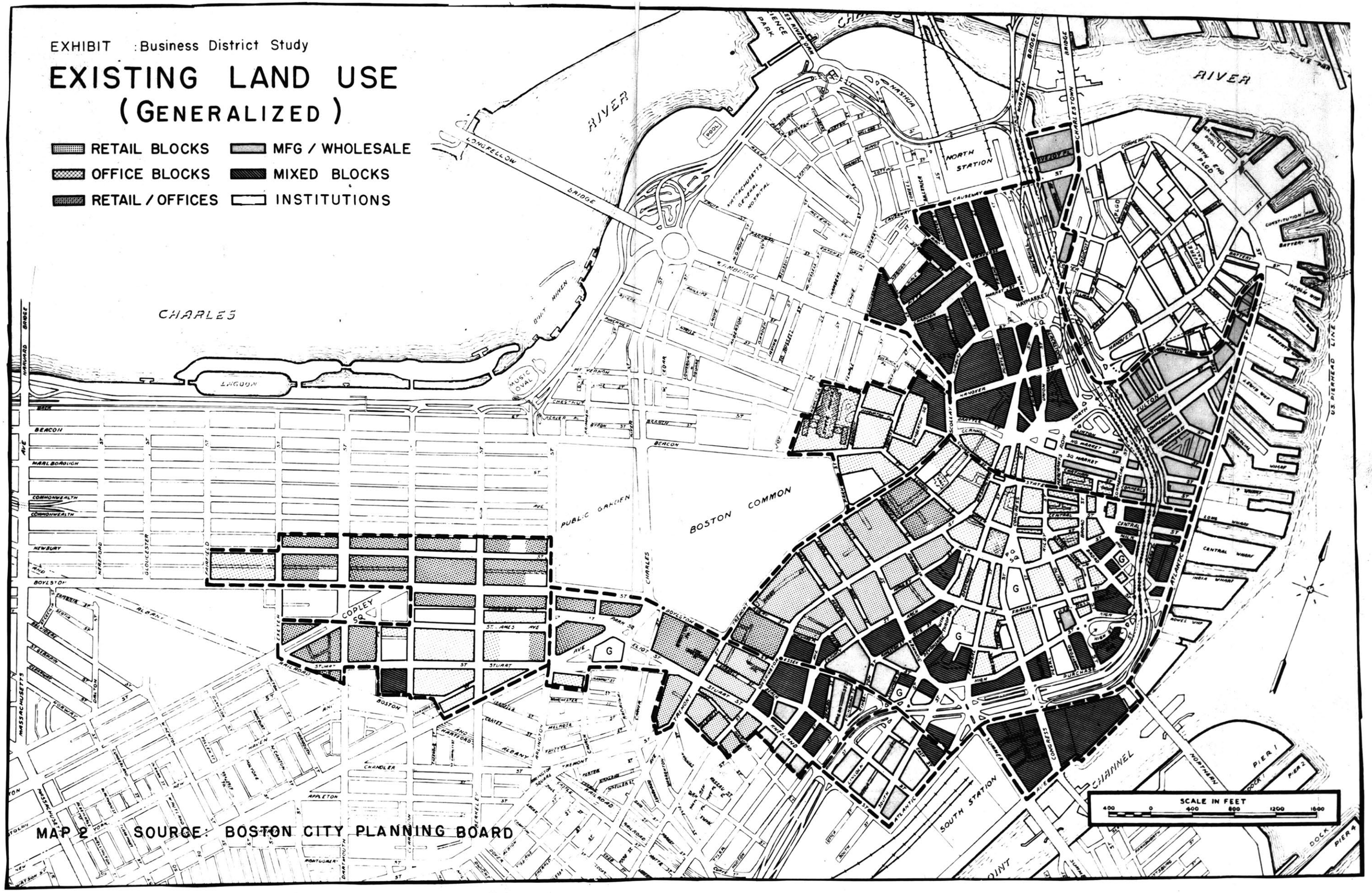
The major units within the district are: 1) the Washington Street frontage between School and Essex Streets; 2) the Tremont Street frontage (along the east side) from Boylston to School Streets; 3) the cross streets between Tremont and Washington Streets--Winter and West Streets, Temple Place, and Summer Street from Washington Street to Church Green (at the foot of Bedford Street).

The units differ functionally, in terms of types of retailing and other related uses. The Washington Street frontage along the easterly side contained the major department stores (with the exception of one lying on the westerly side). On the westerly side of the street, the groupings are: 1) women's apparel stores near the center cluster of department stores; 2) men's apparel and specialty stores toward the office district on the north; and 3) movie theaters, bowling

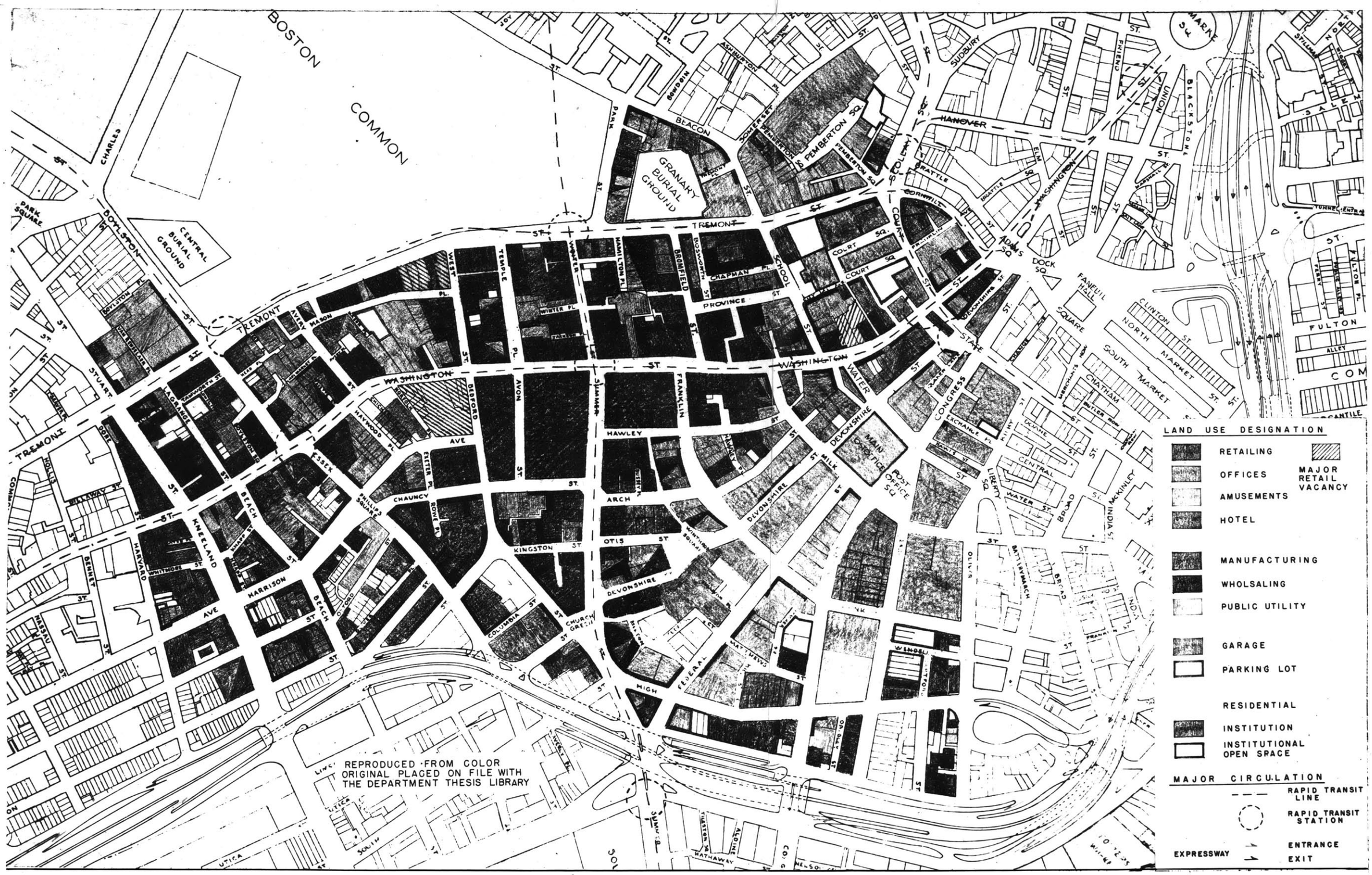
EXHIBIT : Business District Study

EXISTING LAND USE
(GENERALIZED)

- RETAIL BLOCKS
- OFFICE BLOCKS
- RETAIL / OFFICES
- MFG / WHOLESALE
- MIXED BLOCKS
- INSTITUTIONS



MAP 2 SOURCE: BOSTON CITY PLANNING BOARD



MAP 3 EXISTING LAND USE - DOWNTOWN AREA

"AN APPROACH TOWARDS THE REDEVELOPMENT OF THE DOWNTOWN SHOPPING DISTRICT OF BOSTON"

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alleys and penny arcades; eating and drinking places; and cheap clothing stores at the south end of Washington Street between Avery and Kneeland Streets. The Tremont Street frontage contains large apparel and other specialty stores near the Winter St.-West St. center (two of the apparel stores have recently closed). Toward the Boylston Street end, there are small apparel and specialty stores with offices above. Toward the School Street end, there is a mixture of specialty stores, offices, institutional and hotel uses.

Of the cross streets, Winter Street, Temple Place and West Street contain principally apparel stores; Bromfield Street is a center for specialties such as photo supplies and books; School Street is a center for men's shoes. Avery Street contains eating and drinking places and some specialty stores. The Summer Street frontage, near Washington Street, contains some large men's apparel stores. Further along, toward Church Green, there is a mixture of small specialty stores, banks, eating places and offices.

Visual and Topographic Character of the District

The area lies on the slope of the hill that starts at the State House and tapers toward the waterfront. The slope is gradual through the shopping district and steeper just north of the district. The tall office buildings in the district to the east are sufficiently downhill to prevent overshadowing the shopping district. The Common, lying slightly uphill, appears to "approach" the district when viewed from the center of the retail area.

The two major streets (Washington and Tremont) form the major visual elements of the district. Washington Street appears as a narrow canyon as it winds in a long S-curve through the area. There is a feeling of enclosure that is caused by the narrow street (55 feet wide) and the tall buildings (5 to 10 stories). This is further heightened by the intensity of movement along the street by vehicles and pedestrians. At the north end of the street, the Old South Meeting House dominates the view, as do the movie marquees at the south end of the street.

Tremont Street appears as an irregular "gap tooth" wall of buildings (from 2 to 14 stories) facing on the broad open space of the Common. Entering into the shopping district from this point of view, the cross streets appear as narrow slits, causing a great contrast in spatial effect compared to the openness along Tremont Street.

. At the north end of Tremont Street, the lofty spire of the Park Street Church marks the entrance to the area of governmental offices centering around that part of Beacon Hill. The south end of the street penetrates the wall of buildings along Boylston Street with a concentration of tall office buildings and a hotel at the intersection of Tremont and Boylston Streets.

The main cross streets are connecting channels (about 500 feet long) between the two major "spines". Winter street, due to the heavy pedestrian movements, has the appearance of a busy bazaar. Summer Street extends out as a relatively broad cross-piece to the Washington Street spine. The remaining

major streets are Franklin and Milk Streets, which slope steeply downhill into the high office buildings nearby.

Visual Connections from the Shopping District to Adjoining Areas

To the north, both Tremont and Washington Streets curve away from the general axis of the district. In the case of Tremont Street, a termination of vista and activity occur in Scollay Square (the latter has a distinctive character of its own with the "skid row" bars and shops). Washington Street is interrupted at Adams Square--Dock Square with a broad expanse of pavement and opening toward the market area to the east.

Visual ties to the office district (east of the shopping district) are along the four major streets perpendicular to the Washington Street axis: Franklin, Milk, Water and State. (Spring Lane, an existing pedestrianway, is a bent pathway connecting the shopping and office districts. The proximity of the two distinct districts, at this point, is dramatized by this short transition element.)

The connection to the South Station area is along the curving Summer Street. Because of intervening buildings, the major shopping corner (at Washington and Summer Streets) is not visible past Church Green. Bedford Street, ending at Church Green, is even more twisted as it converges upon this small open area.

To the south, the second bend in Washington Street produces a break in the visual tie between the shopping and secondary movie district (the latter contains run-down movie

theaters and drinking establishments). There is a clear extension of Tremont Street toward the major amusement concentration at Stuart and Tremont Streets.

The wall of buildings along Boylston Street, toward Park Square, provides a clear orientation device from Tremont Street. A bend in Boylston Street, beyond Park Square prevents easy visual connection with the Back Bay shopping street along this path.

Use Composition in the Downtown Shopping District

In that part of the shopping district designated as the "Retail Blocks," retail use clearly predominates, occupying three-quarters of the total floor space. (Table 14). Of the remaining one-quarter of total floor space, Consumer Services occupy half; the second half is composed of business offices; institutional offices; wholesaling, manufacturing and public utility uses. (See Table 14).

The retail "core" of highly concentrated retail space is immediately surrounded by offices, wholesaling and manufacturing uses. (Map 2). (Other concentrated areas of specialized use exist in the downtown. The downtown and Back Bay office "districts" contain four-fifths of all office space in the CBD. The manufacturing and wholesale "districts" contain 65 and 60 percent of their respective CBD accomodations.)[4]

4 "Building Accomodations in Boston's Downtown-Back Bay Business District, Spring, 1953", Boston City Planning Board, p. 5.

Within the "Retail Blocks", the major retail use type is the department stores. Together, the three active department stores and the major apparel store occupy over one-half of the four million square feet of retail space.[5] Of the remaining retail categories, apparel is the largest space user, occupying one-third of the total accomodations. The remaining 15 percent of accomodations is divided among furniture, eating and drinking places, and "other retail" uses. (See Table 15).

The Downtown Shopping District as a Component in CBD Retailing

As a function of CBD retailing, the concentration in the "Retail Blocks" represents one-half of the total plant. Other sub-groups are to be found in the CBD, containing specialized goods and services. The Back Bay "fashion shopping area" contains about one-sixteenth of the retail plant; the "amusement-cheap furniture area", to the south of the retail "core", contains about one-eighth of the plant; the "market-cheap clothes-furniture area", to the north, contains about one-sixteenth of the retail plant. The remaining one-quarter, is distributed in less concentrated areas throughout the remainder of the business district.[6]

5 Jordan Marsh, Gilchrist's and Raymond's stores are the department stores currently in operation. Together, they occupy about 1,800,000 square feet of accomodations. White's store, vacated in 1957, occupied 340,000 square feet of accomodations. Filene's store, occupying about 450,000 square feet of accomodations, is primarily a large apparel store for men, women and children. (Source: Inventory by Boston City Planning Board, 1953, revised 1957).

6 "Building Accomodations in Boston's Downtown-Back Bay Business District", op. cit., p.20.

Physical Plant in the Downtown Shopping District

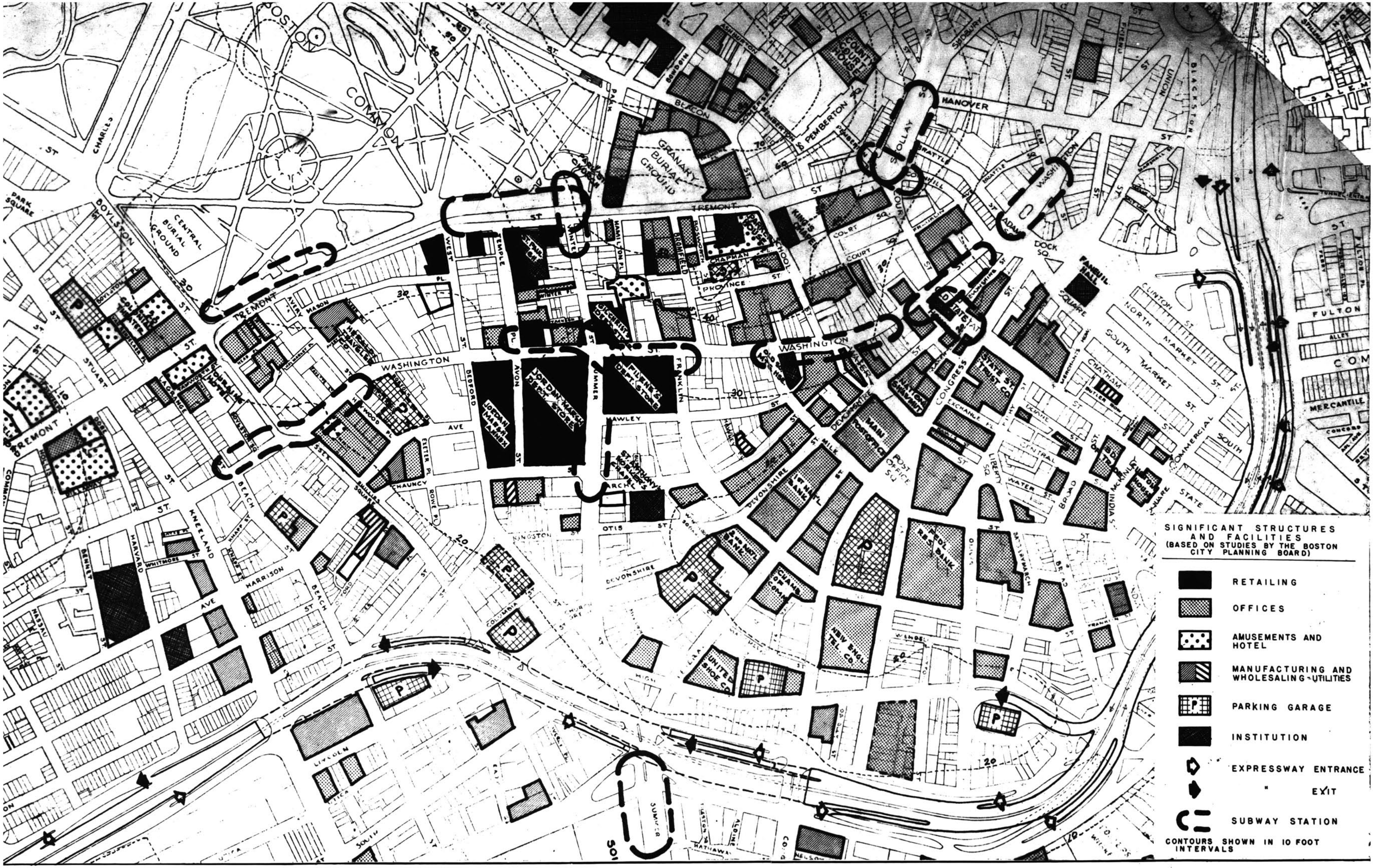
As a basis for description of physical conditions of buildings in the shopping district, the simplest criterion is that of fireproof or non-fireproof construction. This classification method used in the insurance atlasses, generally describes the era in which the structure was built. (In the case of Boston, this dates back to the turn of the century.) The high degree of non-fireproof, or "second class" buildings in the shopping district area indicates the extent to which this simple classification may be used to separate major classes of condition and building type. (See Map 4).

For further evaluation of building condition, the following criteria should be studied:

1) Age (and degree of modernization) of plant and equipment.
2) Structural Condition (and general maintenance).
3) Bulk (height in stories).
4) Flexibility of interior space (skeleton or bearing wall construction).
5) Window area (and ease of interior climate control).
6) General exterior and interior appearance.

The planning agency in its inventory of the commercial area, synthesized these criteria into a set of subjective judgements of potential--for conservation, and replacement. Further field checks by the author indicated minor changes in this system of classification. (See Map 4).

In the area designated as "Retail Blocks", the "conservable" structures occupy only one-half of the total floor


SIGNIFICANT STRUCTURES AND FACILITIES (BASED ON STUDIES BY THE BOSTON CITY PLANNING BOARD)
RETAILING
OFFICES
AMUSEMENTS AND HOTEL
MANUFACTURING AND WHOLESALING-UTILITIES
PARKING GARAGE
INSTITUTION
EXPRESSWAY ENTRANCE
" EXIT
SUBWAY STATION
CONTOURS SHOWN IN 10 FOOT INTERVALS
BOSTON COMMON
CENTRAL BURIAL GROUND
GRANARY BURIAL GROUND
TREMONT
WASHINGTON
BOYLSTON
HANOVER
FANEUIL HALL
JORDAN MARSH STORE
FILENE'S DEPT. STORE
NEW ENGL. TEL. CO.
UNITED SHOE CO.
FULTON
MERCANTILE
KNEELAND
HARRISON
DEVONSHIRE
CONGRESS
SUMMER
FRANKLIN
SOUTH MARKET
NORTH MARKET
COMMERCIAL

MAP 4 MAJOR BUILDINGS - DOWNTOWN AREA

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space. The remaining accomodations are housed, primarily, in converted 4 and 5 story, brick walled-wood floor, buildings built at the turn of the century. The breakdown by use categories indicates: retailing occupies three-quarters of the "conservable" floor-space. On the other hand, of the entire retail accomodations in the "core" area, less than half are in "conservable" structures. It is this latter quantity of over a million and a half of "replaceable" accomodations that indicates the high degree of obsolescence in this use.[7] (See Table 16).

Within the general shopping district area, the patterns of condition indicate spotty concentrations of "conservable" buildings. Generally, the more substantial buildings are found along the major street frontages (Washington and Tremont Streets.) These structures are primarily office building types with the principal exceptions being the three major "department" stores. (Jordan Marsh's new main store and annex, part of Filene's store, and all of Gilchrists' store.)

Four significant areas of obsolescence are found: two of these are sites of department stores (Raymonds' is a "bargain store", White's is now vacated). The third is the area of several blocks between the major department stores and "lower" Summer Street (toward Church Green). The fourth is the Tremont Street frontage to the south of the major apparel stores.

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7. This quantity of replacable plant in retail use does not include vacated White's store (340,000 square feet).

Within the "core" area, the cross streets contain pockets of obsolete structures. Some of these have been remodeled to present acceptable shopping environment. The basic deficiencies of the original construction, however, remain with the problems of fire-safety devices and maintenance of old structures. The major vacancies in the district have occurred at the edges of the "core" area. There appears to be some correlation between patterns of condition, vacancy and distance from the center of the "core".[8] (See Table 16).

The most significant new construction within the retail area has been the rebuilding of the major department store. In this case, a new nine story structure is replacing the obsolete group of six-story buildings. This reconstruction represents an increase of about 1,300,000 square feet of new space. Other new construction has included a small bank building (3 stories) on the Tremont Street frontage, and two large parking structures (12 and 14 stories) at the edges of the "core" area. This slow rate of replacement is in contrast to a considerable amount of new office construction in other parts of the CBD. (Major office buildings are being built or are scheduled for construction in various sections of the CBD. The huge Prudential Center and Government Center are the principal projects scheduled in the near future.

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[8] In this recent study of vacancy in the area of "retail blocks", the more obsolete structures contained 7 to 8 percent vacancy. The more substantial structures were almost completely occupied. Since that time, another major store vacated a fireproof structure --with the announcement that the building would be remodeled for office use as originally intended.

Other major office buildings are being built in the downtown area, and the Back Bay).

Access and Movement in the Downtown Shopping District

The area is located at the convergence of the rapid transit lines and the arterial roads serving the community. (See Map 1). Because of the large volumes of persons entering the area by both means of transportation, there is a high degree of congestion.[9] To a great extent this congestion is caused by the fact that the access facilities serve the dual functions of through and local movements. In the case of rapid transit, the stations that serve the area, also serve the populous sections of the business district nearby. In addition they serve as transfer points for persons passing through the center bound for other sections of the city. (The two major transfer stations for the rapid transit system lie at the heart of the district, offering a high degree of access, but also congestion at, and between, the stations.)

Conflicts also exist in the case of vehicular movements in the area. Heavy through traffic and access traffic vie for the limited street area. (Both Washington and Tremont Streets are major elements in present street system. Some of the cross streets also serve as through channels. The shopping district area, lying in a central position for north-south movement is, traditionally, a bottleneck to this movement.)

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9 "A Parking Program", Boston City Planning Board, 1954. The study found that about 100,000 persons entered the shopping district by transit and autos on a typical weekday. Of these, about 75,000 arrived by rapid transit, 25,000 arrived by auto. (This does not include the number of persons entering on foot.) Plate II, Table .

Due to the large amount of curbside vehicles stopping in the area, bottlenecks are frequent and seriously increase travel time through the area. Off-street loading, that occurs, frequently conflicts with heavy through movements as the trucks attempt to manuever in and out of alleys and docks.

Pedestrian movement, which is the final access element in retail operations, suffers from the accumulation of all other movements in the area. The most dramatic case is that of the conflict of autos and shoppers along the main shopping street. Street crossings between stores on opposite sides of the street are hazardous, while narrow sidewalks (about 8 to 10 feet) force many pedestrians to walk in the roadway. The same conflict occurs along the major cross streets, only service vehicles take the place of passenger cars and taxicabs. Here, delivery trucks parked along the curb, or entering and leaving loading areas, restrict easy pedestrian flow between the stores. The parked trucks also serve to obstruct the vision, so that store window displays are often overlooked.

Current Programs for Improved Access to the Shopping District

A major system for arterial expressways is presently in the stage of implementation. These will feed into an inner ring road that comes within 800 feet of the retail district.[10] This inner ring road (the Central Artery) will serve the dual

10 "Master Highway Plan for the Boston Metropolitan Area", Charles A. Maguire and Assoc., Boston, 1948, and the "General Plan for Boston-Preliminary Report", Boston City Planning Board, 1950 (the Plan for Highways and Transit).

function of through movements between arterials, and access to and from the downtown areas. The expected increase in automobiles in the downtown has accelerated the present program of off-street parking. The parking plan is based upon provision of medium-sized garages for short-term parkers, scattered throughout the downtown (in keeping with short walking distances and limited street capacities).[11] As stated in the planning agency's report, approximately 3,000 spaces in 6 garages are recommended for the shopping district area.[12]

(A large garage, under the Boston Common has been repeatedly proposed in recent years. Unsuccessful to date, the chief problems facing the proposal have been financial and technical. Costly underground construction, access roads and distance from the shopping district--about 2,000 feet to the main stores--have been the chief obstacles.)

Expansions and improvements to the mass transportation facilities, while slower to come about than auto-oriented programs, are currently under active consideration. Since the formation of the Metropolitan Transit Authority in 1945, a new rapid transit line was built to serve the northeast area, and currently, a western extension is on its way to committment. (A more extensive program for extensions and improvements was recommended in 1945 and 1947. The improvements mentioned above represent a very small part of this

11 "A Parking Program", op. cit., p. 9.

12 "Ibid, p. 10.

plan which includes general extension of the present system out to a 10-mile ring from the downtown.)[13]

Pertaining directly to the shopping district area, alleviation of congestion along the Tremont Street line was recommended by the report. Proposed were: a new set of tracks connecting Park St. station with Scollay station; connection of the two stations under the Common; subway arcades to connect this new station to the two parallel stations along Washington Street.[14]

The Major Problems Currently Facing the Downtown Shopping District of Boston.

The major problems facing the district arise from slow adjustments in the established urban development pattern, while rapid changes occur in the less developed sections of the community. The old pattern of activity, development and utilization of land at the center of the city was appropriate for slower, less flexible means of movement. Today, the automobile has increased our speeds and distances covered in normal day-to-day activities. The new consolidated highway shopping centers are an illustration of the development that is in keeping with the evolving scale of the automobile.

The downtown shopping district has been placed in a position of competition with the new centers. The traditional market that has long been the mainstay of the downtown has

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13 "Report of the Metropolitan Recess Commission", 1945, The Commonwealth of Mass.

14 Ibid, pp. 87-89.

been partly attracted to the outlying centers. Improvement programs for the downtown have been aimed at increasing accessibility for the automobile in reaction to the trend toward suburban shopping.

While improved auto access may increase the potential market for the downtown shopping district, the costs of such improvements are very great due to existing concentrations of development.

The large, consolidated highway centers have shown the advantages of large-scale development of shopping activities. Planned arrangement of access, selling area, store location and type, and amenities--are features that have gained wide acceptance by retailers and shoppers. The downtown pattern is almost diametrically opposite. The inefficiencies that have been overcome in the suburban centers, are common in the downtown. Among the more significant inefficiencies are the following:

1) Accessibility to stores for shoppers and service vehicles are in a state of conflict with each other and with through movements.
2) Multiplicity of ownership of land and long-term leases prevent easy assembly for normal rebuilding processes. The result is the familiar pattern of crowded, narrow buildings.
3) A great range in store sizes and available capital means that stores are spread out over a considerable area in order to meet the operating costs they can afford. Occupancy of obsolete space and dispersed

pattern make the shopping trip inconvenient and unpleasant. Furthermore, the dispersed district encourages conflicts in movement in other areas having high vehicular requirements. (A typical situation is the case of secondary stores occupying the lower floors of high vacancy loft buildings. While the upper story space may be obsolete and inefficient for office use, some income is made on the rental to stores. The effect is that of an accumulation of obsolete, partly vacant space with the consequent appearance of a run-down area. Ownership patterns, high costs of construction and taxes have accelerated the problem in the case studied.)

4) The lack of large, overall development has resulted in a jumble of small stores competing for the attention of the shopper. Garish and projecting signs have produced the confusion that has come to be associated with the downtown.

The total effect of these problems is to be seen in the present downtown shopping district of Boston. The remaining retail plant is still oriented to the market of the pre-automobile era. The congestion is at a level of choking off almost all efficiency of movement. (The traffic along the main street, Washington Street, would continue to cut the two sides of the shopping unit apart even with the new Central Artery bypass.) Small operators are not able to make improvements under the present pattern of small operations. (Some

of the larger stores have been able to undergo remodeling, but the majority of the retail plant remains in obsolete space.) Solution to these fundamental problems is one of the principle objectives of a program for redevelopment of the district. If the plan for the area, however, is to have significance beyond the present situation, then it will have to look beyond the solution of current inefficiencies. The broader considerations of the future role for the district in the CBD is a matter for basic study in terms of evolving community goals and how they may be met downtown.

II. STATEMENT OF GENERAL OBJECTIVES FOR THE DOWNTOWN SHOPPING DISTRICT

METHOD OF GOAL FORMULATION

The three categories chosen as a frame of reference for goal formulation are:

1. Conservation of community resources
2. Relief of current problems
3. Provisions of flexibility for change

Within each category, the subject headings selected for planning purposes are:

A. Use and Function

B. Access and Circulation

C. Amenity and Visual Appearance

This system provides a framework where objectives may be formulated, compared and synthesized into planning recommendations through the process of preparation of a physical plan.

1. Conservation of Community Resources (physical and social)

A. Use and Function (Conservation of the following:)

i) A major shopping concentration at the central area with access to all sections of the community.

ii) A major shopping concentration where specialized goods and services may be economically offered to the widest possible market.

iii) A major shopping facility to serve the needs of a high density downtown business area: employees, business visitors and other visitors to the varied

functions in the general area; and the high density residential areas within easy reach of the downtown.

B. Access and Circulation

i) High utilization of existing mass transportation facilities that have been built at a considerable cost and serve a substantial portion of the community.

ii) Economic utilization of improvements to the highway and parking system (currently being built at great costs to the community).

C. Amenity and Visual Appearance

i) High level of public enjoyment of such amenities as: major open spaces (the Boston Common), historic sites (Old State House, Old South Meeting House, King's Chapel, etc.) and fine architectural edifices (New State House, Park St. Church, Ames Building, etc.)

ii) Other specialized visual characteristics of the area that are considered integral to the cultural traditions of the community (small-scale buildings, intimate vistas, richness in color and texture of the visual environment, etc.).

2. Relief of Major Problems currently causing inefficiencies and unsightly appearance

A. Use and Function

i) Restructuring of the land use pattern to reflect presently changing needs and economic opportunities (increases in service trades, office employment and

space; decreases in retailing and industries, etc.).

ii) Relocation of obsolete uses that impair stability or development of active uses (storage and wholesale market functions occupying land and buildings otherwise suitable for retail, office and service functions.)

iii) Rebuilding of antiquated structures and patterns of land ownership that discourage improvements to neighboring areas. (Preferably under an equitable tax system where new construction is not penalized.) This is an opportunity to encourage large-scale redevelopment with the benefits of flexibility of building layout and use of land.

B. Access and Circulation

i) Deconcentration of traffic-generating uses that encourage undue congestion of various types of movement (i.e. spreading out office development in the CBD rather than piling up excesses at one district. These might take the form of sub-concentrations for purposes of communication between related establishments.)

ii) Completion of major access systems currently under development--tying together channels of flow with terminals and transfer points (i.e. expressways and garages; rapid transit lines, expressways and local transit systems).

iii) Designation of areas where movement channels may be efficiently combined, and those areas requiring separation of types of movement. (i.e. Streets carrying all types of vehicles and pedestrian movement; streets

carrying limited types of vehicles; pedestrian streets.)

iv) Location of terminals for persons or goods within easy, safe distance of their destinations (garages and transit terminals near safe pedestrian channels; loading areas within off-street locations for efficient goods-handling and removal of conflict with moving vehicles).

C. Amenity and Visual Appearance

i) Replacement of unsightly buildings with new, well-designed structures (including heightening visual potentialities of vista, form, texture, contrast, scale, enclosure, etc.)

ii) Reordering of chaotic elements in the visual scene: unrelated buildings, signs and street furniture (i.e. organized sign control, simplification of building form, texture, scale, etc.--with maintenance of significant visual features--for variety, contrast and continuity).

iii) Removal of obstacles to full utilization of public open spaces and recreation areas (easy pedestrian access to parks and rest areas).

3. Provision of Flexibility for expected changes in needs and problems

A. Use and Function

i) Provision for areas of mixed uses that encourage growth of compatible development without conflict and inefficiency. (i.e. consumer-oriented uses grouped

together; goods-handling uses being kept together in other areas).

ii) Encouragement of unspecialized building forms and layouts for maximum reuse as needs vary. (Exception to this objective is most evident in the center of the shopping area. Here, short walking distances may require multi-storied retail buildings that can take on specialized form.)

B. Access and Circulation

i) A simplified system of circulation channels and terminals serving all parts of the business area. (Such a system may be more uniform in areas of uncommitted use, and specialized in areas of specialized use--as in the case of the center of the retail area.)

ii) Standardization of public transportation vehicles and terminals to provide further integration of channels (as in the case of transit trains and streetcars where the two types of equipment discourages flexibility of shifting cars between lines to meet varying demands.)

C. Amenity and Visual Appearance

i) Provisions for replacement and adjustment of facilities for public enjoyment, recreation and convenience to meet changing needs of type, quantity and location (street closings for pedestrians, small open spaces throughout the business area, network of pedestrian open spaces, etc.).

ii) Overall visibility of elements of the visual scene with easy methods of orientation and identification of parts of a complex structure. (i.e. use of landmarks, lines of contrast in form, changes in density and pattern, texture, color and intensity of activity).

III. A PILOT PLAN FOR THE DOWNTOWN SHOPPING DISTRICT OF BOSTON

The Method Used in Preparing the Pilot Plan

The preparation of the pilot plan offers the opportunity to synthesize the analytic steps of problem-solving and goal-accomplishment. This has been done through the process of establishing, first, a generalized plan for the area, and further defining this in more detailed considerations. Application of considered judgement has been made explicit, where possible, through a statement of the assumptions applied. The method follows the procedure outlined below:

1) The general assumptions of growth or contraction of the retailing function in the Central Business District, downtown shopping district and the retail "core".

2) The plan for the shopping district and its relationship to the Central Business District (CBD).

3) The plan for the shopping district and its relationship to the adjacent downtown areas.

4) Problems and method of delimiting the area for detailed study.

5) Description of the general plan for the shopping district proper: its internal arrangement and functioning.

6) Statement of the pilot plan for the shopping district: a detailed layout of use and circulation.

7) Description of the pilot plan in terms of amount and type of accomodations: presented as an estimated range of structural density.

8) Delimiting sub-areas for detailed study of re-use potential: an indication of areas suitable for integrated development within the practical limits of effectuation.

1) The general assumption of growth or contraction of the retailing function for: the Central Business District, the downtown shopping district, and the retail "core".

Using the present district as a point of reference, the prospective district is expressed in terms of increase or decrease. While this decision involves application of judgement, it is helpful as a preliminary quantitative device for expressing the goals set forth in the study. The plan for extent of the district, either in terms of total accomodations or land area, is partly a statement of goals and a prediction of expected market processes. As such, it implies that measures for effectuation of the goals are an integral part of the plan for arrangement of the district.

The preliminary step, then, is a statement of extent in terms of expansion or contraction of the downtown shopping function as a CBD activity. Because of the combined pattern of concentrated and dispersed retailing in the CBD, this system of categorization is used in expressing the component directions of the shopping plant.

The basic assumptions of expected trends is that retailing in the CBD will be either at the present level or lower. The reasons presented for this assumption are:

a) Increased accessibility throughout the metropolitan area will come about through transportation improve-

ments and increased mobility of the individual family as reflected in rising automobile use. This may encourage further dispersal of distributive activities, as retailing, particularly in the case of standardized goods and service.

b) Major sub-concentrations of shopping will occur in expanding areas of residential growth, containing specialized and standardized goods and services.

c) Increases in the total downtown population may reflect the general rise in metropolitan population, but may rise at a lower rate as more activities continue to locate outside of the central area. This segment of the retail market may become more important in the downtown shopping function, as a result of the combined trends of outlying retailing and probable increase in central area employment.

The general effect of these assumed tendencies would be that of possible contraction of retailing in the present downtown shopping district for the following reasons:

i) The market for downtown retailing would probably follow shifts in location of downtown population (mostly employees, business visitors, and visitors to leisure activities). These new establishments will probably occur in conjunction with expansion of new facilities located, primarily, outside of the presently built-up downtown area.

ii) The present center, to maintain a more specialized role, will probably decrease the number, and possibly size, of establishments.

In terms of desired goals for the function and the specific area, it may be said that maximizing community needs for efficiency and amenity in shopping would require reorganization of the traditional downtown shopping district into a more specialized functioning area. Adaptation to new modes of access is not only a trend but a goal in terms of overall community efficiency of distribution. Since a significant portion of the community will continue to require the traditional rapid transit facilities for satisfying their needs, the reorganization must be aimed at adjustments rather than completely new form. Similarly, the distribution of downtown population may remain sufficiently concentrated in the downtown area to require easy walking distances to the main concentration of shopping.

The goals of improved amenity include freedom from traffic conflict and provision for relaxation and enjoyment. In terms of land requirements, this would mean an increase in area devoted to free pedestrian movement, and increased light and air through development of open spaces and building arrangement.

The recommended direction for the major retail concentration is that of a somewhat decreased area, with increased provision of open space and those activities that would offer amenity through relaxation, amusement and convenience.

2) Relationship of the Shopping District to the CBD

Function and Density

The district would remain the major shopping concentration in the CBD (and region) allowing for growth of lesser concentrations in other sections of the CBD. In addition to major retail activities, the district would contain consumer services and business services to support the nearby office, manufacturing and entertainment districts--and the general community.

Structural density in the district would be significantly lower than the presently built-up office district (reflecting increased needs for movement and light and air). Within the district, clusters of higher density would occur containing offices and hotels. (These groupings would be located in conjunction with adequate open areas surrounding them to relieve the enclosure of space on the ground.)

Circulation

Vehicular connections would be accomplished along a simplified system of intra-CBD streets. Terminals for vehicular flows would be provided in off-street garages and loading areas. These would be located along the simplified street system, allowing the limitations of a system of narrow streets that are substantially built-up and subject to little increase in capacity through widening.

Transit connections along existing lines would be augmented by relieving train congestion at overloaded transfer

points. (Double-tracking, increased station length and traffic control systems are recommended.) Possible addition of a new extension in the direction of the westerly CBD expansion should be studied. (This may be accomplished along the B. and A. railroad cut presently under study, or under Stuart Street.)

3) Proposed Relationships of the Shopping District to the Adjacent Downtown Areas (See Map 5)

Function and Land Use

The principal use decision is that of a specialized area designated for retail functions. (The retail area shown contains the existing concentration of major retail establishments.) By specifying an area as a retail "core", specialized recommendations for use, density, circulation and visual form are more easily formulated. It is to be noted that while the retail "core" is a concentrated area of retailing activity, other areas would contain some retail activity according to their various needs and potentialities.

(The extent of the retail "core", as shown in the general sketch plan, represents findings of the more detailed studies described in the remainder of this chapter. The sketch plan, then, represents a summary of judgements rather than a preliminary attempt of analysis and design.)

Outside of the concentrated "core" of major retailing, the shopping district is an area of functional transition to the adjoining use areas: general offices; financial offices; professional and governmental offices; textile manufacturers

PUBLIC GARDEN

BOSTON COMMON

PREDOMINANT USE

- MAJOR RETAIL
- OFFICES
- OFFICES, CONSUMER SERVICES & RETAIL
- MANUFACTURING & WHOLESALING
- INSTITUTIONS

MAJOR CIRCULATION

- MAJOR STREET
- EXPRESSWAY EXIT
- " ENTR.
- PARKING FACILITY
- SUBWAY STATION
- PEDESTRIANWAY

0 200 600 1000 FT.

MAP 5 GENERAL SKETCH PLAN - DOWNTOWN AREA

"AN APPROACH TOWARDS THE REDEVELOPMENT OF THE DOWNTOWN SHOPPING DISTRICT OF BOSTON"

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and wholesalers; and entertainment area. The uses predominating in each part of the general area called the shopping district, would represent consumer and business functions that are needed to support the adjacent functional district. (As an example, eating places and convenience shops would be recommended, near the high density office and manufacturing districts. Specialized shops, eating and drinking places--and some movie theaters--adjacent to the entertainment district.) In most cases these uses could serve shoppers as well as downtown employees, thus providing for a great variety of services available to the person who combines shopping with other personal business.

Vehicular Circulation

The principal determinants of major Street pattern and improvements are:

a) connections to the downtown expressway ramps;

b) access to the proposed parking terminals to and from the expressway and major arterial streets; and

c) a simplified street system for intra-CBD movements.

All three objectives may be combined in a single street or series of streets, gaining economy and flexibility. The pattern proposed represents a modified loop system of one-way streets with block sizes up to 900 feet (the average size is 500 feet in length). In most instances the one-way system provides for easy movement between garages in the event of some being filled.

Because the shopping district lies between major business areas to the north and south-west, through movements are retained at the edges of the district. (These are Tremont Street southbound; and Harrison-Kingston-Otis-Devonshire-Congress Streets northbound.)

In the east-west directions, through streets are maintained to provide connections to and from the expressway and business district. (The cross streets are: Court-State, School-Water, Bromfield-Franklin, lower Summer, Boylston-Essex and Stuart-Kneeland. Additional loop streets serve to provide flexibility in flow and general access: West-Bedford, Avery-Hayward-Exeter, Beach and parts of Washington.)

Rapid Transit Circulation

While primarily a concern of long-run trips or detailed station layout, some important connections exist at the middle-range (between one quarter and three-quarters of a mile). To the north and southeast of the district lie the nearby railroad stations. Persons from outlying areas and other cities, who shop in the district can use the existing lines connecting these terminals to the district. (Double-tracking the Scollay-Park street connection would speed up connections to North Station, especially during rush hours.) Connections to the Back Bay shopping district are available along the existing lines. (Additions to this connection may take the form of slow-moving vehicles between the Tremont Street area and the Back Bay shops, one-half mile to the west, traveling along the existing paths in the Common and the Public Garden.)

Pedestrian Circulation

Specialized channels are reserved for free pedestrian flow. These occur in the form of: malls, closed streets, pedestrian alleys, footways, and widened sidewalks. Because of the high volume of pedestrian flow in and out of the shopping district, this form of movement is considered as a separate system serving origins and destinations--and providing enjoyable walks within the area. (The latter may be accomplished through detailed utilization of visual potentialities of each pedestrian channel.)

Connections to the adjacent areas are along the following routes:

Government-Financial-Legal Office Area--

Closed and widened sidewalk sections of Washington Street.

Major Office Area--

Spring Lane and widened sidewalks on both sides of Franklin Street.

South Station Area--

Widened sidewalks of Summer Street and proposed mall following Bedford-Summer Street line.

Entertainment-Wholesale-Manufacturing Area--

Closed or widened sidewalks of Washington Street and the proposed mall extension between Bedford and Essex Streets.

Common and Entertainment-Office-Shopping Area (Boylston Street--

Proposed mall with pedestrian crossing at Tremont Street and pedestrian bridge over Tremont Street (into a proposed multi-story Winter Street shopping arcade).

Visual Form

a) Intensity of Human Activity and movement

The retail "core" is easily the peak area for concentrated, human movement. As proposed, it would contain a high intensity of use within a compact area.

The area immediately surrounding the "core" would be more relaxed, utilized by persons engaged in casual activities and leisure.

The office district to the north and east would continue to contain peaks of human movement at rush hours and lunch hours. Much of this movement will flow into the area surrounding the core, changing that area to one of moderate intensity, resembling the retail "core".

The manufacturing district to the southeast would be similar to the office district in pulsations of human activity.

The Entertainment-Office-Shopping district to the southwest would have a mixed character of activity, with the great intensity occurring in the evenings as the other areas dwindle in intensity. (Washington St. and the cross mall would contain nightime activities on shopping evenings, and special public functions.)

The Common would be an area of relief and relaxed movement. At special occasions of public interest, minor peaks of intensity would occur. (The heavy movements of vehicles along Tremont Street serves to accentuate the relaxed character of this park area.)

b) Building bulk and concentration of easily visible forms

The primary concentration of tall buildings is the existing office district. Because of the sloping topography this concentration is only prominent when viewed from the harbor side of the office district. Lesser concentrations would occur: along Tremont Street; toward the proposed government center (north of Court Street); toward the "hinge" (where Tremont and Boylston Streets meet marking the extension toward Back Bay; and in the manufacturing area to the south. Those concentrations closer to the Common and the proposed mall would appear most visible due to vantage points of open space or high ground elevation.

c) Elements of visual orientation and organization

The clearest definition of form would remain the contrast of openess and bulk along Tremont St. From this line of demarcation, the perpendicular streets form a regularity of open spaces into the shopping district. The addition of a wide mall would accentuate this relationship of the "wall" along Tremont with the "enclosed" area below--providing a broad entry that relieves the great contrast of the two visual elements.

The simplicity of the Washington Street spine (as an open space and pedestrian channel) serves to organize movement and identification of component elements. Downhill, into the office district, the complexity of street pattern and building orientation are relieved by more simplified vehicular systems and connected pedestrian channels (the latter is complex in view of the street pattern and availability of areas for redeveloped open spaces).

Special building shapes and sitings lend to the focal points of visual interest that help orient the person using a complex area. (Examples of such focal points are the present church spires and distinctive buildings located at the end of vistas.) New buildings located at prominent vantage points would help identify points of focus, or change in direction.

4) Delimiting the Area for Detailed Study (See Map 6)

The general sketch plan indicates the groups of blocks representing the retail "core". These have been chosen on the basis of the present concentration of major retail structures. The remaining area of the shopping district is largely left unspecified. Because of the proposed mixed character of use, the choice of a detailed study area is made on the basis of the following criteria:

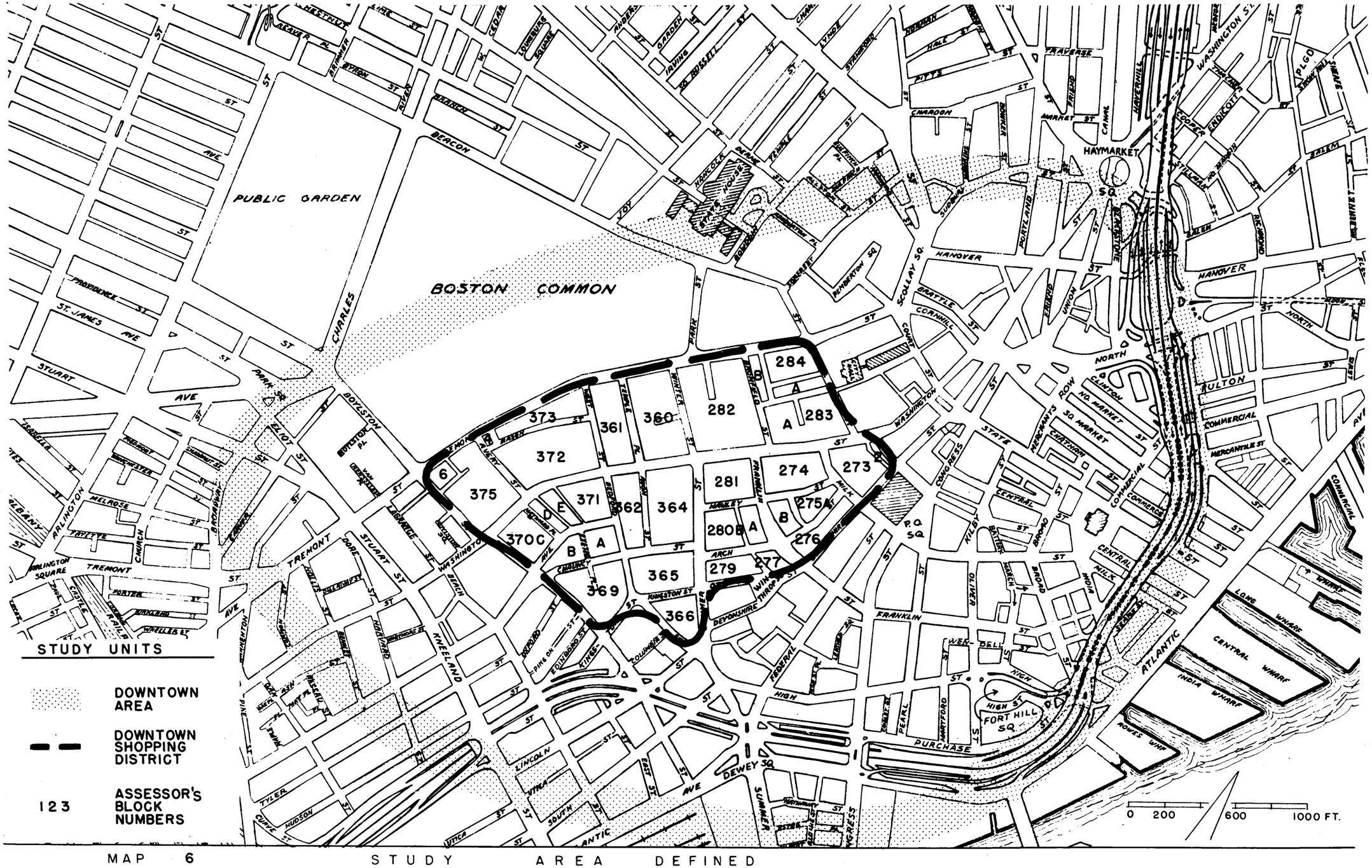
a) Include sufficient area to allow flexibility of retail plant in the event of expansion. (This is considered within the limits of easy walking distance, up to 2,000 feet, or an 8 minute walk.)

b) Limit the area at boundaries of stable use and good physical plant.

c) Consider major through streets as boundaries, preferably when the first two conditions are met.

The Boundaries Selected for the "Shopping District"

The study area is carried to Boylston-Essex Streets, on the south, this being seen as a line of transition to the entertainment and textile districts. (Both of these areas contain a high percentage of obsolete buildings.) The street



MAP 6 STUDY AREA DEFINED

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is also considered a significant component in the major street pattern--connecting the Back Bay area with the Central Artery interchanges.

On the east, the study area follows the approximate line of Kingston-Devonshire Streets, to meet the main concentration of office buildings. This area is clearly established as the principal concentration of substantial buildings in the business district. This line and the previous one meet at the vicinity of Church Green. Appropriately, this apex is the entry point into the downtown for heavy commutor and visitor flows leaving the South Station railroad terminal.

The north "boundary" along School Street is primarily that of a major element in the traffic movements from Beacon Hill into the downtown. Consumer service and business offices are expected on both sides of the street.

Along Tremont Street, the Boston Common clearly marks the end of the business district. Because of the great amenity this park has to offer, every attempt should be made to "bridge" the heavy flow of vehicular traffic along the street that separates the park from the intense activities.

The total area chosen contains approximately 52 acres of which 15 are within the retail "core".

5) Description of the Activities and Functions Recommended for the Shopping District

At the center of the area, the retail "core" would focus upon the three major department stores currently in operation. These will probably continue to be the main shopping attractions and contain the greatest concentration of retail space.

Between this focus, and the Tremont Street frontage, there would be the continued concentration of major retail stores--mainly carrying women's apparel.

Between the "core" area and the office district to the east, the area could contain a mixture of retailing, consumer services and some business offices. A focus of amenity and relaxation, in this part of the district, is recommended in the form of a small plaza, or park developed in conjunction with the historic Old South Meeting House and the Benjiman Franklin birthplace. In addition to providing amenity to the area, this opening could serve to define the edge of the district, with a continued link leading to the Old State House, surrounding offices, and further north to the proposed government center.

Toward the entertainment and garment areas to the south, a proposed pedestrian mall would be the organizing element of a group of consumer services, specialty shops and offices. It would serve as a major meeting place in the district for the shoppers and downtown employees. As in the case of the open space around the Old South Meeting House on the opposite side of the "core", this mall could serve to define the edge of the concentration.

East of the "core", toward the Dewey Square-South Station terminal, the area is suitable for a combination of retailing, consumer services and offices. An open space at Church Green, could define the dual gateway into the district along Summer St. and the mall. Concentration of parking facilities, and proposed extension of the subway station would make this an important entry point into the area.

Description of the Major Access Facilities Recommended for the Shopping District

In terms of numbers of persons entering the area, the rapid transit facilities are expected to remain the most significant means of access. The strategic crossing of the major transit lines, plus projected extensions and improvements, are expected to maintain a high level of transit use by shoppers bound for downtown. Additional entrances and exits to the stations serving the area would allow easy access to most parts of the district. Station extensions (along Tremont St.) and new subway arcades (along Winter, Washington, Avery and Summer Streets) would provide for the possibility of an all-weather system of pedestrian connections between stations. Attention to the design of these entry and exit points could make the use of transit facilities more pleasant and efficient.

Considerable access by passenger automobile is to be provided as a result of the program under way. The total parking program proposed would provide for approximately 5,000 spaces within a 4 minute walk to the main department stores. This represents about 1200 more spaces than presently built or committed. About 2,000 spaces are within a 3 minute walk to the center. It is recommended that setting of rates to be determined to encourage maximum use by short-term parkers, with the possibility for special rebates for shoppers. Access to the garages, in the district would be along service streets, rather than through streets. A system of predominantly one-way "connector" streets would tie in these streets with the entrances and exits to the expressway and major

downtown feeders. Thus, local vehicular movements would be removed from the heart of the district (Washington Street) to the peripheries.

Access by service vehicles would be from a series of off-street loading facilities that are fed by the service street system. (During non-shopping hours, thepaved pedestrianways may be opened to service vehicles requiring access to establishments not immediately served from the proposed facilities.) Small goods movement, not immediately unloaded into their destinations, may be handled by hand trucks and conveyors. Larger goods that must be delivered during shopping hours may receive special access to the pedestrianways. Special loading zones for taxicabs, and cars picking up and discharging passengers and buses, would be provided in conjunction with the pedestrian areas.

Description of the Pedestrian Facilities Recommended for the Shopping District Area

The pedestrian facilities are organized as a system of easy movement connecting a series of specialized elements. These are: 1) the entry points where the pedestrian leaves another system of movement, or enters the district on foot from another area; 2) the amenity or relaxation areas at various points of focus of consumer services and other uses--generally in conjunction with landscaping and special treatment of public facilities; 3) the major pedestrian streets (Washington Street and the cross mall between Avery and West Streets); and 4) the secondary shopping-pedestrian streets (Winter, Temple, West, Franklin and Summer Streets). Each

element in the "system" receives particular treatment with potential for specialized character.

Combined with other circulation elements serving the area, the pedestrian "system" is seen as an essential element in "organizing" the various parts of the entire shopping district. The prospect of easy walking connections to the various pedestrian focal points of activity is seen as a major design objective in the plan.

The proposed cross-mall is considered one of the major elements in the pedestrian system. Connecting the Common to Church Green, it passes through a series of different areas, each with special potential. By a series of depressed vehicular streets, or wide pedestrian underpasses, the major traffic streets could be crossed without conflict. (Between Church Green and South Station the series of pedestrian islands may be crossed by a combination of pedestrian underpasses and overpasses.)

Connection across Tremont Street at Winter Street must be made above grade due to underground subway facilities immediately below surface, at this point. An elevated connection could connect upper level shopping on Winter Street with an enlarged subway station entrance on the Common.

A system for slow-moving surface vehicles is recommended for further study. Carrying shoppers, children and tourists (for a nominal fee), these vehicles could connect the major cross-mall with the Common and, possibly, the Public Garden (the latter by way of an underpass across Charles Street.)

In the warmer weather, such vehicles would enable easy access from the downtown shopping district to the Back Bay by way of the Common and Public Garden. The latter could encourage use of recreational facilities as the famous Swan Boats on the Garden pond.

6) The Pilot Plan for the Downtown Shopping District (See Maps 7a, 7b, 7c)

a) The Plan for Use and Density, showing:

i - predominant use recommended

ii - limits of private development (and designation of public open spaces)

iii - consumer-oriented frontage

iv - pedestrianways (showing publicly-owned area)

b) The Plan for Access and Circulation

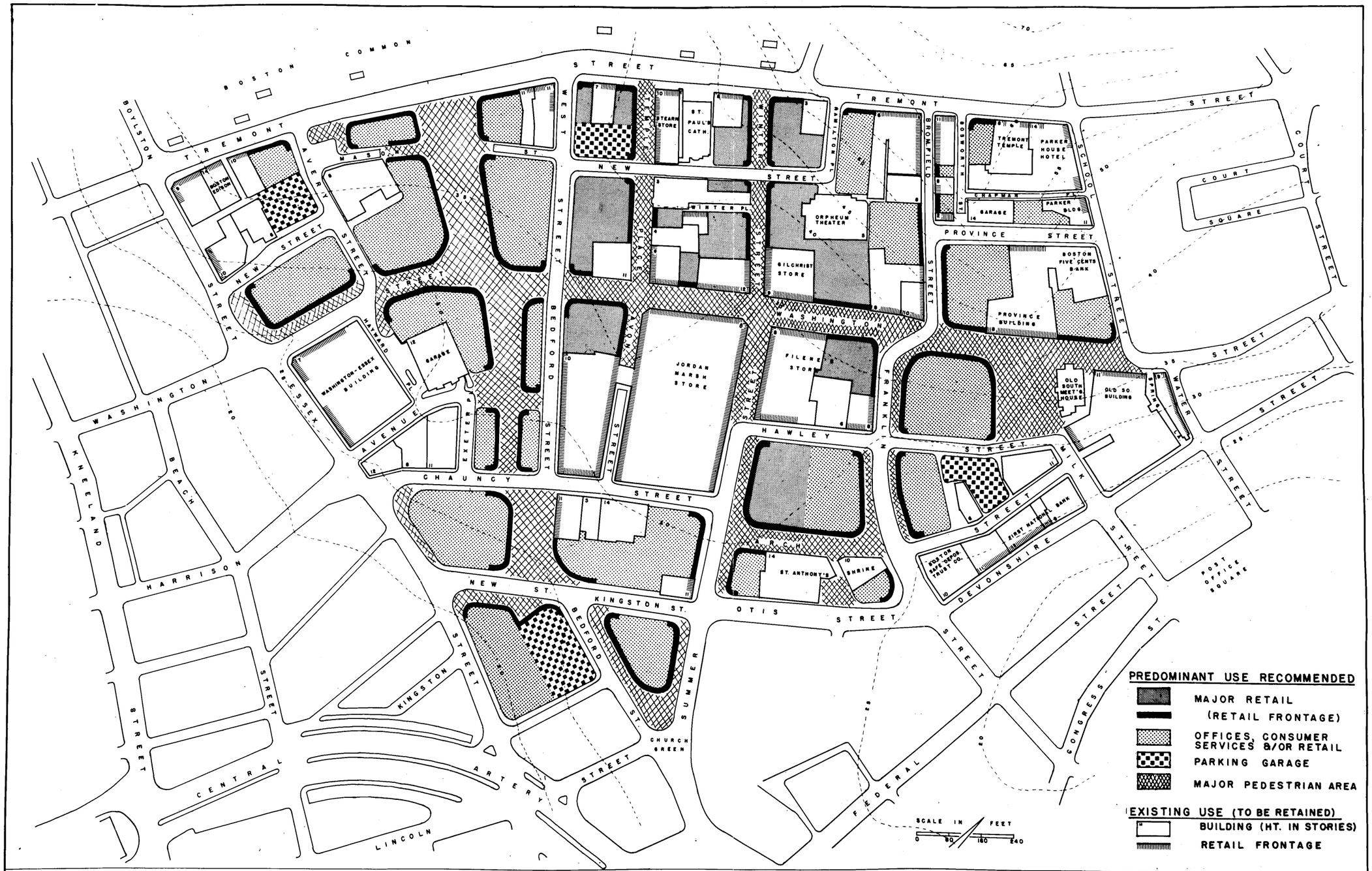
i - Street pattern and recommended one-way system (and turning movements).

ii - Service access to garages and loading areas (including specialized service devices as joint loading facilities).

iii - Rapid Transit facilities (including extensions of stations, passageways and new access kiosks.)

7) Description of the Pilot Plan in Terms of Amount and Type of Accomodations

Within the recommendations of a decreased area for concentrated major retailing, the assumption may be made that new construction in the retail "core" would be of a limited structural density if current trends are expected to continue



MAP 7a **LAND USE PLAN - DOWNTOWN SHOPPING DISTRICT**

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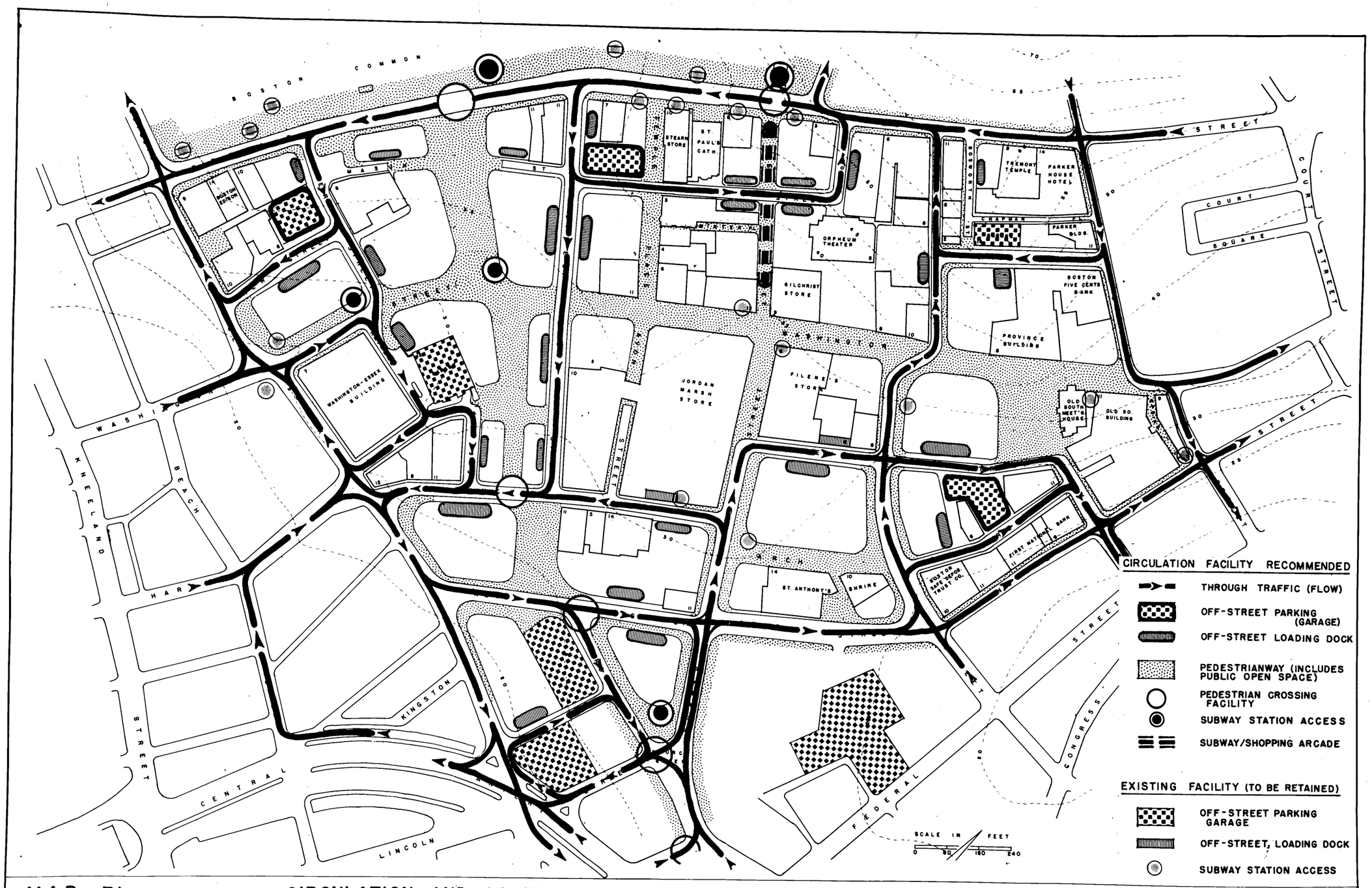

MAP 7b CIRCULATION AND ACCESS PLAN - DOWNTOWN SHOPPING DISTRICT

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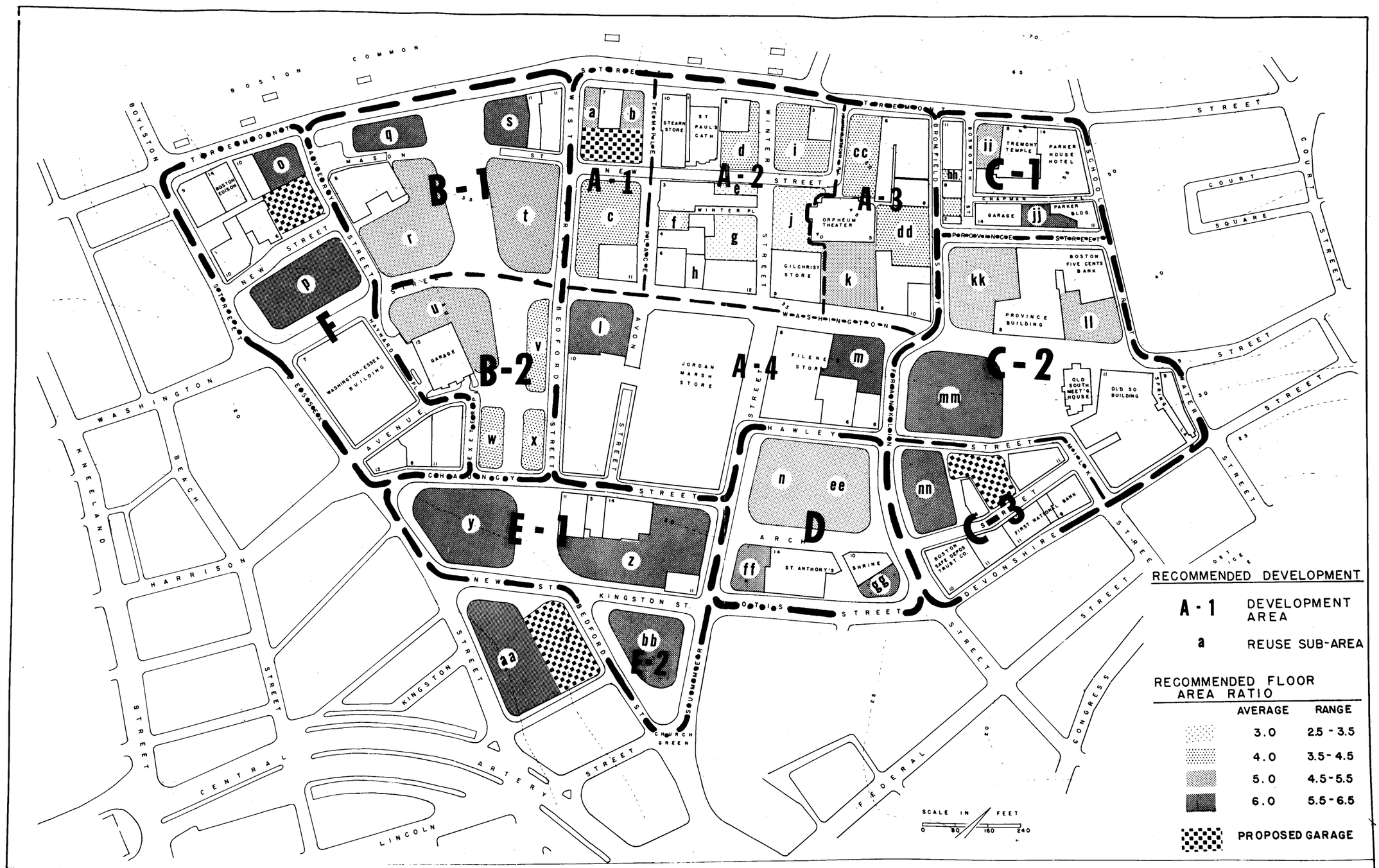

RECOMMENDED DEVELOPMENT

A-1 DEVELOPMENT AREA

a REUSE SUB-AREA

RECOMMENDED FLOOR AREA RATIO

	AVERAGE	RANGE
	3.0	2.5 - 3.5
	4.0	3.5 - 4.5
	5.0	4.5 - 5.5
	6.0	5.5 - 6.5

PROPOSED GARAGE

MAP 7c DEVELOPMENT PLAN - DOWNTOWN SHOPPING DISTRICT

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in the direction of decrease. If this is the case then a low to medium range of net floor area ratio for redevelopment would be appropriate as an assumption. A floor area ratio (F.A.R.) range of 3 to 5 is chosen as representative of such expected retail building types as: small department stores and major specialty stores (F.A.R. 4-6), and groups of smaller stores in arcades or sharing minor office buildings (F.A.R. 3-4).

Limitations on building bulk reflects the general goal for increased specialization of use in the retail "core"--while related office buildings would be recommended in the remainder of the shopping district. This division of use and building type is considered desirable, both as a functional goal (of decreased congestion with proximity of shops) and an aesthetic goal of increased light and air available to the dense concentration of persons expected to be using the retail "core" area.

For the remaining area in the shopping district, outside the retail "core", the net floor area ratio may be slightly higher. The range of 4 to 6 is chosen to represent a combination of building types to be encouraged for this area. This would include offices and hotels (F.A.R. 4-8); and theaters, restaurants, and other consumer-oriented facilities (F.A.R. 3-6).

Inasmuch as considerable public open space is recommended for this area, surrounding the retail "core", the higher end of the range would be appropriate for those sites adjacent to these open spaces.

The procedure employed in preparing the preliminary quantitative plan for the district is as follows:

i) Assignment of recommended densities for each redevelopment site that represent a middle range estimate.

ii) Summation of total plant recommended in terms of major geographic and functional components.

iii) Choice of high and low limits of structural density that straddle the middle range estimate.

iv) Development of approximate quantities of accomodations for the component areas and functions. This is accomplished by multiplying the total redevelopment area for each selected component by the assumed density for that component. (Retail space in the part of the shopping district outside of the retail "core" is assumed equivalent to the ground site area.)

Summary of Total Shopping District Accomodations as Shown in the Selected Range of Development. (Tables 1-12, 16, 17)

The Shopping District, as a whole

The district is expected to tend toward a decline in total floor space (between the present level to a decline of 20 percent). Within the major use categories, retailing may decline between 10 and 25 percent. Consumer services-offices are expected to rise between 25 and 65 percent. (The assumption is made that other uses in this area would remain in the district, only to the extent to which they occupy first-class space. With this criteria, the pilot plan indicates a significant decrease of 55 percent in this category.)

The Retail Core

The total plant is expected to decline between 10 and 25 percent. Retailing may drop between 10 and 30 percent. Consumer Services and Offices are expected to decline between the present level and 15 percent lower. Other uses are expected to decline about 45 percent.

The Remainder of the Shopping District

The total amount of floor space may lie between a decline of about 15 percent or a rise of 10 percent. Retailing is expected to range between a decline of 45 percent and a rise of 20 percent. Consumer Services and Offices are expected to rise between 35 and 75 percent.

The proposed increase in consumer frontage is particularly significant in view of the decrease in retail floor space suggested. The major portion of this frontage is assumed to be

in retail use. Since display of goods is a major aspect of retail operations (particularly in highly competitive shopping areas), this relative increase in frontage represents a higher efficiency of service to the shopper and retailer.

The preliminary program developed in the preceding section represents the consequences of an assumed range of development. In effect it says that if we build at the stated densities, in the areas indicated--then the amount of space for these activities may result as shown. Variations in density recommendations would significantly change the character of the area as proposed. Assuming an upward turn in the market for these activities, a new pattern of land use and circulation facilities would have to be studied. As presented in the Pilot Plan (and the General Plan) the amount and distribution of activities are assumed to be in balance with their service and amenity needs. A more intense use of the area, would require additional circulation capacity and more open space.

8) A Study of Potentialities for Re-Use in the Shopping District Area

The purposes of a detailed study of re-use potential for the area are: 1) to present a preliminary designation of areas for treatment as integrated projects; and 2) to suggest specific development prospects of function and physical form in general terms, without the premature committment of site plan presentations.

The study is deliberately presented in these terms to allow for maximum flexibility of interpretation. The specific

site plan studies, that may be prepared as illustrations of design possibilities are considered as a separate study of a more detailed nature. Detailed programs for each development area would be undertaken in conjunction with the specific site plan studies--using a general guide as indicated in this study.

The categories employed in the study are: 1) Major Use and Functional Orientation (a description of general use categories recommended with explanation of the relationship of the development area to adjacent uses and the physical facilities connected with the area); and 2) Illustrative Development Types and Special Facilities (a description of the detailed physical developments suitable for further consideration in program and site plan studies). (Map 7c)

Development Area A-1

Major Use and Orientation

This area is suitable for both redevelopment and rehabilitation. Considering Temple Place, primarily as a shopping street, combined parking and retail facilities could be developed between Temple Place and West Street. A new street across this block may tie in with the prospective link to Hamilton Place--serving as an access loop for the "core" area. Frontage at the corner site of Tremont and West Streets may be appropriate for combined offices and stores, similarly for the corner of Washington and West Streets.

Illustrative Development Types

A medium-sized elevated parking garage could have entrance and exit on West Street and the proposed new street, leaving shop frontage along the Temple Place side of the garage. An off-street loading bay may be incorporated with this development to serve the adjacent stores. Connections under Temple Place would allow direct service from this loading facility into the basements on the opposite side of the street. Remodeling of shop fronts in the more "conservable" buildings should be coordinated in architectural treatment, providing for related signs and methods of identification.

Development Area A-2

Major Use and Orientation

This area has significant potential for retail re-use due to its location at the major downtown entry for transit riders. Orientation of re-use along Winter Street must provide ample circulation space for the heavy pedestrian traffic that passes between the stations. (A 40 foot street width allows for easy shopping between the two sides of the street.) Frontage along Tremont Street is limited, in extent, but important as a gateway to the "core" area from the Common. Frontage along a widened Hamilton Place is suitable for service entry to the developments fronting on Winter Street.

Illustrative Development Types

Winter Street could be developed as a multi-level shopping arcade (3 or 4 floors) with possible connections to the

major stores facing on Washington and Tremont Streets. The lower level could be tied in with the proposed arcade connecting the two stations at the ends of the street. Transfers issued at both points, would allow such an arcade to be used by shoppers and still provide controlled free transfer. The upper levels could be connected by pedestrian bridges at a few points allowing for easy movement between shops. Escalators would provide easy connection between all levels making the area similar to an "outdoor department store". (Through a closely coordinated, staged development, this area could be treated with unified design, allowing for possibility of overhead enclosure and coordinated access levels. Loading bays along Hamilton Place and a projected cross access street could tie in with joint freight elevators for the groups of shops above.)

Development Area A-3

Major Use and Orientation

The area, as an "edge" to the retail "core", is considered appropriate for both retail and office use. Frontage along Washington Street is suitable as a continued shopping street connected with the proposed street closing. A limited amount of re-use is seen for this frontage in the near future. Frontage along Tremont and Hamilton Place is suitable for combined retailing and offices. Location near the famous Park Street Church and the Granary Burial Ground would make this site attractive for institutional or professional offices. Re-use

potential along Bromfield appears limited, with possible location of combined office-retail and off-street loading facilities. (The latter to serve the Washington Street frontage.)

Illustrative Development Types

New office buildings could be constructed with off-street loading facilities below grade, serving the nearby stores at basement level.

Development Area A-4

This area is the concentration of major department and apparel stores in the district. As the principal attractor of downtown shoppers, it is expected to have continued prominance in a renewed shopping district.

The Jordan Marsh main store is currently undergoing a complete rebuilding, with provisions for additional stories at a later date. The Marsh Annex store is suitable for rebuilding along the Washington Street frontage. (This area is presently occupied by other retail establishments.) The Washington-Franklin corner of Filene's store is particularly suited to rebuilding, as it will be located at the north "entrance" to the Washington Street shopping area. Provisions for a major entrance in this location would heighten the shopping interest at this point of entry.

Development Area B-1

Major Use and Orientation

This is the major focus of consumer and public amenities oriented along the main mall. Frontages along Tremont Street are limited due to positioning of existing first class buildings. The Washington Street frontage is particularly appropriate for high-density consumer shopping and services (or amusements) due to its point at the crossing of the two major pedestrian axes. Frontages along West and Avery Streets are suitable for service access and limited shopping activity.

Illustrative Development Types

Development along the cross-mall should be primarily in low and medium sized buildings (2 to 6 story) with ample open spaces and small courts to provide for major amenity in the district. This area is seen as a ripe opportunity to provide some of the open character of the new suburban shopping centers. A large, new theater (serving community and commercial functions) would be suitably located at southeast corner of the cross-mall. Occupying this focal point, it could front on an area that would be used for outdoor exhibitions and displays. The 8-story building on Mason Street (soon to be vacated by the newspaper plant now occupying the site) could be converted and enlarged into a combined hotel or office with major parking facilities serving the area.

Extension of the cross-mall into the Boston Common is proposed as a major tie between the two amenities. The three alternative methods considered are: 1) depressing Tremont

Street at the center of the block (the subway curves under the sidewalk along the Common in this area); 2) providing for a public underpass in conjunction with the proposed station extension under the Common (such an underpass would probably have to be made at a level below the tracks); or 3) an overpass bridge across Tremont Street. The first method is recommended as having the greatest attractiveness for easy pedestrian movement and allowing for good visual connection between the Common and the district. Subway passenger connections between the two stations and extensions of entrances should be tied in with the new developments allowing access to the major buildings and the center of the pedestrian area.

Development Area B-2

Major Use and Orientation

The area lies at the narrow neck connecting the consumer center with the office-textile district to the south and east. As a continuation of the pedestrian system, the development should be arranged to front on the pedestrianway. Consumer uses as eating places and convenience shops could share the area with offices.

Illustrative Development Types

An office slab building bridging across the mall, with low buildings along West Street could provide a dramatic entry into the area from the textile-office area. Additional low buildings around the new garage would provide for active consumer use at the focus of the cross pedestrian elements.

Off-street loading facilities could be incorporated along West Street and Avery Street.

Development Area C-1

The area is significant as a potential rehabilitation area. (The Tremont Temple is currently undergoing an extensive remodeling.) Improved shop fronts along Bosworth Street would help preserve the character set by the stairway and open-roof restaurant at Province Street.

Development Area C-2

Major Use and Orientation

The area focuses upon the proposed "historic plaza" and is similar to the other major consumer area at the south end of the Washington Street shopping axis. Frontage along Washington Street is suitable for major retailing, eating places and conveniences. Bromfield Street may be developed for secondary retail frontage and off-street loading.

Illustrative Development Types

A major retail building could replace the present group of obsolescent structures housing Raymond's department store. Economical retail space could house a major store and specialized consumer facilities opening on the proposed "historic plaza". (This latter facility could contain a tourist-shopper information office, and a suitable commemorative to the Franklin birthplace. Combined office-retail buildings are

appropriate at the corners of Washington with Bromfield and School Streets. Off-street facilities, to serve the area would be suitable along Hawley, Bromfield and School Streets.

Development Area C-3

Major Use and Orientation

The block between Arch and Hawley Streets is considered to have sufficient potential for re-use to make it suitable for combined office and parking facilities.

Illustrative Development Types

By development around the existing power plant, a medium-sized elevated parking garage (300-400 cars) can be incorporated in a joint development with an office building fronting on Franklin Street.

Development Area D

Major Use and Orientation

The block (currently occupied by predominantly non-fire-proof space) is oriented in three directions. Toward Summer Street, the frontage is an integral part of the retail "core". Along Arch Street, the institutional character is set by the St. Anthony's Church. (A "Worker's Chapel" is well attended by shoppers and workers during the day.) Frontage along Franklin Street is oriented toward combined office-retail use.

Illustrative Development Type

The entire block is suitable for a coordinated development, with a major store and office building arranged around a small open space opposite the St. Anthony's Church. Off-street loading facilities on Hawley Street could serve the development.

Development Area E-1

Major Use and Orientation

This area has significant re-use potential, connecting the consumer area at Church Green with the main cross-mall to the common. As such, it is suitable for quality office space that may be oriented to the nearby textile trades. Frontage along Summer Street is suitable for a continuation of the retail function with combined office-use. Frontage along the main mall would be suitable for consumer activities, especially as a convenience to the adjacent offices and lofts.

Illustrative Development Types

A group of office buildings around the pedestrian area with vehicular access facilities along Chauncy, Essex and Kingston Streets. Low elements in this group may contain consumer facilities and trade-oriented display facilities. A combined retail-office building fronting on Summer Street can be served by an off-street loading area on Chauncy Street.

Development Area E-2

Major Use and Orientation

The principal orientation of the area is toward the proposed focus around Church Green at the foot of the pedestrian system that leads to the main cross-mall and the Common. Frontage on this open space is suitable for consumer facilties and some offices. (The two parking garages located in the adjacent area divide it in two leaving the Essex Street frontage oriented toward the textile-office area.)

Illustrative Development Types

A combined retail-office building is suggested along Summer and Kingston Streets with consumer facilities along the pedestrianway and open space. (The extension of the subway station access to Washington and Summer Street would make this area a "transit and auto terminal".) Pedestrian underpasses are recommended where the mall meets Kingston Street, and Chauncy Street. These streets are expected to carry a heavy volume of traffic in the redesigned system.

Development Area F

Major Use and Orientation

The area is principally a transition area from the retail to entertainment districts--at the "hinge" of the Common. Renewal of the latter district and textile area would provide for a firmer anchor to this part of the downtown. The Washington Street frontage is suitable for a combination of offices

and consumer activities--related to amusement and entertainment. (Replacement of the present excess of tawdry bars and movies would upgrade the area for leisure uses more suitable to a renewed area.)

Illustrative Development Types

An office tower with a low element of consumer facilities is suggested, using Avery Street for the principal off-street loading access. Provision for a small open space with expanded subway station entrance would make this area an entranceway to the main district immediately to the north.

IV. A PRELIMINARY STUDY OF MECHANISMS FOR EFFECTUATING A PLAN FOR THE DOWNTOWN SHOPPING DISTRICT OF BOSTON

The Basis for a Coordinated Effectuation Program

The basic assumption is made that an extensive program of public-private action is needed to bring about changes to the downtown shopping district that would benefit the general community, the land owners and occupants of the area, and the municipality (City of Boston). There appears to be a sufficient basis of agreement on the goals of the interests involved to warrant a coordinated program on all fronts. This is illustrated by the following factors:

i) Major segments of the general community require special facilities for shopping and related functions at the present location of the downtown shopping district. These requirements involve some change in the traditional orientation of retailing in the downtown shopping district that can be brought about most effectively by a coordinated action on the parts of private and public interests and agencies.

ii) The land owners, operators and merchant occupants of the present district are under economic pressure to adjust to changing demands within a rising level of operating costs. (This has been particularly graphic in the cases of recent closings and vacancies during the last year, 1957)

iii) The corporate city requires an economically sound shopping district to provide significant source of income through property taxes. (This is particularly true in the case of Boston, where a high proportion of land is tax exempt and the shopping district has traditionally borne a

heavy burden of the tax load. Lack of metropolitan government at present, or for the forseeable future, necessitates the continued high tax role of the shopping district.)

To some extent, this agreement has spurred various interests into action in the Boston area. Existing representative private organizations (as the Chamber of Commerce, Retail Trade Board and Real Estate Board) and newly formed agencies (as the Mayor's Committee on Civic Progress) have met with public agencies (as the Mayor's office, City Council, City Planning Board and staff) in starting a program of coordinated effort for the improvement of the shopping district. Assisted by newspapers and institutions in the area, this program is currently receiving public attention and interest.

The purpose of the suggested program is to explore some possibilities for organization of public and private interests toward implementation of a plan for the district. The program is divided into two categories for the purposes of a preliminary study: (1) Planning and programming the improvements for the district, and (2) Methods of finance and control of projected improvements.

Responsibility for Planning and Programming of the Downtown Shopping District

The planning function is seen primarily as the responsibility of the municipal agencies acting under the coordination of the City Planning Board and its technical staff. Steering committees of various private agencies may serve to advise the planning agency on matters affecting their opera-

tions. Retailers and other operators will be able to supply necessary details of desirable practices from their point of view. Together with the planning agency, they would be able to review physical improvements with an experienced eye. Participation of consultants would have a similar role of advisory capacity to the total planning effort. The primary responsibility for guidance of overall function and appearance of the district would remain in the hands of the planning agency in evidence of the community purpose that lies as the basis for the renewal effort, and in control of public expenditures. Their principal roles in preparing the physical plan would be that of general planning considerations as outlined in the pilot study: land use arrangement, density recommendations, circulation improvements (existing and new facilities), open space recommendations and improvements and recommendations for control of appearance of development.

Plans of owners and occupants of the more substantial structures will have to be reviewed in the preparation of detailed studies for re-use. Coordination at the preliminary stages would allow sufficient time for these establishments to review their own needs and directions in terms of the entire district--and its total potential in a broad program of redevelopment and rehabilitation.

An Implementation Method for Finance and Control of Development in the Shopping District

The basic alternatives of implementation appear to be (1) individual decisions by enterpreneurs under a control device or zoning measures; or (2) a large quasi-public control

mechanism that is comprised of independent corporations acting under definite plans for development and control of appearance and operation. In both cases public improvements would be the responsibility of normal operating public agencies, but subject to review by the coordinating planning agency (as suggested this would be the City Planning agency).

The pilot plan can be sufficiently flexible to allow for either method to be used, however the latter approach appears to offer greater advantages needed to implement a plan for extensive improvement.

A group of independent private corporations acting under the control of a joint board of advisors (this may include public agency representatives as well as representatives of private interests) has several advantages that are not possible under normal lot-by-lot development processes. Among the more significant advantages are:

i) Assembly of parcels into sites large enough to provide for flexibility of building arrangement, coordination of service facilities, increased open space, and joint convenience facilities for the shoppers.

ii) Favorable interest rates that would be available to large corporations, especially under the strength of a coordinated program.

iii) Close control of architectural appearance (and signs) for a more attractive and orderly visual environment.

iv) Operation of joint facilities and services can be done on a cooperative basis (loading and service facilities, maintenance of public areas and convenience facilities, public exhibitions, and advertising campaigns).

As a method of attracting investment in the component corporations, specific sub-areas may be considered as suitable units for development by a single corporation. (A preliminary designation of such sub-areas has been made as part of the Pilot Plan.) Present interests in the area would have an opportunity to reinvest in a more organized physical plant.

Problems of land assembly and acquisition would require considerable study, extending, perhaps, into use of new powers of public action. (Application of eminent domain powers may be possible under current state law. This action would require proof by a redevelopment agency that the areas involved are obsolete commercial areas, not subject to improvement through normal development processes).[15]

In the event a less centralized means of implementation is considered, it is most important that a strong advisory board be set up representing local business and civic interests. This board could formulate plans and programs that may influence individual decisions of private investors. (Contributions from local interests would be needed to finance an active planning program.) The city planning agency could act as the "central intelligence agency" to provide both ideas and information needed for the preparation of general plans for the district. With the backing of an active city participation, the advisory board may be able to wield strong influence over the private developers and merchants.

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15 Chapter 121 of the General Laws of The Commonwealth of Mass. as amended in 1957. Refer to Chapter 613.

Coordination of Public Improvements as an Effectuation Device

The success of effectuating private improvements in the district depends, to a great extent, upon the coordination of public improvements as: the parking program, street layout and traffic control, transit improvements and extensions, park program and other public facilities. While these are normally the major responsibilities of the agencies involved in their execution, their coordination in a renewal program should become the responsibility of a central agency. For purposes of general planning for the area, the municipal planning agency may be appropriately responsible. In the case of more detailed physical design this may become the suitable responsibility of a redevelopment agency.

Rerouting of automobile traffic is considered an essential element in the success of creating a pedestrian district as indicated in the pilot plan. Such detailed studies as to programming the staging of traffic detours and temporary constructions will be the province of the municipal traffic agency. Similarly, the location of new garage facilities and park facilities will be subject to participation of the parking (Real Property Board) and park agencies. Extensive improvements to rapid transit facilities, and close integration with private development (as in the case of the prospective subway-shopping arcade) would entail close coordination, at all levels of planning and effectuation, between private agencies and the transit agency.

CONCLUSIONS

The method, or approach, developed in this study has been primarily directed toward fulfillment of the goals and objectives enumerated throughout the study. As a procedure, this approach emphasizes the importance of a positive statement of potentiality, rather than the more limited method of adjustment to the current problems. In setting up the detailed objectives that guide the plan decisions, adjustments are considered as part of, but not the entire range of considerations leading to the judgements expressed. Thus the designation of the shopping concentration as a "tight retail core" represents a positive goal rather than a mere recognition of decreased prospects for the function in the area. Similarly, designation of an extensive area for combined consumer and business services is thought of as a device that encourages necessary flexibility of use, rather than uncontrolled mixture of incompatible activities.

The plan may be reviewed in terms of the subject headings used in the statement of objectives. As an attempt to synthesize these objectives into a plan, the intent is to find a balance with realization that there is not always full agreement for the basic orientations of conservation and change.

A. Use and Function

As mentioned above, the conservation of the retail function is reinforced by contraction of the area devoted predominantly to retailing. Re-use of this peripheral area accomplishes the objectives of replacement of obsolete structures,

greater amenity and flexibility through large areas for new development. This method provides service areas for consumers and businesses that focus upon public amenities. Requirements of a flexible street pattern and conservation of first class buildings forces adjustments to the conceptual pattern suggested .

B. Access and Circulation

Requirements for flexibility of street system limit the extent of uninterrupted pedestrian flow. Medium-sized "superblocks" are recommended with special attention to removal of through movement at the heart of the high-volume pedestrian area. Complexities of street pattern occur as the main axis is broken for the specialized movement of pedestrians in the center and vehicles at the peripheries. Points of major conflict between these two types of movement are alleviated by separating autos and pedestrians at different levels.

Separation of service and movement in the local street pattern is shown for redevelopment areas, but remains unsolved for many substantial existing buildings. Specialized service devices (as conveyors) are needed to reach buildings cut off the access system, if objectives of free pedestrian flow are to be accomplished at the heart of the area.

Transit improvements provide for some relief of station congestion and flexibility of access. Station extensions are limited by conservation of substantial buildings and requirements of auto-pedestrian traffic systems.

C. Amenity and Visual Appearance

Replacement of older buildings provides for opportunities of new arrangements of open space and integrated projects. They encourage, however, possibilities for abrupt change in traditional form (of scale, pattern, texture, color, etc.). Simplification of new building form, while providing flexibility in use and orderliness in appearance, may also remove variety and richness in the process. Organization of the pedestrian system provides for specialized paths, but conservation of substantial buildings and traffic provisions reduce the simplicity of pattern.

The study has attempted to bring together various considerations that have been thought appropriate in preparing a plan for the downtown shopping district of Boston. It has largely dealt with general considerations of land use, circulation, public facilities and amenities. Because of this general approach, it is a "sketch plan" requiring elaboration in breadth and depth for more advanced recommendations. In its organization and coverage it attempts to select considerations appropriate to a "sketch plan" or "pilot plan". As such, it is an "approach", both in method and substance.

As a component part of the CBD, the downtown shopping district has both specialized and general requirements of physical form. While it is possible to study the district's specialized requirements without benefit of an overall plan for the CBD, the general requirements require knowledge of other component areas and functions of the entire CBD. Similarly, regional patterns of shopping centers, circulation

facilities and related population characteristics would require study at the broader level if their amplification in the pilot plan is considered to be the principal orientation of the study. Further study of the subject matter may uncover new orientations for both the goal statement and the methods that would achieve these. The sketch plan diagram, the re-use potential study and the pilot plan would be subject to review in terms of new orientation uncovered. The varied problems and difficulties in effectuation of an overall plan have been briefly sketched out. Suggestions for an effectuation mechanism and organization of interests are similar subjects for extensive study.

Given the limitations described, the major contribution is that of uncovering some of the problems and prospects for reorganizing the downtown shopping district of a large city, using the case example of Boston. With the methods of large scale rebuilding, the issues of potentiality are wide, involving many considerations (particularly in the case of the center of the community). If this study has succeeded in describing some of these issues in terms of a real situation, then the principal objective has been satisfied.

APPENDIX 1

(see Table 13)

Selected Data of Retail Activity--Boston CBD, and Standard Metropolitan Area

(source: U.S. Census of Business, 1948 and 1954)

Between 1948 and 1954, total retail sales in the metropolitan area rose from $2,114,082,000 to $2,855,379,000, reflecting the demands of an expanding community. Considering the changing buying power of money (the Consumer price index for the country rose 15 percent in the 6 year period according to the U.S. Bureau of Labor Statistics), the total rise in "real" sales was in the order of about 18 percent.

The sales in the CBD (the Census definition of the "CBD" does not include the Back Bay area) rose from $422,850,000 to $434,376,000 in the period. This was a decline of about 10 percent in "real" sales.

As a proportion of total metropolitan area sales, the retail sales in the CBD declined from 20 percent to 15 percent during the period. A decline in position within the metropolitan structure occured in each major retail category, with men's clothing leading the downward trend.

Of all categories of retail sales in the CBD, the most significant was the department store sales. Occupying close to half of the retail sales of the CBD, this category has declined in total volume and lost position in total metropolitan department store sales.

Among the remaining retail categories of the CBD, the most significant sales were made in: apparel, eating and drinking, and furnishings for the home. While apparel showed a decline as a percentage of total retail sales, eating and drinking remained stable, and home furnishings rose considerably. (Within the apparel category, shoes and women's specialties declined, but men's clothes and general ready-to-wear apparel rose.)

APPENDIX 2

Definition of Use Categories

Retail Use is defined, in the general sense, by the U.S. Census of Business, as:

> ". . . establishments primarily engaged in selling merchandise directly to personal, household, and farm users." (includes only those establishments open to the general public.) [16]

As related to the CBD, the Census lists the "major groups of retail" as:

> ". . . food stores; eating, drinking places; general merchandise groups; apparel accessories stores; furniture, home furnishings, appliance dealers; automotive groups; gasoline service stations; lumber, building materials, hardware, farm equipment dealers; drug stores, proprietary stores; other retail stores." [17]

The Boston City Planning Board, in listing the major categories for its inventory of accomodations (as summarized in its report) uses:

> general merchandising; apparel; furniture, etc.; restaurants, etc.; other, etc. (Further breakdown of general merchandising into the sub-categories of: department stores, and variety stores.) [18]

Consumer service categories, for the purposes of this study are based on "selected service trades" as specified by the city planning agency's inventory. They are:

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16 U.S. Bureau of the Census. U.S. Census of Business: 1954, Central Business District Statistics Bulletin CBD-33, Boston, Mass. p.3.

17 Ibid., p.6.

18 "Building Accomodations in Boston's Downtown-Back Bay Business District", op. cit., p.10.

hotels; amusements (theaters, bowling alleys, billiard halls and night clubs); and "others" (beauty parlors, barber shops, dry cleaners, tailors, cobblers, repair shops, etc.) 19

Ibid., p. 24.

TABLE 1

Selected Range of Re-Use Development Density or F.A.R.
(Floor Area Ratio)

	Retail Core	Remainder of the Shopping District
Low Range	3.0	4.0
Medium Range (see Map 7c)	4.5	5.5
High Range	6.0	7.0
E isting Density	5.9	5.9

TABLE 2

Existing Use in the Shopping District (floor space in 000's of sq. ft.)

(See Map 4 , Table 16)

Area	Total	Retail	Consumer Services and Offices	Other
Retail Core (as proposed)	3,770	2,910	610	140
Remainder of the Shopping District	6,290	1,310	2,980	1,400
Shopping District Total	10,060	4,220	3,590	1,540

TABLE 3

Existing Use in Buildings Designated as "Conserved" (floor space in 000's of sq. ft.)
(See Map 7a)

Area	Total	Retail	Consumer Services and Offices	Other
Retail "Core"	2,280	1,800	400	80
Remainder of the Shopping District	3,290	330	2,370	590
Shopping District Total	5,570	2,130	2,770	670

TABLE 4

Area for Re-Use (based on designation of buildings and areas suitable for redevelopment)
(See Map 7c)

	Net Development Area (as determined by sites designated in the Pilot Plan, Map 7c)*
Retail Core:	184,400 sq. ft.
Remainder of the Shopping District:	2,752,300 sq. ft.
Total Shopping District:	2,905,900 sq. ft.

* Net Development Area is defined as: the lot area suitable for private building; not including public open space, streets, or structures designated for conservation.

TABLE 5

Medium Range Development: Accommodations in Re-Use Area (based on detailed assignment of densities in the Pilot Plan)
(See Map 7c, Table 17)

(floor space in 000's of sq. ft.)

Area	Total	Retail	Consumer Services and Offices	Other
Retail Core	3,126	2,475	570	80
Remainder of Shopping District	6,042	880	4,572	590
Shopping District Total	9,168	3,355	5,142	670

Percent Change (compared to existing accommodations)

Area	Total	Retail	Consumer Services and Offices	Other
Retail Core	-17	-15	- 7	-43
Remainder of Shopping District	+ 4	-33	+54	-58
Shopping District Total	- 9	-20	+48	-57

TABLE 6

Low-Range Development

Gross Accommodations in Re-Use Areas (generalized)

Retail Core:	184,400 x 3.0	=	553,200 sq. ft.
Remainder of Shopping District:	511,500 x 4.0	=	2,046,000
Total:			2,599,200 sq. ft.

Assumed Re-Use Composition by Use

Retail Core	sq. ft.	assumption
Retailing:	442,560	(80% of gross accommodations)
Consumer Services and Offices:	110,640	(20% of gross accommodations)
Remainder of Shopping District		
Retailing:	415,000	(25% lower than similar re-use in medium-range plan)
Consumer Services and Offices:	1,631,000	

TABLE 7

Low-Range Development: Accommodations in Re-Use Area
(floor space in 000's of sq. ft.)

Area	Total	Retail	Consumer Services and Offices	Other
Retail Core	2,833	2,243	510	80
Remainder of Shopping District	5,336	745	4,001	590
Shopping District Total	8,169	2,988	4,511	670

Percent Change (compared to existing accommodations)

Area	Total	Retail	Consumer Services and Offices	Other
Retail Core	-25	-30	-16	-43
Remainder of Shopping District	-15	-43	+34	-58
Shopping District Total	-19	-27	+26	-57

TABLE 8

High-Range Development

Gross Accommodations in Re-Use Areas (generalized)

Retail Core:	184,400 x 6.0 =	1,106,400 sq. ft.
Remainder of Shopping District:	511,500 x 7.0 =	3,580,500
Total Shopping District:		4,686,900 sq. ft.

Assumed Re-Use Composition by Use

	sq. ft.	
Retail Core		
Retailing:	885,120	(80% of gross accommodations)
Consumer Services and Offices:	221,280	(20% of gross accommodations)
Remainder of Shopping District		
Retailing:	690,000	(assumed 25% higher than medium-range plan)
Consumer Services and Offices:	2,890,500	

TABLE 9

High-Range Development: Accommodations in Re-Use Area
(floor space in 000's of sq. ft.)

Area	Total	Retail	Consumer Services and Offices	Other
Retail Core	3,386	2,685	621	80
Remainder of Shopping District	6,871	1,020	5,260	590
Shopping District Total	10,257	3,705	5,881	670

Percent Change (compared to existing accommodations)

Area	Total	Retail	Consumer Services and Offices	Other
Retail Core	-10	- 8	- 2	-43
Remainder of Shopping District	+ 9	+22	+77	-58
Shopping District Total	+ 2	-12	+64	-57

TABLE 10

Summary of Re-Use Accommodations Studies (High, Medium and Low Range)

(000's of sq. ft.)

Area	Net Development Area	Gross Accommodations	Net Floor Area Ratio
Retail Core:			
Low Range	478	2,833	5.9
Medium Range	478	3,126	6.5
High Range	478	3,386	7.1
(Existing)	647	3,770	5.9
Remainder of Shopping District:			
Low Range	908	5,336	5.9
Medium Range	908	6,042	6.7
High Range	908	6,871	7.6
(Existing)	1,064	6,290	5.9
Shopping District Total Accommodations			
Low Range	1,386	8,169	5.9
Medium Range	1,386	9,168	6.6
High Range	1,386	10,257	7.5
(Existing	1,711	10,060	5.9

(Decrease in Net Development area: 23%
This reflects the increased amount of public open space and garages, though somewhat offset by the street area re-used for development.)

TABLE 11

Summary be Category of Use: Total Accommodations in the Shopping District

(in 000's of sq. ft.)

Use Category	Existing	Low-Range	Medium-Range	High-Range
Retailing	4,220	2,988	3,355	3,705
Consumer Services and Offices	3,590	4,510	5,142	5,880
Other	1,540	670*	670	670

*As represented in "conservable" buildings

Percent Change (compared to existing accommodations)

	Low-Range	Medium-Range	High-Range
Retailing	-27	-20	-12
Consumer Services and Offices	+26	+43	+64
Other	-57	-57	-57

TABLE 12

Retail and Consumer Service Frontage (in feet)

Re-Use Areas	
Predominantly Retail*	2,160 - 4,320
Combined Retail, Consumer Services and Offices	8,880
Total Re-Use Area	11,040 -13,200
Conservable buildings	5,440
Total Shopping District	16,480 -18,640
Existing Frontage in Shopping District:	14,080
Percent change:	17 - 32% increase

*(Lower range represents frontage entirely at grade. Higher range is 100% larger to represent possible multi-level shopping in arcades, as previously suggested.)

TABLE 13

Retail Trade in the Central Business District of Boston, 1954 and 1948*

A. Kind of Business	1954 Sales ($1000)	Percent of Total	1948 Sales ($1000)	Percent of Total	B. Percent of Standard Metropolitan Area Sales in Central Business District 1954	1948
Retail Sales Total Standard Metropolitan Area	2,855,379		2,114,082			
Retail Sales Total C.B.D.	434,376	100	422,850	100	15.2	20.2
Gen'l Merch. Group	212,438	48.9	207,993	49.2	58.8	66.9
Dept. Stores		45.7		45.7	69.7	77.1
Other		3.2		3.5	17.9	24.7
Apparel, Acces.	64,513	14.9	74,268	17.6	28.5	38.5
Shoes		2.9		3.0	33.0	41.9
Men's, boys' clothing & furnish.		3.9		2.1	41.5	56.7
Women's clothing, specialty		5.7		6.8	27.8	34.2
Ready-to-wear		4.7		3.4	26.9	36.1
Furniture, Home Furn. & Applian.	27,321	6.3	18,273	4.3		
Eating/Drinking	46,118	10.6	44,480	10.5	18.7	20.8
Others**	83,986	19.3	77,834	18.4	4.4	6.0
Selected Categories:						
Jewelry		4.3		3.5	51.2	55.3
Books, Stationery		1.5		1.5	38.9	42.0
Music		0.4		0.6	39.2	40.6
Selected Services						
Hotels	18,036		18,123			
Motion Picture Theatres	7,024		7,978			

*"Central Business District Statistics," Boston, Mass., 1954 Census of Business, U.S. Department of Commerce. (The C.B.D., as defined by the Census, does not include the Park Square-Back Bay shopping area.)

**Includes: Automotive group, gasoline service stations, drug stores, and "other retail stores," as defined by Census (Merch. categories: liquor, jewelry, books, sports, florists, music, photo).

TABLE 14

Floor-Space Accommodations of Retail and Consumer Service Groups as Components of Total Inventory for Boston's CBD, "Retail Blocks" throughout the CBD, and the "Retail Blocks" in the Downtown Shopping District, 1957

(Additional data shown for other major use categories) (See Map 2)

	CBD	"Retail Blocks" in the CBD	"Retail Blocks" in the Shopping District
Total Occupied (in 000's of sq. ft.)	46,240	6,630	5,270
Retail Space	8,050	4,350	4,010
Consumer Services	5,200	1,320	610
Office Space	19,890	540	360
Wholesale, Storage, and Manufacturing	10,930	340	270
Public Utility and Institutions	2,170	80	20

(Source: Boston City Planning Board Inventory)

Percent Composition

	CBD	Retail Blocks in the CBD	Retail Blocks in the Shopping District
Total	100	100	100
Retail Space	17	66	76
Consumer Services	11	20	12
Office Space	43	8	7
Wholesale, Storage, and Manufacturing	24	5	5
Public Utility and Institutional	5	1	-

(Source: Boston City Planning Board Inventory

TABLE 15

RETAIL and CONSUMER SERVICE Types and Their Relative Importance, for Boston's CBD and Selected Sub-areas (1957)

	MM sq. ft. of accom. (gross)		Percent composition	
	CBD	Retail Blocks within the Shopping Dist.	CBD	Retail Blocks within the Shopping Dist.
Total R & CS	13,250	4,620	100	100
RETAIL	8,050	4,010	61	87
Gen Merch.*	2,030	1,970	15	43
Dept. Stores	1,800	1,790	14	39
Variety Stores	230	180	1	4
Apparel**	2,360	1,490	18	32
Furniture	1,090	100	8	2
Restaurants	1,050	100	8	2
Other	1,520	350	12	8
CONSUMER SERVICES	5,200	610	39	13
Hotels	2,400	-	18	-
Amusements	1,390	360	10	8
Other	1,410	250	11	5

*does not include vacated White's store: 340,000 sq. ft.

**includes Filene's clothing store: 450,000 sq. ft.

(Source: Boston City Planning Board Inventory)

TABLE 16

Inventory of Existing Plant: Area, Floor Space (Accom.), and Utilization of Floor Space (in 000's of sq. ft.) (does not include historical sites or institutions not containing office space)

Areas (for Block No.'s see Map)	NDA*	Net** Density	Gross Accom. (not Including basements) Except****	Vacant	Occup. Non-Resid.	Retail	Office	Cons. Serv.	Whols. Stor.	Mfg.	Pub. Util.	Instit.
Existing "Retail Blocks"*****												
#282,360,361,372 373,362,364,280 281,274,275	948	5.5	5270	200	5050	3600	480	630	80	220	70	20
Existing Use of Projected Retail "Core" #282,360,361,280 281,362,364	647	5.9	3770	100	3670	2910	290	320	70	50	-	20
Retail "Core"- Conserved Plant***	294	7.8	2280	-	2280	1800	210	190	40	40	-	-
Remainder of Shopping District												
#374,375,376	125	6.3	790	10	780	110	250	260	20	-	60	80
370-371 (prior to new garage)	156	6.4	990	380 (340)	610	150	200	80	140	30	-	10
365	74	6.6	490	40	450	40	250	10	30	100	20	-
366	43	5.8	250	10	240	50	-	10	30	150	-	-
377,379	35	4.9	170	10	160	70	90	-	-	-	-	-
276	35	9.1	320	-	320	10	310	-	-	-	-	-
272,273	54	7.2	390	10	380	20	360	-	-	-	-	-
283,284	157	6.0	940	20	920	160	300	360	30	20	-	50
369	84	5.6	470	20	450	10	10	-	130	300	-	-
274,275	116	4.7	540	50	490	260	140	20	10	40	20	-
372,373	185	5.1	940	50	890	430	50	280	-	130	-	-
Total	1064	5.9	6290	600	5690	1310	1960	1020	390	770	100	140
Remainder of Shopping District "Conserved Plant"												
374,375,376	45		420			20	240	10	10	-	60	80
370,371	91		710			30	240	80) gar.180)	140	30	-	10
365	30		280			30	230	-	-	-	20	-
366	-		-			-	-	-	-	-	-	-
277,279	6		60			-	60	-	-	-	-	-
276	35		320			10	310	-	-	-	-	-
272,273	54		390			20	370	-	-	-	-	-
283,284	94		730			90	200	350	30	10	-	50
369	-		-			-	-	-	-	-	-	-
274,275	13		120			-	100	-	-	-	20	-
372,373	29		260			130	-	-	-	130	-	-
	397	8.3	3290			330	1750	620	180	170	100	140

*NDA: Net Development Area = Lot Area; **Net Density = $\frac{\text{Gross Accom.}}{\text{NDA}}$; ***"conserved plant" - based on detailed inventory by the B.C.P.B., revised to date with approximate adjustments made for variations in "retained" classification as shown in the Study of Re-Use Areas, Map ; **** includes basement space in Jordan Marsh store, Blocks 370-371; *****does not include now vacated White's store (see Map).

TABLE 17

Medium-Range Development Plan, Re-Use Area Development
(See Map 7c)

Retail Core Redevelopment Area	Net Development Area (in 000's of sq. ft.	F.A.R.	Gross Accommodations (in 000's of sq.ft.)
a	4.0	5.0	20.0
b	5.0	5.0	25.0
c	27.0	4.0	108.0
d	10.0	4.0	40.0
e	2.5	3.0	7.5
f	2.7	4.0	10.8
g	12.0	3.0	36.0
h	6.7	6.0	40.2
i	16.0	4.0	64.0
j	16.0	3.0	48.0
k	21.0	5.0	105.0
l	18.0	6.0	108.0
m	15.5	6.0	93.0
n	28.0	5.0	140.0
Total:	184.4	(4.6)	845.5
Remainder of Shopping District			
o	9.7	6.0	58.0
p	32.0	6.0	192.0
q	11.0	6.0	66.0
r	41.0	5.0	205.0
s	12.5	6.0	75.0
t	40.0	5.0	200.0
u	31.0	5.0	155.0
v	10.0	4.0	40.0
w	7.5	4.0	30.0
x	7.5	4.0	30.0
y	40.0	6.0	240.0
z	45.0	6.0	270.0

TABLE 17 (cont'd)

Remainder of Shopping District

Redevelopment Area	Net Development Area (in 000's of sq. ft.)	F.A.R.	Gross Accommodations (in 000's of sq.ft.)
aa	22.0	6.0	132.0
bb	16.0	4.0	64.0
cc	16.0	4.0	64.0
dd	28.0	5.0	140.0
ee	8.0	6.0	48.0
ff	2.8	6.0	16.8
gg	6.0	4.0	24.0
hh	6.5	5.0	32.5
ii	8.0	6.0	48.0
jj	29.0	5.0	145.0
kk	15.0	5.0	75.0
ll	45.0	6.0	270.0
mm	22.0	6.0	132.0
Total:	511.5	(5.3)	2752.3

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